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LEAGUE OF NATIONS

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The President of the International Agricultural Institute.
The Director of the International Labour Office
The Director of the International Institute of Intellectual Cooperation
are present at the meetings in an advisory capacity.

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de FEO Doctor Luciano, Director.
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With the present issue the International Review of Educational Cinematography appears in a new form; but in changing its vesture it does not change in substance or in spirit, nor does it deflect from the general policy for which it was created and that has directed the efforts of the Institute during the first half year of its life.

While gratefully acknowledging the collaboration we receive from all parts of the world, we are anxious that the Review, which is the concrete expression of the aims of the Institute, should, in its general presentation, appear more in consonance with the importance the publication is assuming throughout the world.

We can look back with some legitimate complacency on the past six months. The Institute had been in being barely seven months when the Review was launched abroad in the world to seek its fortune. A very big effort had to be made, with an organization necessarily hastily improvised and with the strictly limited means at our disposal. Five editions in five different languages: the Institute was resolved that it should affirm its world claims and its international position. The new educational aims of the cinema and the problem of its application to all grades and systems of teaching, as also the study of the manifold social, moral, psychological and juridical aspects of the cinema, demanded the publication of an organ that could get about the world easily and be read by the peoples of all tongues. And so, undaunted by the difficulties surrounding us, we tackled the task of bringing out the Review in the five official languages of the Institute; nor do we despair that in the more or less near future it may be issued also in other important languages.

We are the first to recognize the early failings of a child so hastily sent into the world, though begotten with so much love and enthusiastic faith. To-day we are endeavouring to develop its outer as well as its inner grace: to perfect it both in form and in substance.

Thus a handsomer general and typographic presentation accompanies interior reconstruction: an ampler supply of facts and information that reaches us from all parts of the world, a greater care of the translation into the several languages, and a more rigorous selection of copy.

In accordance with the suggestion and request of many good friends and authorities on film questions, we have completely transformed the Notes and News section; this important part now assumes a quite new form, the bare statement of facts and happenings being shown in relation with the world effort to make of the cinema an instrument of culture and knowledge.
The articles published will tend to a more definite purpose. Those of a more general character will gradually make room for articles directed to the comprehensive examination of the problems ahead of us: new situations and new possibilities arising; particular conditions here and there, big experiments, the needs and claims of specific fields of work and study and of important institutions.

Increasing attention will be paid to the several practical aspects of the educational cinema question. Thus, in fulfilment of the express desire of the Governing Board of the Institute, the Review will devote entire numbers to the consideration of special questions. Our March issue will thus be devoted to the social aspects of the cinematograph, the May issue to the film as an instrument of hygiene and social welfare education, the July issue to the rôle of the film in teaching, and the September issue to the use of the film in the domain of labour, with special reference to scientific management and vocational training. And so on and so forth.

These will appear as Special Numbers setting forth the terms of the several problems, and containing articles from the pens of eminent authorities in the several fields, together with an abundance of facts and information, the description of experiments, etc., of a pertinent kind.

Each issue — apart from these special numbers devoted to a single problem — will contain examples of important educational films of a kind to interest not only children and the young, but all those who appreciate the full importance of widening their knowledge of life and general culture.

These model films — of which the «Buddha» by the eminent Orientalist, Prof. Carlo Fornichi, appearing in this number is an example — will, whenever possible, be accompanied by illustrations, so as to enhance the attractiveness of the Review and at the same time to disseminate reproductions, drawings and photographs of little known works of real interest.

We are making a truly big moral and financial effort to carry on the Review, which lives and prospers thanks to the support given us and to rigid administration. We are confident that during 1930 its circulation will increase to an extent that will enable us to regard the first stage of its life as successfully closed. All outside support is gratefully received by us, whether in the form of general adhesion and encouragement, subscriptions to the Review itself or publicity subscriptions; all is welcome.

It is only by a wider and wider circulation of the Review in all languages that we can stir and keep alive world interest in the great educational possibilities of the Cinema and present the question in a proper light.

To the thousands of personalities, institutions, reviews and papers that have stood by us during these first six months and been so liberal in their support, praise, encouragement, and criticism; to all our fellows of the world press — reviews and newspapers — that have reproduced, summarized, cited and encouraged our publications — to all those who will stand by us and help us in the future in which we have so much confidence, we tender our warmest thanks and we promise them we will hold on tenaciously with our work in the confidence that the faith and enthusiasm that moves us cannot fail to move the molehills and... mountains in our path, and to achieve our purpose. And to all a happy and prosperous Year!
THE FILM AND CATHOLICISM.

(From the German)

Ever since it came into existence, Catholicism has been faced by a constant succession of external problems, which in the course of its millenary career it could not pass by without expressing approval or disapproval, without scrutinizing right through the husk to the very core the sweet but often poisonous fruit offered on all hands. Now it was a heresy or other religious error, now matters perhaps in themselves indifferent, such as the progress of every branch of culture may bring forth. The pursuit of such matters was a subject of interest to all true believers, whom it behoves to watch over the forces of the human soul, to dispel dangerous influences, and to make helpful ones subservient to the ends of religion. Very diverse contributions have been made to civilization in its several aspects in the course of the ages by philosophy and theology, by natural science and medicine, by art and mechanics. Such names as those of Galileo and Copernicus stand out as conspicuous crystallization points.

It is only in the last decades that science, art and mechanics have combined to produce a cultural conglomerate which affects all mankind. Thus the markings that vein a marble block, though coeval with the marble, can only be admired in their sparkling beauty and brilliant hues after it has been finished by the master polisher. From these manifold variations in the evolution of modern culture — fruit of a strange union between art and mechanics — has sprung a child whose importance is still considerably underestimated and overlooked, namely the film.

The film is animated by an intense activity which has enabled it in the course of its brief thirty years of life to conquer the whole world. It had hardly appeared on the scene before it had already become a problem, many sided as problems are wont to be. And this problem must be approached in all earnest by Catholicism. Edison said: «The film is the most powerful instrument for good or evil». This fact alone brings it within the range of the tasks of Catholicism as a doctrine and principle of life, and it is the practical use made of its possibilities which dictates the standpoint Catholics should take.

Thus the pith of the problem lies on the one side in the film itself and on the other in the human beings who are subject to its influence.

The problem of the film arose at the moment when it ceased to be purely a vehicle of instruction and began to show in motion human conduct, actions, and vicissitudes; from the moment it had power, like a conjuror, to set in motion and to impart life to things which are not in reality as it shows them to be. Mere possibilities were represented as realities. Sound and voice have already come within its sphere, and plasticity and colour will soon.

How does all this react on man? It is known that, just as every other stimulus, so also optical stimuli produce strong emotions, which in their turn
prove certain nervous reactions in the passive spectator. Prof. Dr. Ackerknecht, the active investigator of the motion picture, says in this connection: «It is evident that the peculiarity of the motion picture as a cause of motor stimuli lies in the sphere of sensation, or more exactly in the gradation of its sensory power on the receptivity of individual minds». The film exercises on the spiritual powers of man a strong direct influence, more or less effective according to individual sensibility. Consequently, the film can affect general morals and ethics. In view of the fact that about 12 million persons in the world attend daily the existing 60,000 cinemas, no rational person can doubt that the film possesses an enormous power. Now, the direction in which this force will operate cannot be a matter of indifference to Catholicism.

With regard to this, F. Koch S. J. writes in the September 1929 issue of the old and well-known review: «Stimmen der Zeit» «...When the art of printing commenced its victorious career the State and the Church endeavoured to secure themselves against it by enacting laws, and if possible to make it serve them. Through State and Church control on the writing, production, and sale of printed works (censorship, prohibition, index, privileges, etc.), an effort was made to keep writers in the right path. So also in the case of the film and wireless, State legislation is already intervening to protect public order, to safeguard the rights of morality, justice, and public welfare. But what means does the Church, no longer protected and supported in the accomplishment of its tasks by the Christian State, command to safeguard effectively its flocks from the dangers to which the film and the wireless expose or may expose them? But it must go further than this, it must endeavour to win for itself these two powerful auxiliaries of modern culture and make them subservient to its aims. How can it succeed in achieving this end?».

We must admit that Catholicism as a whole observed at first a reserved, nay a hostile, attitude to the film. We deeply regret that through that attitude much was lost that can be regained only with great difficulty. For while we folded our arms and looked on, Catholics attended the cinemas in great numbers, just as other people did. Then an aggressive procedure was adopted, but unfortunately only in a negative direction: rejection, legislation, boycott. There were reasons for this, of course. Thus, F. Friedrich Muckermann S. J. writes in the Catholic «Filmkorrespondenz» as follows: «We are aware that as regards the film there did not exist at first a sufficient consciousness on the part of the responsible persons of its artistic and moral effects. We are aware that the original sin of the film has gone on reproducing itself from decade to decade. We are aware that the general decay of sacred traditions has been helped also by the film...»

Despite all this, among Catholics there have always been men who recognized with wisdom and foresight the great importance of the film and who did take action. These were generally men who, as leaders of great organizations and associations, dreaded the consequences which a misused invention would have on the people in general and on youth in particular. Their endeavours however, while also tending to avert danger, were at the same time constructive. The protective
dam had to be enlarged until it became a solid embankment keeping the waves off.

The Popular Association of Catholic Germany, acting on these motives, founded the well-known large film-hiring center in Munich Gladbach. As far back as 1912 its catalogue already included over 1000 films. This was one of the largest educational film collections in Germany. It is regrettable that this institution has ceased to exist. It was recalled to life of a kind in the shape of the «Neuland-Kinematographie» of Cologne which, besides the sale of apparatus, dealt also with the hiring and later on the production of cultural and educational films. This undertaking has been in its turn superseded this year by the «Deutsche Bild-und Film-Zentrale», likewise at Cologne. The same reasons led ten years ago in Munich to the formation, in connection with the important South German Workers'Central Association, the «Leohaus», of that film company which was the first Catholic concern to take up the production of recreational films in Germany. It is still operating now, and with great success. The «Bild-Zentrale» of Cologne above referred to was likewise founded by the «Leo» Association. The safeguarding of youth was the chief objective of the Central Association of the Catholic Youth of Düsseldorf when it set up its own film department, since enlarged into the «Stella Maris» Cinema society, operating since 1921 in a much wider sphere than that of the Central Association. It is now merged with the «Bild-und Film-Zentrale» of Cologne. Of the other initiatives which were carried out in the meantime, but no longer exist, the «Glofafilmsgesellschaft» of Berlin, later on renamed the «Spera», should be mentioned. There are, moreover, still in existence some firms in which considerable Catholic capital is invested.

Most Catholics interested in film work have joined a Film work Fellowship, which in its turn is one of the groups forming the Central Cultural Committee of Catholic Associations. The leader in that Committee at Cologne is religion-teacher Marschall. From it emanate the directions regarding the selection of the film censors, the preparation of Congresses, etc.

Institutions similar to those existing in Germany were also established by the Catholics of France. Here also the efforts of several Catholic associations centre in the «Comité catholique du cinématographe», under the high patronage of the late Archbishop of Paris, Cardinal Dubois. The active leader of these institutions is Canon Reymond, Paris. In France the organization of club and parish cinemas is particularly excellent, while there is still much to be done as regards production.

In Italy there exists the «Consorzio Utenti Cinematografi Educativi», which has its centre in Milan. Carlo Canziani is the zealous advocate of Catholic cinematograph reform.

Owing to the tendencies of the general film industry in Italy the position should be somewhat easier in that country. Neither does there exist there an extensive production of international importance, although a good start is being made.
Catholics have been very active also in Belgium, where they have created a notable film organization. The movement there centres around Canon Brohée of Louvain.

In Switzerland different organizations and associations in several places are actively engaged in efforts to raise the film standard. We may mention the «Vereinigung der Freunde der Kinoreform» (Association of the Friends of Cinematograph Reform), the head of which is Dr. Beyl, Zurich, the «Heroldfilm», founded by Dr. J. Wyss at Rorschach, the «Schweizerischer katholischer Volksverein» (Swiss Catholic Popular Club), which instituted in 1928 its own film advisory department. In Switzerland the movement still lacks that unity which will be attained only when present endeavours move in a uniform direction.

In Austria the centre of Catholic film work is constituted by the Austrian Film Committee with its president, Stiftshofmeister Rumler. The chief supporter of the movement is the National Federation of Austrian Catholics.

The Dutch Catholics have been particularly successful as regards censorship. The president of the State Film Board of Censors is F. Hermans of Rotterdam, who is also in the midst of the Catholic film movement. In southern Holland the movement is led by Prof. Bemelmans, the director of the «Voor Eer en Deugd» office.

The Catholics of Jugoslavia with their «Prosvetna Zveza» are also widely interested in this important problem. Vicar Vimco Zot of Ljubliana has become well-known through his activity in that field.

Catholics are astir also in Spain, England, Czechoslovakia, and Hungary. It would lead us too far to go into particulars in this article.

In America, the leading country in the film trade, Catholics in general have not cared much about these questions. Only recently a section of the Catholic Women’s movement has shown its interest in the matter through the institution of a special Committee for the examination of films.

It may be stated without exaggeration that Catholicism is alert throughout the whole world, as regards the film question.

A radical change in regard to the problem «Film and Catholicism» has been brought about since there has been a possibility of international cooperation. Is the idea of such cooperation not obvious in the case of a Church which extends over the whole world, which has one Head and one flock, one hymn and one prayer? Something would certainly be achieved if the world-uniting power of Catholicism were appropriately applied to the film, which is international despite all national peculiarities.

This work of international co-operation began with the First International Film Congress held at the Hague in 1928. Urged by the same desire, the chief Catholic countries endeavoured to join hands. It was only as yet a tentative and preliminary stage, but the great formula was found: the film and Catholicism had come to terms. The shoot planted at the Hague grew and developed, as could be seen on the occasion of the Second Congress at Munich in 1929. The task of laying down rules for practical international Catholic film work was undertaken. At
the Hague we saw only larger or smaller groups groping to find their way, still
impeded by a natural diffidence; at Munich we beheld one large compact circle.
As the outcome of the two Congresses, there now exists an International
Catholic Film Committee, the offices of which are at Paris. Its President is Dr.
Ernst, Munich, and Canon Reymond, Paris, is the director. The principal countries
are represented. This Committee will constitute in future the centre for international
film work. Now that the film has existed for over thirty years, and has become a
great power, Catholicism has finally obtained the long desired for and so hardly
won central organization.

A German cinema specialist stated publicly two years ago that the Church
was the greatest enemy of the film. His contention was even then energetically
refuted by the «Reichsfilmblatt», which emphatically asserted: «The Church is
anything but an enemy of the film. Who says so is a false prophet». Now, after
only two years, the chief representatives of the film trade attend the conferences
of Catholics. Catholicism has indeed approached the problem rather late, but now
its stand is clear.

To Catholicism the film, as indeed every other invention of the human intellect,
cannot be a matter of indifference. It must and will oppose aberrations for the sake of
those who look up to it for guidance and leadership. Such opposition, however, should
not resolve itself into sterile talk and criticism, but into earnest comprehension of the
gravity of the problem; it should appreciate and turn to account what good there is in
the Film thereby building up a safe dam against pernicious influences. It is the sacred
duty of all its auxiliary forces to concur in condemnation whenever necessary, but at
the same time they should instruct and guide for the good of mankind.

Richard Muckermann.
The Khmer Buddha
(reproduced by kind permission of the Guimet Museum, Paris)
The history of the vicissitudes of the life of the Buddha, that is to say of the Prince of the family of the Sakiya who, on account of his wisdom and holiness came to be known as the Buddha, namely the Perfectly Enlightened One, is certainly one of the most edifying of all stories by reason of the deeply philosophical and ethical lesson it conveys. All honest and intelligent men who traverse life’s stage acquire the religious sense; that is to say, they are driven by the caducity of the things of this world to aspire to eternal truth and learn from the sorrows of life to be compassionate and to love all living creatures. Wisdom and goodness — these are the most precious fruit which it is given to man to gather in his brief earthly pilgrimage. Now the life of Buddha — the greatest of all the great Indians — is all permeated with wisdom and goodness. The most imaginative and suggestive of legends have been added to historical fact to render the arid truth more attractive, to sweeten «the rim of the cup», and all this has given rise to a marvellous combination of truth and fantasy of a kind to convince the intellect and move the heart.

Why should the educational film neglect to exhibit on the screen the great and lovable figure of the Buddha?

We are informed that in India and the United States a film dealing with this subject has met with success; but its details are unknown to us and we prefer them to remain so, in order that we may ourselves attempt, on the basis of legend and history, to reconstruct in scenario form the life of Buddha in its essential lines.

This might be divided into four parts:

1) birth and early years;
2) from the first awakening of the mind to its complete illumination;
3) his teaching;
4) his last years and death.

All this could be illustrated compactly and comprehensively in seventy-two pictures, in a manner to give a simple and enjoyable picture of one of the vastest religious and moral conceptions of mankind.
PART I
BIRTH AND EARLY YEARS.

1st PICTURE.

The Gods rapt in the extasy of meditation.

One of these, the Buddha, rises and announces that he is going forth to be incarnated in the womb of a mortal woman so as to reveal to men the Law of the Supreme Good that redeems from suffering.

2nd PICTURE.

Kapilavastu, the city at the feet of the Himalayas, rich in high pinnacled palaces and towers.

3rd PICTURE.

The Palace of Kapilavastu. King Suddhodana is seated on his throne, with Queen Maha Maya at his side. The court. The devoted and happy subjects pour blessings and gifts or their King.

4th PICTURE.

A star-lit night. A terrace of the Palace; under an awning Queen Maha Maya, chosen by the Buddha as the noblest among women to be his mortal mother, is sleeping. In her dream an enormous white elephant with six tusks appears to her, a symbol of the super-human son whom she is miraculously to conceive.

5th PICTURE.

Ministers, bards and astrologers announce to the King that at last an heir will be born to him. The happy King distributes gifts, pardons and amnesties.

6th PICTURE.

Ten months later. Queen Maya, followed by her maids of honour, repairs to the Lumbini pleasure grounds; she radiates light around her by virtue of the divine being she carries in her womb. Raising her arms and holding on to the branch of a lofty satin tree, she gives birth, without a vestige of pain, to an infant boy, who springs miraculously from her loins, while the God Indra descends from the sky to receive the child in his arms. Ranks of rejoicing gods are seen in the heavens. A rain of flowers falls on the ground, and two cascades, one of cool and the other of warm water, pour down and bathe the head of the divine infant. An enormous white lotus flower springs from the earth, upon which the gods, who reign to the north, the south, the east and the west, lay the child. Other gods support the awning, the symbol of royalty, while yet others fan the child with magnificent plumes. Fountains of water spring from the earth and the trees miracu-
The Birth of the Buddha
(reproduced by kind permission of the Pesaro Gallery, Venice)
lously blossom. Fire bursts into a brilliant flame on an altar in the background of the scene.

Mystic song and music resound and add to the gaiety of the scene.

Suddenly, to the amazement of all present, the child rises from the lotus flower and advances seven steps with majestic gait, while behind each step a lotus flower springs up. Then in a powerful voice he announces: «I am born for the salvation of the world».

7th PICTURE.

A terrace of the Royal Palace. Suddhodana is seated on his throne, surrounded by the Court. The child is lying in his cradle under an awning, watched over by nurses. The figure of a man gently cleaves the air and on alighting on the earth assumes the aspect of a venerable hermit. This is Asita, the famous seer, who begs the Kings to grant him a view of the child born to him. Suddhodana takes the child in his arms and shows him to the saint. The latter gazes at him long, becomes meditative, sighs and sheds tears. The King is taken aback. Asita reassures him, and tells him that this child is destined to be the future revealer of the truth, the spiritual minister of suffering mankind. «He will abandon the splendours of the Court» says Asita «and will take refuge in wild forests to seek there the eternal Truth and preach it to the world. I weep because I shall die before the blessed lesson is taught». Then Asita is rapt from the earth and disappears as he came.

8th PICTURE.

Maya is told of Asita’s predictions. The too happy mother dies and is borne up to heaven in a cloud of light. Suddhodana entrusts the child to Mahaprajapati, his maternal aunt.

9th PICTURE.

In the background a temple with majestic idols. The ceremony of baptism: the name of Siddhattha is given to the infant. The idols fall prostrate before him as he comes up to them.

10th PICTURE.

The child Buddha astounds his teachers by the knowledge he displays which renders all teaching superfluous.

11th PICTURE.

The Council of the King and his Ministers. It is decided to invite to Kapilavastu all the most beautiful royal princesses, that Siddhattha may choose his bride from among them. Suddhodana wishes to surround the Prince with pleasures of all kinds and deter him from the renunciation announced by Asita. Heralds are sent forth.

12th PICTURE.

The choice of the bride. The Prince has presented the last of the jewels he has to distribute to the princesses who have been summoned, when the lovely
Yasodhara comes up to him. To her he offers his own necklet and ring, showing thereby that he elects her as his bride.

The marriage ceremony.

Suddhodana, still brooding on Asita's prophecy, decrees that the sorrows of life shall be hidden from his son and he has four palaces built, stored to overflowing with the pleasures and delights of all seasons. The summer palace. The autumn palace. The winter palace. The spring palace.

A groop composed of Siddhattha, Yasodhara, Rahul, recently born to the happy spouses, and Suddhodana. Touching family scenes.

PART II.

FROM THE FIRST AWAKENING OF THE MIND TO ITS COMPLETE ILLUMINATION.

Siddhattha, weary of his golden cage in the enchanted palaces, asks his father to allow him to go abroad in the city. Suddhodana consents, but as soon as his son has left his presence he calls together a council of his ministers and issues the severest orders to the governor of the city that all trace of what is sad and ugly in life and which might trouble the young prince shall be removed from the roads he is to pass through.

The Governor takes immediate steps to get the streets in order.

Siddhattha is seen in a golden chariot between two ranks of cheering populace. From windows, balconies and terraces anxious faces gaze forth. While the prince returns cheerfully amid the joyous acclamations of the people, the figure of an old man, broken down by age and leaning on a stick, appears to him, but to him alone. The prince is amazed. He turns to the charioteer and asks him what on earth this apparition means. On being told that old age waits in store for all men, the prince is troubled and orders the charioteer to drive him back to the palace.

Siddhattha meditates on the transitoriness of human life (medallion).

Siddhattha's second drive out. A sick man appears to him. The prince is amazed and is greatly taken aback on being told by the charioteer that no man is immune from the risk of disease. The prince returns at once to the palace.
20th PICTURE.

Siddhattha meditates on the miseries of disease (medallion).

21st PICTURE.

Suddhodana’s bed-chamber. The King beholds in a dream the prophesy of Asita come true, for the figure of Siddhattha appears to him clothed as a mendicant friar. He awakes with a start and summons his ministers, who tell him that in fact the prince on his return from both his drives has been sad and thoughtful. He promptly dismisses the governor of the city and changes the charioteer. Orders are given that the prince must be hemmed in more closely than ever with pleasures. The King then gives orders that he be taken to the pleasure grounds where all the loveliest courtesans of the city are assembled. The King summons them to the palace and gives them orders as to how they are to behave.

22nd PICTURE.

Siddhattha’s third drive. A corpse appears to him. He is amazed and plunged in grief when he is told by the charioteer that no man can flee the inevitable doom. He gives orders to return immediately to the palace, but the new charioteer does not obey him, whips up the horses and drives him to the Padmabhanda pleasure grounds, whence the lovely dancing girls pour forth to welcome the prince.

23rd PICTURE.

In the Pleasure Grounds. The temptation. Siddhattha unshaken returns to the palace at sunset.

24th PICTURE.

Siddhattha meditates on death (medallion).

25th PICTURE.

Siddhattha’s fourth outing accompanied by young comrades. Riding his favourite horse Kanthaka, the prince repairs to a ploughed field where a vision of labourers toiling under the sun’s burning rays and the destruction of plants and animals as they fall beneath the plough cause him to meditate on the sorrows of life. The apparition of the mendicant friar. The return to the palace.

26th PICTURE.

Siddhattha meditating on renunciation (medallion).

27th PICTURE.

Siddhattha tells his father of his wish to become a monk. Suddhodana in despair exhorts him to fulfil his duties as a warrior and the continuer of his race. The prince answers him that he will consent on three conditions: that his father guarantee him that he will not grow old, that he will never fall sick, and that he
will not die. Suddhodana realizes that his son is determined on his course, and gives orders for the vigilance over him to be redoubled and that the prince be entertained by a concert performed by the ladies of the court most practised in the art of music.

28th picture.
The concert. The prince is sad and pensive. Of a sudden the young players are overcome by sleep and abandon themselves to slumber in the most wanton postures. Siddhattha's disgust. He resolves to leave.

29th picture.
The courtyard of the palace with a great gate in the back-ground.

Siddhattha gives orders to his groom Channa to saddle his horse for him. Channa reluctantly obeys and leads his horse up to him; the prince caresses it.

30th picture.
The nuptial chamber. Yasodhara and Rahula are sleeping. Without awakening them, Siddhattha salutes them and exclaims: 'I shall return when I have become the Buddha and not before'. He places a rich necklet in Yasodhara's hand, in remembrance.

31st picture.
His departure. The door of the palace and the gates of the city fly open of themselves. Kanthaka, followed at a distance by Channa, is seen galloping through the streets and the fields.

32nd picture.
A hermit in the background. Siddhattha descends from his horse. Channa comes up to him. The Prince and the groom talk together, the groom entreating him to desist from his intentions. The prince shears his long locks with his sword, and the locks and the diadem are gathered up by the gods. Siddhattha proceeds to divest himself of all regal apparel. A hunter roughly clad in a tawny coloured mantle comes up to him and the prince changes his clothes with him. He bids farewell to Channa. His horse weeps on leaving him and licks its foot. The prince sets out towards the hermitage, while Channa watches him from afar with tearful eyes.

33rd picture.
In the hermitage. Various sacrifices; penitents crowd round the prince. His disappointment at the vanity of their asceticism, and the admiration of the old penitants for the young hero of renunciation. Departure from the hermitage.

34th picture.
The Royal Palace. The grief of the women when they learn from Channa of the Prince's irremovable determination to give himself up to an ascetic life. Suddhodana's despair.
35th PICTURE.

Siddhattha, emaciated to a skeleton by his fasts, does the most arduous penances in the presence of his amazed and admiring disciples.

36th PICTURE.

Convinced by experience that penances do not open the portals of Truth, Siddhattha makes his ablutions once again, and, exhausted as he is, he drags himself along the ground in search of food. A dainty shepherdess appears before him and offers him a pottage of rice and milk. On beholding him eat once again, the five disciples are disgusted and abandon him. Siddhattha takes a bundle of fresh grass from a reaper and carries it off to the foot of a Bo tree. Seated on this, he crosses his legs and gives himself up to meditation. The leaves of the tree, which had been waving in the breeze, grow still with all the rest of nature.

37th PICTURE.

Mara, the tempter, assails the holy man with seductions and threats. The hero remains invincible. The demons having dispersed and fled, the secrets of the Supreme Good are revealed to Siddhattha. All nature rejoices.

PART III.

THE TEACHING.

38th PICTURE.

Siddhattha, now become the Buddha, is at first tempted by Mara not to reveal the redeeming truth to mankind. But Brahma descends from the heavens and succeeds in overcoming the doubts and hesitations of the hero, who exclaims: «Let the gates of Eternity be flung open to all! He that has ears let him listen to the Word and believe!».

39th PICTURE.

Buddha preaching. His first disciples, who earlier had forsaken him, now hang upon his lips. The number of these grows to three-score, then to a thousand; rich and poor, nobles and commoners, young and old, leymen and friars are among them.

40th PICTURE.

The Buddha is seen wandering round the streets of Rajagrhā begging his livelihood. King Bimbisara comes reverently towards him and invites him to dine at the palace.

41st PICTURE.

A hall in Bimbisara’s palace. A princely gathering is seated round a copious board. The King himself ministers to the Buddha, and at the end of the banquet he declares his intention of presenting to him the Veluvana Pleasure Grounds.
BUDDHA TAKING A BATH - Bas-relief at the site of Borobodur (Java).
Veluvana Pleasure Grounds with rivulets, grottos, and sylvan cabins and retreats. On a rock are inscribed these words: «How to overcome suffering has been revealed to the Master».

Yasodhara attired in widow’s garb holds the necklet which Siddhattha had left with her, and with her other hand she grasps the little hand of Rahula, now seven years old. They are walking in a garden; she with languid and dejected gait, Rahuma, on the contrary, is gay and sprightly. They pause before a pond blossoming with lotus flowers, and the little boy amuses himself by throwing grains of rice to the fish and bits of bread to the swans, while his mother raises her eyes to heaven invoking news of her husband, whom she has not seen for seven years. Some ladies of the court come to tell her that two rich merchants have arrived at the palace, bearing news of the Buddha.

A hall in the palace. Suddhodana is seated on his throne, surrounded by his court. The two merchants tell the king of the holy deeds of the Sakiya saint. Yasodhana hangs on their words. Messengers are despatched to invite the Buddha to come to Kapilavastu and the king gives orders that the city shall be garlanded and beflagged to receive the august guest.

A street in Kapilavastu with triumphal arches. In the background are seen the gates of the city. Richly caparisoned elephants, soldiers in dress uniform, groups of populace and citizens. The houses of Kapilavastu are ranged on either side. A royal pavilion with gold embroidered red and green silk curtains. Yasodhara arrives on a rickshaw and disappears behind a curtain of the pavilion, which she pulls aside impatiently from time to time to look towards the gate of the city. At last she sees a man enter in by it with deliberate gait; his head is shaven, he wears a yellow mantle and carries an earthen alms-bowl in his hand. The monk stops from door to door to beg alms, with lowered eyes he thanks alike those who give to him and those who refuse. His majesty is such that all gaze on him with amazement, and press around him, exclaiming «Who can this man be!» On coming up to the pavilion, the monk beholds the curtains thrown open and Yasodhara fings herself at his feet, crying aloud «Siddhattha, my Lord!»

The throne room. Suddhodama is told that his son has entered the city in the garb of a monk, begging from door to door. The Buddha walks in and with a single look he calms the king’s wrath. None the less, the latter reproaches him for not pursuing the glorious traditions of his race. The Buddha answers:

"— 21 —

42nd Picture.

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"Father, I offer you a treasure more precious than a kingdom; namely the Truth that by curbing our passions we conquer pain and open up the doors of the ineffable peace of the Nirvana."

Suddhodana then takes the bowl from the Buddha's hands and is converted. Yasodhara, Rahula and all the court press round the magic conqueror of souls.

47th picture.
The four principal disciples of the Buddha: Ananda, Anuruddha, Upali and Devadatta (four medallions).

48th picture.
The court of Bimbisara. His son Ajatasattu plots with Devadatta that he shall usurp the crown and place his companion at the head of the Buddhist community. A riot in the palace. Bimbisara is bound and locked up in a dungeon.

49th picture.
The dungeon. Bimbisara, subjected to the torture of having his feet burnt by a red hot iron, dies in torment.

50th picture.
Ajatasattu is enthroned.

51st picture.
The Buddha passes under a cliff. Above him is seen Devadatta, who seizes a great boulder and flings it down on the Buddha. The rock merely wounds slightly one of the Buddha's feet, and he proceeds unmoved on his way. Devadatta urges an infuriated elephant against him, but the beast grows as tame as a lamb on meeting the holy man's eye. Buddha proceeds on his way, and Devadatta, hidden behind a tree, looses a poisoned arrow against him. This, however, merely glances off the person of the saint and drops at his feet, where it is transformed into a lotus flower.

52nd picture.
Devadatta, who has been mortally ill for nine months, has himself carried on a litter to the Buddha. In his presence he raises himself on his elbow, and is about to fling himself on the ground; but no sooner does his foot touch the earth than this opens up, great tongues of flame spring from it, and Devadatta is swallowed up by the infernal regions.

PART IV.
THE LAST YEARS AND THE DEATH OF THE BUDDHA

53rd picture.
The Buddha is seen preaching. The rich merchant Anathapindika appears among his hearers.
« My law » says the Buddha « in past ages urged men to endure with heroic patience. I will recount to you the example of Ksantivadin ».

54th picture.
A medallion showing Ksantivadin, the hero of patience.

55th picture.
A pond in a wood. A young prince comes forward, followed by his harem. The favourites seek to inebriate him with their charms. Some gather flowers and weave them into garlands which they hang around the prince's neck. Others play at ball, and others balance themselves on swings, or bathe in the waters of the pond, revealing their lovely forms, and throwing water at one another with the palms of their hands. Others again give the prince inebriating liquors to drink. The King is overcome with intoxication and falls asleep, while his women disperse in groups.

56th picture.
Ksantivadin is seen meditating in a hermitage. The women break into his retreat, and surround him with lures and provocative glances. But the hermit, serene and unmoved, keeps them at bay with the reverence of his presence, till contrite and overcome with shame, they stand and listen to his words of patience.

57th picture.
The Prince awakens. On being told by his attendant that his women have wandered off into the wood, he is annoyed and goes off in search of them.

58th picture.
Ksantivadin is seen preaching patience to the women of the harem. The prince comes up, and still under the influence of drink and mad with jealousy, he throws himself furiously on the saint. The women intervene in vain. He drives them off with an imperious gesture, and turning on the hermit, he exclaims, « Now give us a proof of your patience! » With his sword he slashes off his right hand. Ksantivadin remains unmoved and continues to gaze on the prince with mild and pitying eyes. More infuriated than ever, the prince slashes off his left hand, then his two arms, his nose, his ears, and his feet.
Ksantivadin forgives his murderer as he dies, while flowers rain down from heaven and cover the butchered corpse.

59th picture.
The Buddha is seen preaching. « My law » he says « will urge men in future ages to the sublimest abnegation. I will tell you the example of Kunala ».

60th picture.
Kunala, the hero with the beautiful eyes (medallion).
61st Picture.

The court of King Aseka. The King’s wife is madly enamoured of the beautiful eyes of her step-son Kunala. The young prince rejects the seductions of the incestuous woman. The stepmother swears vengeance. Kunala is sent away to govern a distant province.

62nd Picture.

The King’s private chamber. The Queen enters furtively and robs the royal seal. She writes: «I order that the eyes of my traitor son Kunala shall be torn out in the presence of the whole city».

63rd Picture.

The Governor’s house. Kunala is intent on giving orders for the good of the people. A royal messenger hands to him a sealed packet. Kunala opens it and says «Let my father’s orders be obeyed, whatever they be».

64th Picture.

The central square of the city. A stand is erected in the middle. Kunala mounts it, followed by his despairing wife. Horror is depicted on the faces of all present. Ten executioners, one after the other, refuse to carry out the abominable sentence. At last an imbecile butcher makes up his mind to gouge out first one of the prince’s eyes and then the second. Kunala takes the two bleeding orbs in his hand and exclaims: «I have lost the sight of the body to attain that of the spirit! I forgive my persecutors». He is led away by his wife. Kunala walks off while the crowd weeps and shudders with horror.

65th Picture.

Kunala blind, and led by his wife, plays on a lute and sings under Aseka’s window.

66th Picture.

Aseka is seen listening to the familiar voice and grows agitated. He calls a soldier and orders that the singer be brought into his presence. The father recognizes his son. The queen’s diabolical treachery is discovered. She flings herself at the sovereign’s feet and implores mercy. Kunala intercedes for her and exclaims «If I have sincerely forgiven this woman may the light be restored to my eyes!». Kunala’s sight is at once miraculously restored to him.

67th Picture.

The Buddha’s sermon comes to a close. Anathapindika moved by his holy words, promises him a rich reward.
The Death of the Buddha
(reproduced by kind permission of the Pesaro Gallery, Venice)
68th PICTURE.
Anathapindika in conversation with Prince Jeta in a magnificent park, which he purchases for an amount of gold sufficient to cover its entire area. Some men come up dragging bags of gold with which they pave the ground. Anathapindika offers the rich gift to the Buddha.

69th PICTURE.
The Buddha, now grown old, sees a gazelle in a forest struggling in a net in which a hunter has caught it. He frees it and thus brings on himself the wrath of the cruel man, who throws himself on him, but is miraculously disarmed by the Buddha's gentle glance and is converted.

70th PICTURE.
The Buddha meets a friar who is the victim of a revolting disease and all covered in scabs and filth. Everyone avoids him. The Buddha orders Ananda to bring him some water and with his own hands he washes the poor wretch and cleans his wound.

71st PICTURE.
The death of the Buddha. His weeping disciples surround him. He lies on a litter under a Sala tree. His last words are: « Keep watch for your salvation ».

72nd PICTURE.
A medallion of the Buddha in extasy in the Nirvana.

CARLO FORMICHI
Of the Italian Academy.
PROBLEMS OF THE CINEMATOGRAPH IN ROUMANIA

There are 591 cinema theatres in Roumania, 61 of which are in Bucharest. All these theatres carry on their business by permission of the Ministry of Arts, which has the power of granting or withdrawing authorization in accordance with a Regulation, which comprises provisions relating to the comfort, the hygiene and the safety of the halls.

But, while the position is clearly defined so far as the cinema halls are concerned, it is less so as regards the shows given there. The great popularity enjoyed by this form of entertainment in Roumania as elsewhere — a popularity evidenced by the above figures — and the powerful influence it exercises on the public have created the necessity of a preliminary control or censorship of films.

This institution has passed through many phases. In the beginning — that is to say, at the close of the war — it was committed to the care of the military

(Ed. Note). Dr. Kiritzesco's clear statement of the practical methods used in the revision of films in Roumania may be completed by some data of a purely legislative character which afford a definitive idea of the present state of the censorship in that country.

The revision of films in Roumania comes under art. 4 of the law on the organization and management of national theatres and the control of public spectacles, published in the Official Gazette (N. 67, of March 25, 1926); and is also regulated by later measures on the cinema, published in N. 65 of the Official Gazette of March 1927. There is likewise a ministerial circular, No. 26487, published in 1928 which lays down practical methods of control.

The various rules contained in the above mentioned laws and regulations are briefly as follows:
« The films shown must be accompanied by a document of authorization, and the first scene of each act must bear the inscription, above the photograph: «Approved by the Ministry of Arts and Public Worship».

Exception is made for news reels and topical films of purely local interest which are shown at Bucharest. In the case of these a simple permit signed by a commissioner of the Censor's Office is sufficient, and is valid until the first sitting of the Commission, when it is replaced by the ordinary authorization card.

In addition to the powers of the Official Commission, the civil and military authorities have the right to intervene when the presentation of special films may be a potential cause of disorder, especially in those centres where there is a large youthful population.

It is also the duty of the government authorities to prohibit the presentation of films in regard to which the prescriptions of the above mentioned laws and regulations have not been rigorously observed.

All persons presenting films for revision must pay a tax. Formerly, the amount of the tax varied according to the length of the film, but since January 1, 1929 the tax has been fixed at 75 banio per metre.

As far as the Censor's Office is concerned, no special measures are applied to educational films, which are subject to the same control as ordinary films, even when they are intended for schools, or educational institutions or associations. The tax on public shows, however, is reduced in the case of educational films.

The measures providing for the censoring of films are very important. The rules on the question are not fixed, but simply indicate the lines to be followed. Generally speaking, the Censor-
authorities, and later of the police. These were pioneer days: control was poorly organized and conformed to confused standards; it was concerned mainly with the prevention of seditious films and had scant effective authority. In April 1924, a "Central Censorship Commission" was set up, attached to the Ministry of the Interior, with precise attributions, jurisdiction throughout the whole country, and efficacious powers, guaranteed by the whole police machinery being placed at its service. Since the 1st January 1928, the Commission has been transferred to the Ministry of Arts, and it will shortly pass over to the Ministry of Social Welfare, which has by a recent measure of reform been entrusted with the control of popular educational spectacles.

The Commission consists of 12 representatives of the cultural, artistic, administrative, police and military authorities; the press and the authors' association are also represented on it. The standards observed in judging films are known and generally adhered to. A ban is placed on films that contain anything obscene or pornographic; on scenes of a kind to arouse sensuality; "crime" films which exhibit real or imaginary actions of a kind calculated to pervert the imagination or

ing Commission must reject all films which might be dangerous to the safety of the State or public-order or morality, or which contain matter that might tend to lead the onlooker into criminal ways.

The above briefly indicated policy is not yet completely developed, because the Censoring Commission began its labours only in 1924, and the regulations, incomplete as they are, have been in force for little more than three years. On the other hand, the number of films examined has not been so large as to call for any serious change in the list of reason for censoring; while the lack, touched on by Dr. Kiritezescu, of a local film industry leaves the Roumanian market open to foreign films, which have already been dealt with by foreign Censor's Offices or Commissions.

For purely political reasons, that is to say, with the object of encouraging the diffusion of the cinema in centres where there is a large youthful population and at the same time safeguarding the authority of the State in those centres, it has been decided to print captions in Roumanian, German and Hungarian, in cases where there is a mixed population with a prevalence of one or another ethnical group; and it has also been decided, for the same reasons, to prohibit the appearance on the screen in regions that bristle with political dangers of actors wearing Russian or German uniforms.

It is worthy of note that the censoring of films in Roumania has a time limit, and there is probably no other country in the world which has made this wise provision. The authorization card is valid for five years only. However short or long that period may appear, considering the many things that may influence the duration of a film's value or attraction to the public, there is no doubt that under this system films that have been superseded by new modes of thought and life and technique will have little chance of being shown.

This should obviate the widely deplored habit of exhibiting old films reflecting a state of mind that no longer in consonant with changed conditions of life and art, and make it impossible to go on for ever dishing up some exasperating commonplace to the public, especially in small rural centres, where there is a greater need than elsewhere for the supervision of films for exhibition on account of the lower grade of general mental development and culture. Under the system limiting the authorization to show a film to five years, film owners will no longer be able to profit, at the expense of the public, by a permission granted long ago and that now, under changed conditions, would and ought to be refused.

On this account alone, and apart from all the other points set forth by Dr. Kiritezescu in connection with the censoring system existing in his country, Roumania proves itself to be one of the very few countries that have a proper understanding of the object and value of official standards in the revision of films.
to become a school for crime and brigandage; seditious films that depict social relations in a prejudiced manner or that incite to class hatred, and lastly all films that are regarded as offensive or dangerous to national sentiment. Careful attention is also paid to the correct style of the titles and captions.

Films submitted to the censors are examined by two members of the commission. According to the report thereon made to the plenary commission, this may grant a permit for their exhibition without further ado, or may license a film subject to certain excisions being made, or else reject it. There is a right of appeal, the film being then examined by three other members of the commission, and lastly a right of further recourse, when the plenary commission examines the film. Approval is valid for five years.

The few following figures, considered in addition to those we have cited above, give an idea of the great activity of the cinema in Roumania. In 1926, 1037 films were submitted to the Commission, 20 of which were rejected; in 1927, 553 films were submitted and 14 rejected; in 1928, 741 were submitted and 19 rejected, while up to the 20th July 1929, 383 films had been submitted and 17 rejected. These figures show that the censors are not over drastic in the use of their scissors, and also that it is possible to effect a compromise whereby films, which are unpresentable in their native form, may be so touched up as to pass muster. On this account, the percentage of definitely rejected films is low. It is obvious, moreover, that the selection exercised in the first instance by the producers themselves—in their natural anxiety to eliminate trade risks—is a contributory factor.

It is none the less true that it is easier to formulate standards of judgment than to put them into practice. Ideas on morality are very elastic when it comes to applying them to art, even to the art of the silent stage. Especially is this so when they come to be propounded through the discussion of a dozen persons, who differ from one another in temperament, in the cultural standards expressed thereby, and in their conceptions of social responsibility, and who belong to, and are often the exponents of, different artistic currents. The difficulty of all this is enhanced where no definite laws or even regulations yet exist, and the work of the censorship is carried on in the light of the experience of a very few years, and when, for the same reason, the membership of the censoring commission is subject to pretty frequent fluctuations and changes, which throw together a different set of men, holding different views which have not had time to mature; men who may even find themselves for the first time in the presence of social and cultural problems, whose importance is not immediately apparent to them.

All this results in an instability in the standards of judgment which is unquestionably prejudicial to public interests and serves the interests of the importers of bad films. If, following discussions in the press, the situation seems to have taken on a different aspect, this is due to the fact that the voice of public interest does not make itself heard while film distributors can make plenty of noise.

For the sake of the reputation of the cinema as an instrument of education and
culture, this question of the censorship ought to be cleared up and its *modus operandi* defined. We have every reason to expect that this will be done in the near future, since the question has attained a degree of maturity that should render a solution possible.

The principal hindrance to the nobler rôle of the cinematograph as a means of culture undoubtedly lies in the antagonism between the commercial and money-making interests of cinema managers and an interest in the education of the masses. There is no denying that the mass of the public look to the cinema for light amusement suited to the mental level of the crowd. And since vulgarity appeals more than refinement to the mass of the population, gross, brutal and licentious shows touch the soul of the crowd more than spectacles that endeavour to awaken their finer feelings, to make them think and react to worthy and useful social influences. Speculation on the low mental level of the masses is, unfortunately, one of the tools of the cinema trade; it is this that keeps it on such a low level. There are but few concerns engaged in film production and film exhibition that disregard purely trade interests, or which, having contrived to provide better class films for the public, have achieved this *utile dulci* ideal.

On this account, propaganda by the educational film must for the most part be pursued by non-commercial concerns; either the State or special associations.

In a country of recent culture, such as Roumania, where private initiative is still weak, and the preponderance of the centralizing State must make itself felt in all spheres, the Ministry of Education has felt impelled to take a close interest in the educational cinematograph. The Ministry has made a modest but promising start through the medium of the *Casa Scoalelor*, a popular culture institution that makes gifts of scholastic material to the schools.

A few figures will serve to give an idea of the work accomplished.

From the 1st January 1924 to the 1st July 1929, the School Banks distributed 95 «Eureka» apparatuses equipped with electric batteries to an equal number of «cultural centres» and School Inspectorates, which institutions serve the purpose of extending education to the villages and rural population. 51 apparatuses of different types — «Eureka» cameras with Janus motors, Rothschild, Primus, Pestalozzi, Gaumont, Kinox, Kinnino, Cross & Wolff, Wanderer, Ernemann, Magister II Ernemann, Ica, Professional type, N. A. P. (Pathé), Symplex, Cinema Stator apparatuses etc., have been distributed to the schools of various degrees and kinds. Furthermore, during the same period, the School Banks distributed 84 lanterns for simple and binocular projection to the schools. In addition to this, a considerable number of schools have been able with their own means to acquire slide and cinematographic projection apparatus, thanks to their school committees and associations of parents and professors, which receive schools fees that they devote to the improvement of the schools.

Side by side with the distribution of apparatus, the School Bank has set up a film depository, with a varied stock of films, in which, of course, the educational or instructional note predominates. These films are circulated in rotation to schools and cultural institutions equipped with cinematographs, thus allowing
them to draw up educational film programmes. The present stock of the School Bank comprises: 170 scientific films, 114 landscapes, 75 comedies; 60 topical, 23 moral, and 43 patriotic films, 17 illustrating the life of other peoples, 24 on sports, etc. The titles of 60 films are in course of being changed to the Roumanian tongue. As a rule, a school or cultural propaganda programme includes a short lecture, a film of three or more acts, and some short single-act films, varying in number from 3 to 6 according to their length. The number of the programmes shown in the different schools and institutions, with films supplied by the School Bank, are as follows: 156 in 1927, 352 in 1928, and 209 from the 1st January to the 1st July 1929. At the present moment the School Bank is about to open, in collaboration with the big cultural intitution, the «Athenée Roumain», of Bucharest, two permanent educational cinema theatres, in premises that have been specially equipped in the basement of the splendid palace of that Institute.

I may mention that the sums spent by the Caisse des Ecoles during these last years to procure cinema apparatus and films amounts to 10,381,000 lei, or, in terms of better known European currency, over one and a half million French francs.

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While on this subject of the obstacles hampering the expansion of the cultural film, and having in view not so much the strictly instructional film as those that are educational in the broader sense of the word — that is to say the cinematograph of a kind to awaken better feeling — I should add: (1st) the lack of legislative measures to protect and encourage good films in their fight against bad ones; (2nd) the lack of a national industry. 

Up to the present, the law has viewed the film merely as taxable material producing a sure revenue. The Fisc collects from cinematographic shows, under different heads and for diverse purposes, taxes amounting to 32% of the gross proceeds of taxation.

Cinema managers are induced to cultivate popular films so as to cover their expenses. In this domain, success and scandal are synonimous terms. Sensational or bawdy films that excite the imagination, make the public gasp, and that stir up their nerves fill the halls and fill the coffers, to the satisfaction of the impresarios and the fiscal authorities. Even films of a frivolous society type and sentimental romances that attract a certain class of women, are hardly able to slip in, in the wake of films of this kind. Such spectacles do a propaganda all their own, by contributing to lower public taste. So true is this indeed that a film such as «Nanouk» fails and «The Miracle of the Wolves» barely manages to cover its cost.

Roumania has no cinema industry of its own. A few productions of different kinds — published sporadically by the Studio of Bukarest — as also the mediocre productions of certain Hungarian firms at Oradia or Arad, do not constitute any permanent business, deserving the name of Roumanian Film. Whatever the cinematograph, in its mute character, may represent in international art, it is nevertheless a fact that the spectacle of things, events and personages more closely akin to and
more in harmony with the national spirit of the audience, has a greater influence. Our country would offer an immense and unexplored field to the cinema industry. Our turbulent historical past, the beauty of our landscape, and the originality of our national types and costumes would furnish a natural framework wherein the talent of the scenario writer could insert films of sure interest and success. The lack of national capital and of trained expert personnel hampers, in its first steps, an enterprise that would have every chance of success. This is a field in which courageous foreign enterprise would do well to embark.

We have reasons for believing that these two drawbacks are on the way to being removed. The marvellous discoveries of modern technique would have no raison d'être unless they contributed something new to the psychic wealth of mankind. And the cinema cannot be relegated to the limbo of passing amusements and time-killers for the idle-minded. The day of sensation and purely fiscal interests must be regarded as having set; a future era of wider culture has dawned.

And all this is as true of Roumania as of all other civilized countries.

Prof. Constantin Kiritezesco
Director of Secondary Education in Roumania.
WHY FILM COLLECTIONS SHOULD BE INSTITUTED IN THE SEVERAL COUNTRIES

(From the German)

I. THE DEMAND FOR EDUCATIONAL FILMS.

It is really surprising that the demand for cultural and educational films, which is already rather keenly felt in all civilized countries, should have led only in very few of them, and in these in a very limited number of cases, to the collection of such films.

It would seem obvious to institute film collections, as a kind of reservoir from which the demand could be more easily filled, whether the films be required simply for general exhibition or to meet the purposes of science, pedagogics, psychology, cinematography, etc., or of the history of civilization. Why is the need for such collections for scientific purposes as well as for popular education work so keenly felt? Above all, owing to the fact that present day films are so perishable and short-lived. Dealers have never hitherto shown any interest in films with their commercial career behind them. Novelty! Novelty! is their cry. Although the reason for all this may be found to a great extent in the circumstance that the film is still in its first evolution stages, yet even in this early period of the educational film, as in the older period of the popular film, much has been produced that we would like to retain, to preserve, to see and show again. Unfortunately, there has been little or no chance of this up to the present. The required films simply could not be got hold of again, as they had been thrown away, destroyed, or used up in the shape of waste material.

It might be inferred from this that there was previously no great demand for such films or that such requirements as existed could be somehow sufficiently

(Author's Note.) This paper was already written when the first issue of the «International Review of Educational Cinematography» appeared, containing a statement about the creation of a film collection through the International Educational Cinematographic Institute. This central collection should be welcomed. It had already been suggested in the first draft of the present article, the purpose of which was, and is, to stimulate the institution of such public film collections, which should promote simultaneously the collection, the study, the improvement, and the distribution of educational films for teaching and popular education purposes. This contribution, therefore, supplements and amplifies what is put forward in the introductory article to the first issue of the International Review, as it deals with the whole question of the institution of public film collections.

(Ed. Note). The contribution of our illustrious collaborator, who has done so much for the educational cinematograph in Austria, touches on a question of the greatest interest. During past years many eminent students of cinema problems have examined the question which is here so amply and authoritatively dealt with by Prof. Witt. A later issue will contain a further paper of considerable importance on this question.
filled. It is therefore necessary to deal first with the question of the demand. In this connection a distinction should be made between the general demand and the demand for educational purposes. The second part of the above inference is no doubt correct in respect of the general demand, since although the inventor of the cinematograph had chiefly scientific or cultural purposes in view, and although the exceptional value of the moving picture as a teaching and educational medium was soon realized, yet the pioneer work of those who wish to introduce the film into popular education work and into schools is still a wearisome struggle against opposing opinions and forces, against the superficiality and thoughtlessness of those to whom the nobler kind of film appeals, and against the lack of means. It is only since Dr. Ludwig Koessler, president of the Vienna Urania Institute for Popular Education, the Deutscher Bildspielbund (German Central Association for Recreational Pictures), and similar public spirited institutions demonstrated that not only sensational films, but also the film with an educational and ethical value can, if properly produced and exhibited, attract and interest the general public, that producers and dealers have begun to bestow more attention to the matter. However, the trend of the film market and other well-known circumstances have hitherto hampered any more favourable development. Hard educational work will have to be carried on for many years before the present untrained taste with regard to films be superseded by a better and more refined taste.

This applies even more forcibly to the real educational and teaching film. After Dr. R. Meister, a university professor of Vienna, other eminent educationists have emphasized in Germany and Switzerland the difference between the educational film, in the broader sense in which it was formerly understood, and the teaching film in the narrower sense corresponding to the views of modern pedagogics (1).

While formerly all films which were not merely recreational were considered educational, an exact discrimination of special films is now made. These have one thing in common, namely, that their production is relatively costly and that, comparatively speaking, they have not a ready sale. The people who are most anxious that such films should be circulated and who themselves wish to see them are yet too limited in number, and they are generally not of the wealthiest. Neither schools nor voluntary institutions for popular education in any country, America perhaps excepted, are in a position to spend large amounts of money on the exhibition of such films. There is indeed a large potential demand, which is voiced by educational pioneers in publications and at congresses, but the capacity of absorption is in fact limited.

Nevertheless, taken altogether, the demand is considerable, and it would be desirable to have precise figures as to its actual extent. The International Educational Cinematographic Institute in Rome will perhaps undertake this statistical

investigation. The figures obtained would be eloquent. They would either show that film producers would do well to produce more educational and cultural films than in the past, with a view both to protecting their own interests and contributing to the progress of education, or they would speak in favour of the educationists and popular instructors who advocate the use of the film for educational and cultural purposes, and who should be supported in their work by all possible means. The pursuit of this statistical enquiry would undoubtedly also show that it had not been made in vain, and that in the schools of every degree, from scientific colleges down to elementary schools, as well as in popular (adult) education, the moving picture is used in a constantly larger measure and with evident success as a teaching and educational medium. The demand has no doubt been growing for years. The statistical data, in order to reflect correctly the demand, should not record merely the cases in which films were actually used, but should register also requests that could not be complied with owing to the scantiness of the film stock.

There was indeed talk, particularly a few years ago, of a crisis, of bad times for the educational and also for the cultural film. A few big film producing concerns gave up their educational film departments and a few educational film producers were ruined. But it would be erroneous to infer therefrom that films of this character have no prospect of success. It was, really, only the unsuitable and excessive production at a moment when the special market had not yet sufficiently developed, which led to that purely business crisis. Perhaps the work was not always carried out by the right men, not to speak of the lack of experience. A peculiarity of the film lies in the fact that, contrary to what generally obtains in the case of the book, it is not intended for one single country, but as a rule for a whole continent, or even for several continents. This does not apply in full to the cultural film, because fundamental educational methods differ in the several countries. All these circumstances are of essential importance when it comes to the question of estimating the demand. The crisis above referred to is then to be considered only as an infantile disease of the educational film, and should not diminish the conviction that there actually exists a considerable demand which is growing from year to year. To increase this demand, to eliminate «infantile diseases» and opposition, and to help bring about a state of things that will allow of the demand being filled in all countries to the full satisfaction of both producers and users, should be one of the principal tasks of the national, and still more of the international, organizations and official bodies concerned, and therefore also of the Rome International Educational Cinematographic Institute created by the League of Nations.

II. SUPPLYING THE DEMAND FOR EDUCATIONAL FILMS.

The educational film producers will ask themselves: What educational films shall and can we produce that will prove a business success? The reply to that question is by no means easy, because the requirements will be approximately the same only in neighbouring countries speaking the same language and having
a kindred culture. All the more important would it be to know and to study those films which have proved a commercial success in a given cultural area. These films should be traced and the reasons of their success investigated. However, much could be learnt also from failures, and those films which were less successful or failed to achieve any measure of success should also be made the object of careful study, with a view to finding out the reasons of their partial or total failure. At present the estimation is quite one-sided and superficial. The unsuccessful film does not yield money, it doesn’t sell, and it consequently disappears from the scene. Film dealers are not likely to have given much thought heretofore to investigating the psychological causes or the special circumstances to which success or failure may be due. Should I however be mistaken in this, it would then be extremely desirable that the producers and dealers who have made such investigations should publish the results of their researches in the International Review of Educational Cinematography. From such contributions as well as from the results of the suggested investigations, and from an accurate study of successful films — having due regard to the mentality and educational methods obtaining in the countries where they were exhibited — educational film producers could doubtless derive precious indications for their production. It is high time that also the film industry should advance from the stage of empiric production, based simply on rough estimations, to the phase of methodical production founded on the results of psychological research and study.

The question of how the popular educationist and the school teacher can procure the films most suitable to their purposes has been repeatedly mooted and discussed, but never yet satisfactorily answered. In a number of cases all the seeker can do is to apply to individual dealers or to concerns, who can, of course, only offer what they have actually available. This problem was already thoroughly dealt with by the author in a paper read by him at the Congress for Cinematograph Reform held at Vienna in May 1924 and on the occasion of the First Austrian Educational Week, which took place likewise at Vienna in October 1925 (1). Although the collection of films together with their negatives was also recommended by others (Dr. Ackerknecht, Stettin, and Prof. Dr. Ammann, Munich), no such public, generally accessible collection exists to this day. Naturally the negative and positive stocks of film producers or dealers cannot be taken into account, and neither can the limited school collections which include but a few items. What are these collections compared with libraries! Voluntary institutions for popular education or associations for school cinematographs, as for instance the Austrian Urania Association, the Popular Library, the Vienna Association for Popular Education, and the Austrian Association for School Cinematographs, endeavour, individually or collectively, to procure and collect the necessary material, either by stipulating

firm contracts with film hiring concerns or by acquiring suitable films when opportunity offers. In so far as they do not use these films exclusively for their own purposes, but by lending them make them available also to schools and institutions for popular education, they materially contribute to the solution of the problem of supplying the demand, and the value of their contribution is proportionate to the abundance of their stock, to the easiness with which their films can be obtained and to the number of users to whom they are made accessible.

III. What are the essential points to the film user in connection with the supply of his requirements? (Functions of public film collections).

These points are:

1) information as to the existing material;
2) possibility of making a selection;
3) fitness of the film selected;
4) actual possibility of obtaining the film at a given moment;
5) financial possibility of hiring or acquiring the desired films.

An analysis of these points will show that numerous considerations point to the desirability of the institution of public film collections in every country, and will evidence the many auxiliary functions that can be performed by such a film service with a view to furthering the use of educational films, to the advantage of young people, who are thereby materially assisted in their heavy intellectual work.

1) However large one or other of the existing collections may be, and however accurately their catalogues may have been compiled, such collections nevertheless consist only of a stock that can go but a very little way to satisfy pedagogical and educational requirements. As existing collections are either held by business concerns or owned by institutions for popular education, which, being compelled to turn their films to the best possible account, cannot indulge in much altruism, there exists only an extremely limited number of comprehensive lists of cultural or educational films, such as the catalogue published in 1927 by the Deutscher Bildspielbund (German Central Association for Recreational Pictures of Berlin). That organization owns also a film and photo collection, as do also the Sächsische Landesbildstelle (National Picture Institution of Saxony), of Dresden, and the Bayrische Filmstelle (Bavarian Film Institution), of Munich. The Württembergische Bildstelle (Wurtenberg Picture Institution), of Stuttgart, also owns a film collection. The Urania Association of Vienna has set up, jointly with the Austrian Association for School Cinematographs, the Austrian Records of Educational Films.

Existing lists, however, do not supply sufficient information as to all the educational films that can be procured at the present moment. It may be said at most that the several lists compiled by the bodies above referred to include the films accessible to their members or their fellow-citizens. Of all the existing lists, the catalogue of the Deutscher Bildspielbund is the one that can claim most general importance. Thus we still lack the necessary information, and only the constant
co-operation of all the bodies above mentioned, or the concentration of their efforts, can make it available. This was amply discussed at both the First European Conference for the Educational Film held at Bâle and the Hague Educational Film Conference, and the film card catalogue which the International Chamber of the Educational Film, at present located at Berlin, contemplates building up is directed to this end. The compilation of such records, at first in the several countries, and later the institution of a central card index which would concentrate in one centre the material collected in each country, appears absolutely necessary, since only if the whole material be constantly collected and so arranged as to be easily and rapidly consulted, will it be preserved from becoming obsolete and will it fully answer its purpose.

It is no easy task however for associations or other private organizations to undertake and carry on permanently such a work. Only a public organization, acting with the means and connections at the disposal of State authorities, affords an adequate instrument for collecting information within the several countries, and only an international organization founded on inter-State agreements and financially supported by the different Governments could constitute the central organ (1).

2) The bare knowledge of what is available is, of course, insufficient to supply the demand. Users must be in a position to make a selection and actually to obtain the selected films. Means must be found whereby users can be sure that they may select as they please. They must therefore be supplied with certain indications as to the contents of the films. The bare title is, of course, not sufficient. The essential features of the film contents should be recorded on the index cards or in the catalogues as is done in the Leipsig book lists.

Besides this there is the question of the way in which such records should be made available to users. Hence, either a catalogue of all recorded films should be published and kept constantly up to date, or at least inquiries from users should be fully replied to by an advisory and information department, which should send them multiplex copies of the lists. The question of an extensive selection and of the possibility of obtaining films that are not paying propositions and can perhaps be only seldom utilized, will be dealt with under point (4).

3) As to the question of fitness, it should be noted that the catalogues above referred to, or abstracts from the same, do not afford the user any security that the film selected actually answers his requirements, just as a business catalogue or prospectus gives but a vague notion of whether a book or article answers practically to a given purpose. To this effect the recommendation of a trustworthy body becomes necessary. The reputation of a concern or association is in many cases sufficient, and may be, so to speak, blindly trusted. But the question of trust is a particularly delicate one in such a new field as that of the film, which is often dominated by purely business motives. As a rule, a wholly objective appreciation and recommendation can be more reasonably expected from an official department, which is accountable

(1) See the introduction to the first issue of the "International Review of Educational Cinematography".
to the public, than from a private body. This, of course, is not in the least meant as a reflection on the impartiality of eminent and public spirited cultural institutions, the present article, being a purely objective contribution, which considers the subject matter from all points of view and with due regard to conditions prevailing in the several countries.

Now, who can appreciate the fitness of a film and recommend it conscientiously on exclusively objective grounds? Evidently only a body that has actually viewed it, that is to say that has had it examined by a committee, and is moreover in a position to verify its contents at any moment by means of a documentary specimen it must have on file. It is absolutely insufficient for the body in question to examine a film if it does not possess a copy, since it is well-known that films lend themselves easily to alterations. One has only to cut out or substitute parts of the ribbon or of the wording to get a film the contents of which differ very considerably from the original. It may aptly be compared with a sentence or a book from which important parts, words, or punctuation marks have been omitted or replaced by different ones. It might even happen that a film with the same title, and the parts of which bear more or less the same captions as another, be improperly or by mistake put into circulation, although it has nothing in common, apart from title and captions, with the film examined by the official body. Only the possibility of carrying out at any time a comparative test can give full security against incorrect descriptions, arbitrary alterations, casual mistakes, and intentional interpolations; a recommendation regarding a given film cannot apply to a production that has been tampered with. In the case of text books care is taken that a standard copy be deposited, and authenticated copies are kept in connection with all legal transactions, whether of a public or private character. An authenticated copy of all films handed in for the test qualifying them for recommendation ought likewise to be kept and should be available at any time. It stands to reason that the examination should be a perfectly objective one, and should have regard to all requirements of popular education and teaching, as otherwise it would be a mere absurdity. Each country, moreover, would of course have its own standard for recommendation.

4) But even when proper information has been made available for the purposes of selection we are still a long way off from supplying the demand. Even when a suitable film has actually been chosen, it may under prevailing conditions be unobtainable in many cases. In order to pay its costs, a film must have large audiences. Hence its holder, the lessee or renter,endeavours to secure for it the necessary attendance by establishing a monopoly similar to that set up by the producer and dealer, who, according to the usages of the trade, when selling or hiring a film, stipulate that the right of exhibition shall be limited to a given area and an agreed period. Thus it frequently happens, for instance, that cultural cinemas or schools apply in vain for an existing film to educational institutions or to film producers or dealers, because the producer or dealer has already stipulated a contract in its regard with a cinema or association located in the neighbourhood of the applicant. And as cinemas and cultural associations
in most cases stipulate agreements with quite a number of film holders or dealers, cultural and even school cinemas may in some cases be actually compelled to cease operations. The question of the actual availability of a film is therefore of the highest importance. In this connection it makes no difference whether the film holder is a purely commercial concern or a public spirited institution. The difficulty can be remedied only by public film collections with an adequate film stock.

By this we do not of course advocate a State monopoly of cultural and educational films, but merely what should be a subsidiary function of public film collections. This auxiliary function, as in the case of photographic collections, is indispensable, because all privately supported film collections, whether belonging to business concerns or to public spirited institutions, must be formed of films which offer a reasonable security that the money spent on them will be recovered in a comparatively short period. Furthermore, owing to the pressure of competition, such collections cannot be replenished systematically, but as a rule they are added to only by occasional purchases made when the situation of the market permits. Now, for instructional and scientific purposes, and those of popular education, there arises at repeated but perhaps rare intervals the necessity of getting films which interest only a comparatively limited circle, but are of the utmost importance to those interested. Only a public body can be in a position to collect such films and to make them available, whenever the need for them arises, for a low fee. Only such a public organization, possessing adequate means, could systematically produce films for the above purposes as well as for popular instruction (in hygienics, economics, general culture), and with highly beneficial results. Only such a body could have at its command the whole scientific, pedagogical and State apparatus, and, as it would not be hampered by business considerations, it would also be in a position to carry out a film producing program without having to make any concession to bad taste. There is here a chance for a division of labour satisfactory to both parties, between the public film collection and the private film hirers, who are so strongly influenced by economic motives. The co-operation of film experts would obviate exaggerations, waste and dilettante experiments.

It is particularly important that users, especially schools and scientific institutions, should be able to obtain the required films within a reasonable period of time. While for reasons of economy, it might not always be possible to supply all schools simultaneously with the films wanted, still the exigencies, of a regular course of instruction make it imperative that the films should as far as possible be made available at the right moment. The public film organization would therefore have to help not only as regards the quality of the films but also their quantity.

5) All users of educational and teaching films must, even more than cultural film users, see that they get their films at a relatively very low cost, as they are not in a position to recover their expenses. Scholastic cinemas for elementary and secondary schools in particular will have to go in more and more for the free exhibition of films. In any case, only a very small proportion of the costs incurred can be included in or added to the school fees (like the laboratory charges to be paid in universities, etc.). But that should not be an obstacle to the utilization, already
too long delayed, of this modern teaching medium, the possibilities of which are very far indeed from having been fully explored. Indeed in a near future we shall have to abandon methods and media of teaching which are becoming obsolete, and to bring up and educate our children by the most modern means of teaching and in accordance with ideas very different from those still obtaining, if we would avoid the risk of physically and intellectually injuring the future generations.

Do we not even now pass half our lives sitting on school-benches? At present, however, the financial difficulties in connection with the purchase and renting of films are a powerful obstacle to a wider utilization of that excellent medium of demonstration. The crucial point lies in the business necessities of the producer on the one side and in the limited means at the disposal of users on the other. Even a public collection of educational films will not of course be able to spend excessive sums. It may however, be confidently hoped that the present situation will prove only transient, and that the progress of technique will tend to cheapen considerably the production of films, while on the other hand increasing business will cause a fall in their price. If it be taken into account, further, that teaching films are in general comparatively short, and that the teaching equipment of present public schools includes great numbers of the same apparatus — stuffed articles, wall pictures, wall maps, and books — the average cost of which is certainly not inconsiderable, it will be granted that the above prediction is not altogether unfounded. It should, moreover, not be supposed, that the cinema will be an absolute addition to the previous equipment and expenses of schools and cultural associations, since the development of this means will render superfluous many of the items now in use, these being for the time replaced by the film, itself perhaps destined to be later on wholly or partially superseded by a better and more suitable medium. The estimation of future requirements is not a simple matter of addition or multiplication but involves a higher ethical standard. The question is now one of surmounting a difficulty which cannot be overcome by the interested parties alone. They are unorganized and not sufficiently informed, and the public film collections we advocate should serve the purpose.

Another question that deserves consideration is that of the institution of a collection of films of historical importance. Such a collection exists already in Holland, at the Hague. At the suggestion of the Dutch cultural film pioneer D. Von Staveren, a collection of historical films was started there, many years ago, so that these are now available in quite a considerable number. They were screened in part on the occasion of the Hague International Film Exhibition of 1928, and were found extremely interesting. How valuable it would be to possess the earliest films in their different stages! — how deeply it will be regretted in the future that the negatives or at least copies are not available of the hundreds of different kinds of special films notable for their artistic value or their cunning! And how severely we shall be blamed by future generations because we, who stood by the cradle of the film, did not think of preserving for them those records of important events in the cultural, military, and biological domains; films bearing on scientific investigation, and those showing great catastrophes, the pictures of celebrated or
historical personages, of sporting achievements, etc. Here is an extremely important task for the public collections.

Much is spoken of the exceptional importance of the film. It has already been recognized — whether or not one regards it as incongruous — that the film and the cinema mean now to the majority of mankind much more than the theatre; indeed, we know well how deep and lasting and sometimes how dangerous the influence of the screen can be. And yet hitherto no thought has been given to instituting film collections similar to the libraries or phonographic records now existing (1). Nor does there probably exist any single scientific institute especially devoted to film research, although science would have every reason to investigate this domain in all directions (2). While making all due allowance for the youth of the film, it is none the less incomprehensible and wrong that it should not be taken seriously by so many influential persons and circles, and that it is still too often treated as a child from the slums. Instead of developing its faculties and applying them to the noble purpose for which it is predestined, its talents are mostly used to satisfy the mere love of sensation.

It is dragged into the dens of vice and is compelled to lend itself to the silliest jokes; at best it is suffered to lead a more or less decent adventurer’s life. All that is noble and worthy in it is degraded, the only thing that counts is to make money!

Now that society has neglected its duty and the child trained to venality threatens degeneracy, pains are taken to keep it out of the way. Has perhaps the cry for censoring and prohibition ceased to make itself heard? The voices demanding that it be saved, improved, and made useful to mankind, that it should be well cared for with due regard to its destination, are still too weak, although the fact is being gradually recognized that the film is no diabolical product, a wretched inventor’s fancy, the creation of a crisis of materialistic culture, but is something of such great potential importance for the future development of mankind that it may aptly be compared with the art of printing.

Public film collections such as are advocated in the foregoing, although their sole purpose would be to encourage and assist, would be a powerful means towards the useful and beneficial utilization of the film. Therefore, let us establish public film collections! (3).

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(1) Here I must recall my first footnote, and take notice of the intentions in the meantime announced by the International Educational Cinematographic Institute. Small film collections do exist, but what I have in view are film collections of the magnitude of university or national libraries.

(2) An institute for film research is now being built at the Vienna Technical High School.

(3) It is confidently hoped that such a film collection may be instituted in Austria before the end of this year in connection with the Cinematographic Service. The International Review of Educational Cinematography will report on that organization in due course.
THE CINEMA AND CHILDREN.

All those who are concerned with the study of social problems are unanimous in regarding the question of the influence of the screen on the minds and education of children and young people as the most crucial of all the questions connected with the cinematograph. All other cinema problems are more or less remotely dependent on this. The one essential question is whether the cinema is a blessing or a curse; whether or not it may exercise on the exquisitely delicate and personal sensibility of the child an influence that goes beyond those normal reflexes of sensation and emotivity that are harmless to the unfledged spirit.

The International Educational Cinematographic Institute, ever since the publication of the first number of its Review, has stressed the need of an enquiry embracing all problems connected with the film in its influence on the young. Apart from articles of a purely theoretic character, such as those by Aloysio de Vincente, Henry Carton de Wiart, Alberto Lutrario, and Luis A. Baralt, we may recall the special studies made by Giulio Santini and Hans Cürlich, which formulated theories of a strictly didactic tenour; that of Maurice Rouvroy, dealing with some psycho-pathological problems of the cinema; Thomas E. Finegan’s and André de Maday’s enquiries; « A Discussion of Motion Pictures in their relation to Children and Education », which appeared in our issue of September 1929, and « Crime and the Cinema in the United States » published in the same number, and which weighed the pros and cons of the two opposite viewpoints as to whether the cinema can or cannot be regarded as a school of criminality and corruption for adults and children. This latter article aroused the liveliest controversy in all countries.

Viewed in the light of the theoretical and practical studies that have appeared in the Review and of the enquiries which the Institute is carrying out in pursuance of the resolution passed in Geneva in April 1929 by the Committee on Child Welfare, this problem appears to present two different aspects — one purely didactic and one social.

As a matter of fact, these two aspects, if they do not actually merge into one, have many points in common. The principal aim of the science of teaching is to find out how the child can derive the fullest measure of knowledge from the lessons taught him and grasp and understand their inner meaning with the greatest ease. Thus teaching is ever in quest of new means that may efficaciously help in the noble task of moulding the young mind. And in the pursuit of its immediate and remoter aims, teaching necessarily fulfils an essentially social mission. The child who enters upon life well prepared by a healthy and modern system of education is at once in a privileged position and better able to defend himself against the social perils that beset his path. Knowledge spells the power to reason and the
power to discriminate. Thus the youth whose mind has been trained from childhood by methods of teaching consonant with his disposition and his physico-psychological capacities, will be able to hold his own, unmolested or but little hurt, against the manifold dangers and temptations that beset his senses and his soul during the evolutionary stages of his career.

In any case, the Rome Institute is studying both aspects of the question with the greatest attention and will publish month by month the results of the enquiry it is carrying out, in preparation for the definite views and proposals it intends to formulate on the didactic and social contribution of the screen to children's education.

The didactic aspects of the cinema are clearly delimited. We are here concerned mainly with a knowledge of the different systems of visual instruction practised in the several countries and with discovering their remote origins — a point of great historical and pedagogical interest; examining the possibilities offered by the screen as a means of replacing or completing oral instruction; determining to what branches of learning it lends itself most successfully; in what practical manner it can most efficaciously be used as an instrument of instruction, and hence the technical points to be observed in the production of teaching films — projection apparatus and conditions of exhibition — (halls, length of films, lighting, and so forth) and whether and to what extent the latest inventions of cinematographic science (sound films, talking films, colour and stereoscopic films) may be utilized for teaching purposes.

On the other hand, the study of social questions involves a whole series of enquiries, to which there is practically no limitation; from an enquiry into the possibilities of the employment of children in cinemas (especially in connection with the advantages of creating special cinemas and films for children) to a general enquiry into the direct and indirect influence that the screen may exercise not only on children's health (eyesight, effects of close atmosphere, etc.), but on their mental development and their immediate and future tendencies. It is in fact bound up with the whole study of pediatrics, psychology, psychiatry and criminology.

Thus it behoves us to examine whether the cinema, which to-day offers the greatest of all attractions to children, is under present conditions a blessing or an evil, a help or a disturbing factor in their lives, and what steps ought to be taken for the revision of films suited to children (apart from purely didactic films), so as to render them of real educational value in social life.

But the social problems of the cinema, which offer such unlimited scope for study that they cannot even be enumerated here, are by no means confined to the young alone. In a certain sense it may be said that the cinema, both in its technique and in its capacity for specialized training, is a social problem in itself. It is in close contact with the problems of hygiene, social welfare, trade risks, farm life, and labour in its dual aspect of vocational orientation and rationalization. It is in direct touch also with the legislative domain, owing to the uses to which the film can be put for the ends of justice and as a means of re-educating prisoners and children in reformatories, etc. It has contact even with the field of publicity,
the publicity film being nothing more nor less than a means of diffusing educational and therefore social ideas.

Roughly speaking, and without going into details, such is the general scope not only of our own work, but also of the task to be pursued by all those interested in the problem, to whom the International Review appealed ever since its first issue to help in the common endeavour by the contribution of articles, the enunciation of theories, and in the essentially practical field of the collection of data and information.

The enquiries which we have examined and are about to examine — among the latter I may mention the enquiry made in America by Mr. North, of the Department of Commerce, and the enquiry carried out in Italy by Dr. Cimatti, of the Laboratorio Fossati of Turin — are of a practical character, being less concerned with studying ideal possibilities than with the tangible demonstration of actual facts.

We are now able to set forth roughly the results of an enquiry made by Dr. Elkin with regard to the influence of the cinema on Russian children (1). M. de Maday’s enquiry, and those carried out by Mr. Finegan and Dr. Lampe, dealt entirely with the children in certain schools. The enquiry described in the article « A Discussion of Motion Pictures in their relation to Children and Education » had a wider scope. Dr. Elkin’s enquiry is still more far reaching. It descends in the social scale to those children who do not attend school at all, and for the purposes of the enquiry, it distinguishes between children of the different social classes to which the enquiry applied.

(Dr. Elkin). In his story «The Basin Street Crime», Alexis Tolstoi describes the influence of the cinema on children. He cites examples of children committing crimes under the influence of the cinematograph.

The cinema occupies a very big place in the life of children. As far back as 1911 a Judge of the Childrens’ Court in Liverpool called attention to the fact that in England about 13,000 children aged under 13 attend the cinema daily. In 1913 Professor Zak made a similar enquiry in this country, and noted that 40.9% of the 1,193 children attending schools in Moscow, declared the cinema to be their favourite amusement. 100,000 children frequent the New York cinemas every day.

So far, we do not possess much material on the question of the influence of the cinema on children. During these last years two or three articles have been written on the subject, as for instance «The Cinema and School-children» by M. Pravdoliuboff, published in the Review «The School of the Future» (No. 2, 1927) and «The Influence of the Cinema on school-children» by Madame Stantcikoff-Rosenberg, published in the Review, «The Worker and Education» (No. 2, 1927).

We have recently carried out an enquiry with a view to ascertaining what it is that attracts children to the cinema. We put a number of questions concerning the different aspects of the cinema. These questions were as follows:

1. Do you like the cinematograph?
2. How many times a week do you go to the cinema?
3. Why don’t you go there oftener?
4. What films do you like best?

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(1) Kino i Kultura, Moscow, No. 3, 1929.
5. Why?
6. What film that you have seen ha smade the biggest impression on you?
7. Why did it impress you?
8. Describe the pictures that you liked best in this film?
9. Which do you like best, the cinema or the theatre?
10. Why?
11. What films have you seen more than once?
12. Why did you watch them more than once?
13. Do you feel tired or get headaches after going to the cinema?
14. What do you like doing after you have been to the cinema?
15. What day of the week do you like best to go to the cinema?
16. Why?
17. What time of the year do you like best to go to the cinema?
18. Why?
19. What would you like to change in the cinema?

So far as the questionnaire is concerned, the Elkin enquiry is much nearer akin to André De Maday’s than to Mr. Finegan’s purely didactic enquiry. Questions 1, 2, 4, 5, 8, 14, and 18 of the Elkin questionnaire are substantially the same as those put by M. De Maday. The Russian student has further sought to ascertain how long the cinegraphic impression lasts with children (Questions 6, 7, 11 and 12); children’s preferences in respect of the two great imitative arts, the cinema and the theatre (Questions 9 and 10); the immediate physiological effects following on the show (Question 13) — a point of the highest importance in relation to children’s school life and home life — and the critical taste displayed by children with respect to the screen world, which is so often false to life and in contradiction with its realities.

These questions have in all been addressed to 1,074 children, 774 of whom belong to workers’ schools and 300 to the «Besprisorny» shelters for abandoned children. These children were divided according to their social position into 374 workers’ children, 127 civil servants’ children, 127 children of the lower middle class, and 300 «Besprisorny» children; in all 560 boys and 414 girls. With respect to age, they are classified as follows: 208 children aged between 8 and 10 years, 384 from 11 to 13 years, and 482 from 14 to 16 years. The questions above enumerated were put verbally because a part of the children — 100 of the «Besprisorny» children in particular — were barely able to write, and also because in this way the answers were likely to be more spontaneous and truer than written answers would have been. The children questioned were kept apart from one another, so that they might not be influenced by their companions.

The value of the Elkin enquiry lies mainly in the differentiation between the children of different classes. We are here dealing with 374 workers’ children, 354 children of the middle and lower middle classes, and 300 little waifs, who probably never knew a mother’s love or the teaching of a master. The school and the street: on the one hand, the progressive capacity for self-control resulting from teaching and guidance, and on the other, the sad realities of life practically and painfully learnt from contact, in the tenderest years, with its ugliest side.

There are very few children at the present time who do not like the cinema. Among those whom we questioned, there were only 40, that is to say 4 %; 96 % like the cinema and chose it as their favourite pastime.
In our country as elsewhere children attend the cinema very regularly; some of them for instance go there every day (17 of the children we interrogated stated that they did).

The «Besprisorny» children are the most assiduous cinema-goers; their average attendance is 1 and a third times per week; the workers’ children come next (1 and a seventh times per week); the children of civil servants and of the lower middle classes foot the list, going there only 0.9 times per week. What is the explanation of this fact?

The frequency with which children attend the cinema depends on their social position. The «Besprisorny» vagabonds who are always about the streets and are idle by force of circumstances, are attracted by the cinema because it is the only place that admits them; they are driven away from theatres, and have no means to enable them to get into libraries and schools. Thus the only pastimes open to them are the cinema and playing cards. They try to sneak into the halls without being noticed, but sometimes they pay their entrance. Workers’ children, who also have scant means, choose the cinema because it is the cheapest form of entertainment; theatres are very expensive, and then also the subjects dealt with by the film are simpler and more comprehensible to the children than those dealt with in the theatres.

It should be noted that frequentation of the cinema varies with the age of the children; children from 8-10 years go there 1.8 times a week; those aged from 11-12, 1.3 times a week and those aged from 14-16 go there only once a week. This is due to the fact that with the advance of age other and more serious interests attract children—theatres, libraries, etc., and as a consequence their attendance at the cinema begins to fall off.

It is interesting to note that boys go to the cinema more frequently than girls: the percentage is 1.18 times a week for the boys and 1.2 times for the girls. This is explained by the fact that the boys find it easier to get into the cinema than the girls, and also by the fact that the girls are more inclined for domestic occupations at home.

This difference is much more striking in countries where the difference between the conditions of life and education of the two sexes is very pronounced. Prof. Langeberg, of Cologne, noted this fact in the High School of that town, the boy pupils of which attended the cinema 34.4 times a year while the girls went only 4.01 times.

It must be stated that the children go to the cinema much less frequently than they would like to. This is due to lack of means (69 %); for this reason most of the children urge that the price of the tickets should be lowered; lack of time (16 %); bad eyesight (2 %), and rarely owing to indifference (13 %). Most of the children go to the cinema in their spare after-school hours; 72 % go there on Saturday and Sunday. The «Besprisorny» waifs, on the other hand, who are always free, go there all days of the week, but among them also we find 56 % who prefer going there on Sundays or holidays because the impression made by the film is enhanced by the presence of holiday crowds.

The children go to the cinema much more often in the winter. This is explained by the fact that they are occupied all day in winter and feel the need of the rest and diversion that the cinema affords, and also because our halls are not well adapted to summer shows, being cramped and stuffy. Summer takes the second place (16 %); autumn third (7 %), because the children are busy preparing for the school year, and spring comes last (2 %), because the fine season attracts them to country outings and they have no time to go to the cinema.

The «Besprisorny» vagabonds, who are free all the year, pay no regard to seasons. 42 % of them go to the cinema all the year round. Summertime, however, is the favourite season with them (30 %). During this season, in fact, most of the seats are occupied by children of this class.

The enquiry we have made shows most clearly that the majority of the children (66 %) prefer the cinema to the theatre; 33 % prefer the theatre, and 1 % like them both equally well.

We have been able to note that the children in general prefer adventure films, such as

47 % of the children are attracted by « stunt » and acrobatic films; the « Besprisorny » children more especially have a liking for these (5 %), and the civil servants' children are the least attracted (44 %). As for sex distinction, films of this type appeal to 55 % of the boys and 39 % of the girls. This interest is modified by age. Children aged between 11 and 12 are in the first rank (52 %), and children between 8 and 10 in the last (40 %), while children aged between 13 and 15 years come midway (49 %).

M. Pistrak states that children aged between 10 and 15 years differ entirely from adults in their outlook upon life. Their imagination is very lively and they look at life from a very personal and always a heroic or romantic standpoint. The same is shown by their preferences in literature: Jules Verne, Aimar, Fennimore Cooper, etc.

Another class of films that attracts these children are those of a social and political tenour, illustrating revolutionary deeds and the struggle for liberty.

The percentage of children in favour of these films shows a frequency of 21 %, and the interest increases with age. At the age of 8-10 only 11 % favour them; 16 % aged 11-12; and 35 % aged 13-14. The boys are distinctly in the majority here also: 24 % as against barely 19 % of the girls.

The « Besprisorny » children are in the first rank among lovers of the revolutionary subjects: 26 %, while other classes give 17 %.

The favourite films are « The Potemkin », « The Mother », and the « The Little Red Devils ».

Children like films showing big crowds, workers' heroism, their grit in the struggle and their complete victory. Pictures of this kind, which only the cinema can show, account for their preference for it over other forms of amusement.

Dramatic films are also liked by the children (11 %). The girls are in the majority here, 13 % against 9 % of the boys. Here again interest increases with age. Children aged from 8 to 10 years give a percentage of 4 %; those aged between 11 and 13 years 5 % and those aged between 14-16 years 24 %. The favourite films are « Rosita », « By the Servants' Staircase », « When the Lighthouse went out » and « For Duty's Sake ».

8 % of the children prefer the comic films. The favourites among these are « Some Hospitality ! », « Three Stages » and « The Torkol Cutter ». Buster Keaton is the favourite actor.

The children are not in the least attracted by cultural and scientific films. It should however be noted that not many films of this kind are on the market and therefore the children can hardly remember them. Only 5 % of the children pay any heed to scenery films in preference to other features of the pictures. The boys also like films showing pictures of modern technical systems, the life of animals, and travel. In general the children do not love nature and are not interested in it.

A type of film for which the children have a special predilection are those of a legendary character with gorgeous and luxurious staging. The very fine film « The Niebelungen » may be mentioned as an example of this kind of film; 15 % of the children mention it as their favourite.

Such are the returns of our enquiry. They are certainly not perfect, but are merely of a preparatory character.

The conclusions, however synthetic, of the Elkin enquiry do not differ materially from those of De Maday. We may, indeed draw up a parallel table of preferences from these two enquiries.


There are three main points of difference. The different social environment of the children to whom the enquiry applied (in Switzerland the high percentage of waifs and strays was lacking and the middle and lower middle classes were represented in a much larger proportion than the working classes); the diverse dispositions of the two populations, and the Swiss childrens' higher knowledge and experience of the film as compared with the Russian children.

It stands to reason, moreover, that a more homelike and domesticated manner of life, under a closer control over feeling and education, is conducive to a serener view of life and therefore induces a preference for its comic side and for the simple knowledge of its facts (comic and documentary types) rather than for those aspects that reveal a feverish longing for something new, for a different life with wider horizons, in the realm of dreams rather than of reality.

The detective type of film is most obviously and fatally on the wane. This points to a cinegraphic taste that is setting and has no chance of a new dawn.

The scientific-cultural film is still feeling its way. Dr. Elkin notes that this is due in Russia to the lack of the first essential element — good films of a cultural and educational kind. The same ought not to be true of Switzerland. But it is certain that everywhere, notwithstanding the very fine efforts made by educators and lovers of children, the production of films of a kind to teach and to render subjects of this kind popular is still far from being an accomplished fact, though excellent theories may have been formulated.

The producers of films of this kind must at the same time have a knowledge of science, teaching, and psychology; or must obtain collaborators in these three fields, for all three are equally essential in the production of the celluloid ribbon destined to leave an impression on the developing mind.

Another very important point revealed by the Elkin enquiry (the other conclusions are lucidly commented on by the author himself) is the choice as between theatre and cinema; 66% of the children interrogated expressed a distinct preference for the cinema. This too has its logical explanation and confirms once again the superiority of visual teaching. The cinema is synthetic, rapid in its development of the central action and all its details, allows of a minute and accurate care for technique, light, movement, and scene setting. It demands less brain effort and thus gives greater enjoyment. The theatre is based on analysis, the slow development of action — all excellent things for adults and critics, but bad for children; it has not got the same technical possibilities as the cinema enjoys, the scenes are less moving, especially in the case of drama unaccompanied by music.

* * *

Our enquiries are being pursued all over the world. The cinema is in the forefront of social life at the present day. It is the magical instrument of the future, and its last word will perhaps never be said, because it has infinite possibilities of development. We have seen the progress from the silent film to the sound and talking film; from the flat film in its colourless monotony to the colour film
that reproduces the living hues of nature; from the two-dimension film, to the stereoscopic film; from the film hemmed in for projection in its asbestos cabin to radio-cinematography. What may not the future hold in store?

This formidable weapon of conquest, science and knowledge is one that can either kill or cure; it may help form the citizen of tomorrow or it may have its part in producing moral and physical wrecks who will be a burden to themselves and to society.

For this reason, we are working strenuously and hopefully and have called to our aid students and research workers, even some who are amateurs in social problems. And if by these means we are able, in a near future, to present the essential features of this problem in a clear and practical light, the Rome Institute will not have worked in vain, for it will have won its decisive battle.

**THE FUTURE OF THE TEACHING FILM IN SURGERY**

Dr. Curt Thomalla has published an article with this title in the *Medizinische Welt* which merits attention and of which we reproduce some extracts here.

"The day is approaching — he writes, — when a surgeon will be able to announce: the operation I am about to describe is

(Ed. Note). Is all this the coinage of fantasy, or is it indeed the hard cash of tomorrow?

The subject dealt with by Dr. Curt Thomalla is one of absorbing interest to the scientists of all countries. Already to-day the cinema is an instrument of incomparable beauty and untold possibilities as compared with the cinema of only a few years ago.

A thirty year old industry — what is this span of life as compared with that of others? Perhaps only the electrical industry offers us an example of another such rapid and brilliant career. And the two industries are closely akin; have we not indeed recently assisted at their wedding?

Dr. Thomalla's works send our thoughts back to Jules Verne, and to H. G. Wells; to those brilliant imaginations which have foreseen and foretold in fantastic stories the wonders that man is now translating into fact. But the cinema has staggered the wildest imagination. Cinematographic scenography has made possible deceptions and reconstructions and adaptations which the eye of the expert is often unable to detect or explain; and while colour is making its triumphal entrance on the scene, stereoscopic relief is no longer a hope and a fancy, but a matter of tangible reality, that will soon be known to all. Sound, voice, and words are seized and held fast; tele-projection is already making headway in many countries; television is being studied and concretely realized. All this carries the cinema from the domain of mere amusement into that of science and industry — an ever more complex industry, closely bound up with the electrical power of the nations. And millions upon millions are dropping into the coffers of the cinema halls, while the screen becomes an ever more powerful instrument of propaganda and knowledge.

Dr. Thomalla's article may well encourage us to pursue our campaign, for the educational film. The more perfect the cinema becomes technically and every step forward that it makes, the more deeply are we convinced that it is one of the great forces of tommorow, not only to amuse but to educate, a powerful instrument of persuasion in the hands of teachers, and a sure means of moral and intellectual uplift for the masses.
tle differences in the hues of the tumour about to be extirpated may be observed and compared with the healthy surrounding tissue. « The image shows you the precise colours, just as the students present at the operation are able to observe them » says the surgeon. If it is desired to watch some particular phase of the operation over again, the Professor need only press a knob, stop the projection, and start it again from the beginning; the latter part of the operation will come round again in good time, while the students are able to take careful notes of the whole process.

« The day will come when a dozen or two medical associations in our capitals, towns, or even out in the country, will be able to enjoy all the advantages of the scientific film. A teacher in one town or another, who has been the first to carry out some experiment, will deliver his perfectly synchronized lecture to the central station microphone, and all the medical associations following the course will be able to watch his experiment in its minutest details. The screening of the film being ended, the master will then set in motion a gramophone disc in a special apparatus to enable the students to listen to the typical heart-beat of some phase of heart disease, and compare it with the rhythm of the normal heart-beat, as clearly as if their ears were glued to the stethoscope. After which perhaps, another film may be shown to demonstrate experimentally the intermittent action of the muscles and valves of the heart following on the application of an electric current to the yet living heart removed from some animal, while the students listen to the subtle murmur and palpitation of abnormal cardiac sound.

» All this would have been dismissed as a far-fetched story but yesterday; to-day it is becoming the simple truth.

« The experiment of combining the teaching film and broadcast lectures has been made. We are by now well acquainted with the different systems of talking film. For some time past we have been able to watch natural colour films, mostly of American origin, which, however, are not yet faithful to nature in their hues.

» Scientific and technical use is already being made of colour films; the Bier University Clinique at Berlin and the Klapp University Clinique of Marbourg have already installed the requisite equipment. There are already a considerable number of apparatus for sub-normal size film projection; but so far no standard has been fixed for these reduced sized films.

» For several years past we have had screens for daylight projection; none of these, however, are satisfactory, though projects for an improved type have been devised. The demonstration of healthy and diseased cardiac sound was recently made in the presence of an audience of some hundreds of persons, who were able to follow the whole thing perfectly in a big lecture hall by means of Dr. Lutembacher’s Stethophon.

» The technical premises for all manner of fabulous-sounding inventions have been laid down. These only need to be worked out; but so far we lack the requisite impulse to set the preparatory work going, for everything at present depends on private initiative, whereas State and international organizations ought to take up the matter ».

DOES THE CINEMA EXERCISE A SOOTHING INFLUENCE ON THE EMOTIONS?

Dr. Franz Koelsch, State Councilor of the Bavarian Government, and expert in industrial physics, visited the United States a few weeks back to make himself personally acquainted with industrial hygiene in that country, with the campaign against trade accidents, general public hygiene, and the actual conditions of the American worker in the presence of the ever increasing spread of industrial standardization: Dr. Koelsch was received by the Fifth Avenue Association of New York, and some extracts from an after luncheon speech he made there will not be without interest.

Dr. Koelsch began by expressing his admiration for the manner in which the
great artery of New York life had been organized by manufacturers, bankers and traders. It has been converted into one immense and dazzling shop-window, teeming with attractions, of a kind to fascinate the eyes of passers by, to lure them by their beauty, comfort and elegance, and to entertain and refresh the mind. A great part of the commercial and industrial life of the American metropolis centres round Fifth Avenue. How often business activities are carried amid sordid and monotonous surroundings! A café here and there, a few hectic and hustling restaurants, great gloomy piles of building, crowded streets where men and women, absorbed in their own thoughts and daily cares, hurry past and jostle one another unheeded. But the Fifth Avenue Association has done everything possible to break this monotony and to do away with all semblance of gloom in business life.

The second part of Dr. Koelsch's speech is of special interest. After alluding to all that the cinema could do in the domain of scientific management and to make known the enormous possibilities of industrial rationalization, to diffuse Taylorian principles among workers, and to bring home to them how it is that mass production on a huge scale answers to the requirements of modern life — and therefore and mainly to the requirements of the working classes themselves — Dr. Koelsch went on to speak of the cinema — of the people's pastime par excellence. In this connection he uttered some noteworthy words.

"We are at the present time convinced that films are for the most part an indispensable factor of the common weal. I am of the opinion that if our century had not witnessed the triumphal application and spread of the cinematograph and if technical skill had not attained to the heights to which American industry has carried it, the giddy and formidable routine of our modern life would have ended by stunting human emotions and would have so strained the nervous system of mankind that we might actually fear that, sooner or later, a sort of explosion would ensue, of such violence as actually to threaten the stability of society."

These words of Dr. Koelsch are not of a kind to be passed over lightly; they are food for deep thought.

We believe there is a great deal of truth in what he says... even if we do not follow him to the extreme consequences he foresees.

There is no doubt that the cinema can exercise a soothing influence on the one hand, and that on the other, by affording the highest and most complete pabulum for our spiritual appetites and our emotions, it may really do much to spread among the masses the steady progress of technical knowledge and science, give an agreeable glimmer into the future, and prepare mens' minds for the startling realities of the era in which we are living.

Dr. Koelsch declared the cinema to be one of the greatest gifts of the present day and the modern world.

"In Germany — he said — the cinema has brought families closer together during their hours of leisure; it has introduced a form of collective amusement in the family circle and has turned the cinema halls into a centre of attraction to workers, which draws them away from undesirable haunts where their minds were constantly being poisoned in every way."

There is no doubt that this last affirmation of Dr. Koelsch merits attention. Just as for the first twenty years people were wont to speak of the cinema as an inferior art or industry, so for some years past it has become the fashion to decry it as responsible for half the evils to which society is heir!

The I. E. C. I., which is conducting a very active practical enquiry in this field, welcomes very warmly Dr. Koelsche's statement, in the hope that it may arouse debate and controversy, without which it is difficult to make any progress towards ascertaining the true state of the case.
STATIONARY AND MOVING PICTURES FOR HYGIENE PROPAGANDA

Der Bildwelt, the fine German educational film review, of which Dr. Gunther (the founder of other admirable institutions in Berlin) is the able and zealous editor, and in which he displays his practical grasp of the film problems of today, publishes in its November issue an article by Herr Rudolph Neubert of Dresden, which is both highly interesting and offers matter for debate. Dr. Neubert is a convinced advocate of the advantages of magic lantern slides for hygiene propaganda.

We consider the magic lantern slide the finest of all mediums — he writes — for the purposes of public hygiene propaganda. The primary difficulty with which we had to contend, namely, the shortage of suitable slides, has been eliminated thanks to the Deutsches Hygiene Museum of Dresden. Herr Neubert goes on to deal with the differences between stationary projection for teaching geography, natural history, and the history of art; he describes with the technical sureness that characterises him the right type of slide for hygiene propaganda, and the advantages of drawings for certain kinds of demonstration, etc. So far, of course, we are quite in agreement with him, as also we agree on the essential principle that slides intended for teaching purposes must be carefully revised by experts and not left to the sweet will of manufacturers and speculators. It is in this connection more especially that the Dresden Museum merits praise, for during the last few years it has installed perfect equipment and has set going a very active movement in the field of magic lantern exhibitions.

Herr Neubert goes on to say: "Popular hygiene education must not be limited to increasing general knowledge; it must attempt to improve the bases of health and hygiene education. To do this it is necessary to influence human will, because every man must look to himself if he wishes to become and to remain healthy." So far we entirely agree with Herr Neubert; indeed we go farther, for we are of the opinion that no popular campaign can achieve really sound and beneficial results (especially in such a domain as that of hygiene) unless it exercises not merely an influence, but something in the nature of a suggestive ascendancy on mens' minds and stirs their deepest feelings. Thus it is necessary to bring home to them all the perils, all the evil consequences of negligence, to move and convince the public. By what means does Herr Neubert suggest that this end can be achieved? "The simplest and most primitive method — he writes, — is that of contrasting the false with the true, or, to put it in other words, of contrasting the consequences of negligence with the results of positive action.

Herr Neubert goes carefully into the whole question, cites many interesting examples, and insists on the general principles underlying his thesis. His thesis is excellent, we repeat, but there are some points to which we would raise a demurrer.

We are well aware that the great majority of teachers are still favourable to stationary projection shows. But our experience has shown us that in many cases the young are no longer interested in them; nor are adult audiences where such questions as hygiene are concerned.

Life to-day proceeds at a feverish pace; stationary shows may indeed make some impression, especially when they display contrasting pictures, but the effect obtained is a matter of passing emotion. There was a time when stationary images of this kind created a lasting impression on the mind; this is hardly the case at the present time. For this reason the big social welfare organizations which used to have so much faith in posters, drawings vividly depicting "before" and "after", the "consequences of neglect" and the "effects of treatment", are now dropping this system to a great extent and having recourse to moving pictures. Popular hygiene propaganda bristles with difficulties that are realized only by those who have devoted their time and efforts to it.

The public is not exactly sceptical, but it is not very keenly interested; at least this is true of many countries. And for this reason
films must have recourse to stirring plots (not to sensational ones, for this would lead us into the opposite error); they should in our opinion go yet further and illustrate — as far as possible with local colour — the facts of the general situation and the action and work necessary to bring about an improvement.

It is a thankless task to show the peasants of Latin European Countries the measures taken in America to combat tuberculosis and malaria. The conditions of life and work of the North American farmer are not akin to those of the Italian, Roumanian, or Spanish peasant. For this reason we hold it necessary to depict the general conditions of the Italian, Roumanian, or Spanish peasants themselves, and to show how these conditions might be improved by the adoption of simple rules of hygiene, easily applicable in the countries in question. Herr Neubert may answer: « This is precisely what magic lantern slides can do ». And he is right, if we are held back by considerations of facility and low cost, and hence ways and means. But it is not true if our object is to make the biggest impression of what we have to teach on the simple mind of the peasant masses. « Hygiene instruction » is one thing, and stationary pictures are insuperable for this purpose; but « Hygiene propaganda » is another thing, and it must rely on all possible means of arousing the emotions and on the suggestive influence that only the cinema at the present time can exercise.

Life, as we said above, proceeds at a feverish pace. Stationary pictures don’t interest the public very much; only by motion pictures of a rousing and entertaining kind can we arrest and grip its attention.

In any case, we have always regarded the cinematograph as nothing else than the logical technical continuation of the magic lantern. From the remotest past a continuous and complex effort has been made to supplement phonetic teaching by visual teaching. From Quintilian to Amos Comenius, from St. Jerome to Della Porta, the educators of all countries and all ages have advocated visual teaching. This has assumed an infinite variety of forms, from wall maps to drawings, illustrations, posters, magic lantern slides. At the present time the cinema combines and improves on all this and, while it responds to the dynamic needs of the age in which we live, it affords us an instrument more consonant with the taste of the day.

The problem is certainly arduous. We do not suggest that stationary projection should be altogether abandoned. We merely wish — and Dr. Neubert’s article has afforded us an opportunity — to raise a question that calls for ample discussion. And we have raised it because we should wish to see that such splendid institutions as the Dresden Museum — which contribute so greatly to the general advance of hygiene propaganda — should promote as strenuously as possible the other form of visual instruction: the cinematograph.
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NEWS AND VIEWS

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CULTURAL AND TEACHING FILMS

It is hardly to be hoped that the law recently passed by the Storthing for the protection of eagles throughout Sweden will be effectual in preventing the gradual extinction of the surviving specimens of this royal bird in Europe; but this fact only enhances the cultural and historical value of the film «The last Eagles», produced by Bengt Berg after years of patient and arduous work. No better appreciation can be made of this film, which will preserve for future generations the splendid image of the eagle in flight, when the bird itself has long disappeared from our midst (Der Bildwart, Berlin, F. 6/368) (Cf. also Notes from the Reviews and Papers in our December issue).

The Soviet Government is about to open in Moscow a cinema in which only films recording events of the day will be shown. The latest local happenings will be shown on the screen, together with the most important topical events throughout the world. Thus a veritable illustrated «newspaper» will be unfolded before the eyes of the audience, but a newspaper that the most illiterate can read and understand. If the experiment is successful the Soviets propose to extend the innovation to all the most important towns of the Federal Republic (Le Courrier Cinématographique, Paris, F. 6/293).

Sir James Marchant is a strenuous advocate of the teaching film in England. He has asked the Labour Government to take the matter up seriously, and particularly recommends the institution of travelling cinemas and of an office to organize on a big scale the distribution to schools of projection apparatus, etc. He expresses the view that the work done by the British Film Censorship, which passes more negative than positive films, is insufficient. «The Schoolmaster» says: «Let us get films for our pupils and offer them programmes suited to their mental development and of a kind to bear good fruit». The production of strictly scholastic films is the question of primary importance; the educational film, in the wider sense of the word, comes next. (From l’École et la Vie Populaire, Paris, F. 37/104).

The importance which Russia attaches to the educational film is clearly evinced by the fact that the Soviet Government has decided to appropriate for the next five financial years a very considerable amount to be devoted to the production and systematic distribution of educational films, to training the teachers who will handle them, obtaining the requisite plant and equipment; to the upkeep and supervision of the films and apparatus, and to providing for the widest possible practice of all cinema activity of this kind (Der Bildwart, Berlin, F. 26/29).

Thanks to the activity of the «Svenska» cinematographic industry — the teaching film section of which is directed by Gustaf Berg — considerable use is being made of teaching films in Sweden. For several years past the efforts of the private cinema industry in this domain have received official support, for the Swedish Government has long recognized the great possibilities of the educational film. It is no exaggeration to state that Sweden at the present time is in the vanguard of all the countries that have so far introduced the use of the teaching film. (Le Cinééopse, Paris, F. 37/99).

Referring to the Tenth German Educational Film Week, Emile Roux-Parassac calls attention in the Cinééopse to the development of the educational cinematograph in Germany, whereas in France the campaign in favour of the educational film, though it started under good auspices, seems just now to be somewhat at a standstill. He pronounces himself in favour of the creation of a national institute for the encouragement of
the scholastic film and the institution of regular educational film weeks, the advantages of which have been proved by the German example. Unless an initiative of this kind is supported by the Government, all the praiseworthy efforts made by private producers of scholastic films are likely to be sterile. (Le Cinéépe, Paris, F. 37/100).

Since the foundation of the Lyons Regional Teaching Film Bureau, in 1921, a whole series of film archives devoted to films of a cultural tenor sprang up, thanks to the support given by various local administrations. After Lyons, Nancy, Lille, Clermont-Ferrand, Nimes, and Saint-Etienne, Paris with her «Musée Pédagogique» took the natural lead as the centre of the educational film in France. The coordination requisite for fruitful work was however lacking between these various institutions, and as time went on they found themselves unable, with the limited means at their disposal, to meet all the applications they received. Thus it became necessary to harness all these scattered forces in order to give an effective impetus to the educational film. This has now been done by the institution on the 14th, November 1929 of the Fédération des Offices Cinématographiques d’Enseignement et d’Education. Senator Brenier, of Lyons, an ardent pioneer of the educational film, was elected President.

In addition to the delegates of the several educational film institutions, the executive commission of the Federation counts among its members representatives of public and technical education, of agriculture, and of the Musée Pédagogique (Comoedia, Paris, F. 37/110).

It is being ever more widely realized that the educational film is one of the most important factors in education. The Ministry of Public Education in Czechoslovakia has instituted a general control over the production of cultural films in the Republic. The purpose of this control is to facilitate a better distribution of educational films to schools and institutions concerned with popular education. (Volksbildungsarbeit, Teplitz Schönau F. 37/118).

In Bulgaria the Ministry of Education has drafted a bill on the educational film which aims at rendering the systematic use of teaching films compulsory in the schools (Volksbildungsarbeit; F. 37/119).

Oslo is the first European city to introduce film teaching into its schools (LichtbildBühne, Berlin, F. 37/95).

In the «Visual Review», E. C. Dent refers to the institution of a cinema archive at Kansas University; this consists of sub-standard dimension educational films (16 mm.). Attention is called to the advantage of these small sized films for educational purposes: first and foremost they are much cheaper than standard size films; then they are more easily handled as regards shipping and use in class, and do not entail very rigorous preventive measures against fire. (Normal Instructor and Primary Plans, Dansville N. Y. F., 37/108).

The first sound film for teaching purposes has been released in America, and exhibited at the Teachers’ College of Columbia University to an audience of public school inspectors and masters. This show will be followed by others in different parts of the State, so as to bring home to teachers the value of the new medium of instruction. The Educational Research Department of the «Electrical Research Products Company» — a subsidiary of the Western Electric Company — produced this film, under the direction of Prof. H. D. Kitson. During its exhibition it was stated that in the new school year several schools would introduce sound films in an experimental way. (The Educational Screen, Chicago, F. 37/98).

Clarence J. North has been appointed Director of the new motion picture division of the Bureau of Foreign and Domestic Commerce in Washington. In addition to the function of assisting the American film industry in the development of foreign markets, the newly created division will also devote considerable attention to the interchange of industrial and educational films between Europe and America. (The Educational Screen, Chicago, N. 8, F. 17/59).

The Austrian Educational Film Company is showing week by week in the Vienna cinemas films adapted to the curriculums of the several schools. Special views of the films are first exhibited to the masters, so that they may be acquainted with their content before their pupils are shown them.
These films are of special pedagogical value as they are exhibited to masters and pupils who are prepared in advance for the visual lesson (Das Bild, Vienna, F. 37/106).

Following on the tenth German Educational Film Week, the City of Dresden has made a yearly grant of 50,000 marks to assist the adoption of the film as a means of teaching and for the purchase of apparatus. The schools of that town have at their disposal over twenty fixed projection equipments and a like number of moveable ones. Thirty-two school masters have been specially trained to handle the projection of teaching films. (Le Cinéaste, Paris, F. 26/30).

Teachers and scholastic authorities cannot fail to agree in recognizing the instructive value of the cinema as a means of demonstrative teaching, provided the films, both in subject matter and in form, answer to scholastic and psychological requirements. A statement published by the Musée Pédagogique, dealing with the progress of the Paris Office, shows to what an extent the teaching film is being used in France. Statistics prove that, notwithstanding the predilection shown by teachers for the film, the charges for their hire for stationary projection are as high as they were for standard films before the war. Still projections will always hold their own until perfectly working apparatus are available that allow masters to arrest the projection of moving pictures whenever they require to call the attention of pupils to the form of an object rather than to its movement (Bulletin du Musée Pédagogique, Paris, F. 37/96).

On the other hand, the film is certainly the most suitable means of explaining to students and spectators in general any phenomenon characterized by specific movement. In the opinion of Prof. Paul Honingsheim of Cologne it will, for instance, be necessary to produce an increasingly large number of geographical and ethnographical films and films bearing on economic questions; aesthetic and sentimental aspects ought not to prevail in these. The really important point is to give a clear demonstration of characteristic movements, both as a whole and in detail, making use, when expedient, of slow and accelerated motion equipment. These educational films, completed when necessary by explanations and making use of apparatus that can stop projection when desired, ought to be included in a logical and systematic manner in the general scheme of instruction. (Der Bildkarten, Berlin).

With reference to the Tenth German Film week, Herr Josef Kuhne writes: « The Central Institute for Education and Teaching in Berlin, working together with the German Film Union (Bildspielbund) has organized « film weeks » during the past ten years with the object of ascertaining the value and practical possibilities of still and motion pictures for schools and popular education. The meetings are held year by year in different towns, all the local cinema offices, whether provincial or rural, taking part in them, so that each meeting has a special character of its own, according to the local character of the town. During the last Film Week in Dresden, the centre of the German photographic and film industry went into the technical aspects of everything appertaining to slide and film exhibition and systems of projection. Important questions connected with the reduced-size film, sound films, and photography in the service of teaching were discussed. (Volksarbeit, Teplitz- Schönau).
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HYGIENE AND MEDICINE.

HYGIENE AND SOCIAL WELFARE

So far we have received the following answers from Latin American countries to our questionnaire regarding the use of the film for social hygiene propaganda. These answers show that, with the exception of a few countries where the film is being very successfully used, cinema propaganda is still in the preparatory stage.

ARGENTINE REPUBLIC. — Film propaganda is centralized in the National Hygiene Department, which owns a good number of films, purchased partly at home and partly from abroad. The Department makes direct arrangements for screening these films, which deal with preventive medicine, prophylaxis against such diseases as the pest, tuberculosis, and malaria, and personal and social hygiene.

The medical officers of the National Board of Education and of the Institute of Hygiene also carry on film propaganda on their own account.

Film propaganda for the prevention of venereal disease is carried on by the Argentine Social Prophylaxis Society.

There is no technical or scientific censorship of films of this kind.

COSTA RICA. — Cinema propaganda is carried on exclusively by the officers of the Public Health and Social Welfare Department of San José, which disposes of a certain number of films. This campaign is carried on at cinema halls and schools, exhibitions being preceded by explanatory lectures. There is no permanent organization of this kind of propaganda, nor is it subject to censorship.

DOMINICAN REPUBLIC. — The Secretary of State for Public Health and Welfare of San Domingo has recourse for propaganda of this kind to official and private local public health institutions. The propaganda is not subject to any legal regulation, nor is there any scientific censorship of the films.

PROPAGANDA IN LATIN AMERICA

ECUADOR. — The General Director of Public Health at Quito states that film propaganda will be introduced in the course of the current year. Up to the present, films have been used for hygiene instruction only in the Vicente Rocafuerte National School at Guayaquil.

HAITI. — The National Public Hygiene Service attached to the Ministry of the Interior at Prince’s Port, where all cinema propaganda is centralized, draws up programmes for social hygiene propaganda in which films play a very considerable part. Together with the screening of hygiene and preventive medicine films, others dealing with agriculture are shown: both are accompanied by explanatory lectures, delivered by experts on the subjects.

Hygiene classes for masters and pupils illustrated by motion pictures are also held in the schools. This service carries its very active propaganda right into the remotest corners of the country through the medium of its dependent offices.

MEXICO. — The Minister of Health, Dr. Bernardo Gastellum, has sent the Institute two highly interesting volumes dealing with the admirable organization of his Department. Dr. Gastellum is personally responsible for this organization. A special section for hygiene propaganda and instruction has been set up in connection with the Health Department; this has its agencies in the remotest districts and does film propaganda work on preventive medicine and prophylaxis, accompanied by elucidatory lectures. Apart from this, official and private social welfare organizations carry on a film campaign that is well deserving of note.

The above mentioned Section of the Health Department started its cinema work at the end of 1927 and during the present year has held about 1000 film shows and
lectures. At the end of 1928 it already owned 60 projection apparatus.

**Paraguay.** — Social hygiene propaganda by the film is centred in the General Direction of public Relief Work at Assuncion; it is subject to municipal regulations and is carried on by the officers of the above mentioned department.

The Maternity and Infancy Associations and the Red Cross Society are carrying on hygiene propaganda on their own account with particular reference to infant welfare.

Films intended for public screening must be granted a certificate which the *Comisión de Moralidad y Beneficencia Pública* grants in the first instance.

**Peru.** — The General Direction of Public Health of the Ministry of the Interior informs us that so far no official use has been made of the cinema for purposes of social welfare propaganda.

**Salvador.** — The General Direction of Public Health at San Salvador is the only authority that makes use of the film for the purposes of hygiene propaganda.

So far propaganda of this kind is not subject to any legislative regulations and is carried on casually by the organs of the said General Direction, which has hygiene films screened in the public squares and in schools. The shows are accompanied by lectures.

**Uruguay.** — The National Health Council of Montevideo informs us that so far there is no regular film propaganda service for hygiene purposes, but that the education and propaganda Section of the said Council owns some 46 films dealing with hygiene and prophylaxis. The films are shown at the Universities, cultural societies, and official and private institutions; being in all cases accompanied by explanatory lectures.

Good work is done among the rural population by means of travelling cinemas despatched by rail or automobile.

**Venezuela.** — The Health Office attached to the Ministry of the Interior itself provides for cinematographic hygiene propaganda; so far however this is not carried on systematically.

Shows accompanied by lectures are held in theatres, schools, hospitals, etc.

A regular cinematographic service is shortly about to be extended to workshops, factories, and other industrial establishments.

The lectures that accompany these shows are delivered exclusively by the medical officers of the Health Office.

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AGRICULTURE.

THE FILM IN THE SERVICE OF BELGIAN AGRICULTURE

In our July issue we published an article regarding the organization of agricultural cinemas in Belgium. Following on the enquiry which the Institute has since carried out in that Country, we are now in a position to give some particulars regarding the work done by the Belgian Ministry of Agriculture in this domain and the aims of an important association, Les Amis du Cinema Educatif et Instructif, set up by private initiative in Brussels, which is doing some very bold and effective work. We are further able to publish the views of two of the most important farming organizations in Belgium on the growing importance of the agricultural film.

Lastly, we are happy to be able to inform all those who are interested in the cinema in its bearing on agriculture that a special organization, the Unienpor, the sole purpose of which is to train the rural populations by means of the film, has been set up in connection with the Commission Internationale pour l'Embellissement de la vie rurale (International Commission for ameliorating country life) one of the organs of the great Belgian National Association of that name.

The Belgian Ministry of Agriculture. — This department sent round a circular on the 11th May 1928 addressed to the head masters and head mistresses of government and private agricultural training establishments, agronomists, market gardeners, and in general to all persons interested in agricultural matters, with which it called attention to the increasing use of stationary and moving picture shows for teaching purposes. It stressed the fact that the aversion in some quarters to the cinematograph on the grounds that it leaves but a passing impression is gradually dying out, owing to the fact that special apparatus for teaching by the film is now available, thanks to technical improvements.

The Belgian Ministry of Agriculture has made and is still making special efforts to promote the use of films and slides for the purposes of agricultural training. With this object it decided to contribute 50% towards the cost of the purchase of suitable apparatus and planned the constitution of an agricultural film archive and of a special department for the supply of the film material needed for propaganda.

This splendid work was preceded by the constitution of a private Company, which, with the full consent of the Department in question, has taken over the carrying out of this project.

This organization, Les Amis du Cinema Educatif et Instructif, with headquarters in Brussels, is making every effort to gather together films of all kinds to form a really representative national collection for the use of educational institutions, post-scholastic institutes and popular educational organizations.

The Association, according to its statutory rules, will also supply free to any teaching or educational body:

- a) teaching and educational slides and films;
- b) information regarding films of this kind, and the monographs necessary to lecturers for the elucidation of the films;
- c) projection apparatus, operators, and lecturers.

It will further act as intermediary between the manufacturing firms and the teaching organizations purchasing cinema apparatus and material and will promote educational and propagandist cinema shows, and act generally in the interest of this form of education.

The Company already owns a collection of about 300,000 metres of documentary films. On the 12th May 1928 it was reconstituted as the National Educational Film Institute in order that it might work in collaboration with the I. E. C. I., then about to be formed.
The Belgian Ministry of Agriculture has notified the International Institute in Rome of the creation and work of this Association, which can collaborate to such excellent purpose with it for the common ends they have in view.

Suggestions put forward by certain Agricultural Organizations regarding the part the cinema could play in behalf of agriculture and rural life.

The Namur Province Agricultural League. — This is an agricultural union founded in 1902. It expresses the view that agricultural films ought first and foremost to be utilized for a wider and more effective propaganda of good methods of farming and stock-raising, to help demonstrate the advantages of the farming vocation, and also so as to carry out an educational and recreational mission in country districts. The cinema might well become an efficacious means of checking the exodus from the country.

This organization has not yet had much opportunity of taking up the question of the cinema as applied to agriculture and has had recourse so far only to magic lantern shows. In its opinion, agricultural film production ought to deal with the following subjects: the application of science to agriculture (botany, chemistry, zoology); forage crops; rural institutions; agricultural technique and industries (machinery, land reclamation, sugar refineries, dairy industry), and lastly, farm economy and social works connected therewith (re-colonizing the land, improvement of rural conditions, etc.).

Ligue Agricole Belge. — Founded in 1921; is concerned with all matters connected with the financial, commercial, social and technical aspects of agriculture. During 1928–29 it organized a number of lectures, illustrated by magic lantern slides, and was able to note the lively interest these aroused and the practical results they achieved. In fact, all the cooperative societies of the Belgian Agricultural League apply to it continually to organize lectures of this kind.

As regards technical procedure and the general lines that agricultural films should pursue, the Organization recommends that particular attention should be paid to comparisons between old-fashioned and up-to-date methods of farming, so as to demonstrate clearly the great advantages of modern improved methods.

It differentiates clearly between two different categories of spectators. One group consists of intellectual persons with scientific and technical knowledge; the other group embraces the great mass of farm workers who, although they may not have received any high degree of education, possess practical knowledge and skill in agricultural work. Hence the necessity of producing different kinds of films, suitable to showing to the two different categories of spectators.

With respect to subject matter the League calls attention to the importance of the following:

a) the advantages of hygiene, simplified methods of work, and supervision of farms and premises built in accordance with modern technical requirements;

b) the composition of the soil and how to improve it (fertilizers, experiment stations);

c) diverse crops; plant diseases and how to combat them, and seed selection;

d) harvesting; the preservation of farm products and their handling and manufacture on the farms. The transport and sale of the produce.

And lastly films illustrating the various agricultural industries, with special consideration to stock-raising.

Commission Nationale Pour L’emmellissement de la Vie Rurale. (National Commission for ameliorating country life). — Set up in 1913, with the object of ameliorating the moral, material, and social conditions of the agricultural population, through studies, enquiries, literature and congresses; it aims also at promoting general and vocational training, improving public services, dwelling houses, and farms, and at popularizing improved methods of farming and the use of modern agricultural machinery.

Thanks to the initiative of this Commission, the International Commission for the same purpose was constituted in 1925, to which all foreign commissions of a like kind have adhered.
The Belgian National Association set up yet another body for popular agricultural education; namely the international body, the Unienpor (the International Union for teaching the rural populations by means of scientific film and slide shows).

Let us take a glance at the general aims and purposes of this international body.

**The Unienpor.** — Constituted on the 16th March 1927 under the auspices of the National Belgian Commission for ameliorating country life. Its headquarters are in Brussels.

The Union is divided into sections which embrace all parts of the world and into sub-sections formed by the several countries.

The administration of the Union is entrusted to a board of management, which in its turn appoints a permanent office that keeps in touch with the authorities of the different countries all over the world in order to increase the prestige of the Institute.

The Unienpor is financed by its Sections and Sub-Sections (the former contributing 10% of their revenue and the latter 2%); by such gifts and bequests as it receives, and by subsidies from public departments and private persons or bodies.

**Aims.** — The Unienpor aims at the training and education of the rural populations in all countries by means of:

- the exchange of material for scientific and educational film and slide shows dealing with agriculture in general and with natural sciences, country life, ethnography and folklore.
- Compiling the explanatory texts for magic lantern or film shows; these texts are drafted in the several languages and in French as the international language.
- Study of the special questions connected with the aims of the Unienpor.

The Belgian sub-section was constituted in March 1928 in Brussels to deal with all matters of special Belgian interest and to represent that country in the European Section of the Union; it handles also all film material illustrating Belgium and the Belgian Congo.

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**Items of Interest**

An article in the Paris Figaro makes some valuable suggestions on the subject of the help of the film in the « Back to the Land » Campaign.

The author considers at some length the influence of town attractions on the mass of farm workers and asks whether the authorities responsible for the economic policy of the several countries have ever reflected on all that the cinema can accomplish in this domain. The film can do more in the way of social propaganda in the country than in the towns. It would be well to organize lectures illustrated by films all over the countryside, so as to stir up the interest and admiration of the farmers and peasantry in new methods of farming, and incite them to adopt them for the national good. An appeal should be made not only to the younger generation, but also to the old peasants, many of whom are illiterate, and therefore all the more open to the influence of the screen.

Fresh labour saving devices should help to attach the peasantry to the soil, and travelling cinemas showing special films produced by experts ought to produce a valuable social reaction.

**The Cinema and Agriculture.**

The agricultural film is making good headway in all the Italian provinces and has aroused lively interest among the rural populations. In Latium the Travelling Chair of Agriculture carries on its work in a number of different ways, the main task to which it devotes itself being vocational training for the improvement and intensive exploitation of a tract of 212,000 hectares.

In the rural boroughs and other farming centres of the Agro Romano, the Travelling Chair's technical staff holds lectures, illustrated by cinematographic films, which do much to elucidate the questions dealt with. In addition to this, and in execution of the
policy delineated by the National Government, the Chair is doing active propaganda work in the Army by means of lectures and film shows. (Legionario di Roma, F. 1/51).

The Head of the Italian Government, in pursuit of his policy of increasing the national wheat crop, has laid before the Permanent Wheat Committee the scheme of a motor column to scour all the important centres along the Italian countryside. This motor column will consist of 7 cars, the first of which is to be used for the projection of films illustrating wheat growing technique and all the improvements in cultivation offered by modern farming methods. (Il Popolo di Roma, F. 1/54).

Nor are other countries behindhand in the task of the film propaganda of land improvement. In Lisbon, the Central Commission for the campaign in favour of more extensive wheat production has opened a competition for cinema scenarios to be used in a wheat cultivation propaganda film. (La Película, Buenos Ayres - F 1/53).

The South African Board of Agriculture has had a film prepared, entitled: «The Farmer's Friend». This is the first of a series of films which will serve the purpose of agricultural propaganda in that country. (The Educational Screen, Chicago - F. 1/58).

The Peoples' Commissariat of the Soviet Republic has resolved to increase the production of films on agricultural industrialization and the social improvement of rural life. (Bordeaux Ciné - F. 1/59).

Agricultural films are now being shown also in schools. Thus in Germany an interesting film entitled: «America, Country of unlimited possibilities» was recently shown to the pupils of the Borkum school. Parts of this film illustrate the cultivation of Indian corn and of cotton in North America and the gigantic progress made in the manufacture of agricultural machinery. (Borkumer Zeitung, Borkum - F. 1/61).

In Austria also films are being produced to popularize the ever growing advantages which the agricultural cinema can render as a vehicle of propaganda and teaching. Thus the Cinematographic Academy of the Scholastic Union of Austrian Cinemas has released a scholastic film entitled: «The Calf» illustrating dairies and the distribution of dairy produce to the inhabitants of big towns. This film has been deposited at the Vienna Educational Film Archive. (Das Bild, Vienna - F. 1/56, 1/11/29).

The Swiss Dairy Commission has had three big agricultural documentary films produced and others concerning the raising of stock in the Simmenthal Valley. (Travail de Genève - 1/53).
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LABOUR.

THE FILM IN THE SERVICE OF SCIENTIFIC MANAGEMENT

After the rapid survey we have made of what has been done in Europe, either by the governments, or by public and industrial bodies and institutions, in the application of the cinema to a better understanding of labour problems, the unique contribution which the United States has given and is giving in this domain cannot fail to claim the most earnest attention of the I. E. C. I.

It is well known that practical experiment in the doctrines of labour organization have been developed and applied mainly in the United States, where industrial progress has achieved record production and «rationalization» is the logical result of a state of things originating in unbounded economic possibilities, vast natural wealth, and an intensely busy and widely developed home market — all conditions which render possible, and indeed necessitate, the most complex industrial system and serial production on a gigantic scale.

On this account, the great captains of industry of the United States have devoted their energies and talent to developing the Taylorian theories, which found a hotbed in the conditions I have alluded to above.

Mr. Ford's book «My Life» gives a masterly description of the advantages of scientific management, whose natural home is undoubtedly the American workshop.

The main purpose of scientific management is to bring scientific progress into harmony with industrial practice, with a view to increasing output and diminishing the cost of production. It does not, of course, necessarily follow that American systems of rationalization can be extended to Europe — or even to European countries that are the most developed industrially — on the assumption that, since they have been successful in the United States, they must necessarily work equally well in the several countries of the Old World.

However, America's effort to make its methods known on this side of the Atlantic has given rise to a widespread movement and found expression not only in a number of national institutions, but also in the International Institute set up in Geneva under the auspices of the International Labour Office.

All these bodies, however, appear to be lacking in some essential propaganda factor, which neither yearly congresses, nor the general campaign carried on by pamphlets and periodicals can supply.

Hence the necessity of having recourse to the most practical of all means of popular campaign work — the Cinematograph.

Modern society is coming to realize more vividly every day that this is the means par excellence of education and for bringing home to everyone the most varied aspects of the complex life of the peoples.

In America, the Government, the universities, and the great industrial world have realized the advantages to be derived from the use of the moving picture; and on this account it has been introduced into schools, workshops, and farms, to explain principles, to guide experts, to train the young in the choice of their careers and trades, and to demonstrate the use of particular systems and modern innovations.

The experiments recently made by a big industrial firm in America in the use of the cinematograph for the purpose of improving the quality and quantity of their employees' work, is of considerable interest.

Films were taken of a number of employees engaged on their particular jobs, and were later shown in slow motion to the individuals concerned, who were thus able to study their own actions while at work, to observe defects, and correct wasteful or unnecessary movements. In this manner they were enabled to improve their performance and the results obtained were so good that an average increase of output amounting to 10% was obtained.
Since this system is by no means very costly — for small cameras and projectors may be used for the purpose — it seems not only desirable, but probable that considerable recourse will be had to it to demonstrate how much can be done by the joint efforts of science and practice.

This is a single instance; but examples of the kind could be multiplied to demonstrate the practical possibilities of the cinema in a variety of fields. The I. E. C. I. got immediately into touch not only with the several State Departments, which carry on work by means of the film of a kind unknown in other countries, but also with a number of business concerns, institutes, and universities, and from the information received it is now able to make a comprehensive survey of the work accomplished by the film in the sphere of labour.

In order to be able to gather together all these valuable returns of study, comparison, and official documentary record, the Institute drew up a questionnaire, which has been widely circulated among both government departments and private institutions, so as to be able to determine the fundamental requisites of the use of the film in the study of labour problems. This work is now in full swing.

The Questionnaire contains the following questions:

1. Have you so far in the course of your business (or the functioning of your Department) considered the possibilities offered by the cinematography in connection with the problems of vocational orientation and training and scientific management, or, in other words, with the general problem of how to obtain the best yield from human effort and production?

2. Have you had an opportunity of examining films made for the purposes of vocational orientation and training or dealing with the problems of scientific management?

3. If the answer to the last question is in the affirmative, will you kindly inform us:
   a) what are the defects that have most struck you in such films? b) Were the films of a distinctively technical, scientific, or instructive character, or were they rather of a publicity kind that did not give a correct picture of the subject they purported to illustrate? c) from whom did you obtain the films in question?

IV. Are you acquainted with any firms producing films answering to the above-mentioned purposes? Do you know of either private persons or companies producing films of the kind?

V. Do you know of any schools, institutions, clubs, popular universities, etc., that make use of films for the purposes indicated above?

VI. Do you know of any publications — reports, studies, books, etc., — dealing with this problem in your Country? If the answer is in the affirmative, would you be so good as to inform us regarding them or at any rate to let us know to whom we might apply for information?

VII. Would you be so good as to inform us: a) What systems are adopted in schools in your Country in regard to vocational orientation and industrial or vocational training? and, if there is any printed matter on the subject, either send it to us or get the government department concerned to forward it; b) What results have been achieved? c) Are there any specialized and well equipped laboratories in connection with this study? d) If so, are they numerous? e) Are they used for the purpose of theoretic study only, or are practical experiments carried out there? f) If practical experiments are made, in accordance with what system?

VIII. Has your Government taken up the question of the use of the film in teaching and vocational orientation, or as a means of improving production and of a more careful and discriminating selection of manual workers?

IX. Have any of the big workers' or employers' unions in your Country taken up the study of these problems?

X. What do you regard as the most practical means of attaining rapid results?

XI. Do you consider that films of this character are suitable for exhibition to workers or that they would not appeal to them?

XII. Do you consider that moving pictures of this kind should be of a distinctively technical character, or that films of a more general and quasi dramatic kind should be published, especially when dealing with general «industria knowledge».

XIII. Have the problems of vocational orientation and training been widely studied and developed in your country? Are there any laws of a general kind on the question?
In the questionnaires addressed to the Governments, certain questions, naturally, have particular reference to the institution of offices _ad hoc_, to officially recognized institutions, subsidies for the purpose from government departments, publications, censorship, etc.

As we have had occasion to point out in previous issues, a great number of answers have come in, while the Institute’s competent office is busy carefully examining a mass of very interesting and varied material on the subject.

It is obvious, as already stated, that America offers a vast field of study and the most valuable documentary records, and the Institute is in correspondence on the subject, not only with the State departments concerned, but also with 26 of the foremost industrial, scientific, and educational associations, etc., as well as with many outstanding personalities interested in the question.

The information in our possession shows that a great number of interesting films dealing with vocational orientation, the prevention of accidents in workshops, and the application of scientific methods of labour, have been published in America, by various institutions. These films contain a mass of very instructive matter for all countries, and the Institute is studying them with great care, so as to be able to deduce therefrom what are the essential features of a model educational labour film.

The American Society of Mechanical Engineers of New York is doing excellent work in this field by the exhibition of films illustrating industrial problems and works connected therewith.

A big catalogue published by this Society, listing all the most important films connected with labour, enables us to place before our readers the description of a number of these films bearing on matters of scientific management.

**Building New York’s newest subway.** — A veritable trip along the line of construction, showing the various engineering problems and how they are solved.

**The age of speed.** — Presents the story of grinding and the part it plays in many industries. It has many thrilling scenes depicting the high speed of the age.

**The arteries of industry.** — This film illustrates the manufacture of pipe from the ore to the finished product.

**The island of sugar.** — Shows the world’s greatest achievement in the cane sugar industry, how one hundred and ten thousand acres of dense forest were transformed into a modern plantation, and the largest sugar mill in the world built and put in operation in ten months.

**Conquest of the forest.** — This film depicts in a realistic and instructive manner logging and other operations necessary to convert trees into lumber.

**Big deeds.** — Depicting a few scenes of the following subjects: Pouring the largest casting ever made in our foundry. Construction of the largest armoured cable in the world which will supply electric power to the industries of Shanghai, China. Melting steel with water.

**Building a skyscraper.** — The remarkable growth of a 32 story skyscraper.

**The story of asbestos.** — The reels show the mining operations in Canada and Arizona and the manufacture of the various forms of asbestos products.

**Anthracite and bituminous.** — These films show the early days of the industry, and portray the methods employed when the mines were first opened more than a century ago and the mining and preparation of this natural resource by modern methods. The various systems employed in mining the coal, such as shaft, slope, and draft mining are also presented, so as to give the spectator a better understanding of the industry.

**Something about switch-boards.** — The reel shows in some thirty different scenes many of the unusual processes in manufacturing and installing the equipment which gives a telephone exchange its unique and highly centralized position of importance in modern business.

**The Panama Canal.** — Construction and completion of the Panama Canal.
THE STORY OF PETROLEUM. — Tells the complete story of Petroleum, including prospecting, production, refining, distribution and its ultimate uses.

THE KING OF THE RAILS.— This film shows the evolution of transportation on land, beginning with the American Indian up to the present electric locomotive as used on American railroads. Shows the construction and operation over the picturesque Rocky Mt. District.

THE ELECTRIC GIANT.— This film shows the manufacture of a 250,000 horse-power steam turbine generator, the largest single power producing unit in the world. It tells a vivid story of 20th Century Science and Invention, concluding with a cartoon sketch explaining the meaning of a horse power and how it is arrived at.

INDUSTRY AND THE FILM

An interesting film has recently been shown at the Savoy Hotel in London illustrating by graphs what the modern motor can do for the diverse needs of industry.

The show aroused the greatest interest in the audience, which comprised representatives of the Government and the Dominions and representative business men. The film illustrated the power of the huge tractors used in Australia for military and agricultural purposes, working over rough and uneven ground or through snow, and revealed the ease with which obstacles were got over. Another section of the film illustrated the truly gigantic organization of the London motor bus service. This film was published by the Motor Transport Co., and will be shown in all the most important towns of Great Britain and the Dominions to stress the vast possibilities of motor traction. (The Daily Telegraph - F. 5, S. 88).

The Federation of British Industries is preparing to publish a series of films illustrating the several branches of national production in the industrial field and the methods used in marketing the commodities. Apart from any publicity ends, a film of this kind is undoubtly a means of consolidating business knowledge. (Cinéopse, Paris - F. 5, S. 87).

The Neuchâtel Section of the Swiss Company, the « Maitres Imprimeurs », has taken the initiative of getting a cinema firm to produce under its direction a film in five parts, illustrating the several phases of the manufacture of printing machinery. The film is accompanied by technical explanations regarding their functioning. (Le Cinéma Suisse, Montreux - F. 5, S. 87).

There is no doubt that industrial films are popular with the London public. One that has been shown recently with marked success illustrates the several phases of curing, smoking and kippering herrings. (The Yorkshire Post, Leeds - F. 5, S. 89).

Kennet F. Space, in a brilliant article, well supported by facts, on the question of the uses of the cinema for industrial publicity, insists on the technical exigencies of this type of film, which he declares ought to be as brief as it is lucid; he also insists on the necessity of short captions. The views expressed by Mr. Space are generally shared by all authorities on the question. (Movie Makers, New York - F. 5, S. 90).
TECHNICAL ASPECTS.

SOUND FILMS IN THE SOVIET REPUBLIC

Sound and talking films are stirring up great interest in the Soviet Republic. The U. S. S. R. has always been keenly interested in the cinema as a means of propaganda and culture, and has set up important government departments to deal with the matter, which are doing valuable work. Hence it is clear that the Soviet Government could not remain indifferent to a new development which is bound to enhance the efficacy of an instrument the importance of which they fully recognize.

Great scene directors, such as Pudovkin and Eisenstein, have on more than one occasion expressed themselves in favour of the talking film, and have pointed to ways of utilizing this new invention that display the same brilliant originality that has always distinguished their work in connection with the mute screen.

An apparatus for sound projection manufactured in Russia has been recently tested in a Moscow cinema, and, following on the success achieved thereby, the Government has decided to extend sound equipment to the Leningrad halls and to those of all the principal towns of the Republic, where veritable newspapers in the form of sound news reels will illustrate national and foreign news.

Scientists and experts are at work perfecting equipment for the creation of a national industry for the manufacture of technical material. The U. S. S. R. Electro-technical Institute is working on this in the technico-scientific section of the Higher Council of National Economy and in the Central Laboratory of the Leningrad Electrical Works. Engineer A. F. Shorin, of the Central Laboratory, is responsible both for the sound registering and the projection apparatus that are being tested with such marked success; these have adopted the system of photo-electrical registration of fixed density and, according to a detailed description published in the Pravda, are simply constructed and easily manipulated.

In addition to these apparatus of national production, the U. S. S. R. is negotiating with foreign firms that have specialized in sound equipment, and information from an American source states that several engineers of the R. C. A. Photophone Co. will shortly be leaving for Russia to equip cinema halls with American apparatus.

VOCATIONAL ORIENTATION FILMS.

The Spanish Cinematograph Academy attached to the Ministry of Sciences and Arts, is about to open a class for 100 pupils in cinema acting before the camera and the microphone. The number of applications to attend these classes already exceeds the available places. (El Cine, Barcelona - F. 8, S. 79).

The French Cinematograph Syndical Chamber has opened several free classes in cinematography, sound cinematography, and broadcasting. (Il Cinema Italiano, Rome - F. 8, S. 78).

During the latter half of last November a school for cinema operators was opened in London. The Committee that organized and promoted this useful initiative proposes to arrange a series of lectures on the subject in collaboration with the principal London firms, so that the operators may have the best chance of acquiring all the complicated secrets of the trade. (The Daily Film Renter, London - F. 8, S. 77).

The use of the cinema in technical and vocational training and in vocational orientation is widely recognized in America, where both Government and industry are wont to have recourse to this practical means. The «Electrical Research Products Co.» has opened a new laboratory in Hollywood for research and experiment in connection with talking films. (The Film Daily, New York - F. 8, S. 83).
SUNDARY NOTES

It looks as though the sound film had firmly established its sway in Europe and there is little chance of a return to the days of lively debate that we remember some few years ago on the rival claims of the two forms of cinegraphic art that disputed the screen: the silent film and the sound or spoken film. René Jeanne, writing in the Gazette de Lausanne evidently hold a somewhat different view, however, and expresses the opinion that the sound film can never fully replace either the theatre or the mute film (F. 10/260).

Though it may be over bold to prognosticate, there is, nevertheless, some truth in the affirmation. The sound and talking film are still in their infancy. Leaving aside for the moment the recent statements made by Louis Garnier, Director of the Paramount Film Co., who traces the origin of the spoken film in France some twenty years back, to the time when he was director of the Pathé Firm at Montecarlo (The Film Daily, New York - F. 10/257), it has in fact been going but a very short time, and, as in the case of all new things, there is room for improvement. It is, however, already making its way not only in the public amusement halls, but also in the field of teaching. But much technical knowledge and artistic skill are necessary for an invention of this kind to yield worthy results.

The sound and talking film are at this moment starting on their social career outside the theatre. William Fox is of a contrary opinion to many others (see The Religious Film in this issue) and declares unhesitatingly that this type of film must content itself with three specific domains: teaching children; religious propaganda, and filming the most arduous surgical operations as a means of training medical students (The Film Daily, New York - F. 12/455). Don Ezequiel Padilla, Secretary for Public Education in Mexico, recently announced in New York his firm intention of making a wide use of the talking film for educational purposes in Mexico (The Times, F. 10/246). The R. C. A. Photophone, in its turn (see the Cinématographie Française, Paris - F. 21/354) has already launched a new portable model projection apparatus for talking films, which can be easily used for school and lecture purposes.

The film has stirred up less controversy in the field of operatic reproduction than in others (Exhibitors' Herald World, Chicago - 12/485). The orchestra conductor, Bruno Walter, declares that by this means the remotest townlets and villages, which up to the present have been cut off from all real artistic life, will now be able to enjoy as fine performances as the big centres of musical education and culture. Here also it behoves us to differentiate between the purely sound part and the talking part of the cinema. The first may be said to have attained perfection by now and to reproduce sound quite faithfully. The latter still calls for careful study and improvement. Quite apart from the purely technical aspect of the phonie perfection of speech reproduction, the problem of language, which is an essentially political and national question, restricts for the time being the talking films' chances of expansion and tends to accentuate the national spirit and national susceptibilities of the several States and peoples.

Meanwhile, improvements are being made from day to day. According to a statement in the Regime Fascista, of Cremona, (21/358), Baron Vientinghof Scheel, of Vienna, has succeeded perfectly in transmuting light into sound, and vice-versa on the film. While the Western Electric Co. is defending its patents in the Berlin Courts against those of the Tobis and the Klangfilm Cos. (The Daily Telegraph, F. 12/486), the Washington Patent Office has registered, up to date, over 8,500 patents, bearing entirely on sound films and the uses that may be made of them (El Debate, Madrid - F. 21/335).

Among new inventions of indisputable value, the Capital Theater Supply Co. has launched on the film market a new screen made of non-inflammable silk, specially adapted for the projection of sound films, since it imparts greater luminosity to the image and does not interfere in any way with the repro-
duction of the sound (The Film Daily, New York - F. 21/532). Further afield — in the South Sea Islands — a group of scene directors, experts and actors, who had travelled out there to take a «Movietone» film, in view of the great difficulty of transporting apparatus of such extreme delicacy so far, decided on the following plan: namely, while filming the scenes locally in Fiji, to register sound and speech in their Hollywood studios by radio-telephony, synchronising perfectly with the cinematographic process (El Imparcial, Madrid - F. 30/59).

Among technical inventions, we learn of one with an eminently humane purpose (Cinema Italiano, Rome - F. 12/453). It appears that in a number of cinema halls across the Atlantic apparatus closely resembling telephone receivers have been installed, which enable spectators suffering from deafness, and who in ordinary circumstances could enjoy merely the visual part of the show, to enjoy also the musical and spoken features of the film.

The practical applications of sound and talking films keeps pace with technical improvements. The French Academy (see Kinematograph of Berlin - F. 10/251) has decided to set up an archive of sound films in preference to the usual disc archives, which it would seem have had their day in registering the voice of the immortals. The Philadelphia Police, according to the Daily Telegraph (F. 10/247), have installed talking films to register the preliminary examination of criminals. The film offers endless possibilities in this field. While cinematographic films, hidden from the prisoner’s sight, can register his thoughts as reflected in his expression while he is being interrogated, thus affording valuable psychological clues to the judges, the actual record taken of the dialogue between him and his accusers eliminates all chance of retracting or emending his first statements which are always characterised by greater spontaneity, and does away with the time-honoured claim of criminals that their confessions are valueless because they were extorted by bullying and ill-treatment and that they were forced to sign them by coercion.

Thus the cinema is becoming an instrument in the hands of justice, a factor in psychological enquiry, and the completest document that could be devised for the definite and indisputable registration of the several phases of oral examination.

Television — distance cinematography — the completest artistic means for giving an impression of life in its tangible reality, is also passing from the realm of theory into that of fact. While studies are in progress for perfecting the systems at present in use, the latest information assures us that what was but a dream yesterday is about to become a reality. It may well be that in the near future lovers of the screen will no longer be forced to gather together in stuffy and dark halls in promiscuous crowds. Everyone should be able to set up a small screen in his own room, which, being attached to the radio, will afford him a vision of all that is going on in the world together with the latest creations of the purveyors of novelty and amusement. At Culver City, William Sistrom, Director of the «P. C. D. Television Review» is busy constructing his new apparatus (see the Daily Film Renter of London - F. 30/58); while the United States Federal Radio Commission is hard at work experimenting a new system of television at their «Mikrovisor» transmission station (The Film Daily New York, P. 30/60). Thus a whole world of technical experts and inventors is at work on the future of the cinema, which has no limitations except the limitations of the human mind itself.
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RELIGIOUS FILMS

It is well known that of recent times religious teaching and the propaganda of the Christian faith have had increasing recourse to the use of the film. In this issue of the Review we publish Richard Muckermann's interesting article on national and international Catholic activity in connection with the cinematograph. Not only Catholics, but the exponents of other Christian and non-Christian faiths also, are beginning to use the film to illustrate their religions, both for propaganda purposes and as a purely documentary means of diffusing a knowledge of the rites and customs of diverse religious faiths.

We propose here to call attention to certain aspects of the question of religious films and to recent production in this domain (1).

The question of the desirability or otherwise of the production of special films for the purposes of religion is being widely discussed at the present time both in the ecclesiastical and the lay world. As far as Catholics are concerned, it may be said unhesitatingly that film propaganda has a definite part in their programme of work. This is evidenced not only by articles of a general tenour published in the Catholic reviews, but by the existence of special Catholic cinematographic reviews: among others the German M. K. B. Film-Rundschau, of Essen, the French Reviews, Les Dossiers du Cinema and Le Fascinateur of Paris; the Italian La Rivista del Cinematografo, of Milan, the American «Catholic Theater Movement» of New York, etc. It is also announced that the Dutch Central Catholic Cinematographic Company (F. 28, 48-49) has decided to publish a periodical dealing with film problems. Catholics are convinced of the need of educating public opinion and of introducing laws to enforce specific measures to prevent the youth and the general public being harmed by the cinema. They realize that the film is a weapon of propaganda in the hands of their enemies, and that it is their duty to seek allies and to hold as big a stake as they can in the film industry. Mgr. Beaupin expressed himself to this effect in the Chronique Sociale de France of Lyons; and the Munich International Congress (17-20 June 1929) no less than the Paris National Congress (the latter inaugurated by the «Cinema Mass» at the Madeleine church) of the 4th-7th November, 1929, entirely confirm his views. The formulation of principles on the Catholic cinema movement, the development of educational films and the creation of «family films», as also the use of broadcasting for the purposes of religious propaganda, were the main subjects discussed at both these congresses.

Thus, following on the Paris and Munich Congresses, Walter Dirks in Germany, writing in the Volksbildung und Volksarbeit, of M. Gladbach (F. 11/56) and in Austria, Dr Beran, writing in the Reichspost, of Vienna, (F. 11/55), express the view that the mission of the Catholic Church, in the domain of the cinema as elsewhere, is not addressed solely to Catholics, but is wider and higher in its aims: the Catholic film should contribute to the education and recreation of all, without distinction of religious faith, because through the film and the radio the Church can descend into the lay world and appeal to the whole people, be they Catholic or otherwise, thus performing a work based on the essential force of faith which supports the life not of Catholics alone but of all religions.

The echo of the Paris Catholic Congress resounded throughout the whole Catholic

(1) In connection with recent religious films, cf. also the special «Religious Films» section published in the June to December (1929) numbers of the International Review, and more especially the article that appeared in our August issue.
world. Following on it, other countries demanded that the production of religious films should be promoted. Austrians, such as Beran in the above cited article, are asking that the Catholic film be introduced into Austria. And, in the Region of Oviedo, Spain, a leading article invokes the resolutions of the Paris Congress in support of the need of directing the Spanish cinema towards this form of activity, adding the vast influence that the film exercises on the masses (F. 11/380). But Spain is already doing much in this direction. The Salesian Order, which educates great numbers of the poorest children of Madrid, has recourse to the cinema as a means of teaching in holiday meetings, while the Viscaya Provincial Deputation has decided to set up cinemas at its own expense in all the schools of that Province.

The so-called «Parochial Cinematographic Institute» is hard at work in France; it is supported by a group of voluntary helpers who have recourse to the cinema for purposes of moral and Christian education, to teach the history of the Church and of the Motherland, and to point out noble examples that are a lesson to all. The production of films on the Catechism has indeed been widely developed of late in France. The films are prepared with great technical care and are carefully revised from the standpoint of religious exactitude.

Let us cite a few French films that have recently been announced. A whole series of religious films are being prepared: the first of these, «Baptism», will be produced under the direct supervision of Father Baudet, Parish Priest of Montfermeil, and under the auspices of Monsignor Roland Cosselin, Suffragan of the Bishop of Versailles. On the occasion of the Jubilee of Saint Joan, the «Maison de la Bonne Presse» of Paris, published a film entitled «In Glory» consisting of two parts «Domremy» and «Orleans». The Etoile-Film is producing «The Age of Saint Joan», showing pictures of the ceremonies of Chinon, Orleans, Paris and Compiègne. The Société Venloo is preparing a similar film (M. K. B. FilmRundschau, Essen, F. 11/70).

The Catholic film movement in France has caused a flutter in some quarters. Léon Moussinac, in the «Humanité» (F. 11/69) calls the attention of French Communists to the shows given on the occasion of the Paris Congress, and calls upon them to make a stand against them. He writes, «We must expect to see a whole series of such films produced for the special purposes of religious propaganda», and adds: «Our comrades must be on the lookout here. A strenuous campaign should be organized everywhere against the exhibition of Catholic films, a campaign as effective as that carried on in the past against «war films» and particularly against the «Grand Parade».

It is well to point out however that not all films with titles bearing on religious themes or suggesting such themes are to be regarded as educational from the religious standpoint. Without going into details, which are familiar to all, it will suffice to recall here the «Marvellous Life of Joan of Arc», produced by Jean-José Frappa, against which the French Catholic press put all good Catholics on their guard, for it represents the Saint as a kind of war bacchante and does not adhere to historical religious truth. The Catholic press in fact agrees that this film ought to be banned from the programmes of Catholic cinemas. («M. K. B. Film Rundschau», Essen, F. 11/72).

On the other hand, the French review «Comœdia» states that the British Board of Film Censors has not yet decided to allow this film to be shown in England. The Censors doubt whether certain of the scenes bearing on religious matters would go down well with the British public, while experts declare that the excision of the scenes in question would ruin the film.

The question of the religious film is being widely discussed in England. We refer the reader to a statement that appeared in the December issue of the Review (p. 725) on the monthly meeting of the General Council of the C. E. A., held in Newcastle on the 3rd October last. Mr Walter Scott, who opened the discussion, expressed the view that religion ought not to be regarded as matter for entertainment. Religion and politics, according to this gentleman’s views, are matters of individual conscience. He held that, on the one hand, religious films may have a bad influence on the souls of believers, and that, on the other hand, they are liable
to stir up the struggle between different sects, since propaganda films that express the views of the exponents of a particular religious belief may jar on the susceptibilities of others. He stated that in Liverpool, as in other English towns, religious films that were diametrically opposed to one another had been shown. The meeting resolved that it was better not to encourage this type of film and to commit to their representatives the task of raising the question in the British Board of Film Censors. The Daily Film Renter (11/74) expressed its complete sympathy with this resolution, considering that the public has no desire to be preached at and still less to be wounded in its religious sensibilities; hence the wisdom of avoiding all films of the kind.

Protestants also are stirring up against the exhibition of anti-religious films. "The Union of Evangelical Women," of Breslau, has protested against the exhibition of a film, "A Lost Woman's Diary," because the Christian symbol of the Cross is shown therein in a manner offensive to religious feeling ("Film-Kurier," Berlin - F. 11.68).

In Germany, on the other hand, religious films are officially recognized. Last November the Prussian Ministry of the Interior by a circular addressed to the Reichsverband recalled that on fast days established by the Church only films of a religious, legendary, or historical character could be publicly exhibited, and that the exhibition of comic films was absolutely prohibited.

There are no special provisions with respect to All Souls' Day, but the Ministry recommends that care must be taken that the films exhibited should be in keeping with the solemnity of the day. A reminder to this effect is printed in big type in the German cinema papers, such as the Licht-Bild-Bühne, Berlin - F. 25/134).

As for the special measures taken by certain governments with respect to Sunday exhibitions, the controversy roused on this point both in England and America deserves attention. Complaint is made in Boston that the censoring authorities of that town pursue a different policy with regard to films that are shown on Sundays and those shown on week-days (Exhibitors' Herald World, Chicago - F. 6/320). The only question at issue in England is whether the halls should be kept open or closed on Sundays. The Chatham Town Council took a vote on the question, with the following results: 8050 votes in favour of keeping them open against 7491 votes in favour of closing (The Cinematograph Times, London - F. 25/142). The London County Council allows the cinemas under its jurisdiction to be kept open on Sunday evenings on condition that a substantial but not clearly defined proportion of the receipts shall be allocated to charities. The total sum thus contributed annually amounts to £, 110,000, which is said to represent 21 per cent of the aggregate takings.

In view of anticipated demands from the Council for an increased contribution, cinema owners are now anxious that an arrangement should be made recognizing the present payment of £, 110,000 as fixed permanent.

Hundreds of cinemas in the metropolitan area, but under the control of the Middlesex County Council are not allowed to open at all on Sundays. One of the arguments frequently put forward by exhibitors to induce the Council to modify its attitude towards Sunday opening is the benefit that would accrue to charities (The Daily Telegraph, London, F. 25/145).

In America the sound film has entered the lists. It is stated that Harry Warner, of New York, General Manager of the Vitaphone Co., has engaged the Methodist preacher, A. Sunday, to get out some films of a religious character. (See our December issue, p. 275). The "Film Daily," however, is hostile to the idea of William Fox that sound films should replace sermons, because it considers that the congregation are more attracted by the personality of the preacher than by his text and sermon (F. 11/67).

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The rise of the Zionist movement gave rise to a considerable output of Semitic films. These are not merely Zionist propaganda films, but reflect feelings of race and religious pride that have recently been strengthened by the general reawakening of patriotic sentiment. The great Film, Ben-Hur, in which Ramon Navarro featured, is well known. Let us recall here also the films
mentioned in our July and August numbers: these pictures were produced by the Zionist Committee and bore the titles: «Springtime in Palestine» and «Sailing up the Jordan».

In our December issue we mentioned the Jewish film «Buried Alive», which was meeting with great success in France. This film tells the life story of a Jewish hero and reproduces a number of Jewish rites that are wonderfully reproduced. Scenes of a like kind are shown in the film «The Promised Land», produced in 1925 by Henry Roussel, featuring the well-known actress, Raquel Meller, who is so greatly admired by the French public. «Jacob's Well» is the only film of a theatrical character among these Palestine films, except for a few brief Zionist propaganda films. The British War Office has released a film entitled «The Palestine Campaign and the Surrender of Jerusalem». A film which is being prepared in the Paris studios of the Rue Franceur, the photographs of which were taken by the operator Sammy Brill, is of great topical interest. This operator was in Palestine during the recent disorders and did not hesitate to risk his life to take a documentary film that shows Palestine before, during, and after the rioting. (Comedia - Paris, F. 6/208).

A few Russian films also deserve attention. The scene director, A. Soloviev, of the Vufka Co., is preparing a film «The Five Brides Elect», representing an episode in the pogroms committed in a small Jewish community by bands of Petliura. (Les Nouveautés du Cinema Soviétique - F. 11/62). The scene director, V. Tourine, and his assistant K. Aron, of the Vostok-kino, have left for White Russia, in quest of material for a new film, «The Jews on land work» (Les Nouveautés du Cinema Soviétique).

***

In India the religious film movement is well developed, as are film activities in general. We would particularly recall to the reader's memory the article that appeared in the August 1929 issue of the International Review. A few particulars will suffice here.

The Anglican Missionary Society has released a fine film on India and the Hindu religions. The Catholic Church is also endeavouring to propagandise the Faith by means of the film in India. The Indian press notes that the film «The King of Kings» met with an enormous success in that country. It has been showing for several weeks in Madras. This fact — as the papers point out — suggests that the cinema offers an efficacious medium for carrying the message of the Christian Faith to the Indians. The noble figure of Christ and the fearlessness with which He proclaimed himself to be the Son of God and the promised Messiah, make a powerful impression on the minds of the uninitiated. (M. K. B. Film-Rundschau, Essen - F. 11,71).

***

Let us lastly mention, by way of information, certain films of a purely documentary type not concerned with religious propaganda; but which come within the category of religious films because they illustrate the religious uses and customs still prevailing among certain peoples. As stated in our December issue the scene director Dmitriev is about to release an ethnographical film «In the Country of the Oudmours», based on the photographs taken by the Mejrabpomfilm in the Votsk region. This film shows more particularly the ceremonies and sacrifices of a religious kind that still prevail in that territory. The «Maya Cycle» was recently shown at the Odeon Theatre at the Hague. This film, besides showing some very interesting views of the Islands of Java and Borneo, contains the documentary record of the cremation ceremonies in those lands (Kinematograph, Berlin - F. 6/323).

***

We have, of course, only been able to glance at the big question of religious film activity in this brief survey. In later numbers we shall publish further particulars relating to protestant propaganda by the cinema.
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THE FILM IN THE POLITICAL ARENA.

The steady development of the cinema for the purposes of international propaganda is a phenomenon that neither statesmen nor governments can overlook, while both individuals and governments have promptly seized upon the talking film as a means of propagating social and political ideas and all matters of national interest.

Thus we read in the Película, Buenos Ayres, (F. 9/50) that « the King of Spain is the latest personality of world importance whom we have been able to see and hear by means of the Fox-Movietone. The Spanish Monarch was filmed while making a brilliant speech. The exhibition of this film, following upon the very popular one reproducing a speech by Bernard Shaw, is regarded as a real triumph of the talking film ».

The Head of another State has had recourse to the film to deliver a message to his people. The Daily Film Renter (London - F. 9/77) informs us that the Maharaja of Kapurthala (Punjab) has had three talking films taken, reproducing addresses delivered by himself. The first of these films was taken in Hindustani, the second in English, and the third in French.

The President of the Czechoslovakian Republic is another statesman who appreciates the importance of the cinema as a means of propaganda, and has had recourse to the visual-talking film as a vehicle for conveying a message to the Czechs and Slovenes in America. « President Massaryk has had recourse to the talking film » the Cinema Italiano of Rome informs us, (F. 9/87) « and standing before this mysterious machine he pronounced a speech exhorting his compatriots across the Atlantic not to be impatient over the delay in forming the new Government ».

The heads of Governments are not behind the heads of States in making use of the new instrument: just recently the President of the French Cabinet, M. André Tardieu, had the Government programme which he had set forth in the Chamber registered by talking film in his office (The Daily Telegraph, London - F. 9/78).

A new and unexpected application of the cinema is its use in electoral campaigns. During the recent political contest for the election of the Mayor of New York, we are told that « Mr. James J. Walker made use of the talking film for canvassing purposes. His political speeches were given out in Times Square in the business centre of the City » (Le Courrier Cinématographique, Paris - F. 9/61).

Indeed the cinema is such an excellent instrument of propaganda that, as le Courrier Cinématographique informs us « the film played a leading part during the recent elections in Australia and is held largely responsible for the fall of the government. The increase of the tax on amusements and the introduction of a very heavy duty on foreign films had so irritated film owners and renters that they availed themselves of the powerful weapon in their hands and carried on such a strenuous screen campaign against the late Government that they carried everything before them ».

The great importance assumed by the film in political campaigns is equally evident from the following extract from the Daily Telegraph - F. 9/62)

« Through the acquisition by the German Government of an option on the majority of the shares of the Emelka Company, the film has become avowedly one of the principal weapons of party politics in Germany. The Universal, the largest of the German film concerns, was launched under the control of Herr Hugenberg, who has cautiously yet undeniably used it to spread the political views he holds. The Emelka ranks as the second of the German film producing companies and by its means, it is admitted, the Republican Government hopes to meet and
beat the Monarchists on the screen as well as at the polls.

The Soviet Republic is also making wide use of the film for domestic political propaganda. Thus we learn that recently «The Presidential Board of the People's Public Education Commissariat sanctioned the use of the cinema in the «five-year scheme» campaign. The Sovkino Company has been invited to reproduce in its news reels all the measures connected with the «five-year scheme» and further to increase the output of films illustrating social questions of industrialization and national agricultural collectivism.» (Les Nouveautés du Cinéma Soviétique - F. 26/26).

Nor is the cinema merely an instrument of domestic political propaganda, it is also a powerful instrument of propaganda abroad, by depicting the social conditions of several countries. Most of the films produced in Russia reflect the new social ideas that govern the Republic. Thus, for instance, «The way of the Universe» deals with the formation of human character and shows the development of class conscience in a worker of our time, showing how the communist worker type is evolved under the influence of social and historical conditions. (Les Nouveautés du Cinéma Soviétique - F. 9/4).

And again: «The film «Two Women» deals with the antithesis between the two types of women of the Soviet Russia of to-day. The first part shows the old-world type of woman, while the second part depicts the cold-blooded heroine, yet glowing with revolutionary ardour, who remains adamantine through the most difficult times and does not suffer herself to be seduced by the lures of an easy and thoughtless life.» (Les Nouveautés du Cinéma Soviétique - F. 9/6).

The power of the cinema as a vehicle of propaganda abroad has been realized also by the governments of other countries. The Roumanian Government recently voted that the sum of 30,000,000 Lei should be granted to the Cooperarea Fortelor Sociale to promote a great National Lottery, the proceeds of which are to be devoted to constructing educational cinemas and also to the production of national propaganda films for exhibition abroad. (Kinematograph, Berlin - F. 26/27).

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LEGISLATION.

F I L M  C E N S O R S H I P  I N  A U S T R A L I A

Present legislation and the censorship office. — Cinematographic censorship in the Commonwealth is regulated by section 52 g. of the Customs Act of 1901, under which «all goods the importation of which may be prohibited by proclamation» are considered as prohibited imports. Under this section proclamations have been issued and regulations made, which are generically known as «Cinematograph Films Customs Regulations». These regulations govern the conditions under which moving pictures are admitted into the Commonwealth of Australia, and are set forth in the Statutory Rules of 1926, N. 132.

The Preliminary Part of these Rules defines the precise meaning of the terms adopted in the text. Thus the term Censor or «the Censor» means any censor appointed in pursuance of the Regulations to carry out the revision of films, including the «Chief Censor», while «Film» covers all forms of cinematograph ribbon of all dimensions, whether standard or reduced.

These Rules are those generally in force throughout the whole Commonwealth. In point of fact, New South Wales, Victoria and South Australia have particular regulations of their own, in the matter also of cinematograph censorship, but as a general rule they accept the decision of the Commonwealth Censorship. We are further informed by the Commonwealth authorities that negotiations are taking place between the Commonwealth and the several State authorities with a view to the latter handing over their powers to the former, so that uniformity of the laws relating to the control of films may be secured.

The Censorship Board consists of three members, namely the Chief Censor and two other censors, one of whom must be a woman. They are appointed by the Governor General.

The Appeal Board likewise consists of three members: a Chairman and two other members appointed by the Governor General, one of whom must be a woman.

The members of both Boards hold office for such period not exceeding three years as the Governor General may determine at the time of their appointment, and are eligible for reappointment. Members of these Boards who are not officers of the Commonwealth Public Services, receive fees and travelling expenses as fixed by the Governor General. They cannot be removed from office except for misbehaviour or proved incapacity. This also is in the hands of the Governor General.

In the case of illness or inability to attend of a member of the Censorship Board or the Board of Appeal, the Governor General may appoint another person to replace him for a specified period, so as to avoid that the absence of the requisite quorum should hold up the work of the censorship or give rise to protest or question.

Conduct of the censorship board and the appeal board. — The presence of any two members forms a quorum enabling either of the Boards to act.

The decision of the majority prevails, but, in the event of only two members being present and being divided in opinion, it is provided that the decision shall be postponed to a plenary meeting.

In view of the institution of the Board of Appeal and of the possibility of recourse in the last instance to the Minister of Trade and Customs, who may, if he deems expedient, direct that the question of the exhibition of a film be submitted to himself for decision, action cannot be taken in the ordinary Courts against the rejection of or order to reconstruct a film.

Appeal against the decision of the Board of Censors may be made to the appropriate authority not later than 14 days after the date of the notification to the importer of the decision from which the appeal is made;
the appellant must specify in writing the grounds for his recourse, and deposit the sum of 3 guineas together with his appeal. The Board of Appeal retains this amount unless in its opinion the appeal is completely or substantially upheld.

The meetings of the Appeal Board are convoked by the Chairman, who must give notice to the interested party not less than 24 hours before the date fixed for the sitting so that he may file his defence and if he wish be present in person.

The appeal against the decision of the Censor's Office may either be granted in full, or subject to conditions and emendations, or it may be altogether rejected. In any case the Chief Censor of the Office first viewing the film is required to give effect to the decisions of the Court of Appeal.

All films imported into or exported from Australia are subject to the censorship, whether they are intended for public exhibition, or for screening in schools, cultural and educational institutions, or private organizations.

The expenses of both offices are borne by the Government, which meets them either out of the deposits retained when appeals are rejected or, as in the State of Victoria, by a slight adjustment of the figures of the Customs tariffs, or lastly, as we shall see further on, from a fee charged for screening.

THE DUTIES OF THE CENSORSHIP BOARDS.
— As already stated, both Boards deal with films imported into the Commonwealth or exported therefrom.

a) IMPORTATION: No film may be delivered from Customs control until it has been registered in accordance with the Censorship Regulations and a certificate for its delivery in accordance with the appropriate form obtained from the Censor.

The Censorship examines each application for the registration of a film and may:

a) register the film when it is regarded as fit for importation and deliver to the applicant a special certificate for its withdrawal;

b) register the film subject to the conditions specified in the Regulations and to any special conditions which it may see fit to impose; or

c) refuse unconditionally to register it.

Special forms are drawn up for all the above purposes and are appended to the Statutory Rules.

The Comptroller may require importers to furnish a general security prior to the examination of the film and the delivery of the certificate so as to ensure that the requirements of the Board shall be rigorously observed by the importer.

The registration and passing of films by the two Boards may, as above stated, be made conditional to certain requirements and emendations. In such case, the importer is at liberty to refuse to comply with the conditions and, upon definite refusal to pass the film being delivered, he may re-export the film from Australia or destroy it under Customs supervision as a prohibited import.

On the other hand, he may accept the conditions and emendations. In this event, Art. 17 of the Regulations lays down in precise terms the obligations with which the importer must comply. Applications for permission to reconstruct a film must be accompanied by a plan setting out in detail the grounds upon which it is claimed that reconstruction might be permitted and enumerating any proposed deletions or additions. The Chief Censor may at his discretion approve or amend or disapprove the plan thus submitted.

In any case, delivery from the customs of a film for the purpose of reconstruction is not granted unless the importer gives sufficient security for the observance of the following conditions:

1. that no person other than the importer and four bona fide representatives of the importer shall be present at the screening of the film;

2. that all eliminated matter shall be properly tagged, described, and forwarded together with the film to the Censorship Office;

3. that within 14 days after the date of delivery the portion of the film remaining after elimination will be returned to the control of the Customs at the licensed warehouse or station from which it was removed for reconstruction.

One positive copy of all matter eliminated from a film shall be retained at the Censor's office. The remainder of such matter may be re-exported or destroyed under the super-
vision of the Customs, as above stated. All films that have been definitively refused must be re-exported or destroyed within four weeks from the date of such refusal being notified.

The following procedure is adopted by the Censoring Authorities.

All films respecting which application is made for registration must be sent in to the Censorship Board accompanied by a filled-in form specifying the title and class of the film, etc. The Board at its discretion views the film.

Any film submitted for registration is, whenever the Censor requires it, and at such time as he thinks fit, screened for inspection, at the applicant’s risk, upon payment by the applicant in advance of a fee of two shillings and sixpence for each reel of film. The importer and not more than four bona fide representatives of the importer may be present at the screening.

All publicity matter connected with films must before importation be deposited with the Censorship Board, and are subject to the same conditions as the films themselves, comprising the faculty of appeal. In all cases the importer must give security that such matter will not be used in any form other than the form in which it may be passed for importation, unless the consent in writing of the Censorship Board has been obtained.

Publicity matter comprises posters, photographs, sketches, programmes, slides and other advertising matter intended for use in connection with the exhibition of the films.

b) Exportation. The Censorship Board examines all applications received for the permission to export films, and may in accordance with the Regulations:

a) approve the exportation of the film subject to certain conditions or otherwise;

b) refuse permission to export the film where the Board is of the opinion that it is not fit for showing abroad.

The examination of films and publicity matter submitted for exportation is subject to the same conditions as applications for importation. This holds good also with respect to the emendation and reconstruction of films and the possibilities of recourse to the Appeal Board.

Export permits must be delivered by the exporter to the officer of the Customs at the export ship or Parcels Post at the time the film is brought to the wharf or Parcels Post for shipment. The films must, of course, be packed and marked in such a way as to make them readily identifiable with the export permits.

General and Special Standards of Censorship. — Certain definite basic principles underlie the censorship standards of the Australian Commonwealth regulating the importation or exportation of films. Here as elsewhere a whole scheme of rules is gradually being formed whereon the reasons for rejection or revision are based. These are firmly grounded on the few clear and comprehensive rules of morality in accordance with which all civilized peoples regulate their conduct.

a) Religion. Respect for religion in whatever manner it may be expressed or manifested is the general rule from which no deviation is allowed. Religious principles go hand in hand with good manners, and thus blasphemous titles and the representation of sacred subjects in an indecorous or degrading manner are prohibited.

b) Politics. The general and logical distinction as between domestic and foreign policy is enforced. No films that are regarded as derogatory to public interests are passed. Attention to this point is all the more necessary in the case of films that are intended for exportation abroad and which might be liable to stir up ill feeling against the Commonwealth.

As regards foreign policy, it is prohibited to import or export any films likely to be offensive to the people of any friendly nation and in particular to the people of the British Empire, or to prove detrimental or prejudicial to the Commonwealth of Australia.

c) Social Questions. The Australian censorship operates with the usual and necessary rigor in the comprehensive domain of social life. All films that are liable to offend public morality, or that reproduce improper or obscene pictures of life are definitely banned.

d) Crime. All films that are likely to incite to crime or to arouse admiration for criminals, or which in any way present crime in a favourable light are rejected.

As already stated, the censorship does not
apply only to the films themselves and to publicity matter connected therewith, but also to the titles and captions, which may have a corrective or detrimental influence on the film, and are all of an integral part of it.

The Australian Censorship has an eye also on the ethical value of films in relation to the age of spectators, and certificates allowing their exhibition specify whether they are or are not suited for exhibition to children aged under 16 years of age.

**AUSTRALIAN CENSORSHIP STATISTICS.** —

There are a number of statistics partially reflecting the work of the censorship. Official statistics take us to the close of 1927. These are interesting and, in some points, highly significant.

*a) 1927 Imports:*

<table>
<thead>
<tr>
<th>Origin</th>
<th>Films</th>
<th>Footage (one copy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1366</td>
<td>4,148,460</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>369</td>
<td>914,609</td>
</tr>
<tr>
<td>Other Countries</td>
<td>235</td>
<td>650,247</td>
</tr>
</tbody>
</table>

This gives a total of 1970 films and a total footage of 5,723,316 feet (1).

(1) 736 out of the aggregate of 1970 films were of sub-standard length (total of 1590 reels). It will be noted that there is a fall in imports, as compared with those for 1927, although they register a marked increment; in favour of the U. K. Imports during the previous year were sub-divided as follows:

<table>
<thead>
<tr>
<th>Origin</th>
<th>Films</th>
<th>Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1681</td>
<td>5,119,241</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>271</td>
<td>492,869</td>
</tr>
<tr>
<td>Other Countries</td>
<td>190</td>
<td>553,228</td>
</tr>
</tbody>
</table>

giving an aggregate of 2151 films and a total footage of 6,197,338 feet.

Of these 1970 films, 1492 were passed unconditionally, 420 were passed after eliminations had been made, and 58 were rejected in the first instance.

The Censorship is of course mainly concerned with films of a dramatic character (feature films). 640 films of this type were examined and dealt with as follows:

<table>
<thead>
<tr>
<th>Origin</th>
<th>Films</th>
<th>Footage (one copy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>512</td>
<td>3,122,814</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>74</td>
<td>528,152</td>
</tr>
<tr>
<td>Other Countries</td>
<td>54</td>
<td>384,957</td>
</tr>
</tbody>
</table>

225 of these were passed without eliminations, 361 were passed after eliminations, and 54 were rejected.

Of the total of 54 films rejected, 38 were returned to the country of origin without being exhibited in Australia and 18 were granted registration after being altered and reconstructed in such a manner as to conform to the standards of Censorship.

There were four final appeals to the Minister for Trade and Customs. In the case of two of these films, the decision of the Chief Censor was upheld, while two were passed after being reconstructed as required.

During the four years 1925-1927 the following feature plays were dealt with as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passed without eliminations</td>
<td>322</td>
<td>44.6</td>
<td>359</td>
<td>51.5</td>
</tr>
<tr>
<td>Passed after eliminations</td>
<td>331</td>
<td>45.9</td>
<td>308</td>
<td>43.0</td>
</tr>
<tr>
<td>Rejected in first instance</td>
<td>68</td>
<td>9.4</td>
<td>88</td>
<td>12.3</td>
</tr>
<tr>
<td>Totals</td>
<td>721</td>
<td>697</td>
<td>715</td>
<td>640</td>
</tr>
<tr>
<td>Absolute rejections</td>
<td>47</td>
<td>6.5</td>
<td>57</td>
<td>8.1</td>
</tr>
</tbody>
</table>

*b) EXPORTATION. During 1928, 546 films were exported from Australia. These films were exported to the following countries:*

<table>
<thead>
<tr>
<th>Country</th>
<th>Films</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Guinea</td>
<td>93</td>
</tr>
<tr>
<td>Fiji</td>
<td>64</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
</tr>
<tr>
<td>Norfolk Island</td>
<td>22</td>
</tr>
<tr>
<td>New Zealand</td>
<td>98</td>
</tr>
<tr>
<td>United States</td>
<td>93</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>54</td>
</tr>
<tr>
<td>Straits Settlements</td>
<td>40</td>
</tr>
<tr>
<td>Java</td>
<td>22</td>
</tr>
</tbody>
</table>

India .......... 6
Pacific Islands .. 31
Japan ........... 7
Philippine Islands .. 13
France .......... 1

It will be noted that there is still a considerable difference in volume between Australian imports and exports. But in any case statistical returns point to the likelihood that in the not distant future Australia will be in a position to hold its own against the invasion of foreign films.
THE CINEMA AND THE TREASURY

One of the revenues of the Treasury that is continually on the increase in every nation is that deriving from the tax on public entertainments, and among these is naturally included the cinema. The average revenue in France during recent years from this source has amounted to 260 million francs, in round figures (Bulletin de la Chambre Syndicale Franaise, Paris, D, 24/115). This fact to some extent justifies the resistance opposed by all the governments to the demand made for fiscal abatements in the interests of culture, science and education, since such abatements would necessarily entail the sacrifice of a considerable item in the Budget.

Apart from the campaign waged by all those interested for a general reduction of the tax on entertainments, the purely educational and scientific film ought undoubtedly to be exempted.

Whether the State should or should not burden by taxation one of the public forms of enjoyment and recreation is a question more or less open to discussion. It may be that one of these days we shall succeed, in the interests of the worker who has a right to a little pleasure after his day's toil — in devising a system exempting entertainments of a popular character from taxation and taxing more heavily those of a luxurious type. In any case, all entertainments, whether at the cinematograph or otherwise, which aim definitely at increasing culture and knowledge, or that are organized for purposes of propaganda and for the spread of ideas, should be exempted from any kind of tax. To tax a thing is equivalent to acknowledging and sanctioning its superfluosity, if not its uselessness. Necessities should not be taxed.

A typical example of this system is offered by Germany. In the Reich, according to the report presented by M. Fernand Morel at the recent International Congress of the Cinema at Paris (Cine Journal, Paris, F 24/109), the average tax on entertainments, starting from June 10, 1926, was fixed on the basis of 15%, with the faculty on the part of the municipality levying the tax, of increasing or reducing it by 5% and 3% respectively.

This faculty of increasing the percentage, of which the municipalities almost always avail themselves, brings the maximum percentage to 20%. A diminishing tariff is, however, provided for films of an instructive or educational character, and for propaganda films. The reduction is generally granted in accordance with rather vague and empirical criteria. A film, for instance, which is 200 metres long enjoys, on that account alone, a reduction of 3%; a film of normal length but of a generally cultural tenor, is entitled to a reduction of 8%; while cinematograph programmes entirely composed of educational, scientific or documentary films are exempted from taxation.

In France, after a vigorous campaign waged by cinema proprietors and by the syndicalist organizations, the Financial Commission approved a general reduction of 50% on the entertainment tax (The Film Daily, New York, F. 24/115) whereas the cinema proprietors expected and still hope that Parliament will stretch the reduction to 70% when it comes to be ratified (The Daily Film Renter, London, F. 24/118). A reduction of from 5 to 11% of the complementary poor tax which has been in force since 1439 is asked for.

In Australia, on the other hand (Le Courrier Cinematographique, Paris, F. 24/116) while a very high customs' duty has been introduced on the importation of foreign films, the tax already in force on public entertainments in general has also been increased. The Government of the Irish Free State also (Le Courrier Cinematographique, Paris, F. 24/117) has decided to tax, indirectly, the entrance tickets to cinemas, by imposing an import duty of 33% ad valorem on the apparatus for sound films, in spite of the protests of the Association of Cinema Theatre Managers, who fear that this will hit the introduction of this type of film.

In the other European countries things are at a standstill in this connection, although everywhere an attempt is being made to induce the various governments to revise;
the fiscal regime, for the benefit of both cinematograph proprietor and spectator.

In **England**, the entertainment tax (Ciné Journal, Paris - F. 24/109) is from a penny to ninepence on entrance tickets costing between sevendence and five shillings; the tax on tickets costing more than five shillings is fixed at a shilling, while the sixpenny tickets are exempted.

In **Austria**, there is only an annual tax based on income, but as there is a special law authorizing communes to impose on their own account taxes which may reach as high as 50% (a percentage actually applied only at Innsbruck), all the municipalities profit by this authorization to a considerable extent, imposing taxes that average about 28%.

In **Italy**, there is a fixed tax of 20% on the daily returns, as well as certain non compulsory taxes on syndicalist associations and others. In the province of Milan, however, there is an additional tax of 2% on the Scala for the benefit of the Roadways Board.

In **Belgium**, there is, as in England, a progressive tax of from 10 to 22%, according to the prices of tickets, which vary from 3 to 7 francs and more. The tax is completed by another so-called censor’s tax, which is equal to 5% of the sum paid to the State; and there are also optional communal taxes which may amount to as much as 100% of the State tax, but which, with some few exceptions (Char- leroi 65%, Namur 60%), are kept within an average of 30%.

In **Sweden** the tax on entertainments, likewise progressive, varies from 5 to 60 öre according to the price of the ticket, which varies in its turn from 50 öre (equal to 3.55 French francs) to more than 250 öre.

In **Switzerland**, the only tax in force on entertainments is a communal tax, which is 10% in the Latin cantons and 15% at Geneva in addition to a supplementary poor tax of 7.50%. There is no tax on entertainments in German Switzerland.

The general average is around 20%, with slight variations. A good fifth of the general revenues from entertainments goes to the State or the Communes, and this necessarily influences the possibility on the part of the public to frequent such places of entertainment. The suppression of this tax would undoubtedly bring about a considerable increase in the number of spectators, especially among the less well-off classes, and, together with a rigid censorship, would be conducive to a better and wider diffusion of social and moral ideals and a fuller knowledge of the world. The loss sustained by the State would thus be compensated by moral and cultural improvement. But is it very likely that moral considerations will carry any great weight in the fiscal domain, which is strictly concerned with mathematics?

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**MANUFACTURED TOBACOS OF THE HUNGARIAN ROYAL TOBACCO MONOPOLY**

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<tr>
<th>CIGARETTEs:</th>
<th>Export Price per 100 Pieces (in Pengos)</th>
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<tr>
<td><strong>Coronas</strong>, gold-tipped (in packets of 20)</td>
<td>4.90</td>
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<tr>
<td><strong>Triumph</strong>, Rose petal-tipped (in packets of 20)</td>
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<tr>
<td><strong>Sphinx</strong>, straw-tipped (in packets of 20)</td>
<td>4.30</td>
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<tr>
<td><strong>Coronitas</strong>, gold-tipped (in packets of 20)</td>
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<td><strong>Stenbocai</strong>, without mouthpiece</td>
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<th>CIgars:</th>
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<td><strong>Royal</strong>, (in boxes of 20)</td>
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<td><strong>Heros</strong>, (in boxes of 25)</td>
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<td><strong>Novitas</strong>, (in boxes of 20)</td>
<td>26.35</td>
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<td><strong>Regalia Media</strong>, (in boxes of 25)</td>
<td>17.48</td>
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<td><strong>Tobacco</strong>, (in cases of 5)</td>
<td>11.40</td>
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<th>Day</th>
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THE CINEMATOGRAPH IN THE SOVIET REPUBLIC

The enormous development of the cinematograph in Soviet Russia may be set forth in a brief sketch, with the aid of a few figures. It is already well known that whereas the screen industry is passing through a period of crisis in all but a very few countries, partly on account of the fight between mute and sound films and partly on account of purely economic reasons, the Soviet Republic has decided to constitute, through the Central Committee for the Cinematograph of Moscow, a special organization which is to work out, with the active assistance of all the national cinematograph organizations, a project for the definite systematization of cinematographic art in Russia (Film Kurier, Berlin, F. 25/135). This initiative has a double motive: to spread the cinematograph throughout the country and to conquer foreign markets. With regard to the more delicate point, namely, the exportation of the Russian film, it is well known that exports at the present day reach with difficulty the total of half a million roubles a year (Kinematograph, Berlin, F. 19/362), a figure which is in sharp contrast with the fame that the Soviet production has gained technically. On the other hand, although the Republic has an enormous territory and a very large population (a great part of which has yet but little contact with the cinema) one of the greatest sources of profit and of developing the major possibilities of the cinema is to be found in the winning over of foreign markets; it is only by this means that the immense cost of films can be covered. It is therefore necessary not only to work strenuously at home, but also to conduct a successful battle abroad. The demand for blank films, in close relation with the constant increase of production, has been almost trebled, partly because Russia lacks a local industry capable of supplying its needs. Almost all the blank films needed for its works come from Germany (Casseler Post, Cassel, F. 19/307). A comparison of the first six months of the three years 1927-1929 gives us the following figures:

Exportation of blank films from German territory, in round figures: metres 31,969,000, 35,418,000, 47,912,000

Exportation to Russia: metres 5,434,000, 11,521,000, 19,915,000.

The task of developing the home market in being actively pursued, and a serious and growing attempt is being made to conquer foreign markets. According to the new official programme of the Central Russian Committee, or at least according to the information we have been able to obtain, in the period still to run between the present moment and the year 1932-33, 12,846 travelling cinemas and 4112 fixed cinema theatres are to be established in the Republic (Je sais tout, Paris - F. 19/275), and it is estimated that the number of spectators, which was about forty millions in 1927-28, will then reach over one thousand and three hundred millions. At the same time the number of cinema operators will increase from the present 5000 to 20,000.

These two last figures should be considered with special attention. The presumed number of spectators is in relation to the vast extent of Russian territory, which would necessitate the creation not of another 4000 theatres, but of tens of thousands of new cinematograph theatres, as well as the itinerant but efficacious work of travelling cinemas, an organization which corresponds to the eminently rural character of the population, and the propaganda and exhibition possibilities of which are in a certain sense unlimited.

The number of operators is of importance not only in itself but also because these men must have a very special training when they are to work in villages. They must not only
ensure the technical perfection of the shows, but also make sure that they are understood by the masses, largely illiterate, that will form their audiences. It is for this reason that the Russian cameraman acts practically as lecturer and propagandist, reading aloud the captions and explanations accompanying the films, and often giving supplementary explanations on the main points.

Rural propaganda is an important factor of cultural and educational propaganda. And the Soviets have this subject greatly at heart, particularly in view of the fact that at the present day the spectator, probably owing to the lack of good film material bearing on culture and science, is not attracted by this kind of spectacle. While arrangements have been made for the increase of existing scholastic cinemas in the Ukraine alone to 1200 within the next five years, the government of the U.S.S.R. has earmarked the sum of 63 million gold roubles, according to the official statement made at Berlin by MM. Marianoff and Sucharewsky, for the production of educational and scholastic films during the next five years (Der Bildwart, Berlin, F. 26/23). It is also worthy of note that the Sovkino Co. has planned, for 1929-1930, the production of 53 big films, against 208 reduced mangerage films, some of which will deal with political subjects; the greater number, however, dealing with social hygiene, industry, agriculture, ethnography, economic geography and events of the day (Humanité, Paris, F. 3/259).

The technical type of film that has most success in Russia today is the sound and talking film. The great scene director Eisenstein considers, indeed, that the mute film has had its day (Ciné Journal, Paris, F. 10/264). The optical works of Leningrad will shortly terminate the first ten apparatus of authentic national production, according to Shorin's invention, the details of which are still kept secret. Arrangements have also been made for the construction, during the next industrial year, of 250 other apparatus of the same kind, which will be financed by the Electrical Industry Trust.

The development of this technical branch has already had its effect on the public and on the production of films.

The people crowd to the cinemas in such numbers that they continually have to wait in queues for the next show of the new type of film. As to production, the film industry in Russia has decided to make more than a hundred million gold roubles' worth of sound films during the next two or three years. To this end, an endeavour is being made to establish close collaboration with foreign houses, especially German ones, in the hope of bringing the two industries into closer relations and of making the Russian film better known in Germany (Kinematrograph, Berlin, F. 12/451).

Russia, in fact, as the Investija affirm, justly considers that the film is not merely a matter of thought and art but also of business, and that, as business, it has a right to live. 'To live means to know and make oneself known, which is one and the same thing; and in the world of business life means crossing one's own frontiers and making the economic conquest of foreign markets.

GERMAN FILM BUSINESS DURING 1929

During the first nine months of 1929 there was something of a crisis in the cinematograph industry in Germany, with, however, an influx of new business as compensation. While there were 157 cinematograph firms that had to come to an arrangement with their creditors, five of them being declared bankrupt, there were, on the other hand, 136 new cinematograph firms inscribed in the books of the Commercial Court. Thirty-seven firms changed hands.

The greater number (58) of the new firms were constituted in East Germany. After this comes West Germany (27 new firms), Central Germany (25 new firms), Southern Germany (18) and Northern Germany (8).

One of the most important points to be noted is the commercial type of the new
firms. Only four of them are corporations, one a joint stock company, 88 are limited liability companies and the other 43 are firms without any guarantee of liability.

The capital declared by the 136 firms formed a total of 2,565,500 marks, 510,000 of which belonged to the four corporations, and 2,055,000 to the limited liability companies. The capital of existing firms was increased by 625,000 marks, 525,000 of which went to corporations, and 100,000 to limited liability companies. The total amount of capital invested in the cinematograph industry, in the first nine months of 1929, was 3,190,000 marks, while other firms registered a reduction of 80,000 marks.

As we said in the beginning, the number of firms that were in difficulties and that went bankrupt, considered in relation to the number of new Companies formed, suggests that there was a crisis in the German cinematograph industry; and in fact this view is held by some persons (1) who regard it as connected with the general situation of the country.

But the real facts of the case show the situation to be more promising. After deducting the capital withdrawn from the industry, there still remains an increase of capital to the amount of 3,110,000 marks; which is a demonstration of the real consequence of the bankruptcies and arrangements with creditors.

When, in a period of more or less general economic crisis, the large sum above mentioned is invested in an industry within the short space of nine months, and when it is further, invested in the constitution of new firms, we have the material proof that capitalists have faith in the future of the industry in question; which in this case signifies that they have faith in the future of the screen and in its possibilities.

The data to hand do not state what class of subscription was adopted for the various companies. It is obvious, however, that the subscribers were either private persons (and a private investor who risks his money knows or at least has reason to trust that it will not be lost); or they were capitalists or firms in the industrial world, in which case they were in the best possible condition to weigh the risks and to decide upon the advantages not only of increasing the capital of existing firms, but also of assisting in the creation of new ones, always a rather hazardous undertaking economically.

On the other hand, the numerical importance of the failures must be considered not as an isolated fact, but in relation to the above mentioned circumstances.

In Germany as elsewhere, the economico-biological phenomenon of selection holds good in the cinematograph industry — as indeed in industry in general; and selection is always a gradual process.

The smaller and weaker organizations, and those which are not so well prepared for the battle, are apt to collapse, leaving the future to those which are sounder financially and materially.

It may also be true, although it cannot be demonstrated by statistics, that the failure of the less sound firms is due to a new factor that is being introduced into the life of the screen: the arrival of the sound film, and its struggle with the mute film. This necessitates transformations, new plants and other expenditure, which the less powerful organizations are not in a position to meet. But is a transformation in technique, which necessarily brings its economic consequences, to be considered as a crisis, or should it not rather be considered as a phase of evolution, and therefore as a further and better chance of life?

---

The value of an object or of any manifestation of thought or art can be tangibly expressed only in figures. Numbers are the index of the practical life we live and set forth facts in clear and unequivocal fashion. Most people are more open to the persuasion of arithmetic than to that of theory or commentary, which, though they may attain to fine flights of dialectics are apt to settle out of sight upon dusty book-shelves or to remain closeted in the minds of dreamers. We might almost invert the ancient biblical dictum and say: *multi et electi* are those that take a practical view of life, while the few who go through the world hugging some hidden and sterile dream are no longer the elect.

The figures of the Cinema are eloquent. They evince the value that the world attaches to the new art which has so definitely and triumphantly established its sway. They show that there are no bounds to the progress of the screen, that nothing can now check it and that it is bound in time to convince even those who are doubtful and critical about it to-day.

According to the most recent statistics, the number of cinema theatres may be said to be increasing day by day. To confine ourselves to two States whose statistics are on a fairly modest scale, Roumania has 540 cinemas to-day, a tenth part (50) of which are at Bucharest (*Bulletin de la Chambre Syndicale Française*, Paris, F. 19/358); while Hungary has 467, 91 of which are at Budapest (*Bull. cit.*, F.19/359).

Considering the extent and density of the territory and populations of the two countries the proportion to territory is greater in Hungary, while, if we look only to the capitals, the first place must be granted to Bucharest.

The increase of cinema theatres and of the number of spectators is, according to the most recent information, directly related to the progress of the sound film. In America, the number of persons who go to cinematograph shows is from 15 to 20 per cent larger than last year, and this is particularly the case in those theatres that have been equipped for the new kind of film (*The Daily Film Renter*, London - F. 19/356).

In Holland also, and particularly at Amsterdam, the number of spectators attending cinematograph shows is constantly increasing (*The Film Daily*, New York - D. 19/365).

Contemporaneously with the announcement that the Western Electric Co. has, up to the present, installed 3500 sound equipments throughout the world (*The Daily Film Renter*, London - D. 19/361), 12 of which are in Sweden (*The Film Daily*, New York - F. 19/366), we learn that there are 400 new films in preparation for the year 1930 in America alone, 70 % of which will be sound or talking films. (*Il Cinema Italiano*, Rome - F. 19/363).

With regard to the apparatus, 307 Phonofilms and De Forest Phonodisc equipments have been set up in the United States, in addition to those of the Western Electric Co. In Europe, 200 apparatus of the latter system have been set up. (*The Daily Film Renter*, London - F. 19/364).

At Dallas, in the United States (*The Film, Daily New York* - F. 19/373) out of the 53 cinemas managed by the Rowley and Robb Theatres Inc., 27 are already supplied with sound plants, on which the company has spent more than 300,000 dollars.

That the cinema is useful as giving life to a veritable army of workers connected with the screen, from the upper ranks of those concerned with its technical and artistic side, to the last supernumerary, is a fact which admits of no discussion. The following figures, however, may be useful as showing the economic-social value of this extremely modern means for the spread of popular knowledge. For the installations of sound films alone in the United Kingdom, the Western Electric Co. has 739 employés on its books, 215 of whom are English engineers, the others being employés of diverse categories, and all English with the exception of 34 Americans. (*The Daily Film Renter*, London - F. 19/377).

On the Californian coast (*La Película*,
Buenos Ayres - F. 19/371) and in the various studios scattered along the shores of the Pacific Ocean, there are 13,054 persons employed, to which number must be added 5457 auxiliary employees, who work casually from one studio to another. Altogether, there are 19,111 employees, without counting directors and managers, technical experts and actors and actresses.

The employment of this great mass of screen workers represents a considerable movement of capital: three million dollars per week, or 136 million dollars per year.

On the other hand, there is the disadvantage that since the advent of the sound film, 7000 musicians out of the 25,000 employed by the cinemas in the United States and Canada, are out of work (The Film Daily, New York - F. 19/368); a great mass of workers who will gradually be made room for, but who, for the moment, are certainly not likely to bless the new development.

In addition to its economic aspect, there is the indirect social welfare aspect of the screen. In England, according to the Daily Film Renter (London - F. 19/370) an average of 21% of the cash taken in the cinemas open on Sundays is assigned to charity. Last year's statistics for the City of Berlin on the means of relief and assistance to the people show that the cinemas of the capital provide a living for 8000 workers who would otherwise be on the list of unemployed.

There are seven film-distributing companies in the territory of the Commonwealth, representing the producers all over the world. The General Directors of the said companies are federated in the Motion Picture Distributors of Australia, under the presidency of Sir Victor Wilson.

The Australian Government, through its Department of Emigration produces directly a series of Films «Know your own Country», which are diffused everywhere and which form the object of a recent convention between the Commonwealth and the Trade Commissioner's Department in New York.

The output of films is limited both by lack of the requisite capital, and by the cost of each single film, which varies from £. 3,000 to £ 10,000, thus rendering it necessary to seek markets outside Australia.

The capital invested in the Cinema industry is estimated at the present time at £. 25,000,000, all owned by Australian Companies. About 20,000 persons are employed, either directly or indirectly, by the local film industry.

There are about 1250 cinematograph halls in Australia, many of which are scattered throughout the small centres.

The hire value of the films is estimated at the present time at about one million and a half pounds sterling yearly, and the yearly number of spectators at about 110 millions, a large number, when we consider that the population of the Commonwealth does not exceed six and a half millions.

An American captain of the film industry, William H. Hays, made a striking speech on the cinema at the New York Board of Trade on the 13th November 1929 in which he set forth American cinema statistics in a series of crude but incisive statements.

Mr. Hays said that during 1928 the attendance in cinemas increased weekly by ten millions.

During two years the American film trade employed a capital of half a billion dollars in transforming the old cinema plant into equipment suitable for sound films.

American capital invested in the film industry amounts at the present time to 2,500,000,000 dollars, and the industry employs 325,000 men and women. It absorbs yearly 150,000,000 feet of ribbon for negatives and 1,500,000,000 feet for positives.

More silver is used in the American film industry at the present day than in any other trade in the world.

15,000 cinema advertisements are published daily and 100,000,000 dollars were spent on this form of publicity during 1929.

Exports increased during the first nine months of 1929 as compared with the same period of 1928 by 41,000,000 feet of positive film. The Department of Commerce estimates that America makes one dollar out of every foot of American film that crosses her frontiers.

All this shows that the one things that counts in the world of to-day is figures. The fact that the cinema is a manifestation of art and of technical genius and that it has social possibilities does not alter the business
realities of the case. Art and technique are problems for dreamers and research workers; the question of what the cinema may contribute to world life is a matter for the student who analyses the secret motive powers of human action; but business is at the root of it all, the need to live and conquer world markets; the purely economic fact of the struggle and victory of the strongest. The fact that the cinema has created a new industry and provides a livelihood for a whole army of men and women, who would otherwise be without employment, is a tangible fact expressed in figures that end in a goodly series of zeros, and the art and technique that form its core become a simple matter, ‘though they are the unconscious instruments of one of the most formidable businesses of our age.

Will Hays ended his concise statement of the history of the cinema by four aphorisms:—

George Washington was one of the richest men in the Colony. The first Bill he signed as President was one for the development of manufactures and trade;

Alexander Hamilton was a business man, even in his career as a statesman.

The eloquence and fame of Benjamin Franklin’s writings on economics have overshadowed his political writings;

The voyage in the course of which Christopher Columbus discovered America was the outcome of a business enterprise. Queen Isabella pledged her jewels at exorbitant interest in the hope that the exploration she was financing might bring the wealth of the Indies to Spain.

In all this play of figures and dollars, the country that is farthest away in the East, but that is intellectually and artistically most closely in touch with a form of progress that has age-old traditions and origins, is working in silence. Among the many film-producing houses of Japan, there are six whose capital already reaches over one and a third millions sterling. Last year, in the land of the Rising Sun, 200 long-meterage films were produced, 60% of which kept their national character intact. (Cinetrafografo, Rome - F. 19/367).

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ABOUT THE WORLD

In one of the earliest numbers of the International Review, a zealous and valuable member of the Governing Body of the Institute, Señorita Gabriela Mistral, pointed to the cinema as one of the finest means of propaganda and documentary and folklore culture.

Side by side with the work that the Institute is carrying out in steady pursuit of the aims for which it was formed, it is interesting to note that all over the world the documentary film is constantly advancing in favour, for the public is coming to realize that this is the most tangible record of the passing show and that the celluloid ribbon will bear incontrovertible testimony to generations to come of the life of our time, which would otherwise remain a closed page to them, and indeed become but a pallid memory to ourselves with the passing of years.

The documentary film, though it is strictly a film of science and culture, must not be confounded with the typical educational film. The latter, the purpose of which is to educate and to popularize science, comes within the strict domain of teaching. The former, on the contrary, is more universal in its scope, that extends beyond the school walls and the purpose of completing or replacing the work of the schoolmaster, and is becoming an increasingly popular item in the public cinema halls.

A few extracts from some of the latest reviews and newspapers will afford an idea of the value of this particular type of film.

Europe. — In Russia, the Ufa Co. and the Klangfilm have subscribed to an enterprise for carrying out a vast programme of film production, both sound and talking. The first which is entitled «Hadchi Murat» and is taken from a novel by Tolstoi, reproduces the century-old struggles of the mountain tribes of the Caucasus to obtain their freedom. The scenes of drama and passion are unfolded amid realistic scenery and local customs which are destined before long to disappear (La Película, Buenos Ayres, F. 6/314).

Russia has also produced a documentary and propagandist film, «The Eleventh Year», illustrating the life and work of the Soviets during the last few years throughout the whole of the territory of the U. S. S. R. (Humanité, Paris, F. 3/229).

This too is a typical document, which will remain as a picture of the life and work that have grown out of the revolution; it is of the same type as the film «Year VII», illustrating the new works of the Fascist regime in Italy.

The latest news to date in Italy concerns a film «Romagna» produced by the National L. U. C. E. Institute. This shows the artistic beauties and characteristic folklore of that region (Il Tevere, Rome, F. 6/320). Another film La Grazia, which was photographed almost entirely amid the woody and picturesque mountain scenery of Gennargentu in Sardinia (La Tribuna, Rome, F. 6/322) and which is based on a story by Grazia Deledda, gives a complete illustration of the manners and customs of that part of the island.

While France, on its side, is organizing, by means of the Pathé Journal (Comœdia, Paris, F. 6/27) a series of sound films of topical events throughout the entire territory of the Republic, of a definitely documentary and folklore character, in Germany, the Ufa Co., is carrying out a film illustrating the navigable rivers and canals of the Reich and the methods adopted to foresee and forestall floods (Popular Film, Barcelona, F. 6/303). This film does not only afford documentary evidence of an actual state of things, but is also scientific in the ends it serves, and acts as propaganda for inland navigation. Meanwhile, the «Richard Wagner» Union of German Women has organized, at the Kammer Lichtspiel of Magdeburg, an exhibition of the film «Wahnfried», which illustrates the
country of Franconia and the typical pilgrimages made to the ancient residence of the Margraves of Beyrouth and the surrounding castles (Magdeburgische Zeitung, Magdeburg, F. 6/321).

In England, Walter Creighton is carrying out a talking film which has been described as a genuine panorama of the British Empire and will probably be one of the greatest documentary films produced up to the present. The film has been executed in cooperation with the Empire Marketing Board; the title has not yet been definitely fixed upon (The Daily Film Renter, London, F. 6/301). In any case, it gives a complete picture of English expansion throughout the world, through her dominions, protectorates, mandates and self-governing colonies, of everything in fact that demonstrates and justifies the prestige and power of the Empire.

Iceland also (Popular Film, Barcelona, F. 6/302) will, thanks to the Ufa, have its cinematographic document, reproducing its wild and melancholy beauties, its eternally ice-covered mountains and its seas almost always veiled in gloom; the film will also illustrate the intimate life and customs of the inhabitants.

Spain has already launched the film Asturias at the cinema of Oviedo (Region, Oviedo, F. 6/299); it is the first of a folklore series, illustrating the life of Gijon and other characteristic parts of that region.

America. — We pass from a picture of the jolly and careless life of the students of Bregon University (Movie Makers, New York, F. 6/300), a production of the students themselves, who are the actors, scene directors, technicians and supernumeraries of a film that took three months' work to prepare, and probably entailed the omission of a certain amount of study, to the film » The Marvels of the Amazon », which was projected at the Dusseldorf Planetarium (Dusseldorfer Nachrichten, Dusseldorf, F. 6/317) and is of special interest on account of its reproductions of the scenery and the extraordinary wealth of its folklore scenes.

Contemporaneously, a sound and talking film was shown in Spain (El Debate, Madrid, F. 6/307) under the title » Black Souls and Humble Hearts », based on memories of the unforgettable Uncle Tom. It gives an entirely new and profoundly humane view of the life of the masses of negroes dwelling in the Southern States of America around the Mississippi.

Africa, which is still a wild and virgin country, in spite of the advance of civilization, has always had its attraction for the research student and the scholar.

After being shown in other important Italian towns, the film » Silvia Zulu » was shown in Venice, where it enjoyed a marked success (La Gazzetta di Venezia, Venice, F. 6/66). This film was made during the expedition to Zululand led by Captain Gatti. An extremely interesting folklore and geographical record of the country centres round a slight love story, the principal figures of which are two magnificent natives.

At the Gramercy Studios in New York, the well known African explorers, Mr. and Mrs. Martin Johnson, are working on a talking film » Across the World » (The Film Daily, New York - D. 6/311), which is built up around their fascinating adventures in Africa.

Meanwhile, the African film » Stampede », produced in America for the British Instructional Films Co. (The Times, London, F. 6/313) is being shown in London. M. De la Fontaine is engaged on the production of » Seto », a film of adventure, documentation and folklore, the scenes of which are laid in the desert solitudes of the Sahara (The Daily Film Renter, London - F. 6/306); and lastly, an American company for the production of documentary films has already had an extremely sensitive sound apparatus taken to Africa, together with three microphones suitable for reproducing the human voice, the howling of wild beasts and the singing of birds (The Billboard, Cincinnati, D. 6/310).

Asia also has many characteristic things to show us. Sammy Bill was courageous enough, during the recent religious disturbances between Arabs and Zionists in Palestine, to work off a film which has a quadruple value: documentary, political, folklorist and topical (Comœdia, Paris - F. 6/298).

Out of the series of photographs taken in the Indian jungle by Commander G. M. Dyott (The Film Daily, New York - F. 6/205), a film has been created with the title » Hunting tigers in India »; it is a typical and amusing novelty, and is at the same time ex-
The problem of preserving films is certainly up against serious technical difficulties, which engage the serious attention of such institutions as the "London Central Library" which, it is stated in the Daily Chronicle, is appealing for at least £50,000 for the important national purpose of safeguarding suitable films against decay. "We are told that most of the film companies allow their old pictures to moulder on their shelves. But those that are worthy of preservation should be put in "cold storage" and protected against decay." (The Daily Chronicle, London - F. 34/360).

In Germany also the question of the creation of a cinematographic Museum is being widely discussed and, despite all technical difficulties, a demand is being voiced for the creation of a great Film Archive for the preservation of films.

We insist upon the need for a Cinema Museum that would collect and preserve the best copies of all the best films, just as pictures and books are collected in State Galleries and Libraries. (Film Kurier, Berlin - F. 34/377).

There is already a Film Museum in the United States; namely the University of Southern California Cinematic and Art Museum. This is due to the initiative of Mr. J. Tarbottom Armstrong who, after being its tenacious advocate, in now its able director.

This Museum possesses relics of the infancy days of the cinema industry, among others:

"There is a cinema camera which is believed to be the fourth ever made. Together with the camera is preserved a film reel that was manufactured at the same time. There is also the first film ever taken in Los Angeles, a short film made in 1902, showing a horse race at the City Exhibition Park.
There is also another film, taken last year, which shows Theodore Roosevelt, then President, as he alighted from his train and made a speech at Los Angeles. (Southern California Daily Trojan, Los Angeles - F. 34/351).

This now very general wish for cinematographic Museums, similar to the Libraries and Picture Galleries of past times, demonstrates the ever growing importance attached to the cinema in the field of international education; it was the same with the press when it was first invented.

«In 1468 Gunterberg, by inventing the printing press, enabled men to propagate their written ideas far and wide. This was the first step towards international propaganda of the customs and habits of the several countries. In 1895 the Brothers Lumiére, by inventing the Cinematograph, made it possible for the nations to do the most effective propaganda in making known themselves, their methods of organization and the value of their social ideals. Thus the cinema replaces the book. And then the film is a polyglot that leaves the most lasting impression of all that it shows». Maurice Labro in the Courrier Cinematographique, Paris - (F. 34/388).

Indeed no industry and no mechanism devised for the benefit of man kind has ever progressed so rapidly as the mute and talking cinema.

«Only the printing press can be compared with the cinema in its great educational power» (Film Daily, New York - F. 34/357).

The educational force of the cinema was again recently stressed at Hollywood by Mr. Winston Churchill who, speaking of the cinema as an instrument of future world peace, pronounced these words:

«The cinematograph is a new educational institution that has branches all over the world and that affords all the peoples a new method of education and civilization. (Exhibitors’ Herald World, Chicago - F. 34/329).

In view of this new realization of the educative powers of the cinema and its beneficent influence on family life and society, proper attention ought to be paid to the real needs of the masses, and the films offered them should be really both popular and instructive, so as to enable the cinema to redeem its unfair reputation as a mere means of superfluous amusement.

«May it become for us what the theatre was for ancient Greece, and what to-day it can no longer be for many reasons; that is to say a show in which the collectivity takes an active spiritual interest, and in which the public, instead of the usual careless attention it pays to passing shows, takes a living part, follows the action enthusiastically, and participates as actors in the scene».

Russian production seems to be following along these lines; sooner or later the other producing nations will realize the need of pursuing a new direction so as to render the film morally and educationally effective and a purifying influence — all things that are not consonant with the old conception we had of it. (Il Cinematografico, Rome - F. 34/345).
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The President of the International Agricultural Institute.
The Director of the International Labour Office.
The Director of the International Institute of Intellectual Cooperation.

are present at the meetings in an advisory capacity.

OPRESCU Prof. Giorgio, Secretary.
dc FEO Doctor Luciano, Director.
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THE SOUND FILM AND COPYRIGHT

(From the German)

I.

A fresh problem has arisen in Germany to complicate the manifold economic and artistic problems that already beset the sound-film. In addition to the difficulties of all kinds regarding patents which are creating an increasingly untenable situation, a society of authors is now putting forward a claim for a percentage on all exhibitions of sound-films which are protected by copyright. The Gema (Genossenschaft zur Verwertung musikalischer Aufführungsrechte) — the Society for the protection of Copyright in Musical Performances — has recently addressed a request to this effect to the German cinema industry.

It is obvious that in the codification of authors' rights the law did not take sound-films into account because this type of film — notwithstanding the experiments made with it at the beginning of the Century — has assumed real economic importance only during the last two years. Nor, according to the results of the enquiries carried out by the Spitzenorganisation der Deutschen Filmindustrie (Central Organization of the German Film Industry) has the law so far considered this question in any of the countries that produce and manufacture sound films. We are therefore on virgin soil in this domain. Studies to ascertain the legal status of the sound-film are for the present of a purely theoretic kind.

As in the case of all new juridical and economic problems that arise in the course of technical developments (broadcasting for example) this new legal problem falls within the scope of the general system of existing legislation until such time as the law may make special provision for it. The rights in the sound-film could come under one of the following heads: the rights subsisting in mechanical reproduction; the rights in cinematographic reproduction, and, lastly, the rights in public representations, which are identical with those in musical performances.

II.

1. The majority of the German film manufacturers consider that the rights in the sound-film are in the nature of rights in mechanical contrivances. According to the provisions of the German copyright law on the obligation to take out a license (Par. 22 of the Copyright Act), this right is acquired by the producers and includes the right of public representation. In so far as the sound rights are concerned, the producers of sound-films must assign the mechanical rights to the composer, and the cinema owner or manager is therefore entitled to exhibit the film without any further compensation to the composer, or the society of authors of which he is a member, as the case may be.
The juridical reasons for attributing this mechanical character to the rights in the sound-film are fully set forth. Sound-films are made by transposing a musical composition on to a contrivance (film or gramophone disc) applied to an instrument (the cinematographic camera) which serves for the mechanical and audible reproduction of sound (Paragraph 12, No. 5, of the Copyright Act). It therefore follows that, even if the right in sound-films comes to be recognized as a right apart, it would be in the nature of a right in a mechanical contrivance and would consequently be subject to German enactments on copyright and the obligation to take out a license. Therefore, for this reason alone, authors' societies are not entitled to claim a royalty on exhibitions.

2. Independently of the question whether or not the right in sound-films is to be considered as a right in a mechanical contrivance, another possible course suggests itself: that of including it under cinematographic rights. This point of view is strenuously upheld by Alexander Elster, one of the foremost authorities on copyright questions in Germany. He declares that the sound-film, as the word itself implies, belongs to the film category. For this reason copyright in sound-films is not in any way different from cinematographic copyright.

From this point of view also the right to claim a special royalty on the representation of sound-films is disputed, since cinematographic copyright (the rights of cinematic photography) are acquired by the producer. The only difference — and one of no fundamental importance — between the mute-film and the sound-film consists in the fact that the cinematographic producer must acquire the cinematograph rights not only of the scenario-writer but also of the composer. The musical composition becomes an integral part of the film. The right of cinematographic representation — that is to say the right to represent the film as a whole (therefore including all the parts thereof that comprise musical reproduction), are ceded by the hirer to the exhibitor.

3. For the reasons above shown and in view of the provisions of the German copyright law, it follows that it is impossible to aver the identity, or even to draw an analogy between a cinematographic sound-show and the performance of a piece of music. the Gema alone among German authors' societies disallows this fact by claiming a royalty on the sound-cinematographic representation by way of compensation for musical rights. It is obvious that, in order to be able to claim any royalty on sound-films, it must from the start consider the right subsisting therein as a musical right, since it — unlike other authors' society in Germany, namely the Genossenschaft Deutscher Tonsetzer (Society of German Composers) does not protect the mechanical rights of its members. Thus the Gema premises a thing that still remains to be very carefully considered.

III.

The economic consequence of the Gema claim would be that a royalty would become due also from each representation of sound-films. Very bad results have been obtained in the past from this system when applied to non-mechanical musi-
cal performances. It is a system that involves not only a very costly machinery of control (inspectors have to ascertain in the several premises where performances are given whether any infringement of copyright has taken place), but entails also a very considerable diminution of the legal claims of authors, who — like the composers whose works are reproduced in sound-films — have already been paid individually by the producing films, whereas (if the Gema’s point of view gained acceptance) they would not receive any royalties as individual composers of the music for the sound-films, but as members of a society of authors. The receipts obtained in this manner would be substantially lower than those they would get from the producing firms, since the royalties paid to authors' societies are pooled, and each member receives his share thereof in accordance with a fixed system of distribution.

But even if the view that the right subsisting in sound-films is in the nature of a mechanical right were to be accepted, there would still be another serious danger for the film industry — not so much for the producers as for the cinema hall owners — since the authors' societies have asked that the provision under paragraph 22a of the German Copyright Act, granting exemption from taxation for the representation of mechanical music, be rescinded. The representation of sound-films would be seriously hit if the German Government were to grant this request. For in these circumstances the authors' societies would claim a royalty not only on all public shows in which gramophone discs, electrical pianos, automatic pianos, mechanical organs, etc., are used but necessarily on sound-film entertainments as well.

Both of these courses — that responding to the demands of the Gema, which asks that sound-film entertainments be treated in the same way as public musical performances, and that which, by regarding the right in sound-films as akin to a mechanical right, would entail the rescindment of paragraph 22a, would result in a diminution of copyright, which, as shown above, would be a serious loss to the authors.

IV.

The question now arises as to whether, at the present stage of its development, the law ought to take the sound-film into consideration at all. The answer would be in the affirmative if by so doing it could clear up this extremely complicated legal position. It would, however, be necessary to avoid that any such settlement should result in imposing a further pecuniary burden on all sectors of the national cinematographic industry, which is already fighting for its life, it being clear that the law ought not to allow an artistic creation of industry, such as the cinematograph, — which is still in the stage of sound innovation — to be hampered by fresh burdens that could only increase the risks of the film business.

It should always be borne in mind that the film is not a purely artistic production; nor will it ever become such. It’s creation is in fact governed by economic laws, and like all other industrial products it is subject to the fluctuations of the
market. If in addition to the heavy burden of the salaries paid to film stars and interpreters, luxury taxes, etc., there were to be added a tax on the exhibition of sound films, the risks of the cinema business would be aggravated to an unbearable extent, given the present German economic situation. It would clearly not be to the interest of the authors themselves, nor of the societies caring for their interests, to hamper the new device at the outset of its development; the only result would be to dry up the source from which they hope to obtain more.

Dr. Walter Plugge.
Advocate of the Supreme Court of Berlin
Official Representative of the German Confederation of Cinematographic Industries
1st. PART

WESTWARD HO!

FIRST PICTURE

The University of Salamanca in the year 1498. Law students and students of theology, attired in long black mantles, are listening to the masters’ lectures or walking to and from in earnest discourse. One of them, a young man with clear-

(Ed. Note). The noble figure of Bartholomew de Las Casas stands out in singular relief in the history of the Conquest of the New World. His name made less noise in the world than that of the famous conquistadores, but for all their glory these heroes were far beneath the humble Spanish Dominican father—in moral stature.

This drama took place at a time when the word soldier was not always a very honourable appellation. Soldiers, as the word itself signifies, were then mercenaries, adventurers in the pay of one lord today and of his enemy to-morrow if he offered higher wages. They subsisted and derived most of their gains from loot, and the sacking of a conquered city— with all the horrors attached to it — was in the ordinary course of warfare in those times. No special blame nor abhorrence was attached to it.

In speaking of the soldiers— the mercenaries— of all races, of that period, we refer to “Frenchmen” “Spaniards” etc., with little care for the good name of the nations on whose behalf these fighters fought — or their repute for chivalry and honour, with which the adventurers were little concerned.

This was a time when vagabonds and bravers, bands of brigands and pillagers of all kinds, devastated countries and were ready for any adventure.

« Comme un vol de gerfauts hors du charnier natal,
Fatigués de porter leurs misères hautaines,
De Palos de Moguer, routiers et capitaines
Partaient ire d’un rêve héroïque et brutal,
Ils allaient conquérir le fabuleux metal
Que Cipango mûrit dans ses mines lointaines...”

The young Bartholomew de Las Casas was one of the first to embark. But under the leather jerkin of this worthy son of the classical and legendary land of chivalry there beat a pure and generous heart, which was quick to rebel against the cruelties and extortions of his companions of fortune, in their quest of the “radiant metal”... the “vile metal” that is responsible for so much evil and so much shame.

From this moment the whole life of De Las Casas was devoted to defending the Indians against brutal spoliation. The civilization of the Old World — a civilization that left so much to be desired — had shipped some of its basest instincts and fiercest greeds to the shores of the New world; Bartholomew de Las Casas brought the antidote to the evil: the consolatory word of Christ. And in the name of Christianity he preached moderation and humanity to the gold-hungry conquerors and again, in the name of the Redeemer, he bearded the Spanish Court,
cut features and piercing eyes, Bartholomew de Las Casas, careless of his books and lessons, dreams of adventure which ever since Columbus’s discovery, is the passion that engrosses all Spain. He gazes sadly at the court yards and the dreary halls. His eyes are fixed on distant horizons.

SECOND PICTURE

A street in front of the University. The students pour forth gaily. Close to the entrance gate a group of men surround a wounded sailor who wears his arm in a sling and leans on a crutch. They listen agape to the story of the sailor, who had travelled with Columbus and is just back from the New World. Bartholomew de Las Casas is arrested by his words and joins the group.

The sailor tells of strange and marvellous things and Bartholomew beholds:

THIRD PICTURE

Sturdy caravels with painted sails, scudding before the wind.

FOURTH PICTURE

(Close up) The deck of a caravel. Sailors on the yards. The Admiral’s eyes are fixed on the horizon.

FIFTH PICTURE

The sea. The waves. In the distance a thin strip of land, that grows clearer and larger. Trees and mountains come into view.

SIXTH PICTURE

The narrator mimics the enthusiasm of the sailors, flings his cap into the air, tries a step or two of a jig. His listeners hearken with a wondering smile. Las Casas beholds the new land as in a dream. The books he is holding slip one by one from his hands.

SEVENTH PICTURE

The tale proceeds. The Spaniards are seen landing. Naked natives, wearing striped plumes on their heads, hasten up to them, and gaze at them dumbfounded; they finger their dress and signify their surprise. One of the officers addresses them. They cannot understand. He makes signs that they want food. The Indians promptly run off to a village, which can be discerned among the trees, and bring back fruit, vegetables, and chickens. The joy of the sailors. The Indian Chief, attired in a mantle made of feathers, approaches the officer and salutes him.

---

a champion and precursor of anti-slavery and the humanitarian ideas of modern times, and proclaimed the necessity of peaceful conquest.

All this is clearly set forth in the cinematographic summary contributed to the Review by Marcel Brion, which we publish in the conviction that nothing is more educative from the social and moral standpoint than a worthy and living film rendering of the example offered us by the life and action of men who are an honour to mankind.
Eighth picture

The Indian Chief is wearing a gold necklet (Close up).

Ninth picture

The Spaniards surround him and gaze covetously at his necklet. The Officer fingers the ornament with an enquiring look. The Indian at once divests himself of it and places it round the officers neck; the latter weighs the heavy chain in his hand. The officer enquires: «where is gold to be found?» and points to the necklace. The Indian smiles carelessly and makes a gesture as much as to say: «There is plenty of it over there!»

Tenth picture

The sailors listeners stare amazed. The sailor continues his story:

Eleventh picture

The Indian explains to the officer that he will take him where the gold lies. The Spaniards follow the natives and march towards the forest.

Twelfth picture

Las Casas comes close up to the sailor. He listens to his tale with an eager and enthusiastic expression.

Thirteenth picture

An equatorial forest with huge trees, liana, and multicoloured birds. The band of the conquistadores are seen marching through it.

Fourteenth picture

A river wide as the sea. Strange beasts, serpents, and alligators are seen on its banks.

Fifteenth picture

A fairy city with palaces, temples, and hanging gardens. A crowd of Indians splendidly dressed and crowned with feathers hasten to greet the Spaniards. They offer them virgin gold, jewels, and statues. The officers clamour for more! The Indians, smiling, add more gold to the heap.

Sixteenth picture

The astounded listeners shout with glee. One of them, however, sceptically fingers the sailors wounded arm. The sailor jerks his head: «The Indians aren't always so docile. You've got to fight them!»

Seventeenth picture

An ambuscade in the virgin forest. Fierce looking tattooed savages fling themselves against the Spaniards. The Indians and the conquerors fight at the entrance
to a temple. The Indians are terror-stricken by the cavalry. The Spaniards fire a small gun; the Indians fall prostrate to the earth.

**EIGHTEENTH PICTURE**

The sailor signifies that all that is nothing as against the splendours of the conquered land.

**NINETEENTH PICTURE**

On the summit of a mountain the leaders on horseback raise their plumed hats, the soldiers brandish their lances and arquebuses. Far off is seen an immense plain, fields and lakes.

A soldier flourishes a standard.

**TWENTIETH PICTURE**

The sailor and his listeners move off. Bartolomew de Las Casas remains alone, lost in his dreams. The images conjured up by the sailor’s story pass rapidly before his eyes: the ships ploughing the waves, the shore, and the Indians on the shore, the forest, the city, the fighting, the temple, the prostrate Indians, the gold necklace, the boundless plain, the waving standard.

**TWENTY-FIRST PICTURE**

The Port of Cadiz. Ships are being loaded for Columbus’s third voyage. The Admiral is supervising the victualling of the caravels and reviewing sailors and soldiers. An officer brings up to him the newly recruited sailors and soldiers. Amidst the bronzed countenances of the old adventurers, the youthful face of Las Casas stands out. The Admiral is struck by the bold and frank aspect of the young fellow, pauses, stops in front of him and smiles.

**TWENTY-SECOND PICTURE**

On the deck of one of the boats. Las Casas wearing a helmet and a leather jerkin, is polishing his sword and pistols. Impatient for the landfall, he rises several times and looks over the bulwarks. He is surrounded by sailors, soldiers and priests.

**TWENTY-THIRD PICTURE**

The soldiers, on landing, make ready for the march. Las Casas gazes at the severe and resolute officers on their horses. No Indians are to be seen. The country looks dreary and inhospitable.

**TWENTY-FOURTH PICTURE**

The band advances into the forest. It reaches an Indian village. The natives are terrified and hasten to bring along all that the Spaniards ask for. But the latter are insatiable, they demand more food, more drink, more gold. The Indians fall
prostrate and signify thay they have no more. Then the soldiers fall on them and beat them, and drive them in front of them with whips and lances.

TWENTY-FIFTH PICTURE

An Indian town. A messenger recounts how the conquerors have ill-treated his countrymen. Rage and indignation. The Chief appears in his feathered raiment, his high crown and jewels, and calls his people to arms.

TWENTY-SIXTH PICTURE

The Spanish band approaches the town. It sees the Indian army drawn up in battle array. A battle. The natives flee before the volley of arquebuses and small cannon. The Spaniards pursue and massacre them. Their dogs tear the Indians to pieces.

TWENTY-SEVENTH PICTURE

The city in flames. The Spaniards destroy the palaces, devastate the gardens, seize on the women. They butcher the priests of the idols on the steps of the temples.

TWENTY-EIGHTH PICTURE

Long chain gangs of Indian slaves drag themselves along wearily. When one of them falls the Spaniards kill him. A Spanish priest intervenes to stop the massacre, but is rebuffed.

TWENTY-NINTH PICTURE

A village. A brutal officer has several Indians strung up on trees. A Cacique protests; he is promptly bound to a stake. The officer's dogs are hungry and he sets them on an Indian. Everywhere corpses, weeping women, burning houses. The Cacique's body is licked by the flames. Las Casas stares with horror at these atrocities. But under orders from his leader, he strikes the Indians; his sword is bathed in blood and his hands spattered with blood.

THIRTIETH PICTURE

A Spanish priest is seen celebrating the Mass in a little church. The soldiers are listening to a monk, Antonio de Montesimos, preaching. The preacher vehemently reproaches them for their brutality. He points to the Christ on the Cross. He recalls the docile, submissive Indians. He enjoins them to put a stop to their atrocities. The soldiers mockingly jeer at the monk; but Las Casas looks troubled.

THIRTY-FIRST PICTURE

Las Casas, rapidly recalls in a series of images all the massacres he has taken part in — the burning village, chained Indians, the caciques bound to stakes, slaugh-
tered women, dogs devouring children. He drives away the image with a gesture of horror. He flings away his sword, and rushes out under the amazed gaze of his comrades.

**THIRTY-SECOND PICTURE**

In front of the Church. Las Casas falls on his knees and weeps. He sees a vision of the Christ. His countenance all mercy and peace. He beats his breast. He tears off his cuirass, and takes an oath to consecrate himself for the future to the defence and protection of the Indians.

**SECOND PART**

**THE APOSTOLATE**

**THIRTY-THIRD PICTURE**

The Church of Cuba filled with Spaniards and Indians. The Bishop is seen on his episcopal throne. The Captains. A Priest at the altar is saying the Mass. He turns round for the «Ite Missa est». Bartolomé de Las Casas is celebrating his first Mass. His face is radiant with joy and peace. He stretches out his arms to bless. The Indians raise their eyes towards him with a look of hope and affection.

**THIRTY-FOURTH PICTURE**

The little Indian village of Zanguarama. In front of the modest church, Las Casas, dressed in a white surplice, is addressing the Indians who crowd around him. He shows them the Cross. He preaches justice, peace and brotherhood. The bronzed faces of the Indians are working with emotion; many are in tears. One of the Indians comes up and stretches out his arms; they all press round the priest, for

**THIRTY-FIFTH PICTURE**

...a band of Spanish soldiers invades the plaza. The commandant wielding his whip orders the Indians to disperse and to return to the mines and fields.

**THIRTY-SIXTH PICTURE**

A tragic picture of the exhausted Indians working in the gold mines under the lash of their guard.

**THIRTY-SEVENTH PICTURE**

Las Casas throws himself between the Indians and the Spaniards. With his outstretched arms he protects the natives, who tremble and implore. The officer advances and raises his whip, but Las Casas wrests it from his hands and flings it away. Then with a gesture of command he orders the soldiers to clear off. They obey, muttering insults and threats. The Indians on their knees kiss the priest's hands and robe.
THIRTY-EIGHTH PICTURE

Diego Velasquez's army. Las Casas is marching beside the General. A band of Indians is brought up before Velasquez. An officer asks what is to be done with them, and Velasquez answers: «kill them». The wretched men make a rush to the priest. Las Casas then invokes justice and charity and beseeches Velasquez to set these innocent men free. So powerful is his serene authority that Velasquez grudgingly consents.

THIRTY-NINTH PICTURE

An Indian village. Diego de Albuquerque is presiding over the «distribution» of the Indians; that is to say, he is allocating them as slaves among the settlers and soldiers.

Despite entreaties, families are torn asunder, women are separated from their husbands, children from their mothers. They are beaten and knocked about to silence their cries and complaints. Suddenly Albuquerque looks perturbed and annoyed; he has just perceived Las Casas approaching. The natives begin to look hopeful; the soldiers to look angry. The «distribution» is interrupted. Las Casas consoles and comforts the unfortunate wretches.

FORTIETH PICTURE

While Las Casas is instructing his catechumens, a terrified Indian rushes up to him. He announces a fearful disaster.

FORTY-FIRST PICTURE

Some Indians are seen fleeing through the forest pursued by Narvaez's horsemen. Fierce dogs worry the fugitives. The horsemen beat down the Indians with blows from their arquebuses.

FORTY-SECOND PICTURE

...when, suddenly, Las Casas appears in the path, seizes the reins of Narvaez's horse with one hand and with the other drives back the sword the officer had bared into its scabbard. He then raises the crucifix which he wears round his neck to show that it is God's will that he enforces.

FORTY-THIRD PICTURE

Narvaez walks into an assembly of officers, officials and settlers. They all complain of Las Casas's zeal and the way in which he hampers them in the accumulation of wealth. One of them tells how his slaves have been freed, another how Las Casas has stirred the Indians to mutiny. A general outburst of anger. A secretary drafts an indictment against him for sedition, lèse majesté... high treason. ingl.
Forty-fourth picture

A messenger serves Las Casas with a writ to appear before his judges. The Indians are overcome with despair at seeing him go.

Forty-fifth picture

A road before the Tribunal A crowd of Spaniards insult Las Casas as he passes them. The soldiers threaten him. Some bare their swords; others grip at him; some shake their fists in his face. A stone hits him on the forehead. Las Casas staggers and wipes the blood from the wound. The crowd laughs and jeers at the Father. The officers and slave-dealers egg the crowd on to violence.

Forty-sixth picture

The session of the Real Tribunal. With violent gestures an officer accuses Las Casas of betraying Spain and hindering the conquest. All the Spaniards present approve the officer and shout insults against the priest. He is silent. The judges look embarrassed. When the officer stops speaking, Las Casas is called on to defend himself. He compares brutal conquest with peaceful conquest, the only kind that can answer the interests of Spain and of the New World. « What do we behold at present? » he asks.

Forty-seventh picture


Forty-eighth picture

« If, on the contrary » says Las Casas « the conquest was carried out in accordance with the King’s orders and with Christian precepts, we should have joy peace, abundance, and the conversion of the heathen ».

Forty-ninth picture

(A picture of peaceful conquest). Fertile fields in which the Indians are working happily and exchange friendly greetings with the Spaniards. The priests baptising the Indians. The Spaniards are masters of a docile people. Artisans are seen teaching European crafts to the natives. A monk conducts a choir of Indians. A clean and prosperous village. A Church crowded with Indians...

Fiftieth picture

Las Casas turns to the officers and settlers. « These men » he declares « are the real enemies of their country and of their religion ». The judges hesitate and consult one another. In their uncertainty they decide to refer the whole affair to the King of Spain.
FIFTY-FIRST PICTURE

A ship sails for Spain. Las Casas is seated on the deck writing his report to the King on «The Destruction of the Indies».

THIRD PART
LAS CASAS AGAINST THE COURT

FIFTY-SECOND PICTURE

The ante-chamber of the royal audience hall. A crowd of courtiers, officials, officers. They talk about the priest who has just landed.

FIFTY-THIRD PICTURE

Las Casas, clothed in white, crosses the huge courtyard of the Palace.

FIFTY-FOURTH PICTURE

At the door of the ante-chamber an officer stops Las Casas. What does he want? «To see the King». The courtiers burst out laughing. A chamberlain explains that Las Casas must send in a request for an audience and wait to be summoned. Las Casas goes away disappointed.

FIFTY-FIFTH PICTURE

A group of governors and ministers, the Chancellor, and the Bishop of Bourgos, all of whom are large owners of Indian slaves, are plotting to prevent Las Casas from seeing Charles V.

FIFTY-SIXTH PICTURE

A few days later. Las Casas returns to the Palace. The chamberlain stops him: Not today. Las Casas argues, but the chamberlain is inexorable. Another time.

FIFTY-SEVENTH PICTURE

Some days later. The sentries at the foot of the great staircase prevent Las Casas from mounting it. They hustle him out into the court yard and lead him to the gates.

FIFTY-EIGHTH PICTURE

At the window of the ante-chamber the courtiers, who have been watching the above scene, laugh. This mad fanatic will not return to trouble them!

FIFTY-NINTH PICTURE

Some days later. Las Casas, repulsed by the sentries, gives way to despair. At this moment Thomas Matienzo, the King’s confessor, comes out of the palace.
Las Casas goes up to him and begs him to procure him an opportunity to informing the King of the atrocities committed in the New World. Deeply moved, Matienzo promises to help him. He himself leads him towards the king’s chamber.

Sixtieth picture

The two priests cross the antechamber amid the astounded courtiers. They enter the audience hall.

Sixty-first picture

Charles V, attended by the Arch-bishop Cisneros, the Commander Lope de Conchillos and President Hernando de la Vega, listens to Las Casas story. The ministers make gestures of denial to the King and declare the priest to be mad. The King orders them to be silent. Las Casas takes from his sleeve the book in which he has described the destruction of the Indies and offers it to the King. The King, annoyed, reproaches his ministers with having kept him in ignorance of these facts. He asks Las Casas «How can the peaceful conquest, of which you speak, be carried out?» He answers «send no soldiers but priests to convert the infidels and peasants to teach them agriculture.» The ministers protest, this scheme is impractical. The King reflects. He accepts Las Casas project and says «I give you the province of La Cumana, organize it according to your ideas». Las Casas falls on his knees and thanks the monarch.

Sixty-second picture

A Spanish village. Las Casas calls the peasants together and suggests that they should accompany him to the New World to farm it. He says the land is very fertile and that European plants will be easily acclimatised. The peasants hesitate, discuss the matter together, and finally accept.

Sixty-third picture

A similar scene in another village.

Sixty-fourth picture

The port of Seville. Las Casas’ expedition is embarking on a ship. Priests, farmers, flocks and herds, seeds, plants and agricultural inplements are being put on board. Las Casas notices a peasant wearing a sword. He takes it from him and throws it away, pointing with one hand to a spade and with the other to the Cross and explaining that these are to be the real means of conquest.

Sixty-fifth picture

Las Casas’ expedition lands near the Rio de Cumana. Spanish soldiers advance towards the peasants. Las Casas indignantly protests: soldiers have no right to enter this province, which is reserved for him. An officer explains that the Indians have revolted and that general Gonzales de Ocampo is in command of the army which is to punish them.
Sixty-sixth picture
Ocampo’s army marches past.

Sixty-seventh picture
The Indians arm. They massacre some Spaniards.

Sixty-eighth picture
Interview between Las Casas and Ocampo. The general explains that the natives must be punished so as to bring them back to obedience. Las Casas shows him the Royal decree. Ocampo smiles and shrugs his shoulders: he will obey the Governor’s orders and not those of the King.

Sixty-ninth picture
The province, where the peaceful colony should have been installed, is given over to sword and fire. Ocampo’s soldiers burn the villages and pursue the Indians. The crops are destroyed. The little churches are in flames. All the natives arm themselves to defend their countrymen.

Seventieth picture
The war drums are beaten. The priests of the idols, clothed in black, tattooed, and mutilated, exhort the Indians to resist.

Seventy-first picture
The Indians attack a convent and massacre the monks; the faithful natives die in defence of their masters.

Seventy-second picture
Triumphant entry of the Spanish cavalry into the ruins of burning villages.

Seventy-third picture
Las Casas and the peasants horror-stricken watch the soldiers. They see ruin on all sides, trees chopped down, crops devastated and corpses of Indians and Spaniards.

Seventy-fourth picture
The Royal Palace in Spain. In the presence of the ministers, who are delighted at his set-back and humiliation, Las Casas, on his knees, tells Charles V the wretched end of his attempt.

Seventy-fifth picture
In front of the Palace the peasants who have returned to Spain are crouching miserably in the midst of their tools and baggage.
From an engraving by Gatti — Villa Corsini, Roma
SEVENTY-SIXTH PICTURE
The King comforts and consoles Las Casas. He encourages him to continue his noble work, to which end he offers him a bishopric. Will he accept that of Cuzco?

SEVENTY-SEVENTH PICTURE
The magnificent city of Cuzco is shown with its churches, monasteries and riches

SEVENTY-EIGHTH PICTURE
Las Casas refuses: it is much too splendid for him. He will only accept the poorest and humblest of bishoprics such as Chiapas.

SEVENTY-NINTH PICTURE
The little city of Chiapas, in the heart of the virgin forest, surrounded by Indian villages and huts.

EIGHTIETH PICTURE
The King smiles at this modest request and embraces the priest.

FOURTH PART
THE BISHOP OF CHIAPAS
EIGHTY-FIRST PICTURE
Great rejoicings in the little city of Chiapas. The Indians dance with joy and are busily decorating their houses. The Spaniards, on the other hand, look sour. Suddenly all the natives rush to meet Las Casas, who is entering the city. Demonstrations and cries of joy, the natives jostle one another so as to touch and kiss his garments. Cries of «Father! Father!» Las Casas, deeply moved, blesses them and caresses the children who are presented to him. He passes a group of Spaniards who do not salute him. He smiles. What does it matter? The joy and love of the Indians suffice him.

EIGHTY-SECOND PICTURE
Indians are working and singing in the fields. They look happy and peaceable. Las Casas appears on the path. At once cries of gratitude and of love greet him. On seeing the priest, a Spanish overseer hides a whip behind his back.

EIGHTY-THIRD PICTURE
From all parts of the New World where the natives are appressed appeals are sent to Chiapas. Las Casas receives the Indians, who, with tears and gestures of pain, recount their sufferings. Las Casas rises, girds up his garments, takes his staff and goes off.
Eighty-fourth picture
Las Casas and his guide traverse the tropical forest. Some wild Indians are in ambush, but, on recognizing the traveller they come out of hiding and prostrate themselves before him.

Eighty-fifth picture
A gang of slaves drags itself along the road. The soldiers hurry the pace. One of the Indians collapses and falls down. He is deserted. Frightful despair of the wretched man who is about to die; he implores for mercy. Las Casas hastens up raises him and gives him to drink and promises him place and happiness in the next world. He baptises the dying man who expires with a last glance of gratitude and love.

Eighty-sixth picture
Peru. The Spaniards in their greed for gold are seen ravaging the ancient tombs in which the Indians were buried with their jewels. They are ferreting out rings and necklaces from among the bones. They stop suddenly on perceiving Las Casas. The priest reprimands them severely; he then reverently replaces the bones in the grave and cries out in exasperation to the Spaniards: «Will you leave neither the living nor the dead in peace! »

Eighty-seventh picture
At Chiapas. The Bishop has assembled the priests of his diocese. He exhorts them to fight with all their might against the exactions of the conquerors. One priest approves. He recounts how...

Eighty-eighth picture
...in his village the settlers had driven the Indians out of the church during the Holy Rites.

Eighty-ninth picture
A monk who had sought to oppose the abuses of the soldiers had been bound to a stake and whipped by orders of an officer.

Ninetieth picture
Las Casas urges the priests to take severe measures and to refuse absolution to the Spaniards if they persist in showing themselves such bad Christians. He reads to them his «Instructions to Confessors » which they all approve and promise to follow.

Ninety-first picture
The Royal Palace in Spain. The President of the Council of the Indies indignantly lays a copy of these Instructions before the King. A General protests. All discipline is at an end with this Las Casas!
Ninety-second picture

The report of a General is read out. In the plaza of a Mexican city a regiment is making ready to set out against the Indians. Las Casas comes up. He harangues the soldiers. The officers shout to silence him, but Las Casas continues to speak. The soldiers are moved by his words. Several quit the ranks, others throw down their arms. The officers are angry and seek to hold them back. The General arrives on horseback. He is surprised at the scanty number of the force.

The officers there upon point out to him the soldiers who are disbanding. The General draws his sword and threatens the Father. The latter points his finger heavenward; he is obeying God’s orders. And by this time only the General yelling with rage and the furious and impotent officers remain in the square.

Ninety-third picture

The Minister of Finance enumerates the losses that the Treasury is suffering owing to the Bishop’s attitude. He demands that he be punished.

Ninety-fourth picture

All the officers, the governors, the ministers, their faces convulsed with rage, are seen shaking their fists, and calling upon the King to punish the Priest.

Ninety-fifth picture

The chronicler Juan Ginés de Sepúlveda calls for silence. He quietly hints to the King that Las Casas’s ideas are based neither on law nor on theology. He takes upon himself to refute all the Bishop’s claims. What surer means of undoing him than to discredit him and confound his arguments?

Ninety-sixth picture

The King after reflecting accepts Sepúlveda’s offer. He orders that Las Casas should appear before the Council to defend himself.

Ninety-seventh picture

An immense library. Under Sepúlveda’s directions, secretaries and scribes are heaping up books and manuscripts and consulting heavy tomes. Sepúlveda, having found a certain passage in the Bible, points it out triumphantly to the Minister of Finance.

From the tops of tall ladders the foes of Las Casas hand down huge volumes which are flung angrily on the tables to crush their adversary.

Ninety-eighth picture

At Chiapas. Las Casas reads the letter summoning him to come and dissemble himself and defend his erroneous theories. He gives vent to a gesture of irri-
tation and weariness; he has so much to do where he is! He shows the letter to a priest, who reminds him of his advanced age, the fatigues of the voyage... «What do I care for that!» exclaims Las Casas «the truth must triumph!»

**Ninety-ninth picture**

Aboard ship. Priests, monks, and Indians take leave of the Bishop. The Indians part from him reluctantly. They stretch their hands towards him and shed tears. They have at last to be hustled off the ship. From the quay they cry out «Come back to us, Father! Come back!»

For the fourteenth time Las Casas crosses the ocean, to defend the life and liberty of the Indians.

**Fifth part**

**Las Casas against the Sophists**

**Hundredth picture**

At Valladolid. The Royal Council is assembled in a vast hall. The assembly of bishops, ministers, sages, and high personages. Professors, priests and monks are in attendance.

The adversaries are facing the judges to whom the decision of the dispute is committed. Sepulveda is surrounded by secretaries and friends; books are heaped around him. On the other side Las Casas is alone, without a single book.

**Hundred and first picture**

The President of the Tribunal announces that the proceedings have begun; he says that the truth must be elucidated. He calls on Sepulveda to speak. Sepulveda rises with an arrogant look and starts his harangue.

**Hundred and second picture**

Sepulveda's speech. He extols the greatness and the splendour of the conquest... the magnificent band of heroes.

**Hundred and third picture**

The officers assembled in a corner of the court eagerly swallow his words.

**Hundred and fourth picture**

The Indians are described by Sepulveda as monsters devouring human flesh. Their temples, their idols, their sacrifices...

**Hundred and fifth picture**

The audience shudder with horror at the picture.
Hundred and sixth picture
Las Casas rises and interrupts him with a violent gesture. He starts to speak.

Hundred and seventh picture
Some of the audience. They show signs of incredulity.

Hundred and eighth picture
Sepulveda’s wrath. He gesticulates like a madman.

Hundred and ninth picture
Las Casas in his turn grows angry... His speech (He rapidly recalls the atrocities of the conquerors).

Hundred and tenth picture
Some views of the audience; their convictions are wavering; they are moved by the speaker’s words.

Hundred and eleventh picture
Las Casas stops, exhausted. He falls back in his chair. A young monk wipes his face.

Hundred and twelfth picture
The President rises and postpones the continuation of the discussion to the following day. Stir and debate among the audience.

Hundred and thirteenth picture
The next day. Las Casas and Sepulveda in their seats. The judges enter. Some of the audience show obvious signs of sympathy for the Bishop.

Hundred and fourteenth picture
Las Casas speaking. His calm and deliberate manner make it evident that he is disputing points of law.

Hundred and fifteenth picture
Sepulveda interrupts him and points triumphantly to a passage in one of his tomes, which he reads aloud.

Hundred and sixteenth picture
The judges hesitate, their eyes fixed on Las Casas.
Hundred and seventeenth picture
Las Casas jumps up from his seat, seizes the book from the hands of his opponent, hurriedly turns over its pages, and in his turn reads out a passage in contradiction of the previous one.

Hundred and eighteenth picture
The Judges approve. The friends of Sepulveda are angry. A number of hands are raised and brandish heavy folios. Mouths yell arguments, volumes tumble about. A regular hullaballoo. The Judges are anoyed and protest. Las Casas smiles contemptuously. He takes up the thread of his discourse.

Hundred and nineteenth picture
Sepulveda’s emissaries insinuate themselves among the audience and incite them against the Bishop. An outbreak of vociferation. Las Casas raises his voice to make himself heard. A hubbub. The President looks at the hour-glass, and postpones the sitting till the morrow.

Hundred and twentieth picture
The tenth day of the dispute. Las Casas is exhausted, but sticks to his guns. His foes take turns to heckle him and raise ever fresh objections. While some of them are speaking, others are busy seeking fresh arguments in their books which they pass on. At last, however, Sepulveda and his supporters are reduced to silence. Las Casas has a look of triumph. The President declares the discussion closed and, rising from his seat, he goes over to Las Casas and embraces him. The Bishop sways and falls into his arms.

Hundred and twenty-first picture
A monastery near Madrid. Las Casas is sick and old. He is unable to travel back to America. He tosses on his bed and frets at his inaction.

Hundred and twenty-second picture
He sees Indians calling for him, supplicating arms stretched out towards him, faces bathed in tears, backs furrowed by the whip. A crowd entreats him to come and save them.

Hundred and twenty-third picture
He starts up to leave his bed and falls back. Then he takes his pen and writes, meditates, and writes again...

Hundred and twenty-fourth picture
Las Casas is very aged. He is 90. Old and infirm, he is unable to return to the New World. Seated before an open window he writes a letter to Carranza de Miranda: «Remember that the Indians are my children». 
Hundred and twenty-fifth picture
A group of Indians surround the Father. Their eyes are fixed on him with love and tenderness. But some Spaniards come up and drive them off.

Hundred and twenty-sixth picture
Las Casas sighs. He rests his forehead on his hand. There is so much to be done still! He writes: «When I am dead, watch over them; protect them».

Hundred and twenty-seventh picture
Las Casas lies on his bed, dying. He is surrounded by monks. Suddenly the dying man smiles; he hears...

Hundred and twenty-eighth picture
...the bells of the little Church at Zanguarama. The Indians fill it to hear the Mass. A soldier threatens them and half draws his sword. Las Casas pushes the sword aside.

Hundred and twenty-ninth picture
Las Casas feebly repeats the gesture; he stretches out his arms and then folds them, as though pressing a beloved creature to his breast. He murmurs: «My children» and dies.

Hundred and thirtieth picture
Meanwhile the church bells are ringing and the Indians fall on their knees and mourn their Father.

Marcel Brion
Foreign critic of the «Nouvelles Litteraires» of Paris

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EDUCATIONAL FILMS IN THE UNITED STATES

The old Chinese proverb «One seeing is worth a thousand tellings» applies nowhere with greater force than to the educational motion picture. A recent test conducted at John Adams High School in Cleveland is specially significant of this fact. A class of children there were first called upon to read a text-book dealing with the life of Lincoln; then they were shown the well known motion picture on Lincoln’s life. One year later these same pupils were given a test as to certain facts in Lincoln’s career which appeared both in the book and the picture. Seventy-eight per cent of the pupils remembered the facts from seeing the film. It is small wonder that a medium so potent in its results should have vast potentialities not only within the United States but as between all the nations of the world, whose school children should receive the most effective means of learning about the habits, customs and commercial life of their neighbours in other countries.

It is unfortunate that so comparatively few accurate statistical facts are known regarding the production, distribution and exhibition of educational films in the United States. The Educational and Industrial Section of the Motion Picture Division of the Bureau of Foreign and Domestic Commerce hopes to make extensive surveys before long which will uncover pertinent data along this line. All we know at present is that over 500 firms are more or less constantly engaged in the making of educational films of all sorts and that their product now embraces several thousand subjects.

Before offering any further comments regarding the various types of educational pictures and the methods by which they are produced, it should be stated that many films — both features and shorts — made entirely for entertainment purposes and rented to theatres as such, are likewise educational, either in theme or treatment, and can be put to excellent use in school, club, civic, social or church work. Even though Department policy forbids the mentioning of films of this character by name, anyone who attends motion pictures with any regularity can recognize them. Many of them glorify striking incidents in the history not only of the United States but of other countries as well. At least three films in recent years have dealt with Biblical subjects and treated these with such reverence and delicacy that they have been endorsed for Sunday school and other forms of Church teaching. A number of examples might be cited of films which in the guise of fiction set forth the mechanics of aviation, railroading, the steel industry, or some kindred occupation. To these many are added by the tremendous output each year by the entertainment film manufacturers of short material of a strongly educational type. I refer here, for example, to the series of two-reel nature studies produced by Ufa several years ago, and to the many scenics and the studies of plant and animal life which form part of the magazine material of several of our leading companies.
The purely educational film produced for educational purposes alone may fall into one of three categories. There are first those where the actual assembling has been done according to specifications of a continuity sheet written for educational purposes by educators themselves. This is really the truest type, and these are bound to increase materially in direct proportion as their distribution becomes more wide spread, this in turn depending of course on a greater realization of the effectiveness of visual education. A second type of educational film is one which is assembled from stock shot libraries. These are generally films of scenic and geographic nature and little attempt is made to introduce story value into them. They constitute, however, a large and growing list of subjects and their use is wide.

The third type of educational film is the industrial film which really falls in a class by itself. In other words, while all industrial films are in the broadest sense educational, the uses of the industrial film are aimed not so much towards the increase of abstract knowledge as toward the concrete result of either stimulating the sale of a definite commodity, advertising the advantage of using some distinct type of article, or calling attention to the excellence of a particular type of manufacturing process or industrial institution. Their manufacture, sale and exhibition, therefore, really form separate topics in themselves, into which, however, it is not our intention to go into any detail in the present article. All that need be said at the moment with regard to their production is that such films are generally made either by regularly organized industrial film producers, or else by manufacturing companies which desire to make a film for advertisement purposes.

The distribution of educational films is carried on through four main channels. Not necessarily in the order of their importance, there are first, the producers themselves; second, large equipment manufacturers which maintain libraries of non-theatrical films, partly as a means of supplying product for their portable projectors and other types of equipment for use in the school, club, home or other places where non-theatrical films are most likely to be shown. Third, come the visual education societies, composed of the appropriate departments of the State Universities, of the schools in many of our larger cities, and of the museums in certain of the commercial centers in the United States. There are over 100 of them all told and taken together they constitute probably the largest distribution outlet for educational films. A fourth important channel lies in such regular distributors as the Y. M. C. A. and other benevolent and philanthropic societies of like nature. And finally to these may be added many manufacturing establishments which have taken films advertising their plant or product and which distribute them through their own advertising departments. The type of film here is of course the industrial rather than the purely educational film.

The terms on which educational pictures are distributed in the United States are either on an outright sale at so much per positive print, or else on a lease or rent basis. Industrial films on the other hand are usually supplied free with the user paying transportation costs, the theory being that the advertising value of the films will eventually pay for the cost of production.

At the present time there are said to be 800,000 logical outlets for motion
pictures in places other than the motion picture theatre and the home. In other words, a potential field of display exists for the non-theatrical film that is forty times as large as that in the recognized theatres of the United States. Over 47,000 non-theatrical standard projectors are believed to be in operation and twice that number narrow-width or 16 millimeter projectors, the two combined amounting to over seven times the number of theatres in the country, and this number is growing steadily.

Of all these outlets there are about ten different types which claim major attention. Again disregarding any special order of importance, schools, clubs, churches, chambers of commerce, technical societies, workingmen's groups, theatres, halls, women's clubs, fraternal societies, all show educational films in proportion to the interest of their members in films of this character and the facilities at their disposal. The theatrical showing of educational films is, of course, strictly limited, being confined usually to their use as «fillers» on the program.

The use of the educational picture in the schools of the United States is of special interest to the Educational and Industrial Section of the Motion Picture Division and it is about to circulate a questionnaire to approximately 20,000 schools of all sorts, from which it is hoped information will be developed showing the extent to which visual education is being employed and its potentialities for further use. All that is known now is that there are 30,000,000 boys and girls in this country in attendance upon various educational institutions and that already the motion picture as a means of education is being used among many of them. The city of Detroit for example is reported to have over 300 standard equipped projectors in use among the Detroit public schools and, according to a recent press dispatch, educational films are to be introduced in the high schools and certain of the elementary schools in greater New York. Perhaps the greatest barrier in the way of the spread of the use of educational films in the schools of the United States is the small amount of money in school budgets available for this purpose. It was recently demonstrated, however, that 2,380,381 children in the New York schools profited during 1928 by this form of visual education at an estimated cost of 34 cents per child per year, and under such relatively cheap conditions it would seem that a great general expansion of the use of educational films in the classroom is not far off, particularly in view of the results attained.

While much has been said concerning the use of Educational Motion Pictures in the United States, a great deal of valuable material is being prepared by all other nations of the world on this subject and it is felt that a real good can be accomplished by bringing about an international exchange of this material. Much work along this line is now being done by the Educational and Industrial Section of the Motion Picture Division and it is hoped that in the near future worth-while foreign films will be shown on the educational screens of all nations.

C. J. North
Chief, Motion Picture Division, Bureau of Foreign and Domestic Commerce.
The film «The Gates of the Caucasus», in which the author meant to show the military railway of Georgia, gives much more than pictures merely descriptive of the railway itself.

Only two of the six parts of the film keep to the original idea.

Let us see in what manner it has been possible for the camera to illustrate the work of the railway.

From Vladicaucasus to the station of Kasbek stretch the Terek river and a chain of greyish-green mountains covered in clouds or powdered with snow.

The bed of the Terek river is composed of calcareous and granitic rocks and schist.

From the village of Tchmi we follow the right-hand side of the gorge. We see how, near Koban, the Ossets have built on the river Guisel-don the first hydro-electric power-station in Ossetia.

After crossing the pass of Djerakhov we reach Fortuag, the hamlet (1) of the Ingusci, three-quarters destroyed and deserted. The Ingusci have obtained land in the plains and are about to desert the mountains.

In the passes we found a lot of tombs full of skeletons and skulls and scraps of material, mostly putrid.

Near Darial, we viewed a splendid panorama amongst the stony ruins of «The Castle of Tamara».

Next come Kasbek and Sioni, miserable villages among the high mountains. The railway runs along the ridges. Here and there are tunnels built to protect it from snow storms. The highest pass is 2,400 metres above sea-level. Goudaour appears and disappears among the clouds. The Mletsk road is a superb and well constructed work.

Here we see the valley of the Aragva. The harvest is in full swing. The peasants use large scythes, which are quite different from Russian scythes and look like huge locks. The land is cleared by twelve pairs of oxen yoked to one plough. The oxen are shod.

Further on we reach Passanaur in full sunlight; the church of Anaur which we pass dates a long way back; then come stretches of the railway near Dushet, mbolical Zagues and the plain of Tiflis as it appears from the heights of David.

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Certainly the railway is not the principal feature of the film. The railway is only the thread stringing together the different elements of the picture.

From the station of Kasbek we climbed the similarly named mountain. It was a risky undertaking which was successfully carried out and with which we were delighted.

(1) Aoul so-called in the language of the country.

ingsl.
For experienced mountaineers the climb would not be out of the way, but for us it had special difficulties.

Mountain climbers set out on their expeditions without impedimenta to carry, while we had to carry our cameras, reserve films and much else besides. We were, in fact, obliged to take extra carriers along with us, so that we should have greater liberty of movement.

For mountaineers the climb is the only problem, but for us the climb was extra work secondary to our purpose; our main work was photography. This alone would have put us at a disadvantage compared with ordinary climbers. These climb rapidly, bent on storming the peaks. We had to go slowly, stopping frequently, seeking out cross paths and spending whole nights upon the road, on account of unavoidable delays, thus subjecting ourselves to a lengthened stay in the high mountains where the air is very poor in oxygen.

Then the fact that we were not at all used to climbing put us at a great disadvantage compared with professional mountaineers. Not only did we lack experience in climbing high mountains, but we were also not in training.

This year two sets of travellers had, before us, tried to reach the summit of the mountain, but both had failed.

We had already arranged with the Geographical Society of Georgia to organize the climb in common. The Society had agreed to supply five men for the expe-
dition: what was our surprise when, on the appointed day, we found, at Kasbek Station, twenty, instead of five, natives of Tiflis. The interest in our expedition had been greatly increased by our taking a cinematographic camera with us.

Our fears were unfounded. After a three days' march, made up of good and bad luck, we reached the summit.

Including the carriers, we numbered 43 men. This was the most numerous expedition that has ever climbed the Kazbek; it was also the least suitable from a mountaineering point of view. Further, it was the first cinematographic expe-

dition (not only of the U. S. S. R., but of the whole of Europe) to attempt to work at an altitude of above 5000 metres.

We were able to prove, illustrating it by the film, that mountain climbing is one of the most interesting sports which can be indulged in by people of average health, not only as an amusement for the select few, but a healthy form of exercise for the many.

The various adventures of the climb form the second and third parts of « The Gates of the Caucasus ».

The fifth part of the film deals with the Khevsurs.

We spent ten days at Chatil, an entirely savage Khevsur village. It resembles a medieval fortress in which men live at the present day as people lived several centuries ago. Their clothes are like those of the ancient Germans. On holidays
they put on armour and chain mail and fight tournaments like the knights of the Middle Ages.

Round Chatil are «sacred» fields, sown by the community. During the whole of the summer no Khevsur is allowed to go to them.

There are also near Chatil sacred woods in which the cutting of even a branch is forbidden. In the woods are altars ornamented with argals' horns, where, to the present day, sacrifices are offered.

The village has two streets. The men's street for the use of men and horses, which no woman or horned animal is allowed to use. The second street is for the use of unclean creatures, such as women and cattle. Men consider it beneath their dignity to use it. In the street of the unclean, there are the «samrevlo» ditches in the earth where menstruating women and those in childbirth are compelled to live in the most revolting filth.

Money is unknown. Occasionally a native will accept a coin which he uses as an ornament for his woman.

On the road from Chatil to Crozny, in the district of Gollantchay of Tchecia, along the precipitous path which overhangs the Argoun, we almost met with disaster; we lost two cameras so as to save the life of the second photographer.

Five months later the telegraphic agency of the U. S. S. R. communicated to the world at large the total loss of the expedition composed of eight people. The German paper «M. L. K. Woche» reproduced some metres of the film of our ascent of the Kazbek, taken from the Soviet Cinematographic Review, with the inscription «Last photographs of the Soviet cinematographic expedition which perished in the Caucasian mountains».

In truth, this may be described as exaggerated: firstly there were three of us and not eight, secondly we are not at all dead; on the contrary we are hard at work on the production of the film.

The sixth part of the film is as deplorable as it is original. It shows the orgies during a festival of the native idolaters in one of the passes of Mt. Noulety.

The film is produced as cinematographic travel notes; a form of cinematographic journalism which is yet to be recognized.

Up to now educational ethnographic and geographic films have been produced in the shape of records of travels, scientific reviews and dull demographic descriptions. The author's attitude towards his work is disguised by a fictitious impartiality.

For our part we wish to bring journalistic elements to the cinematograph, both as regards the arrangement of the subject and the captions. At the same time we wish to apply to the cinematograph a form of self-criticism not yet, so far as we know, applied to Soviet cinematography.

«The Gates of the Caucasus» is the first attempt at this. As such it is full of mistakes. Everything in it can be criticized, but we are the first to realize its defects and are prepared to accept criticism.

Nicolas Lebedev.
When some ten years ago the idea occurred to us to take kinematic photographs of the human bladder by means of the bladder speculum we realized that this signified the discovery of a new principle: namely, the photography by direct light of the movements that take place in the cavities of the human body that are impenetrable to light.

The bladder speculum, which makes it possible to illuminate perfectly the inside of the bladder, was invented 50 years ago by Nitze of Berlin. All that is needed is a small electric lamp, a so-called miniature lamp, which necessarily can give only a small amount of light.

In order to be able to take kinematic photographs by means of this speculum, the intensity of the light, and therefore also the dimensions of the little lamp, require to be considerably increased. This being impossible since, for anatomical reasons, the diameter of the tube containing the speculum cannot be increased, the whole problem was reduced to a problem of light. We referred the matter to certain highly competent authorities in the domain of physical optics, but the answers we obtained from them merely confirmed the impossibility of solving the problem. Nevertheless we persevered in the attempt, with the help of the late engineer Kiso of the Agema firm.

The power of the light of the speculum, generally known as the « Cystoscope » depends on three factors:

1) the afore-mentioned lamp;
2) the loss of light due to reflection and absorption;
3) the size of the exit-pupil.

As regards absorption and reflection, the position is as follows.

A ray of light passed through a perfectly clear sheet of glass loses on the average 4% of its intensity. As, in this case, the ray of light has to pass through several glasses (the prismatic lenses) the intensity of the light, after passing through the first lens is reduced to 96%, after passing through the second to 92.16%, and after passing through the third to 88.47%, and so on. Since there are a number of lenses in the cystoscope, the loss of light is necessarily considerable. On the other hand, however, the object of having a number of lenses being precisely to increase as far as possible the clearness of vision, it is out of the question to lessen their number. We had therefore to confine our attention to the third factor, namely the exit-pupil.

If an optical instrument, such as a cystoscope, is held at a distance of 25 cm. from a normal eye, directly in a line with a source of light — as for instance the
blue sky — a small mobile disc will be seen in the eyepiece. In an ordinary telescope this disc is the size of a lentil. This optical phenomenon, which in the less modern cystoscopes measures 1 mm. in diameter, is known as the exit-pupil.

The intensity of light in an optical instrument increases by the square of the size of the external pupil.

An enlargement of the external pupil from 1 to 2 would therefore not double but quadruple the light. Hence we realized that the only practical way to obtain a greater intensity of light was to enlarge the external pupil and to this means we had recourse. It is obvious that here again possibilities are strictly delimited, the decisive factor being the pupil of the human eye, which cannot take in more light than is physiologically possible. Nevertheless, thanks to laborious optical works, such as adaptation of the lenses, etc., we succeeded in obtaining a considerable enlargement. I do not wish to dwell on the details of the process, which come within the province of physical optics rather than of medicine; I will confine myself to stating that two years of unsuccessful experiment went by, and that, in spite of the number of kinematic-photographs that we took and the continual modifications wrought in the apparatus, all our efforts to register the phases of movement through the cystoscope proved unavailing.

At last, in the third year, by the time we had well nigh lost all hope of success, we quite unexpectedly perceived, when developing our films, the first movements of the urethral outlet. This discovery encouraged us to pursue our efforts and to perfect still further our apparatus and the technique of kinematic photography.

I must here make a brief digression to explain the processes that take place inside the human bladder. First of all the ureters have their outlet in this organ; coming from the kidneys, they empty the urine there formed into the bladder. This is not a continuous drop-by-drop process, however, but, owing to the rhythmical peristalsis of the muscles of the ureters, the urine is expelled into the bladder in waves, at given intervals. This rhythm differs from one man to another. Thus, as the nervous power of the ureter usually ceases in the case of diseases of the spinal marrow, these become changed, as it were, into mechanical tubes, from which the urine empties itself mechanically. Other diseases likewise disturb the said rhythm; hence it follows that the observation and registration of the movements of the ureters may be of great importance in diagnosis.

In addition to these movements of the ureters, we have to consider also the movement of the walls of the bladder itself and of the various tumours that pulsate in the bladder. Now, however, that we are able to perform surgical operations with the assistance of the cystoscope, we wished to register these operations by the kinematograph.

The optical problem having been solved, as we have shown, only the kinematographic problem remained. While, on the one side, it was necessary to join the cystoscope to the camera in a manner that would render it impermeable to light, it was on the other hand necessary continuously to observe the mucous membrane of the bladder while photographing, since the faintest inevitable movements of the patient cause slight displacements. The point under observation easily gets outside
the range of vision and the little cystoscopic lamp, penetrating into the vesical mucous membrane, is apt to produce burns of a not negligible kind. We therefore interposed between the cystoscope and the tube for the kinematic photography, a so-called lateral observer which enables us continuously to observe the photographic process. As we had also to take a panoramic view of the whole interior of the bladder, it was necessary to devise a mechanism which, by turning its handle, would also cause the cystoscope to revolve.

Such were the difficulties we had to overcome, and now at last we are in a position to affirm that we have succeeded in kinematographing the bladder with great exactitude.

Was all this worth while? We feel justified in giving an affirmative answer. First of all, by this means we discovered a new principle; namely, direct photography of the phases of movement in the cavities of the human body that are impenetrable to light. It is obvious that this method is not applicable to the bladder alone, but that it can be applied to all the other cavities of the body, more especially the peritoneal cavity in which — thanks to appropriate devices — we are able to study
very carefully the movements of the internal organs: the intestines, the gall bladder, stomach, etc.

The principal practical advantage of this achievement lies in its teaching possibilities. Whereas, as a rule, only two persons can watch what is going on through the cystoscope — and even they can see but imperfectly when the bladder is diseased — the interior of the bladder can now be displayed fully on the screen to practically any number of students. The facility thus afforded is also most important for the purposes of diagnosis and treatment.

We are of the opinion that we can see more, and more distinctly, through the eye of the kinematograph than through our own eyes. Our subjective eye is easily dazzled and the glaring red light of the cystoscope tires it. The eye of the kinematograph is always clear and immobile. And furthermore, by making use of the chronometer-microscope, we are now able to observe in their several phases the physiological movements that take place inside the cavities of the body, which is of great importance in our physiological and biological researches. For diagnosis and treatment it is also a great advantage to be able to observe continuously the several phases of the process through the projection of these films.

The kinematograph is undoubtedly opening up great possibilities. The Scientific research student, moreover, should not be concerned only with immediate results. Like a good husbandman, he confidently scatters seed over the earth, and waits for it to germinate and ripen.

Dr. J. J. Stutzin.
Director of the Urological Ward in the «Queen Augusta Victoria» Hospital in Bertinó.
THE CINEMATOGRAPH AND SCIENTIFIC MANAGEMENT.

There are two directions in which we may envisage a close connection of interest between the scientific management movement and the cinematograph industry.

In the first place, within a very few years, the production and distribution of cinematographic films has become a factor of great importance in the economic life of many countries. This new industry and this new market, like any other form of economic activity, may be managed in a traditional and rule of thumb manner, or it may be submitted to those processes of scientific thought which in Europe are coming to be known as «Rationalization». The organization of the production of pictures, the examination of the type of subject which will have the widest appeal for exhibition, the arrangement of the mechanics of distribution may all be subjected to that analysis of facts, their measurement, testing and statistical control, which are the cardinal processes of scientific management.

In the second place, the specialized technique of the moving picture may be applied to the wider task of demonstrating and instructing manufacturers and distributors of all grades in the principles and practices of scientific management itself. The practical business man is very apt to be suspicious of new ideas which are presented to him in verbal form, whether in literature or in lectures. His mind always returns to the need for actual demonstration. He is not averse to new possibilities, but he wants to see them at work. His reply to those who are interested in new methods or devices is almost invariably «Show me». This is true whether he be a leading «captain of industry» or a «worker at the bench». His mind reaches conviction, and, through conviction, enthusiasm by way of the eye rather than of the ear. It is in this direction that the cinematograph can exercise an influence of incalculable educational value for the economic life of the world.

For indeed though, in the majority of cases, economists and leading representatives, whether of employers or of workers, are convinced of the importance of a new attitude towards the problems involved in the control of economic activity a large proportion of the individuals actually engaged in business life have yet to be convinced of the value of such methods. This was recognized by the World Economic Conference of 1927. Its resolutions stated definitely that:

«The judicious and constant application of the process of rationalization is calculated to secure:

1. To the community greater stability and a higher standard of life;
2. To the consumer lower prices and goods more carefully adapted to his needs;
3. To the various categories of producers, larger and more certain remuneration to be fairly distributed among them».

But it further recommended that:

«Governments, public institutions, professional and industrial organizations, and the general public should influence producers to direct their efforts along the
channels described... and that they should encourage and promote in every possible way the ascertainment and comparison of the most efficient methods and the most practical processes for rationalization and scientific management».

This second clause indicated clearly how greatly the leading minds concerned with the economic life of the world felt the need for constant effort and propaganda directed towards a more widespread knowledge of modern methods of business management.

If, as we have suggested, it is true that the practical business man, whether manager or worker, is most easily convinced by ocular demonstration, it becomes clear how large a part the cinematograph should play in spreading the knowledge and appreciation of these new techniques.

Great as is the educational effect of visits to other factories which are scientifically managed, this procedure is obviously limited in its application by considerations of time and expense. It is far simpler to make a pictorial record of the facts which call for demonstration and to display that record in a whole series of factories without any necessity of transporting managers or workers to other centres. Moreover, if such a record is in part cinematographic, giving actual pictures of new processes and forms of organization in operation, it will carry a conviction and a sense of reality which are absent from any lifeless photographic reproduction.

This has, of course, been to some degree realized already. We can trace the use of the cinematograph in scientific work in many directions. In the first place it has been applied to the movements of the individual operative. F. Gilbreth first used it in the United States for the construction of his wire models for movements of the single worker’s hands or body in carrying out a particular operation. From these models it was possible to study both the wastes due to unnecessary motions and, more important, the subtle losses of time and energy which could be ascribed to the use of arithmetical movements of the arms or body. Very large increases in output were obtained by the use of Gilbreth’s detailed studies. More recently the «slow motion» picture has been used along similar lines. In one factory this technique has been applied with great success to office workers. Each separate clerk, and particularly those engaged upon machine operations, was photographed by means of a small cinematographic apparatus. The films were then shown in slow motion to the individuals concerned, who were thus enabled to study their own actions while at work and to eliminate wasteful and useless movements. Since they could study the films again and again and, as they progressed in this process of self-training, new films could be made, they were able, without any criticism from the managers, and in a way which was interesting to them personally, to improve their performance. Average increases in output amounting to 10% were obtained by this technique alone.

Similar valuable results have been obtained by micromotion cinematography of machines and portions of machines actually in operation. The possibility of reproducing in a greatly enlarged form at a slow speed the actual constitution of metals under stress has opened up wide possibilities of improved industrial practice.

Apart, however, from such detailed studies, the possibility of emphasizing the
wider lessons to be derived from more scientific organization has already, to some extent, been demonstrated by means of cinematograph films. Very modern and well organized factories have been photographed throughout a whole series of processes with considerable success. Those who have attended recent Congresses for scientific management will recollect some remarkable pictures of this order which showed a variety of different forms of manufacture in process.

If, however, the larger economies to be realized by the process of rationalization are to be demonstrated to the general run of manufacturers in a form which will really carry conviction, it seems essential that films should not be limited to photographs of organizations in operation, but should be specially constructed for the purpose. They should show not only the workshops of a scientifically managed factory with bright, clean and well ordered machines turning out boots or bottles. They should go behind the workshop, and demonstrate the actual operation of the organization which plans the work, which arranges for the sale of the products, which, in short, makes orderly machine production possible. Moreover, they must illustrate not only the scientifically managed and well ordered factory in operation, but the difference between a factory so organized and one managed on the old rule-of-thumb principles — the difference in its profits and in the ease and happiness of its workers, as well as in the physical appearance of the manufacturing processes.

There are two great difficulties in the way of realizing this ideal. In the first place, instructional films of this character, while they would be of immense value to teachers of scientific management, are costly to produce. It is doubtful if they could be exhibited in the ordinary run of commercial cinematograph theatres as popular items in their programmes. On the other hand, it is doubtful if employers and others who are engaged in the introduction of scientific management methods have as yet wholly appreciated the enormous importance of preliminary educational work of this description. That such work would pay its way in an improved understanding of scientific management and consequently in a lessening of the psychological obstacles to its introduction, is unquestionable. But the outlay represented in preparing such a special film is undoubtedly considerable and arrangements have yet to be made to place one on the market. The second difficulty is of a more technical character. If the picture is to convey its lesson forcibly it must, as has been indicated, show the factory before as well as after re-organization. But, generally speaking, the employer who has not yet made up his mind to re-organize departments which show great opportunities for the introduction of scientific management, is by no means willing to allow his older methods to be photographed for instructional purposes. The desire to treat manufacturing processes as secret is a prejudice which only gives way slowly as those responsible become more and more accustomed to modern methods of management and to the constant high rate of improvement which results from a full grasp of these principles. And the man who understands modern production methods and who is responsible for a department or for a factory running in the old way is seldom very proud of it or very willing to have it reproduced. The man who does not understand modern methods
is usually equally unwilling that his methods should be photographed, because he feels that they represent trade secrets which it is important for him to preserve.

There is no question that means will be found to overcome these difficulties. It is of course quite possible to put together a film which, by taking portions of similar processes from different factories, will amply illustrate the differences in method to which we have referred. The question of organization could undoubtedly be dealt with by a judicious intermingling of actual photographs of the processes of control illustrating meetings of the Board of Directors, the General Manager at work in his office, the telephone exchange, etc., with diagrammatic presentations of the form of organization, the flow of instructions from the Board to the individual worker, and so on. A film built along these lines to illustrate the whole process of the introduction of scientific management into every aspect of a business undertaking would be of great interest to all grades of employers and immensely valuable as a means of instruction. But it would have to be specially rehearsed, drawn, and built up as the result of close collaboration between a group of experts in scientific management, a skilled film producer, and well-equipped studios. And it is doubtful whether it would be worth the expense involved to any single employer. It is a task which should be financed co-operatively by a group of employers who are interested in modern methods of management, and possibly on an international scale.

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THE CINEMA AND HYGIENE PROPAGANDA.

(From the Spanish)

The cinema has simplified hygiene propaganda by rendering it more effective. Apprenticeship, even to acquire the arts that are most congenial to us, is always a laborious effort. All achievements, like the birth of new ideas, are fraught with labour. But teaching becomes humanized from the moment that, having surmounted its initial difficulties, it emerges from the study or laboratory into the light of day. The finest achievement of the born teacher is to impart a living interest to arid themes, to arouse curiosity in matters that do not make a ready appeal to most men, even those matters that must be presented in their naked truth.

If the child has something akin to genius up to a certain age, this is mainly due to the acquisitive powers deriving from his imagination, which give substance to shadows and infuses reality into the most abstruse things. But with the advance of years man loses his illusions and the power of creating them and must rely on the analytical powers of his mind to work out what once came to him so spontaneously. We might preserve the spirit of childhood if only some cunning and appropriate technique enabled us to keep these imaginative elements alive, and the power to penetrate beneath the surface of apparently superficial things.

The cinema is making this possible. It develops the idealistic sense as no other modern system has yet succeeded in doing. It naturally enriches the mind, it casts a brilliant glow on matters that are dull in themselves, and thus stirs our curiosity in them.

By its means one can take in easily what otherwise would demand strenuous effort. Hence the lesson of the screen is readily and thoroughly learnt.

Now the cultural and instructive part of a film intended for hygiene propaganda must be interwoven in an interesting plot if we wish it to produce effective results. Its success will largely depend on the skill with which this is accomplished.

Daily life is all too rich in situations connected with disease for there to be any lack of suitable material. It will suffice to seize on any one of these and reproduce it. The simplest and clearest subjects are also the best. We not need not have any misgivings as to the appeal made by such themes.

When the idea behind a film and its central action is of doubtful intrinsic value an exaggerated form of expression will be needed to make it go down. It is the same with the cinema as with architecture: a bad architect has recourse to ornamentation because he is unable to build with real elegance. The best films for hygiene propaganda have no need to ostentate their purpose; they are more likely to carry conviction when the onlooker spontaneously realizes their purpose.

When we are faced by painful and irremediable facts, we must endeavour to influence men and arouse their will power sufficiently to dispel the obsession of the evil from their minds, and get them into the right spirit to help themselves and to
shake off all indifference and sloth. A film of a purely technical kind can appeal only to the professional classes, which are the least in need of this form of propaganda. However splendid such films may be for teaching, as enlarging the circle of observation, bringing the latest technique within easy reach — thus reducing distances and bringing the populations of the smallest centres into touch with those of the big towns — they remain inefficacious for the general public; for those who most need them, owing to their lack of all training in such matters, their indiscipline to medical treatment, their tendency to drop it prematurely owing to lack of knowledge and confidence in its results. Purely scientific films offer no attraction to this class of persons. To obtain success from them much preliminary educational work would be necessary so as gradually to raise the level of culture; a work that is here out of the question.

We obtained excellent results from the film in Mexico in the early days of our infant welfare campaign, the main object of which is to ensure a healthy progeny, on which account our Public Health Code requires all those desiring to marry to present a health certificate before they can do so. Our method was to introduce a propaganda film in the ordinary cinema programmes or else to organize special shows; but in all cases the reels screened were required to be interesting in themselves, apart from all propagandist aims, and to attract and hold the public like any ordinary motion picture. Some German films did us yeoman service in this way. The public watched the development of situations which in many instances coincided with their own experience; or else, the pictures gave them warning of imminent danger and of the need to forestall it. The impression made on the public was evidenced by the numbers of letters received and by the ever increasing success obtained by the National Anti-Venereal Mission in its tours all over the country.

We visited the more important cities and the smaller centres; vocational institutions, schools, factories, barracks and prisons. One of the most interesting of the results achieved was the change we wrought in the mentality of the people, by getting rid of a mistaken sense of shame concerning this class of disease. The one idea used to be to hide the evil. Not till the birth of the next generation was the veil of this social hypocrisy torn asunder, and it was the children who paid the price of it. Now the sufferings of syphilitic and other venereal diseases are regarded in the same light as those due to other infirmities. The crime consists in concealment.

Any intelligent child welfare campaign must start by considering the health of the future offspring. Everything else is of secondary importance, and the «Dispensaries» that have been set up in all quarters of the Republic answer to such requirements. Each Friday at the same hour classes were held on infant welfare (prenatal and post-natal), in addition to the assistance rendered by the Health Delegation and the social work it carried on.

Much is due to Señor don Plutarco Elias Calles, who organized an unprecedented hygiene campaign in the Mexican Republic during the period of his enlightened administration. The whole country was taught by graphic means to understand the dangers of these diseases, the forms they most frequently take, the development
and decline of the infection, preventive measures against it, its treatment, when and where medical advice is necessary, and the perils of quack remedies. The Rockefeller Foundation of New York contributed valuable assistance in combating hookworm (*uncinaria*) by working in cooperation with the Mexican departments. One of the most valuable results of film propaganda was the increase in the number of sanitary conveniences installed in a number of the poor little villages in which this form of disease was prevalent.

It is earnestly to be hoped that the production of films combining the qualities I have mentioned will be intensified. Hitherto there has been a tendency to err on the side of too much pedagogy and to overlook the importance of rousing spontaneous interest. The path to knowledge, whatever the precise goal may be, is always a thorny one. All work must have a definite aim; let us endeavour to express our high aims in terms of the drama of every day life and to present them in a concrete form; we need have no misgivings as to the outcome of our efforts.

**Dr. Bernardo J. Gastelum**

Former Minister of Public Education
Former Chief of the Department of Public Health in Mexico.
The Governing Body of the International Educational Cinematographic Institute held its second session at Rome from October 2nd to 4th, 1929, under the chairmanship of Professor Alfredo Rocco, Minister of Justice, President of the Governing Body of the Institute, Member of the Committee on Intellectual Co-operation.

The following were present:

Dr. Hans Curlis, Director of the Institute of Cultural Research, Berlin;

M. Jules Destrée, former Minister of Science and Arts, Vice-Chairman of the Committee on Intellectual Co-operation (replacing Professor Gilbert Murray, Chairman of that Committee);

Professor Henri Focillon, Member of the Sub-Committee on Arts and Letters;

Professor Oscar de Halecki, Member of the Sub-Committee on University Relations (replacing Dr. Vernon Kellogg);

Mr. G. T. Hankin, Inspector of the Board of Education, London;

Dr. Hugo Andres Krüss, Director-General of the State Library, Berlin; Member of the Sub-Committee on Science and Bibliography;

Prof. Gabriela Mistral, former Principal of a Girls' College, Author;

Dr. R. P. Paranjpye, former Minister of Education, Bombay, Member of the Council of the Secretary of State for India, London.

Don Pedro Sandro y Ros de Olano, Marquis de Guad-el-Jelú, Member of the Child Welfare Committee;

Prof. Gonzague de Reynold, Member of the Committee on Intellectual Co-operation.

The following were also present in an advisory capacity:

M. A. Dufour-Feronce, Under Secretary-General of the League of Nations, Director of the International Bureaux and Intellectual Co-operation Section of the League Secretariat, representing the Secretary-General;

The Marquis Paulucci di Calboli Barone, Under Secretary-General of the League;

Professor G. Oprescu, Secretary of the International Committee on Intellectual Co-operation, Secretary of the Governing Body of the International Educational Cinematographic Institute;

Dr. F. Vivaldi, Auditor of the League of Nations;

M. Maurette, representing the Director of the International Labour Office;

M. de Michelis, President of the International Institute of Agriculture;

Dr. Luciano de Feo, Director of the International Educational Cinematographic Institute.
1. New Members of the Governing Body

Since the Governing Body's first session Dr. H. Gürlis (of Berlin), Mr. G. T. Hankin (of London), M. L. Lumière (of Paris) and Mr. Milliken (of New York) have been appointed new members. Their appointment is a most welcome addition to the Governing Body, as they are distinguished experts on cinematography and more especially on educational films. Further, Count Carton de Wiart has been appointed second Delegate of the League of Nations Child Welfare Committee.

2. Permanent Executive Committee.

The Permanent Executive Committee consists of the President of the Governing Body and of the five members—Professor Focillon, the Marquis de Guad-el-Jelu and Drs. Krüss, Milliken and Paranjpye. The Committee held three sitting at the Institute in Rome, on which the Marquis de Guad-el-Jelu reported to the Governing Body.

According to this report, the Committee first heard the Director's report on the current work of the Institute and discussed the questions to which it gave rise. The Committee then appointed the officials needed to staff the Institute, as far as it is competent to do so under the general and administrative Regulations (clerks, shorthand typists, lower-grade officials, etc).

In order to prepare the question relating to the Budget, the Committee appointed a Budget Sub-Committee with the President of the Committee in the chair and M. Focillon and M. Krüss as members.


The report by Dr. de Feo, the Director, gives the following survey of the work so far undertaken by the Institute:

The Institute, which was opened on November 5th, 1928, started work on December 1st. Its first duty was to organize its internal services. It then immediately began to collect information about all firms and institutions engaged in any kind of work connected with educational cinematography. Relations were also established with a large number of periodicals and newspapers, and a start was made with the preparation of an international catalogue of all existing educational films.

Further, a collection was begun of all legal enactments relating to cinematography, and these are being arranged and compared. The same applies to the censorship regulations of the different countries.

The Institute has entered into relations with other international organizations engaged in educational cinematography with a view to cooperation or a division of work. These organizations include the League of Nations Committee on Intellectual Co-operation, the International Institute of Intellectual Co-operation, the League of Nations Child Welfare Committee, the International Labour Office, the Institute of Scientific Management, the International Institute of Agriculture, the International Committee
of the Educational Cinema and Social Education, and the International Chamber of the Educational Film.

As regards the use of educational cinematography, the Institute has made a beginning with the following studies: a collection of all film patents since 1890, starting with Germany, England and the United States; a study of all the technical problems of educational cinematography; a catalogue of all existing educational films dealing with agriculture, public health, and the rationalization and scientific organization of labour; in the sphere of education, a study of the principles of cinematography in the schools; an enquiry into the available means of employing scientific films in universities and scientific institutes.

The monthly periodical published by the Institute, the International Review of Educational Cinematography, has appeared since July 1929 in English, French, German, Italian and Spanish. It contains general articles and short reports covering the whole field of educational cinematography. In spite of the short time that it has existed it has already about 500 subscribers.

In order to pave the way for relations with national cinematographic organizations, the Director of the Institute has paid very successful visits to Paris, Berlin and the United States and he will shortly be visiting England and Spain.

In the course of a detailed discussion of the Director’s report on the work of the Institute, it was generally agreed that, in spite of limited funds and a small staff, the Institute had done extraordinarily useful work. In connection with individual points in the report it was observed that, in addition to its use in the schools, the cinematograph might also be of value for scientific instruction and research. A wish was expressed that the circulation of the Review should be increased as far as possible, especially in countries where educational cinematography is still undeveloped. It was also recommended that special numbers of the Review or separate publications (cahiers) should be issued dealing with particular aspects of educational cinematography.

The Governing Body went very closely into the question of the representation on the Institute of national educational cinematographic interests. It was thought that national organizations of this kind would be exceedingly useful from the point of view of international co-operation in educational cinematography and of co-operation with the Institute, so long as it did not involve the creation of too many organizations. It would be particularly advantageous if the National Committees on Intellectual Co-operation could be made to include, in equal strength, representatives of both the users and the producers of educational films. The Governing Body refrained from making more detailed proposals in this matter, as the conditions obtaining in the different countries vary in many respects.

As regards the future, the Institute has first to continue the work already begun. Among the tasks which the Director has already planned, or which are, for other reasons, particularly desirable may be mentioned: the preparation of an international catalogue of educational films in the form, to begin with, of a list of educational films described as such by the competent authorities in the different countries; the employment of films for scientific purposes, especially in connection with micro-cinematography; the publication of a cinematographic vocabulary in the most widely spoken languages; the ques-
tion of a cinema library; the issue of a special publication on the educational treatment of films in their historical and practical aspects, in connection with the work of the League of Nations Child Welfare Committee, a study of the differences in the legislation of the various countries (censorship); a list of existing school films; the proposed agreement by which films passed by the censor will be revised at given intervals — say, every five years; a report on the conditions which cinema theatres showing films for young people must fulfil in order to satisfy police and health requirements; the use of non-inflammable films.

4. Abolition of customs duties on educational films

On this question a preliminary study has been made by the Institute, called «The Legislative Aspects of Cinematography: Fiscal Treatment». From the point of view of the circulation of educational films, it is of vital importance that there should be facilities for their exchange between one country and another. At present, there are serious obstacles in the way of this exchange, and sometimes it is made impossible by high duties, which, in most cases, make no distinction between «educational» and other films. The Governing Body thinks this question so important that it proposes to deal with it at an early date with a view to the conclusion of an international convention. Accordingly, it adopted the following resolution:


The Governing Body considered whether it was possible and desirable that the Institute should participate in the production of the films manufactured for the League of Nations, which are at present entrusted to a private firm. After a detailed discussion, the Governing Body adopted the following resolution:

6. Relations between the educational cinema, television and broadcasting.

At its 1928 session, the Governing Body requested the Council of the League of Nations to entrust the Institute with the collection of information on television and broadcasting. The League Council acceded to this request and asked the Committee on Intellectual Cooperation to make suggestions to the Institute as to the best treatment of this matter. At its session in July 1929, the Committee on Intellectual Co-operation decided that the Institute should not concern itself with television and broadcasting except as regards the collection of information on scientific progress in these spheres.

The Governing Body has now expressed the opinion that television is still in the stage of laboratory investigation, but that the sound film has progressed further and is ready for employment in the schools and for other educational purposes. For the moment, however, the Governing Body considers, in agreement with the resolution by the Com-
mittee on Intellectual Cooperation, that the Institute should confine itself to collecting information on progress made in these branches of cinematography.

7. Development of the recreational cinema

According to a report to the Governing Body, submitted by the Marquis de Guad-el-Jelu, the Child Welfare Committee passed a resolution in April 1929 deciding "to direct the attention of the International Educational Cinematographic Institute to a study of the means for promoting and encouraging the production, exchange, and representation of recreational films intended specially for children and of a character to amuse them, while contributing towards their intellectual and moral progress ".

Although the Governing Body is aware of the difficulty of defining the term "recreational film" in such a way that it can be distinguished easily from the "theatrical film", it nevertheless recognizes the importance of this question and requests the Director of the Institute to initiate a preliminary study of this problem.

8. Staff.

The permanent staff of the Institute at present consists of the Director, one Head of Service, one Chief Accountant, eight clerks and eight employees of lower grade. There are also nine persons outside the Institute entrusted with special tasks. A member of the Court of Appeal at Rome in his spare time acts as legal adviser.

In agreement with the Director, the Governing Body has so far refrained from dividing the Institute into Sections and appointing Chiefs of Section, as the Institute is still in course of development and during this period the official organization should be kept as elastic as possible.


In the Institute's Budget for 1928, receipts were estimated at 630,000 lire, and expenditure at 230,000 lire, leaving an estimated balance of 400,000 lire. Actual expenditure in 1928 amounted to 228,074 lire, resulting in a total surplus of 401,926 lire. After hearing the report by Dr. Vivaldi, Auditor of the League of Nations, the Governing Body approved the closed accounts for 1928.

In the 1929 Budget, both receipts and expenditure were estimated at 1,029,000 lire. In the meantime, the revenue has been increased by an annual subsidy of 15,000 lire from the Roumanian Government, and an annual subsidy of 25,000 lire from the Hungarian Government, for which we desire to express our thanks.

The Draft Budget for 1930 places revenue and expenditure at 1,131,000 lire. The revenue consists of the subsidy of 890,000 lire from the Italian Government, the subsidy of 15,000 lire from the Roumanian Government, the subsidy of 25,000 lire from the Hungarian Government, and 201,000 lire from the surpluses of previous years. As regards expenditure, Governing Body, Executive Committee, Experts, etc. account for 138,000
lire, staff for 631,000 lire, Travelling Expenses for 40,000 lire, Office Expenses 127,000, Entertainment Allowances 90,000, Publications 75,000, Unforeseen Expenses 20,000, and Miscellaneous 10,000 lire. The Governing Body approved the Budget for 1930 in this form and expressed the hope that other States would follow the example of Italy, Roumania and Hungary and recognize the importance of the Institute by an annual subsidy.

10. Conclusion.

A survey of the Institute during its first year shows an extraordinary amount of useful work accomplished with comparatively small means and a limited staff. No definite results can be expected after so short a time. It is first necessary to fix the range of the Institute’s work, to establish relations with outside bodies, and thereby prepare the ground for successful achievement. In this direction the Institute has made substantial progress and, as the present reports shows, various specific tasks have already been put into execution and results may be anticipated within a reasonable time.

This satisfactory record for the first year is mainly due to the Director of the Institute, Dr. Luciano de Feo, who, with untiring zeal, has devoted his wide knowledge and the whole of his energies to the Institute, and whose enthusiasm and personality have won for it encouragement and assistance. It is the duty of the Governing Body to recognize this fact once again and to thank Dr. de Feo and his colleagues warmly for what they have so far accomplished. The Governing Body is confident that the Institute will continue to deserve recognition by all those who are interested in the development of educational cinematography as an important instrument of education.

(Signed) Alfredo Rocco  
President

(Signed) Dr. H. A. Kruss  
Reporter.

REPORT OF THE ITALIAN REPRESENTATIVE ON THE COUNCIL OF THE LEAGUE OF NATIONS

The Governing Body of the International Educational Cinematographic Institute met for the second time in Rome on the 4th October 1929 under the Chairmanship of the Hon. Prof. Alfredo Rocco. All the members of the Board were present or represented, with the exception of Prof. Knoph Monsieur Lumière, Mr. Charles Milliken

(E. N.). In order that our readers may be informed in regard to the work that is being done by the International Institute for Educational Cinematography, we are publishing the official report presented by Prof. Alfredo Rocco, Minister of Justice, and the Reporter, Dr. Hugo Kruss, to the Council of the League of Nations in the month of January.

From a due sense of delicacy, we did not speak of the work done by the Institute in previous numbers. We desired that the first word said on the subject should be an official
and Prof. Nitobé who expressed their regret at being unable to attend or to send delegates to represent them.

After hearing the Report which Dr. Hugo Kriiss read on behalf of the Governing Body, the Council was able to judge of the work done in the course of the year. The problems which the Governing Body had had to consider; and the most practical and efficacious methods pursued in the endeavour to solve them. The Governing Body recognized that the Institute had gathered together a highly valuable documentation, and one as complete as possible, on the industrial firms and institutions concerned with the question of the educational cinematograph; that it had formed a collection of legal provisions concerning the cinema and the conditions regulating its censorship in the several countries; that it had entered into relations with a number of organizations, mostly belonging to the League of Nations with a view to useful collaboration and so as to avoid any overlapping in their work. Mention should also be made of the growing favour which the Institute's organ, the International Review of Educational Cinematography, is meeting with in all interested quarters and of the journeys made by the Director of the Institute during the year in order to satisfy himself directly on the work being done in the several film producing countries.

The Governing Body, after expressing its approval of the exhaustive way in which all this work is being carried out by the Director of the Institute with the help of a still limited staff and under very difficult conditions, arranged to commit to the Institute for next year the following tasks: to compile an international catalogue of educational films and study the question of the use of the cinema for scientific purposes; to publish a cinematographic vocabulary in the most important languages; to start a study of the differences between the censorship laws in the several countries; to lay a report before the next meeting on the conditions that ought to be enforced, in the

one, and limited ourselves to the periodical illustration of the work done by the publication of notes, reports, information and studies.

Today, in publishing the official report, the Institute is entitled to feel proud of the judgment expressed in regard to its work; and all its officials, from the editor to those in the humblest ranks, feel it to be an imperious duty to multiply their efforts and redouble their activities, in order that the organization may continually respond to the desires and be worthy of the trust of the superior controlling organizations.

According to the two resolutions spoken of as attached to the report of Prof. Alfredo Rocco and Dr. Kriuss, the Institute was charged to convene a Committee of Experts to study the project for an International Convention to suppress all customs' duties on educational films; and this has been done.

The draft of this project, which has been approved by the Executive Committee, is about to be submitted to the Council of the League of Nations for the definite approval of the State Members of the League.

Further, it has been recognised that, although the Institute must not assume any responsibility in the manufacture of films, this pledge does not prohibit the Institute from lending its aid to the League of Nations and its organizations to bring about the better preparation of purely documentary films relating to the League itself.

The Institute is thus carrying on its work of collaborating with and supporting the efforts of the great Geneva Organisation; and intends to continue along the path marked out for the accomplishment of its ends.
interest of hygiene and police control, in all halls where films are exhibited to children as also on the problem of non-inflammable films.

The most important question to claim the attention of the Governing Body was that of the Convention for the abolition of Customs duties on educational films, a draft of which the Institute was asked to prepare. The President of the Governing Board was asked to call a meeting of experts to be held in Geneva to draft this scheme of a Convention. The project will in due course be considered by the Institute’s, Permanent Executive Committee at its next meeting and communicated to the members of the Governing Body for their opinion. In the event of this opinion being favourable, the President was invited to lay the project before the Council of the League of Nations to be forwarded to the several States Members and non-Members of the League of Nations.

The Council had entrusted to the I. E. C. I. the task of studying the question of television and broadcasting in collaboration with the Committee on Intellectual Cooperation. The Governing Body had arrived at the opinion that television did not come directly within the scope of the Institute’s activities and that the latter ought rather to limit itself to gathering information on the progress achieved by the sound film, in so far as such progress comes within the range of the educational cinema.

The Governing Body then proceeded to approve of the Institute’s balance-sheet for the year then closed, and that for the following year. It expressed its deep satisfaction at the subsidies voted in favour of the Institute by the Roumanian and Hungarian Governments together with the hope that other Governments would contribute in like manner to the support of the Cinema Institute, which is doing work of real value to the world.

I have the honour to lay the following draft Resolution before the Council:

The Council takes note of the Report of the Governing Body of the International Educational Cinematographic Institute and will transmit it to the Assembly. The Council is gratified to note the practical and definite character of the work carried out by the Institute and congratulates it thereon. It approves of the programme of work which the Governing Body has entrusted to the Institute for next year. It thanks the Governments which have already granted subsidies to the Institute and expresses the hope that other Governments may very shortly see fit to do likewise.

«The Council requests the Secretary General of the League of Nations, in conformity with its Statutes, to transmit to the Italian Government and the Members of the League the Report submitted by the Governing Body». 
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ORANGES
LEMONS
BERGAMOT
SUNDRY ESSENCES
THE CULTURAL CINEMATOGRAPH IN POLAND.

The Ministry of Communications owns a number of films illustrating the work of the department in the matter of railway construction, and others for the vocational training of the mechanics assigned to this branch. The former type of film was shown at the Polish General Exhibition; the latter is of a strictly instructional order.

The Ministry of Military Affairs entrusts film activity to the Society of Military Studies. Some films have been produced for training soldiers. In addition to this the Ministry has certain cinemas at its disposal for purposes of general culture among the troops.

A Central Film Office has been established in connection with the Ministry of the Interior to deal with such matters as film censorship and to elaborate the legislation requisite for the diffusion of the film in Polish territory and facilitate the national production, especially of educational motion pictures. This office has produced a certain number of films with the help of private cinematograph firms. Most of these aim at making the country better known and thus serve touristic aims.

The Ministry of Labour and Social Welfare has produced some films bearing on the protection of workers and on hygiene. The problem of the scientific and educational cinema has been exhaustively studied and dealt with by the Ministry of Education and Public Worship and also by the Ministry of Agriculture.

Thanks to subsidies from the Ministries in question, an Institute of Educational Cinematography has been set up in connection with the Museum of Industry and Agriculture; this Institute has taken under its direction the film section of the Scholastic Associations created in 1926. This Institute has its headquarters at Staszic House, Nowy Swiat, Warsaw. It comprises offices, a studio, and a cinema hall that can seat 60 persons. Teachers who require to learn the methods and aims of the educational cinema gather in this hall. Debates and lectures on all matters pertinent to this class of film are held between the screenings.

Taddeus Woyno is Director of this Institute. The staff consists of Engineer Henri Suchorzewski, Head of the Education Division, Mr. Henri Wysokinski, Head of the Agricultural Section, and the film operator, Mr. Witold Kakzkowski.

The Institute owns its own collection of films, some of which are the production of the Museum of Industry and Agriculture; but the greater number are purchased in the United States and France. Their subject matter is all of agricultural interest. A considerable number of films have been commissioned from America and are expected shortly; others are being prepared in the Institute's own studios. A number of lantern slides is also kept in stock.

Up to the present, the Institute has for the most part supplied its films to the educational and agricultural organizations, but it now caters for all the State schools and private schools which care to subscribe and which can thus obtain films dealing with all branches of teaching to which the Cinema lends itself.

So as to facilitate the diffusion of the film in country districts that are lacking in electric current, the Institute is studying the expediency of making a wide use of the "Oko" equipment invented by the engineer Proszynski. The inventor is at present engaged on perfecting this apparatus so as to make it possible to reduce standard-size films to the proportions of a film of his own creation. The Institute is busy diffusing these equipments which are also able to project series of photographs and lantern slides on film.

The Institute has established a film depot
at Warsaw and also owns a depot of equipments intended for schools. It is desired to establish depots of this kind in all the principal Polish cities. Following the example of foreign countries, a scheme has also been worked out for diffusing the film by means of travelling cinemas. The agricultural organizations of the Poznan Municipality are planning to purchase an automobile equipped with cinematographic and broadcasting apparatus. The object of this scheme, organized under the auspices of the Institute, is to provide films dealing with agricultural subjects and stock-raising for screening at agricultural societies. At the same time the Ministry of Agriculture, in concert with the Cinematographic Institute, is studying a plan of campaign to arouse the interest of all persons concerned with the educational film. It is desired to create an educational cinema to exhibit the Institute's films in all of the several communes and districts of Poland.

(Ed. note). A quite recent official communication from the Polish Government enables us to inform our readers of the exact position of the educational and cultural cinema in the Republic. The survey is all the more interesting from the fact that it does not reflect merely the measures carried out or planned by the Government for the development of the educational screen, but also illustrates what is being done in this domain outside government activities.

Two points brought out by this survey are of particular interest: the invention of a special type of equipment for projecting films in localities that are not provided with electric current and the start that has been made in agricultural propaganda by means of travelling cinemas.

These two efforts, which will assuredly be crowned with success, are connected with a well-known characteristic of countries that live largely by agricultural industries, namely the contrast between town and country life and the need of retaining the country population on the land, of checking the exodus to the towns, and keeping the farming class in touch with the life of the day.

Up to the present, Italy, Russia, Poland, Bulgaria, and India are the countries that have been most active in developing the vagrant but most valuable service of the travelling cinema.

Urbanism like emigration, is due mainly to two factors: one strictly economic and the other psychological. The land worker has to wage a hard battle day by day, year in year out, against the forces of nature and its uncertainties, he is at the mercy of the hazards of the weather and the markets. His deficient knowledge of modern improved systems of farming often prevents him from deriving all the fruits due to him from his labour, which is consequently heavier and at the same time less profitable than it would be if assisted by scientific means: machinery, fertilizers, etc. Under such conditions the illusion of the city — its industries, its lighter labours and quicker returns — assails him. It matters little whether the city of his dreams lies at hand, over the hill tops or across the ocean. He fondly imagines it as the Eldorado that will yield its treasures to his hand.

Then there is the lure of town life, with its gaily lighted streets, its glamour and attractions. The country is supremely lovely to those who are shut up all day between four walls and who can carry with them the congenial company of their intellectual work and thought. But
the land worker, who is generally so isolated from all contact with spiritual life, yearns for town joys, that he has not himself experienced and knows only by hearsay, coloured in the telling and with all the sordid details left out. He wants to see for himself, to enjoy all these marvels that suggest eastern fable to his ears, and... later on, when he attains them, and disappointment follows so closely in their wake, he is already caught by the vortex of the town, and has no longer the means nor the will to get back to the country, with its trees full of song by day and its star-lit nights.

The cinema promises to be the most powerful, if not the only, means of combating this evil, this exo dus from the land. Accompanied by verbal explanations, it can suggest ways and means of rational farming, and tell the peasant how to obtain from the earth — ever an ungrudging mother to the sons who love her — all the wealth that no industries can create, the pure and untainted riches of the soil.

It can convey to the remotest country districts, to the tops of mountains, and to sun-beaten shores, the vision of all beautiful things and the moral and spiritual knowledge of life; it alone can fill in the gaps and supply the wants of country life.

When travelling cinemas have become a common feature of the countryside in all nations, it may well be that the "call of the town" will be silenced, or be so much less audible that the battle may be regarded as won.

This phenomenon of "urbanism" is a problem of urgent social importance, because it is responsible for so many anxious problems of morals and of life.

We cannot allow the country to be turned into a desert, we must see that our woods and forests are preserved and re-wooded so that the rainfall may be a source of profit and not of ruin — all this is an essential aspect of the production of wealth; of the universal capital that it behoves us to safeguard. And then again there is the moral aspect of the demographic problem; the purity of customs and morals.

Here is a simple statistical table:

<table>
<thead>
<tr>
<th>Region</th>
<th>Arable Land %</th>
<th>Forests %</th>
<th>Utilizable uncultivated tracts %</th>
<th>Non-arable land (buildings, waters, sterile) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>44.78</td>
<td>29.85</td>
<td>5.97</td>
<td>19.40</td>
</tr>
<tr>
<td>Asia</td>
<td>20.47</td>
<td>29.75</td>
<td>20.43</td>
<td>29.54</td>
</tr>
<tr>
<td>Africa</td>
<td>17.86</td>
<td>31.54</td>
<td>32.90</td>
<td>17.76</td>
</tr>
<tr>
<td>America North.</td>
<td>14.59</td>
<td>37.50</td>
<td>16.66</td>
<td>31.25</td>
</tr>
<tr>
<td>America South.</td>
<td>20.78</td>
<td>44.95</td>
<td>22.47</td>
<td>11.80</td>
</tr>
<tr>
<td>Oceania</td>
<td>11.24</td>
<td>13.48</td>
<td>38.21</td>
<td>37.07</td>
</tr>
</tbody>
</table>

Now do the percentages of town and rural population correspond to the percentages of arable land (or land fit for cultivation when properly reclaimed and treated), all due allowance being made for the needs of industry?

This involves a serious problem and herein lies the reason that the Rome Institute is so happy to welcome Poland among the nations that have taken up the good fight and is watching with such keen interest the results of the experiments she is making.
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Calendered Paper
Rotogravure - Publications
Illustrations

Placards and Posters
Writing Paper of all qualities,
Ordinary, fine, extra fine and
handmade Style
Cellulose Packing Paper
CINEMATOGRAPHY IN THE INDIAN PENINSULA.

1. The Indian Film Industry.

The Cinema. — The enquiry embraces the whole of British India proper: i.e. the territory formed of the Indian Peninsula, Burma and the Island of Ceylon.

The chief centres of the industry are Bombay, Calcutta, Rangoon and in a lesser degree, Colombo. All films exhibited in India pass in the first place through one of these centres, before being distributed throughout the smaller towns and the inland States.

According to the 1927-1928 Report of the Indian Cinematograph Committee, there are some 350 cinema halls and theatres in India. Only three hundred of these are permanently open. About a dozen of the remaining ones are regimental cinemas, and the rest — mostly located in the hills — are open during a few months of the year only.

The cinemas are distributed very unequally between the several areas. From the maximum of 83 for the province of Bombay, 60 for Burma, and 50 for Madras, we come down to 8, 6 and 4 respectively for the North West Frontier, Assam, and Delhi. Taking into account the aggregate number of permanent cinemas, regimental cinemas, and those that remain open only during a given season, the ratio of cinemas to population is as follows:

(One cinema to every)  Inhabitants
                        (approximate)
Delhi (one cinema to every)     122,000
Burma                    220,200
Bombay                  233,000
North West Frontier     281,400
Central Provinces and Berar 604,900
Punjab               738,700
Madras              484,400
United Provinces       1,008,400
Assam                1,267,700
Bengal            1,506,300
Bihar and Orissa       2,833,500

Although there has been a progressive increase in the number of cinemas since 1921 (during the last six years this increase has amounted to 36%), the number is still much too low for the needs of the population. Leaving aside the twelve regimental cinemas, which cater of course for a strictly limited public and whose programmes are of a special and restricted kind, we need only recall that 87 out of 300 permanent cinemas are located in the big cities; little more than 200 thus being supposed to cater for the needs of the enormous mass of the rural populations and the inhabitants of the smaller towns.

A simple comparison of the average frequency in cinema attendance as between India and three other countries — one American, one European, and one Asiatic — is interesting:

<table>
<thead>
<tr>
<th>Country</th>
<th>Cinema for every inhabitant</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>802,509</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>5,654</td>
</tr>
<tr>
<td>England</td>
<td>12,742</td>
</tr>
<tr>
<td>Japan</td>
<td>79,900</td>
</tr>
</tbody>
</table>

The great paucity of cinema theatres in India is all the more striking in the light of other comparisons.

There is on the average one cinema to about each 3,560 square miles of territory. The total number of seats is about 222,000, and if all of these were occupied daily, it would take three years to give the whole of the population of India a chance to visit the cinema. As a matter of fact, however, only 200 persons on the average attend each cinema daily; with an aggregate attendance of 61,800 for all the existing cinemas with a yearly total of about 22,248,000 spectators.

It is also interesting to note that there are 250 towns in British India with a population of over twenty thousand inhabitants; only 94 of these are provided with cinemas.

The native Indian States, with a population of over 70 million inhabitants, possess only 60 cinema halls.

The character of the Indian cinema is necessarily affected by the same cause that accounts for the scant number of theatres; that is to say the poverty of the native population.
The large and luxurious halls of the western world are unknown in India. The theatres are for the most part unpretentious buildings that have been adapted summarily for the purpose, with an average of about 800 seats apiece. The entrance fees range from a minimum of 3 annas to a maximum of 2 or 3 rupees for boxes. The musical accompaniment to the shows varies from one cinema to another, according to the class of the audience.

Small orchestras provide good western music for the cinemas frequented by Europeans and cultured Indian audiences; only Indian music, the cost of which is much lower, is played in the halls frequented mainly by native audiences. The Burmese cinemas go in for a characteristic music of their own. As a rule, two shows are held daily, besides an extra show on Saturday and Sundays. The cinemas of the chief towns, and especially those of Bombays and Delhi, give as many as 4 and 5 shows a day, especially when Indian films are being exhibited. In Peshawar special shows are given on Fridays for business men and visitors to the city.

The cinemas may be divided into distinct classes: some hundred of a distinctly western character that provide almost purely western programmes, and those showing nothing or little besides Indian films.

The first group is controlled almost entirely by the Madan Theatres Ltd. and the Globe Theatres Ltd., which furnish mostly western films, among which the American predominates, only a small proportion being European production. The Madan Theatres Ltd., however, furnish also a certain number of Indian Films of their own production.

The so-called «travelling cinemas» — which are quite different in character from those organized for propaganda purposes by Government and quasi-Government institutions in various European countries such as Italy, Poland, France and Bulgaria, are an important supplementary feature here. These Indian travelling cinemas are a creation of the film distributors, and are a characteristic feature of the peninsula.

The Report of the Indian Cinematograph Committee refers to an enquiry that was made to ascertain the number of these cinemas in each province. Precise data were unobtainable. The licence granted to these travelling cinemas from 1921 to 1927 numbered 1035, but the total of these cinemas did not exceed one hundred and was in fact, in all likelihood, considerably below this number. These cinemas are short lived. The appear and disappear from season to season and as special occasions may demand, (fairs, markets, religious festivals, etc.); occasionally they are installed in hired premises rented for the purpose for periods not exceeding one month at a time, but for the most part they live and have their nomadic being amidst tents and travelling benches loaded on caravans.

Entrance fees are of course very low; they never exceed 2 annas, and often not more than one anna is charged.

There are a greater number in the southern than in the northern provinces. They exhibit old second hand western films which can be purchased for a song and are generally in very poor condition.

They do not often screen native films, although there is a firm at Calcutta that devotes itself to the production of films for travelling cinemas.

These travelling cinemas are strictly popular in character and cater for the poor. Their gypsy-camp life, with its continuous ups and downs and the heavy burden of the fees charged for the requisite licenses, renders their life precarious and hand-to-mouth — a vagrant and rustic calling that recalls very faintly the art of those nomad companies of artists, the clerici vagantes and the sacred representations that flourished in the country districts of the West in the Middle Ages.

Distribution and hiring. — There are only four important firms that import western films. The distribution of Indian films is almost always attended to directly by the producers, few of them making use of distribution and renting agencies.

Two hire-systems are in vogue: one on a royalty basis and the other at a fixed fee. The average royalties are at the rate of 40% of the takings to the producer and 60% to the renter in the case of films being shown for the first time; the renter being required
to meet the various charges for advertisement, rent of premises, staff, music and other accessory expenses. For second-view films the producers' royalty is reduced to about 33%. The fees of middlemen acting between producer and renter-exhibitor, when any, are fixed at 10%.

The rules are very different in Burma. In the case of films of exceptional value, the producer can charge as much as 70%; but he has to take over the publicity and in some cases also the music. The royalty is rarely more than 55% in the case of the less valuable films.

The purchase system also varies considerably. In addition to the purchase of one or more specified films, a number are generally taken over en bloc or on trust. Purchase en bloc means that, at the beginning of the working year, the buyer acquires the whole series of the year's output without knowing what all or at any rate a part of it will consist of. On trust purchase means the purchase of a number of films or entire programmes without knowing what films will be supplied.

According to the above-cited Report (m. 54), the system itself is variable. Thus the en bloc system is not always the same and, in some cases, the exhibitor enjoys certain privileges that afford him some liberty of choice.

The cost of the films—the fixed price—differs considerably according to their quality. A super-film may cost as much as 20 thousand rupees, while second-hand American films can be purchased on the London market for a comparative trifling sum of five pounds. The price of course varies according to the films and the hall. Thus not more than one hundred rupees per week is charged to the less important theatres for the mere hire of second-rate films. The hire price of Indian films, is more sustained; these are rarely let out at less than 40 rupees a day.

Given the cost of films, the scant number of spectators, the charges of upkeep, and the often high rents charged for the halls, the cinema business cannot be a very paying one in India, except under three different conditions. Firstly, when the exhibitor himself owns the hall; secondly, in the case of theatres of repute in thickly populated centres with a good number of luxury seats (at a high price), and lastly, in the case of cinemas that are purely native as regards both premises and shows. The entertainment tax which is in force in Bombay and Calcutta, and which it is contemplated introducing also into Madras, is a serious handicap to this part of the cinema business.

Production and Importation. — The Indian film production rose from 24 films for the working year 1924-1925 to 110 for the last year under survey, giving a total length of films examined by the censor of 777,375 metres against 4,432,164 metres of imported films; the ratio being 14.92 to 85.08. Including the figures for Burma, where the national output of films is more developed, the ratio is 21.20 to 78.80.

The importation of blank films and printed films, whether subject to official inspection or otherwise, has undergone the following fluctuations from year to year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Blank Films</th>
<th>Printed Films</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922-1923</td>
<td>520,429</td>
<td>6,790,000</td>
</tr>
<tr>
<td>1923-1924</td>
<td>1,451,655</td>
<td>5,759,000</td>
</tr>
<tr>
<td>1924-1925</td>
<td>3,194,760</td>
<td>6,250,000</td>
</tr>
<tr>
<td>1925-1926</td>
<td>6,258,199</td>
<td>7,611,000</td>
</tr>
<tr>
<td>1926-1927</td>
<td>7,715,632</td>
<td>9,767,000</td>
</tr>
<tr>
<td>1927-1928</td>
<td>11,221,054</td>
<td>10,235,656</td>
</tr>
</tbody>
</table>

registering an increase of over 100% for blank films and of over 51% for printed films.

There are in all about 38 producing firms, of which 17 are in Burma, 2 in the Indian States (one in Kolhapur and one in Baroda) and the remainder in the big centres, mostly in Bombay and Calcutta. It cannot be said that these firms, with the exception of one or two of the principal ones, follow any regular system of production. Their capital is, generally, in the hands of a few subscribers and does not exceed two lakhs of rupees. Any organization conducive to strength and uniformity in the work, for the benefit of producers and hirers, is lacking or rudimentary.

Nearly all the producing firms have their own studios of a comparatively simple order, consisting of smallish walled-in spaces with high screens and glass arches, with a system of curtains, to diffuse the light. These studios usually have
annexes for developing, printing, and all other accessory processes of the work.

The more important firms have fixed companies of actors and actresses who are paid monthly salaries, varying from a minimum of thirty rupees up to 600 or 700 rupees for the stars, who are recruited from dancing girls and not from the cultivated classes. There are few specialized scenario writers for the cinematograph. The few journalists and literary people who undertake this work receive up to 1,300 rupees for each scenario.

The lack of good stage-managers and operators and of specialized technique usually leads to inferior films as compared with Western productions. The subjects and the scenarios are wanting in originality, the actors are sticks and have no expression. Although of recent years the photography has greatly improved, still the defects in technique and lighting spoil the whole effect of the film, which might be good and original. The length of the film has only recently been reduced to normal. In Burma, however, it is still unduly long, since the Burmese public love lengthy films.

The cost of producing a film varies, according to the subject, the actors and the sort of production which is desired, from 5,000 to 50,000 rupees — the average cost being between 15 to 20,000.

While film managers in India are having a difficult time, film manufacturers on the contrary, find it a very paying business. We need only reflect that a good film may be shown for several weeks’ running in the bigger towns and that this first run often covers the first cost of production. In spite of this, native capital is very unwilling to participate in this industry, partly because of the natural disinclination of the people to take part in any form of commerce and risk, partly because of past failures, and partly for reasons of religion and caste, i.e. on account of actresses chosen from the class of dancing-girls being employed.

The flourishing state of the Indian film industry and its low cost of production are the results of several favourable factors. Work is cheap; wages (even of «stars») are comparatively low; the subjects can be easily adapted to the magnificent natural scenery (photographed in the open), and there is small need — considering the undeveloped cinematographic taste of the local population — for an aesthetically elaborate production or for a high technical standard.

We have already referred to some of the conditions of production. Apart from rainy seasons, which necessitates working in studios with added difficulties of special technique and artificial lighting, we get brilliant sunshine, splendid expanses of open landscape, woods, rivers, mountains, superb antiquities, roads, markets and many coloured crowds such as it would be impossible to meet with in any western country. Nearly all types of men are represented with their special ethnical characteristics.

The difficulties of producing good films of a paying nature arise from other factors. Entirely Indian films are not suitable for exportation owing to the very peculiar nature of the action and representation. It is, therefore, necessary for them to find a market in their own country. Habits, costumes and dialects differ greatly from one province to another. A Bengalese film would not be popular in Madras and still less so in Bombay without special alterations to allow of its more general diffusion. For instance, Burmese films are not popular in India, and vice-versa. Hindu films do not go-down amongst Mohammedans, who prefer to see scenes representing their own life and ideas or else western films. The captions must be in the dialects of the different provinces; this also considerably increases the cost of production.

In spite of all this the film producing industry flourishes and is steadily improving.

**Types of Films.** — The documentary film has a very limited public in India and is not much in use. Few firms produce it; usually only such firms as control large circuits and which export abroad (especially to America) short documentary films for topical gazettes. The public demand for serial films has almost ceased. The audience of today prefers a picture which, even if long, carries the story it presents to a conclusions.

Western films are greatly appreciated. Certain particular types are in great demand; such as great artistic productions and the
creations of Douglas Fairbanks, Harold Lloyd and Charlie Chaplin which, because of their entirely personal character, are certain of great success throughout India.

The strictly Indian type of film is, however, the favourite. This may be because the mass of the population, owing to lack of knowledge of the language and of European ideas, is unable to follow the action represented in western films. Or it may be that the re-evocation of their own history and tradition touches the heart and stirs the feelings of the native audience. Social-drama films have little interest for Indian audiences. They deal with matrimonial differences and with situations totally unknown and incomprehensible to the audience, whose mode of life is entirely different.

Hence the preference for pictures which are more readily understood by the audience. Even cultured Indians, who realize that their own films are inferior in art and technique to the American ones, go in crowds to see screened the life of Krishna, episodes from the Mahabharata and Ramayana, or fantastic stories from the «Thousand and one Nights» such as Ali Baba or Aladin, something in short that is in touch with their traditions of thought and action.

Indian films have the power of impressing the imagination of Western spectators as well. In the above-mentioned «Report» (No. 144) it is stated that an English lady, who for the first time saw a mythological Indian film, agreed that these Oriental productions superseded European ones in fascination.

The evidence of commercial interests is unanimous in this respect. If at first the exhibition of a western picture brings in bigger daily profits, it is found that the audience dwindles and the takings consequently fall off as time goes on. Appendix 4, page 226 of the Report shows that the richest booking fees were realized by Ben Hur; but these rapidly dwindled over a six months' period, and a comparison in Bombay between the three chief cinemas exhibiting western films and the three chief ones exhibiting Indian films, showed a net profit of over 41,000 rupees in favour of the latter.

In September 1927, the Hon. J. Crear submitted a resolution to the Indian Legislative Assembly for the appointment of a committee entrusted with the task of examining and reporting on the existing system for the revision and censoring of films and on the state of the Indian cinematographic industry. Among those who spoke on the subject, the Hon. C. Durais Swami Ayyangar called attention to the necessity of keeping a vigilant eye on religious films, so as to avoid anything in the nature of the perversion of native religious rites. The Hon. Laba Lajpatrai Rai remarked on the bad habit of representing Asiatics in a derogatory light and depicting their customs in a distorted manner. Col. J. D. Crawford and the Hon. Mohammed Yamin Kahn supported this protest, though from different motives.

One outcome of the above discussion and of another that took place at the same time in the Council of State on the 6th October 1927 was the appointment of a commission of enquiry to examine the question throughout British India.

In so far as the encouragement of the native film industry is concerned, the principal recommendations contained in the above mentioned Report (Nos. 152 to 157, 162, 187, 197, 275, 277, 279 and 280) were as follows:

1. the opening of new cinema halls;
2. the exemption of all blank films from duties and taxes;
3. the abolition or limitation of the tax on exhibitions and entertainment tax;
4. a permission to open bars in cinemas in conformity with enactments in force regulating the sale of alcoholic drinks.

II.

The Educational Film

The Indian cinemas, especially in the principal cities, give weekly afternoon shows consisting entirely of comic films, which are those that children like best.

The enquiry carried out by the Commission, nominated pursuant to the proposal of the Indian Council of State and summarized in the Report (No. 200 et seq.), affirms that the majority of Indian educators are of the opinion that considerable use might be made of the film in establishments for education and training, especially in the
more cultural ones, as a scholastic means for special lines of training, but none of these were disposed to make financial sacrifices to carry this plan into effect owing to the situation of the school budgets.

Lack of practical initiative in launching it has, moreover, limited the production of this type of film. Owing to the deficiency of suitable technical means, it was not possible to create films of a purely scientific order, of the kind to be found in the catalogues of European countries, which are costly, difficult to make, and offer limited possibilities of diffusion. Producers have therefore confined themselves to reproducing facts and lessons from everyday life, in a simple but attractive form.

Among those deserving of praise for such efforts, we may mention Patés & Sons of Lahore; Guaranga Bros., of Madras, and Karamchand & Bulchand of Hyderabad; and call attention to the success obtained by certain matinées for girls held at the Bennett’s Girls’ High School of Vepery in Madras.

An English physician, Dr. Bentley, of the Bengal Health Office, stated in connection with an epidemic of cholera in Calcutta that half a dozen copies of a film on cholera prophylaxis would have been of great service to the efforts of doctors and authorities.

The Central Publicity Office of the Indian Railways had, on its side, started the production of railway publicity and touristic films.

The Commission therefore recommended the creation of a Central Cinema Office to coordinate all these scattered initiatives, with a view to raising the level of production, and so form a film collection of a kind to diffuse throughout India the benefits of culture and science, especially as the purely educational and cultural character of such films would make their appeal universal, which is not the case with dramatic films owing to the diversity of language, customs, and uses in the different provinces.

It further proposes to render it compulsory, in all cinema programmes, to screen one educational film lasting not more than 10 to 15 minutes and to entrust the supervision and selection of these films to the Central Cinematographic Office.

It further proposed to exempt all educational films entirely from customs, dues and import tax; this category would comprise all films for public culture such as those dealing with hygiene, agriculture and industries and all those with cultural and scientific aims.
EASTMAN CLASSROOM FILMS

...A series of strictly educational films that are finding great favor in various European countries as well as in the United States.

TWENTY of these special classroom films were used in the Eastman experiment of 1928, involving about 11,000 pupils and 200 teachers.

The experiment proved conclusively that pupils taught with these films made definite, measurable, scholastic gains over pupils taught without them.

In addition, the film-taught pupils exhibited the following superiorities:

1) An increased interest in school work.
2) Greater originality.
3) Ability to think more accurately and reason more soundly.
4) An increase in the quantity and an improvement in the quality of their reading.
5) Marked improvement in vocabulary.
6) A clearer appreciation of environment.
7) An extension of experiences beyond immediate environment.

About 100 Eastman Classroom Films, prepared deliberately and scientifically, are now available on these subjects: Geography, General Science, Health, Civics, Nature Study, Biology.

A brief descriptive list of all films may be had on request.

Eastman Teaching Films, Inc.

Subsidiary of

Eastman Kodak Company

Rochester, N. Y. U. S. A.
The Cinematograph as an auxiliary for teaching in modern Schools

1.) Kinamo N. 25

enables the modern school teacher to take his own cinematographic pictures, without having to follow a special course of instruction. During his lectures, it gives him the assurance of real competence. With this apparatus, the phenomena of nature, the various manifestations in the life of animals, birds and insects can be fixed in the film. Micro-organism, invisible to the naked eye, can be photographed with the help of the microscope, and thrown on the screen during the lecture, to illustrate the lesson more vividly.

2.) Kinobox C.

Is a small portable apparatus for projecting; it is in the shape of an attaché case. With this apparatus, the most unforeseen events and problems which have not been mentioned in the scholastic program, can be treated with speed and accuracy. These projections give the student a better understanding of the subject and are extremely useful to the lecturer.

The richly illustrated catalogues of KINAMO N. 52 and KINobox C. will be sent to you gratis on application to:

Leiss Ikon A.G. Dresden
EDUCATIONAL AND TEACHING FILMS.

Ten years have passed since Dr. Ulrich K. T. Schultz entered the Universum-Film A. G. of Berlin, where he has done great service for the educational film as Director of the biological section. After his first modest attempts, when, with a pail of sand, a couple of handfuls of grass and a stone or two, he prepared a background for the animals to be photographed, he tried for the first time to give a special setting and interest to the educational film, so that it might prove more attractive to the public. It was in this way that the first educational films in natural science were prepared for projection in public cinemas, such as «The Flying Deer» and «The Embarrassed Gardiner» (Der Gärtner in Not) and the welcome given to these films was so enthusiastic that there has been an increase of action and story in all films of animal life. In expeditions to foreign countries, the great natural science films show us marvellous visions from the life of every kind of animal; we are shown the whole course of their existence, and even the pulsating life on the bed of the ocean, which had hitherto constituted an unknown world. After a labour of two long years, the educational film «Nature and Love» was completed; its object is to make known to the layman everything that science has been able to discover about the origin of life on the earth, and on the birth and development of mankind. Dr. Schulz was fortunate in finding an able collaborator in the realisation of his idea in the present competent Director of the educational section of the UFA, Dr. N. Kaufmann. The sound film is now offering new perspectives to the educational film, and it is hoped that, by its means, an additional development that more closely corresponds to its ideals will be given to the natural science films, biological, ethnological and geological. (Ufa-Feuilleton, Berlin - F.)

F. Dean Mc Clusky, Director of the Scarsborough School of New York since 1919, when the idea of the educational film in school teaching began to be put in practice, describes the various phases of improvement through which this new and efficient means of instruction has passed in the United States. In his explanation, Mc Clusky touches on the production and application of films for scholastic purposes, two problems that have suffered great changes in the course of time; he then explains the fundamental principles of the relation between the film and the plan of instruction on which the use of the cinematograph must be based, if we are to have efficient teaching by means of the film in schools. The type now generally preferred is the reduced fireproof film of 16 mm., and little by little the original system of the «complete cinematograph lesson» has been abandoned. (The Educational Screen, Chicago).

In forthcoming numbers, from December to June, «The Educational Screen» will publish an entire series of articles by W. M. Gregory, Director of the Pedagogic Museum of the Schools of Cleveland, under the title «Means of Visible Education in Europe». In this series of articles the writer will describe the impressions received during his travels for purposes of study in Europe and, after giving a general view of visible education in Europe, he will give a very thorough and complete explanation of the new methods of teaching and other studies and efforts that are being used in the teaching of youth. The systems used and the work that is being carried on in important educational centres like London, Oxford, Brussels, Berlin, Frankfort on the Main, Leipzig, Vienna, Budapest, Zurich, Berne, Munich in Bavaria, Jena and Paris, will be brought to the knowledge of American teachers, and special mention will be made of the film as the most modern.
means of instruction. (The Educational Screen, Chicago - F. 35/122).

At Los Angeles, the scholastic authorities are organizing a series of free lectures with demonstration, on visible education, in which the entire problem will be set forth with its objects and aims, its limitations and possibilities. The lectures will illustrate all the means of visible education used, as well as the projection apparatus and suitable film material. Those who wish to attend this course need not have any special preparation (The Educational Screen, Chicago - F. 37/123).

A Luxembourg, the Ministry of Public Instruction has made an agreement with a cinema in the capital to permit scholars of the various schools of Luxembourg to attend special performances at which educational films only will be shown. The films are supplied by a Belgian company «Les universités cinégraphiques». Every year there are about 20 performances of the kind. The entrance price is exceedingly low, because the Ministry of Public Instruction contributes a subsidy towards the expenses. There is no educational cinema at Luxembourg, because the use of educational films in scholastic teaching is still in its beginnings. And there are many reasons of a technical and custom's nature which prohibit the introduction of educational films from neighbouring countries: France and Germany. (Communication from the Luxembourg Government, December 11, 1929).

The December number of the «Bildwart» of Berlin contained a series of lectures on the scholastic cinema, which were delivered by experts at the X German Conference on Photography (X Deutsche Bildwoche) at Dresden.

F. Paul Liesegang, of Düsseldorf, made a report on technical and pedagogical considerations in the selection of projection apparatus for schools, and gave a detailed explanation of the various methods in use (F. 37/155).

H. Joachim, of Dresden, gave an explanation of the «Technical innovations in scholastic cinematography», and dealt especially with the technique of light and the new constructions of projection apparatus for educational use (F. 21/436).

Dr. Gottlieb Imhof of Basle, Director of the Swiss Educational Cinematographic Chamber, dealt with the interesting problem of the «Importance of the Reduced Film for Schools». After giving a brief summary of the development of the educational film in the various countries, the speaker expressed due acknowledgement of the undoubted merits of Marey, Lumière, A. Colette, E. Roux-Parassac, F. Lampo, the schoolmasters of Hamburg (Hamburger Lehrerschaft) and the producing firms Pathé Frères and Eastman Kodak Company in connection with the educational cinematograph. France was the first to create an educational film of an essentially scholastic character. The scholastic film must represent an improved method of visible education, which should be limited to representations of dynamic, that is to say mechanical and biological happenings. It should in any case never be used as a substitute for the work of the teacher. Even the best educational film existing should be no more, in the hands of the teacher, than so much raw material. The teacher should always be the artist who understands how to stimulate interest and collaboration, by means of the film, in the youthful minds entrusted to his care.

Thus, teaching by means of the film offers an active school of intense labour in the truest sense of the word. As the educational film constitutes a very expensive instrument of instruction, however, only the most precious educational material should be illustrated by this means. The didactical construction of the scholastic film can, naturally, be done only with the continuous collaboration of schoolmasters in educational cinematograph production. The schoolmaster alone can prepare the list of necessary films, select the teaching matter and work out the films themselves. Fiscal authorities, customs' officers and firemen should have nothing to do with the educational film. All the cinematograph archives subsidized by the State should, as in France, enjoy official exemption for the forwarding and return of films. For, at bottom, the only possibility of a genuine success for the scholastic cinematograph lies in a rational organization of the schools and the creation of numerous educational
cinematograph archives in each region, or, better still, in each locality. All subsidizing bodies should do their utmost to procure films for teaching purposes, while the practical schoolmaster alone should have the task of seeking for suitable material from the pedagogic point of view. At didactic ballast should be eliminated, thus reducing scholastic films to a standardized length of from 30 to 40 metres, the only really efficient length, if the teaching given with the aid of the film is to be thoroughly worked out in one lesson. We want to introduce the film into every school existing, since by its means we can obtain the best teaching results in a minimum of time, for the film can give ampler and clearer explanations even in the most outlying schools. (Der Bild-wart, Berlin - F.)

In Belgium, the Ministry of Arts and Science has already arranged that an experiment shall be made, in one of the girl teachers' schools in Brussels, of giving the lessons alternately with and without the aid of the film. The results obtained from these two methods will be compared, and the State intends, in this way, to verify practically the results obtained by the use of the film during lessons in Norway and America, where for some time past the superiority of teaching by the aid of cinematograph projections has been acknowledged. The step which has been taken by the Belgian Minister of Public Instruction, Vauthier, has naturally aroused the utmost interest on the part of the Association «Les Amis du Cinéma Educatif et Instructif», which was founded in Belgium in 1927. (Le Soir, Brussels - F. 37/116).

In Austria, Dr. Heinrich Fuchsig made a number of experiments during the years 1924-1928 with Viennese scholars of from 8 to 18 years of age, in order to ascertain what should be the minimum size of the cinematographic image to be projected in schools. The different sized images were not presented to the scholars one after the other on the same day, but with intervals of some days between, and each time the scholars were examined in identically the same way on the figures and movements they had seen, and also on the memory of them retained. It was found that the minimum size that could be considered as sufficiently adapted to the pedagogic point of view — that is to say, the minimum size which permitted of a rapid conception of the essentials parts of the image and the possibility of seizing the movements projected, as well as a lasting impression on the memory — was a projection covering a superfi"cies of 1,20 square metres, or at least 1,20 by 0,90, with normal lighting and the ordinary films as regularly made by the Agfa. (Gewöhnliche Agfa-Normalfilm-struktur). Even when employing reduced-film apparatus, it is absolutely necessary to make use of these dimensions unless one is forced to make enlargements, which reduce the clearness, etc. of the figures. On the basis of these experiments, Fuchsig prefers the normal film for scholastic projections, thus showing himself to be in antagonism with all those who advise using the reduced film. (Das Bild, Vienna - F. 37/129).

While we thus have competent individuals expressing opposite opinions with regard to the size of scholastic films — reduced or regular type — in the United States a pedagogue has come forward to warn us against stereotyped science, which he wittily calls «canned education», and also against «music boxes», with which there is an attempt to substitute musicians by means of the sound film. Professor Robert E. Rogers, of the Massachusetts Institute of Technology, is of the opinion that the film in America, and especially the sound film, and the wireless, are on the point of almost completely eliminating the necessity for the teacher, and of rendering instruction mechanical; which fact, he thinks, is likely to give us a «half-baked population intellectually», a population, that is, of persons «who are not illiterate because they can read, but read nothing but tabloids». The teaching that obtains on the whole in America, nowadays, is nothing but a system of making known to schoolchildren a «bewildering mass of little facts» and a useless quantity of «tricks of the trade», instead of communicating original ideas to them; and this means the end of all individuality and originality, of every capacity for criticism or judgment, and the ruin of the entire fundamental science. Professor Rogers advises us to return to the old school of common sense, which taught
children the few simple things that are absolutely necessary in life. All those who propose the use of the film in teaching will be astounded, as we are, that just from America, where Taylorism originated, should come this harsh criticism of the film in scholastic education; but they will all agree with us that not one of the real friends of the educational film has ever had the idea that the pedagogue should be substituted by the film. Instead, by securing the teacher the use of films of a high educational value, which correspond in all respects to school requirements, we desire to bring the personal work of the schoolmaster to the highest degree of efficiency. (Christian Science Monitor, Boston - F. 37/136).

Starting from this pedagogic point of view, the Oesterreichischer Schulkinobund (Austrian Union of the Scholastic Cinema) has recently projected an excellent film entitled « From the Tree to the Newspaper ». This shows the schoolchildren on the film, with the addition of fixed photographs showing, from time to time, how lumber is obtained, how paper is made and how a newspaper is printed. The scholar, after looking at marvellous forest scenes, tranquil alpine lakes and foaming cascades, is able to follow the transport of the lumber down to the valley and so to a modern paper factory, where all the processes in the making of paper are shown; and from there he passes to a technical establishment, where he sees a printing press at work and how a newspaper is set up, from the composing room to the printing press, with its heavy rotary machines; and finally, the distribution and despatch of the daily paper. (Das Bild, Vienna - F.5/100)

Professor Clair E. Turner, of the Massachusetts Institute of Technology, has produced a series of instructive medico-anatomical films, for the purpose of showing children the movements of the human body during its physiological activities. The photographs were taken by means of the X rays, which allow us to watch the activities of the microscopic digestive glands of the stomach, intestines and kidneys, and the working of the heart. The processes of deglutition were also shown on the film, and how the teeth grow, and other phenomena of the human organism, all suitable for being projected before school children. (The Educational Screen, Chicago - F 13/93).

Dr. John Thomson-Walker, surgeon of King's College Hospital, projected his sound film of surgical operations recently before the London Royal Society of Medicine. While the images passed slowly across the film, the voice of the professor explained every cut or surgical intervention, little by little as it appeared to view. At the end of the projection of this film which has cost an enormous amount of time and trouble and was conceived solely for the use of medical students, Sir John Thomson-Walker declared as follows: « We are on the eve of great innovations. By this method we shall be able to show to a large number of students, half a dozen operations in a single afternoon. I am convinced that hospitals and universities will be able to draw enormous advantages for the teaching to be imparted to medical students from this application of the film, which gives also an explanation of all the medical and surgical proceedings time by time as they are presented before the eyes ». (New Jersey Journal of Education - F. 13/96).

Lorenzo Luxuriaga, in the newspaper « El Sol », makes a criticism of the International Institute for the Educational Cinematograph, and of the Review of the Educational Cinema. He then takes under consideration the utility of the film for educational purposes in general, and especially for scholastic teaching. According to him, films which have an indirect educational effect on the spectator are of more value than films projected with a definite moral aim. As to the bad film, it has the same effect as so-called « bad books »; both have a bad influence on those who have a tendency to crime, whether as the result of environment or educational or natural inclination. The greater value of the film in schools lies in its direct application as a means of instruction and illustration. The cinematograph is, in this connection, greatly superior to an infinite number of other means of modern instruction. As a matter of fact, the film gives life to teaching, exercises a more lasting effect on the memory, awakens and sharpens the sense of observation, and gives a special
vivacity to the subject of instruction. In a word, the film makes the master’s words or the text of a book infinitely more efficacious. All the same, according to Luxuriaga, the utilisation of the cinematograph in teaching is limited, both as regards its content and its educational method. In fact, abstract and spiritual subjects are little suited to cinematograph reproduction, as for instance, languages, mathematics and history. In other subjects, on the contrary, such as geography and the natural sciences, the cinematograph is able to complete very satisfactorily both the book and the so-called means of visible instruction. The scholar must not merely submit to a purely passive and receptive education, but must be incited to activity. (Revista de Pedagogía, Madrid - F.

At the last annual meeting of the Historical Society in England, the problem of auxiliary means for historical instruction was especially discussed. By means of some practical examples, the Society was shown to what degree films, lantern slides and gramophone records could be employed to complete the teaching of the text books. Miss H. M. Madeley, Assistant Head Mistress in Warwickshire, explained to the meeting that such mechanical means could never substitute the master, but that their proper application might represent the best method of completing the work of the master. There are certain subjects, she declared, that even a talented professor is unable to render attractive and interesting, and for these the mechanical means is the only solution possible. In times like ours, when the natural force of the master is daily put more and more to the proof, every auxiliary means that may lighten his difficult task constitutes not a luxury, but a real necessity for the school.

The meeting passed the following resolution:

"That history cannot be made clear to children, in the way indicated in the Hadow Report, unless other auxiliary means are added to books.

"That this meeting of the Historical Society calls the attention of the competent authorities to the necessity of a selected reserve of films that may be used by future historians." (The Times Educational Supplement, London - F. 37/160).

The plastic image of space, or the so-called stereoscopic image, are continually acquiring greater value as efficient aids to science (medicine, criminology, wireless photography, pyrometry, astronomy, mineralogy, archaeology) and to technics (industry, architecture, examination of material, arts, crafts) and it has already been demonstrated that they are becoming continually more efficacious in the most widely differing fields of instruction (knowledge of one’s native land, of the animal and vegetable kingdoms, and of ethnography). Up to the present, however, there was a lack of cohesion among the circle interested. Now, in collaboration with some well known men of science, technicians and experts, the German Stereoscopic Union has been formed in Germany (Reichsbund zur Förderung des Raumbildes) as a central organization to encourage, by means of the creation of work associations for each specialised branch, the creation of an archive of stereoscopic images, and to promote methodically the general introduction of stereoscopy by the aid of the government. (Photofreund, Berlin - F. 17/83).

Cinematographic selection and consultation form the subject of a treaty which informs us of the organization of State Offices for pictures and the film (Amfliche Bild- und Filmstellen) in Germany. The aim of these Government offices is, first, to aid cinema directors and directors of associations and schools in the difficult task of selecting film material, and secondly, to give competent advice on all special questions. In a catalogue which has been compiled by the Bildstelle, the schoolmaster will find the educational films that may serve his purpose, and he will be entitled to see the cinematograph material projected in a suitable theatre once a month. By studying the descriptions given of films, and the criticisms collected and registered by the Bildstelle, those looking for films will find the way made clear for them and will be able to decide whether a given film is really suited to their purpose. Further, the Censor’s card which, as is well known, must accompany every film, will indicate whether or not the film has been declared suitable for children; in fact, the blue colour of the card shows that children also are allowed to see the film. A special
card-case contains all the certificates issued by the Lampe Committee, that is, the State approval of all films admitted by the Cinematograph Office of the Central Institute for Education and Teaching (Bildstelle der Zentralinstitut für Erziehung und Unterricht) of Berlin, which is directed by Professor Lampe; the cards indicate whether the film is artistic, suited for popular education or of a generally didactic character. (Film und Bild in Verein und Schule, Cologne - F. 37/158).

The writer of the diary of the «Bildwart», commenting on the Reich project to associate with the Emelka-Filmgesellschaft, comes to the conclusion that the State or a public and juridical body cannot and must not participate in a similar firm. Without tying itself financially to any single cinematograph company, the Reich could and should, however, try to exercise special influence in the field of educational cinematograph production. It would be sufficient to grant credits to the different communes or countries so that they might be able to procure the necessary apparatus, train the necessary staff, create an experimental institute for scientific films and, lastly, encourage the reorganization of the entire cinematographic educational production, which would consist in separating the authors of educational films (scientific preparation) from the renting firms of educational films. To this end the renting firms for the educational cinematograph would be rationally grouped together under State direction, and by means of the granting of credits in a kind of Clearing House; in the case of limited liability companies or of cooperative associations the question is without importance. An active cinematograph policy on the part of the State is more than ever necessary at the present day, and it should no longer be a question of subsidies, but of a genuine State participation. There are a number of tasks before the cinematograph, especially those of a scientific nature, which cannot be carried out except by the State; the individual producer is impotent to cope with them, for their difficulties are impossible of solution unless it is possible to eliminate economic considerations. (Der Bildwart, Berlin - F. 37/154).

The British Commission for the Cultural and Educational Film, nominated in November last by the Conference of the Institutions and Corporations of Great Britain, was convoked in London for the first time on December 19, 1929. Five sub-commissions of research were nominated, one of them being a commission for scholastic films and another for the production and renting of educational films. G. T. Han-king, member of the Board of Management of the International Institute for the Educational Cinematograph, was elected reporter for the documentary films and for relations with foreign countries. These sub-commissions are to be composed for the greater part of competent experts in educational cinematography. The temporary address is: 39 Bedford Square, London, W.C.I. (The Times Educational Supplement, London).

At a meeting of the pedagogues of German and Italian Switzerland, which was held on December 1, 1929, at the Photographic Institute of the Superior Technical School, the Swiss Labour Association for the cinematograph in teaching was founded (Schweizerische Arbeitsgemeinschaft für Unterrichts, Kinetographie). The following gentlemen were elected to the presidency, which consists of five persons: Messrs. Chr. Beyel, E. Rüst and C. Guyer, of Zürich, Mr. Schäuslin of Küsnacht and Mr. Gottlieb Imhof of Basle. The censorship of educational films will be carried out by an examination committee of seven members. Zürich will be the headquarters of the Arbeitsgemeinschaft, but the secretariat will be at Basle, which will also be the office for the renting of films. (Nationalzeitung, Basle - F. 17/75).

In consequence of the increasing importance of the educational film problem, the French Syndicalist Chamber for the Cinematograph has decided to nominate a Consulting Committee, whose task it will be to send out all information connected with the various national and international problems of educational cinematography. The following gentlemen have offered to form part of the Committee: Messrs. Coissac, Roux-Parassac, Martin Marcel, Jean Bénoit-Lévy and Canon Reymond. (Cine Journal, Paris - F. 12/79).
THE CULTURAL AND EDUCATIONAL FILM.

In an article on the "The task of the Cultural Cinema" published in the Hannoverischer Anzeiger of the 20th November 1929, F. Leman thus defines the cultural films:

"It is a mistake to regard as cultural films only those dealing with travel, exploration, or some form of teaching, or those illustrating some historical incident.

"This would imply a strange limitation of the concept of 'culture'. All films that contribute to develop the ethical and intellectual faculties of those watching them are in fact to be regarded as cultural. This definition at once reveals the great difficulty there is in classifying cultural films; it also makes it obvious that, before thinking of creating a cultural cinematograph, it is necessary to ascertain what public it is intended to reach, since ethical and intellectual development is always proportionate to the standard of intelligence and culture of the spectator.

"At the present time, moreover, the public of all classes is much more exigent than it used to be in regard to the artistic qualities of films.

"The creation of a cultural cinematograph appears particularly necessary for the following groups of persons: first of all for those who have realized from the masterpieces of film production all that the cinema might become, and who have ceased to frequent the ordinary shows because they are wearied by their mediocrity; and in the second place for the cultured intellectual classes. This latter group, being unacquainted with good films and sick of tawdry ones, is averse to the cinema. And yet we have had frequent occasion to note that it is precisely persons of this class who are aware theoretically of the latent possibilities of the film, who realize that the lack of financial means is largely responsible for its deficiencies and who recognize what great new possibilities it could open up to mankind, thanks to its international visual form of expression — the unlimited powers of its optical appeal.

"It is the duty of the cultural cinema, which is mainly concerned with the above mentioned groups to select and to screen the finest and most artistic films that are produced".

***

In another part of this Review we publish a short article from the pen of our eminent collaborator, Jules Destre, on the distinctive character of the educational and cultural film. This article is in response to a definite enquiry which the Rome Institute addressed, directly to all the authorities in the cultural cinema world, and which it now addresses to all its readers through these columns:

"What should be understood by 'cultural cinema'?

"Can we draw definite boundaries to delimit precisely the cinematograph of an educational and cultural character from the dramatic cinema?

"What are these boundaries of differentiation?"

In these terms the question looks simple enough. It is, however, by no means so easy as it looks, and many difficulties present themselves in formulating an answer.

We must not lose sight of the multitude of points at which the two forms of cinematographic activity overlap one another and must also remember that many films, though well grounded on science, can and often must be presented in a scenic and dramatic form so as to reach and penetrate the understanding of the general public, which is not attracted by films of an obviously and often laboriously didactic tenour.

There is another problem to be solved. Let us leave on one side films that deal with the emotional aspects of life and depict it from the standpoint of its contingent possibilities of tragedy and joy, and consider for the moment only historical films that reproduce and reanimate events and customs — all elements that come within the scope of documentary record, even when woven into the plot of a drama — are we or are we not to regard films of this type as educational and..."
Or must this be made subordinate to and limited by the artistic and scenic form in which it can be presented to the public?
Thus the question that the Institute has put and is again putting is not one that can be readily settled. For this very reason we are presenting it in the columns of the Review, in the hope that the variety of the answers that will reach us; and the diversity of the views expressed, and the considerations that students and enquirers may submit to us, may make it possible to find an answer to the question, still so debated at the present time. What is the correct definition of the educational and cultural film?
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ROME
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AVE MARIA
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HYGIENE AND MEDICINE.

TRAVELLING SCHOOLS OF HYGIENE.

In consequence of the exceptional circumstances of the after-war period, the task of teaching hygiene to the people became one of the most important peace labours of the Red Cross.

Popular instruction in the elementary rules of hygiene was at once recognized as one of the most efficient means of limiting the spread of disease and decreasing its intensity; but it was necessary that it should be made available to the entire population and especially to the rural population which as a rule stands most in need of such education.

It was therefore necessary to work out the most practical and rapid method of transferring teaching staff and material to the remotest villages and the system of travelling schools of hygiene was found to be the best suited to the purpose.

From 1917-1918, the Office of the American Red Cross in France and the American Commission against Tuberculosis kept travelling schools of hygiene circulating throughout France with the object of diffusing elementary notions of infant welfare and anti-tuberculosis hygiene.

In the course of 1922 and 1923, the Secretariat of the League of Red Cross Societies collaborated with the national Societies of countries interested in the organization of such schools, which had been working in Poland and in Czechoslovakia. The Polish schools covered 3120 kilometres from January 16 to June 13, 1922, delivering 616 lectures in 21 towns and villages to a total audience of 325,000 persons; and distributed more than 320,000 propaganda pamphlets.

The following data concerning the schools which have been working in Czechoslovakia will give an idea of the favourable results of this type of propaganda. One school visited Bohemia, during several months of 1922; 613 lectures were delivered to a total audience of 212,250 persons, that is to say, to about 55% of the entire population. From January 15 to April 30, another school travelled through Slovakia, visiting 28 towns and villages; its series of 106 lectures were attended by 43,500 persons, and 25,700 propaganda pamphlets were distributed.

As a last example, the South African Red Cross bought and equipped a motor van in 1924 for the purpose of hygiene propaganda. On various occasions the Society has placed its material at the disposal of the Ministry of Public Health, notably on the occasion of an outbreak of the plague in the Orange Free State and the north of Cape Colony.

We may gather from the experience gained by several national Red Cross Societies the general rules which should guide the organization of travelling schools of hygiene.

I. — STAFF.

1 Organizer
1, 2 or 3 Lecturers
1 Chauffeur — cinematograph operator.

The organizer: this agent precedes the arrival of the school in a given place by about twelve days. His rôle is of primary importance, since the success of the school's work largely depends on the arrangements he makes.

The task of the organizer is to make all necessary arrangements for the satisfactory working of the school: to get into touch with the local authorities, to select suitable premises, to fix the lecture programme and the arrangements to be made in view of the attendance of school children and sometimes of garrison troops at special lectures, and to provide for the practical showing of films.

One of the most important parts of the organizer's work is to make known to the people the arrival and the programme of the school, by sending personal invitations, by sticking-up posters and by inserting notices in the local papers.
It must not be forgotten that the school in seldom able to reach any particular locality until shortly before the time fixed for its first lecture, and that it is therefore impossible for the staff of the school to carry out a carelessly prepared plan of campaign or to correct errors committed.

In cases where there is a local Red Cross Committee, it must be informed of the coming of the organizer, in order that he may be assured of the most effectual support.

The lecturers: the school must include one, two or three lecturers, according to the importance of the itinerary and mission with which it is charged. The school is placed under the direction of one of the lecturers. The lecturers need not be all medical men, but the whole staff of the school must be well informed in regard to questions of popular hygiene, and must also be able to explain these subjects in language adapted to the understanding of the different audiences to which they will have to speak in the course of their tour.

It is often advisable to have a woman to lecture and give demonstrations on infant welfare subjects; if possible, she should be a nurse, so that mothers may feel more confidence when asking questions and advice.

The excessively tiring nature of the work committed to the school necessitates prudence in arranging the time table of the staff, which must have two complete days of rest per week, on an average, if the mission is likely to last more than a month. The school should not work for more than ten to twelve weeks at a time; after that period the staff must absolutely take a long rest and overhaul all its material.

Chauffeur-cinematograph operator: During the stops made by the school at the various places, the driver of the motor van is charged with the manipulation of the equipment for lantern slides and films.

It is of primary importance to select a capable and devoted man, who should if possible know something about electricity. Daily attention to the care and eventual repairs, as well as the care of the lantern slide and film material, require a good knowledge of the trade and also a devotion to the work at all times and seasons. It must be kept in mind that the chauffeur will often have to drive the car during the greater part of the day, and then, without resting, rapidly install an entire film apparatus, with screen and curtain complete, in readiness for the evening lecture.

II — Material.

1 Motor van
1 Luminous Projector
Films
Lantern slides
Propaganda pamphlets
Posters

The motor van is intended for the transport of staff and material. It should be sufficiently powerful to undertake a long circuit, on roads that are frequently bad, without considerable overhauling. The inside should be as comfortably arranged as possible, in order that the staff of the schools may endure long journeys without too great fatigue.

It is also recommended that the van should be equipped with a small dynamo and accumulators, in order that it may furnish the necessary electricity for luminous projection purposes in places where there is no supply of electric current.

Projector: There are at the present day numerous types of portable apparatus for the projection of films or lantern slides. The essential qualities required in a projection equipment for the use of travelling schools are: easy handling, strong and simple mechanism, and, above all, the guarantee of security against fire. An apparatus without carters should never be used, and it is also necessary that the operator, on his side, should take every precaution against the risk of fire.

A portable standing screen must also be included in the travelling equipment.

Films: The number of films to be held by each school naturally depends on the importance of the mission assigned to it. The films should be varied in type and the scenarios simple and easy to understand by a working class or rural audience.

The arrangement of the programme is rather important; the lecturer should avoid speaking while the film is being shown, because experience has proved that an aud-
ience is always too much taken up by the film to pay due attention to the lecturer.

Generally speaking, it is best to begin by a lecture lasting about three quarters of an hour; then to show films or lantern slides for about half an hour, after which the lecturer will give a brief summary of the general principles of hygiene dealt with during the lecture, and reply to any questions that may be addressed to him by members of the audience.

*Lantern slides*: Where the audience attending the lecture is largely composed of persons of rudimentary education, lantern slides are the most suitable things to show; they hold the attention longer, and permit the lecturer to explain the images shown on the screen, which he cannot do satisfactorily with moving pictures.

*Propaganda pamphlets*: It is advisable to provide the school with an abundant supply of pamphlets, to be distributed to the audience as it is leaving the lecture room. It is better to have two or three pamphlets dealing with special subjects rather than a single pamphlet on general rules of hygiene. These pamphlets must be illustrated and written very simply; it will be sufficient to indicate the rules of hygiene in short and striking sentences. As these pamphlets will be distributed to children among others, or at any rate are likely to fall into their hands, neither the text nor the illustrations should be of a character to shock children or arouse unwholesome curiosity.

The distribution of propaganda pamphlets will add to the success of the lecture, the public being as a rule greedy for this kind of literature. Furthermore, those who have attended the lecture carry the pamphlets home, and thus spread the educational work of the school throughout the family.

*Posters*: The posters should be brought to each place by the organizer, who will have them stuck up throughout the neighbourhood before the arrival of the school. These posters must announce the school's arrival, make known the object of its visit to the locality, and address a pressing appeal to the public to attend the lectures in large numbers. In order to increase the attraction, the posters should state that films or lantern slides will be shown. There should be a vacant space beneath the printing, so that the organizer may write therein particulars specially applicable to each locality, such as the dates and hours of lectures, and the places where they will be given.

It would also be advisable that the school should supply the organizer with hygiene propaganda posters to be stuck up side with the announcements, so that for some time after the departure of the school the public may have before its eyes a continual reminder of the teaching imparted by the lecture.

**Conclusion.**

In every place where they were carefully organized these travelling schools of hygiene have met with complete success. They have been found to present the most efficient method of popular instruction, especially in countries where the local resources do not permit of a systematic organization of hygiene propaganda.

But the constitution and working of a travelling school necessitates very careful preparation; and it is this preparation alone that will ensure the success of the undertaking and repay the staff for all its devotion and fatigue.

The Propaganda Service of the League of Red Cross Societies.

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**THE CENTRAL SWISS BOARD OF HEALTH. ZURICH-SWITZERLAND.**

The Central Swiss Board of Health at Zurich, which was founded in September 1926, as a philanthropic cooperative society, aims at providing a popular hygienic education. Nearly all Swiss associations of a hygienic character are now connected with this cooperation; the latter represents the technical equipment, which undertakes to see that the programmes of the various associations are put into practice. The med-
ical faculty also belongs, through its organisations, to this cooperative society, which claims the collaboration of medical men in all its manifestations.

We take the following figures from the annual report of the Central Swiss Board of Health (July 1, 1928-June 30, 1929):

"The popular education section, which forms the most important branch of our activities, organised the following manifestations during the current year:

1. Lectures illustrated by films and lantern slides:

<table>
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<th>for adults</th>
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These projections were divided among the various cantons as follows: Argovia 1, Appenzell A. Rh. 2, Basle 2, Berne 108, Glarona 6, Lucerne 1, Saint Gall 9, Schaffhausen 6, Schwyz 1, Soletta & Thurgay 5, Uri 1, Vand 1, Zurich 36, grand total 179.

Attendance: At the 149 performances for adults there were 27,538 spectators, or an average of 185 for each performance; there were 6,438 spectators for the 39 performances for children, or an average of 214; the general average for the whole 179 performances was 190.

The tuberculosis film, which was brought into Switzerland some years ago, has been projected almost everywhere, but still continues to arouse considerable interest, and is giving excellent results in the anti-tuberculosis campaign.

(E.N.) The Central Swiss Board of Health, which has been in existence for only three years, has undoubtedly accomplished a great deal during that period, and offers an excellent example.

The lecture, illustrated by films and lantern slides: «How to Keep Healthy», which comprises the humorous hygienic film «Amalia, the innocent country girl», has been given very frequently during the current year. For instance, the Berne Oberland section of the Red Cross Society charged us to make a journey of propaganda throughout its territory, and the films we showed during this period dealt exclusively with the theme of tuberculosis.

The lecture, illustrated by the film: «How must I tell it to my boy?» brought us into the field of education, where we had a great success. The question of the sexual instruction of boys is obviously one of the most important educational problems of today and, as a matter of fact, it is just in this field that we find a certain diffidence and a certain degree of «prudery», largely due to the influence of parents, which must be overcome in the interests of young people themselves, both from the moral and hygienic point of view. This lecture was greatly appreciated by parents, wherever we gave it. Unfortunately, however, there are still a large number of sceptical teachers, who forget that our young people are living in a world that is in all essentials different from that of the past century. We consider it is one of our chief duties to work in this field.

The question: «Contagious Diseases» was illustrated by lantern slides, the lecturer being Dr. Oppenheim, who gave it in several different communes of the canton of Zurich. We are very grateful to Dr. Oppenheim for thus putting himself at the service of the cause, and trust that his lecture may be repeated in a large number of communes».

In addition to propaganda work by means of the film, the Central Swiss Board of Health arranged for the organisation of a travelling exhibition, lasting 176 days and visiting 43 different countries of Switzerland, on the subject of cancer (the lectures were attended by 13,657 persons). An exhibition on the

The centralisation of propaganda activities undoubtedly permits us to have a clear idea of the work accomplished and, at the same time, ensures that good organisation which is the only guarantee of success.
problems of nutrition was also organised, under the title «Cheap and Wholesome Food», and lectures were given in the following places: Berne, Appenzell, Herisan, Teufen, Heiden, Basle and Saint Gall. And lastly, we have an exhibition of instructive measures of hygiene at Schaffhausen.

A regular service of hygienic propaganda was instituted by means of the wireless, 18 lectures being given by well known medical men and specialists.

A considerable amount of hygienic propaganda was also published in the daily press, in the form of short popular articles.

**HYGIENE PROPAGANDA IN POLAND, FINLAND AND LITHUANIA.**

**POLAND.** — There are a number of different systems in Poland for the projection of hygienic and social welfare films. The sanitary office of the municipality of Warsaw has a regular and well organized film service. In other towns also, such as Lodz, Cracow, Lemberg, etc., the communal authorities are organizing, in accord with the sanitary authorities, regular cinematograph spectacles accompanied by instructive lectures.

Private associations are likewise making considerable use of the cinema for their propaganda work, as in the case of the Polish Association against Tuberculosis, which has organizand a service that is working also in the provinces. During the past year, 459 spectacles were organized in 62 different localities, all of them being films dealing with preventive medicine and prophylaxis; 304,373 spectators attended the shows.

The Polish Eugenic Society possesses its own cinema theatre in Warsaw, where propaganda films are shown regularly. During the past year, 1,349 spectacles were organised, and 90 different films were shown before an aggregate of spectators numbering 207,641.

**FINLAND.** — Although there is no Government Office in Finland which is interested in hygienic and social welfare propaganda by means of the film, there is an office for the protection of workmen which makes use of the screen for propaganda purposes. Private organisations and associations also, such as General Mannerheim's League, use the cinema as a means of propaganda.

In factories and manufacturing firms, the film is also used, but this movement is in the hands of private individuals, and is not at present regulated in any way.

**LITHUANIA.** — The Director of the Health Department of Kaunas sends a communication to the effect that the Sanitary Section of the Department of Hygiene at the Ministry of the Interior, has been charged to carry out the hygienic and social welfare propaganda by means of the cinematograph, although there is at present no special organisation for this purpose.

The Committee for the Protection of Women makes use of the film for propaganda purposes, and also possesses a travelling cinema which is mounted on a railway van.

Hygienic and social welfare films are subject, like all the others, to the usual censor's regulations.
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AGRICULTURE.

THE CINEMA IN THE SERVICE OF AGRICULTURE IN GERMANY.

An article dealing with the organization of the agricultural cinema in Germany published in our October issue called attention to a study on « The Film and its importance to Agriculture » written by Major D. B. Kleinhaus. Given the reputation of the author, and his intimate knowledge of the question, it may be well worth our while to acquaint our readers with some of the highly interesting suggestions he puts forward regarding the help the film can afford in organizing the marketing of farm produce and counteracting the exodus towards the towns, and the work done in Germany by the cinema in favour of agriculture generally.

The realization of the great advantages which the introduction of travelling cinemas might contribute to agriculture and economic interests was responsible, some time back, for the institution in Germany of a central Agricultural Cinema Committee attached in connection with the German Association for Rural Prosperity. This Committee has a special section for the production of films illustrating farming organizations.

In addition to this, the Reich Ministry of Rural Economy, the Bavarian Ministry of State, and the Ministry of Rural Economy of Saxony have taken up the question of the agricultural film with the greatest zeal.

Some time before the outbreak of the great European conflagration, the phenomenon of urbanism — the rush to the towns — had assumed serious proportions, and landowners, clergy, and schoolmasters made serious efforts to provide the peasantry with healthy recreation after the days' toil so as to counteract their anxiety to quit the country.

Experience is showing everywhere that the cinema exercises a singular ascendancy on the minds of the rural masses, whatever type of film is exhibited, and it is therefore a first class means of providing entertainment as well as instruction and education. In the opinion of the Commercial Director of the Central Committee of the Agricultural Cinematograph, Major D.R. Kleinhaus, if it is desired to advance German rural science and technique, instruction in this line must be provided for all farmers, even the smallest, and the film is a far more effective instrument for this end than either books or lectures. Cinema shows are above all necessary for the peasants, because these alone, by giving him a living, a genuine and instructive vision of nature in its several aspects, carry their lesson home to his understanding, and hold his attention.

A circular of the German Ministry of Agriculture, State Lands and Forests of the 12th December 1919 addressed to the various Higher Presidents and State Presidents and to the Police authorities, called attention to the possibilities of utilizing the cinema for the instruction and recreation of the rural populations.

Films illustrating model farms are of the greatest value for bettering the national agriculture, because they stir the spirit of emulation and encourage the farmers to try and do likewise. It would be a lengthy and costly process to attempt such propaganda by lectures or literature, and progress would be laborious and slow. Education by the film is quicker and more profitable.

We must seek to bring up the youth on the land along more progressive lines and teach them their trade more thoroughly; sound agricultural education is essential for the increase of production and should be regarded as sine qua non for all farmers.

In Germany, the film has in fact done much in a practical way towards the increment of agricultural production. The illustration of tillage in all its phases and of the crops produced has shown that it is not so much a question of quantity as of the quality.
of the seed sewn; while the various kinds of fertilizers and the best methods of fertilizing level and mountainous land have been demonstrated by the film in a way no other method could achieve so well.

The marketing of farm produce is another point of paramount importance.

The cinema should and does show that it is futile to expect the market to seek out the producer. All illusions on this score are apt to lead to bitter disappointment and considerable loss to farmers.

It is necessary to make a practical and convincing appeal to the buyers. Publicity — that powerful lever in modern life — must not only persuade, but convince. Now what better means of publicity is available than the cinema?

Propaganda films do excellent service in this regard, not only inside the country, but abroad also, by showing foreign markets what is actually produced in a given country.

Thus the film may be said to be a necessity for the future of rural economy, and it would be hard to exaggerate its value for training purposes, as a guide and counsellor, and for teaching the economic sciences more thoroughly.

Its benefits need not be limited to the agricultural youth alone, but may well be extended to the youth of our cities, who by its means may be taught to know something of the realities of life on the land and be brought into close contact with it.

It is more particularly in connection with the deplorable phenomenon of urbanism that the cinema can render such valuable service, by alleviating the tedium of country life and thus counteracting the peasants' longing for the town.

**ITEMS OF INTEREST.**

The screening of the first English nature talking film «Peas and Cues» has met with great success in England. In consequence of this the British Instructional Films Ltd. has decided to increase the number of films in the «Secrets of Nature» series. Two new films will be ready in a few days and three more during the next month. Amongst these are «The Hawk» the photographic part of which has been undertaken by the well-known naturalist, Mr. H. A. Gilbert; «Bath-time at the Zoo», with sound effects, and «Plants of the Drosera Genus». All these films will be preceded by a spoken introduction by Mr. Anthony Asquith, while their captions will be replaced by spoken comments which will add greatly to their interest. Although the screening of «Peas and Cues» only took ten minutes, the making of the film was spread over nearly six months, the time required to follow the development of the plants (The Times - 1/62).

The U. F. A. of Berlin also, by joining together various previously produced short-length films, has concocted a film named «Secrets of Nature», dealing with ants, monkeys, fish and marine life. This films can be shown for instructional purposes in cinemas giving matinées for children. (The Billboard, Cincinnati - 1/235).

The great German cinematographic company is also responsible for the synchronization, at Neubabelsberg, of the first Ufaton cultural film «Transparent Animals». This will be the first cultural sound film; it will show a series of interesting and little known animals, which were photographed at Messina by the expedition organized by the U. F. A. The film will be accompanied by an explanatory lecture delivered by Dr. Berndt, professor of Zoology at the University of Berlin. (La Publicidad, Barcelona - 1/236).

At the Imperial Institute, London, Lt.-Col. V. A. Haddock gave a lecture, illustrated by films, on agricultural progress in Ireland, which shows that farming is no longer considered as the occupation of the eldest son of rich families, but that it is developing a true scientific character. (The Times - 1/64).

In an article «The Film in Egypt», Mr. E. Athanassopoulo points out that the Egyptian fellahin only understand the cultivation of dates and that the Government wishes to teach the peasants (the great majority of
whom are unable to read or write) by instructional and cultural films, the best methods of farming the land. The firm of Mamatis and Co., which represents U. F. A. cultural films in Egypt, Syria, Palestine and Greece, at once got into touch with the competent Departments with the object of introducing suitable German films into the country. (Kinematograph, Berlin - 1/63).

The documentary section of U. F. A. has returned from an expedition to North Africa, bringing back interesting cinematographic records. Dr. Martin Rikh, the head of the expedition, has prepared from the material collected an interesting set of films; amongst these we may mention one called «Useful Weeds» which shows the harvesting of esparto grass, the raw material for the manufacture of high-class paper, matting, etc. (Comedia, Paris - 1/63).

A film called «Prosperity» has been screened in Strasbourg. M. Jean Bénoit Levy has produced this film which shows the progress made in the electrification of the country-side and, by means of a plot which contrasts the old and new ways of life and work, illustrates the picturesque costumes of Alsatian villages. (Journal de l'Est, Strasbourg - 1/66).

A circular has been issued by the United States Department of Agriculture showing that the use of the film is the best method for promoting agricultural improvement. Agricultural propaganda films are circulated by the Department and depict the working policy advocated by it and by co-operating State institutions. The object of these films is to familiarize the public with the most up-to-date methods, to encourage the public to co-operate, and to diffuse the knowledge of special systems for the improvement of farming, forestry, rural engineering and the carrying-out of other research work. It is calculated that about ten million farmers are annually present at these films.

The Department puts in circulation every year 3,000 copies of its films, and distributes a similar number among the agencies.

In the financial year ending on the 30th of June last 80,000 films were distributed, some to be shown to the general public and some for land reclamation workers.

There is no tax on agricultural propaganda films; farmers are merely required to guarantee that the films shall be shown and returned in due time.

The United States Department of Agriculture makes most extensive use of the film to demonstrate and diffuse amongst the public the results of its work and to keep the public abreast of educational propaganda in the agricultural domain.

Copies of about 300 films mostly varying in length from 100 to 600 metres (occasionally films reach 1,000 metres, or even more), are circulated in the 48 States of North America.

These films are, in the first place, used for instruction by the Department, but agricultural organizations, institutes and schools, universities, church, associations, theatres, etc., may use the films free of cost on condition that they pay the carriage. The distribution of the films is splendidly arranged. A detailed prospectus gives the title, the length, the number of the reel and the subject of each film.

The subjects are most varied and include all the most interesting aspect of farming (domestic animals, farm produce, working technique, forestry economy, insects, methods of marketing, meteorology, agricultural organization, etc.). The films dealing with the campaign against insect pests are most interesting. The competent provincial departments are supplied with portable projectors and carry on their propaganda from town to town by exhibiting films which are both instructive and entertaining. (Film Kurier - 1/67).
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LABOUR.

THE FILM IN THE SERVICE OF SCIENTIFIC MANAGEMENT.

In our notes on this subject that appeared in last month's issue we referred to the wide diffusion of the cinema in connection with labour problems in the United States and set forth some of the reasons that account for it.

Let us now glance at what the American Government has done in the way of applying the cinema to vocational training. There is no special Government department or office for the propaganda of the principles and systems of scientific management, because the Federal laws do not countenance any direct control over the teaching systems applied in the public schools of the several States, for which the school authorities are themselves responsible, while following the general lines of policy laid down by the Central Government. On its side, however, the Department of Commerce gathers all the information and reports obtainable from the different schools so as to be able to guide their systems of instruction along uniform lines and in a practical direction.

The Department of Commerce distributes, from time to time, among the vocational schools information regarding the latest films serving the purposes of particular branches of education.

It has also organized its own centre for the production and distribution of films bearing on measures of safety and the prevention of accidents in mines.

Through the Pittsburg Bureau of Mines, the Department of Commerce collects all technical particulars furnished by experts who have had long experience in mining conditions, in the light of which it has prophylactic films composed and made as a means of preventing accidents, and to illustrate scientific methods of work and the whole cycle of mining operation.

A description of the organization and working methods of this Experiment Station will not be without interest to our readers.

PLAN OF PRODUCTION AND DISTRIBUTION.

The films are produced under the direction of the Bureau of Mines, Washington, D. C., their production being supervised by Mr. M. F. Leopold, safety engineer, who has devoted special study to the prevention of accidents in mines.

The Experiment Station is the chief distributing centre.

The distribution is supervised by Mr. R. A. Wood, supervising engineer, graphic section. There are 13 sub-dividing centres, selected with regard to accessibility to the several mining districts of the Republic. All enquiries pertaining to the production or revision of films are addressed to the engineer in charge of production, while those concerning distribution go to the central distribution office.

All persons and organizations borrowing films are required to:

1. Make alternate choice of film subject, and, if feasible, have requests reach the station at least two weeks before the date of showing.

2. Provide a first-class projection machine and a competent operator.

3. Pay for all telegrams and transportation charges both ways.

4. Re-ship films promptly on the specified date, charges prepaid. (The films are not to be re-wound or repaired when they are returned to Pittsburg, but when being forwarded to another borrower they must be re-wound and put in proper condition for projection).

5. Notify the Bureau of Mines Experiment Station by telegram or letter that it is proposed to re-ship films as requested. This notification should arrive in Pittsburg not later than the re-shipping date specified.

6. Obtain permission from Pittsburg if it is desired to retain films beyond the re-shipping date specified so as to avoid the risk of further borrowers being disappointed.
7. Fill in and return promptly the attendance report card (showing the number of spectators who have been present at the screening of the film).

8. All communications are to be addressed to the Bureau of Mines Experiment Station in Pittsburgh.

***

The Bureau of Mines sends all films free of rental charge. Any failure to comply with the requirements of paragraph (5) necessitates the sending of a «collect» telegram of enquiry in order to protect the interests of the next borrower of the films. Loans may be made to cinema theatres only on condition that no extra admission fee will be charged.

All the films issued by the Bureau of Mines are previously approved by the Pennsylvania State Board of Censors and are of the standard width and perforation used in cinema theatres; they cannot, therefore, be shown on projecting machines designed for other widths and perforations.

In relation to the official character of this State institution it is interesting to note that it was founded in 1913.

We give here under an excerpt from the amended Organic Act enacted by the U. S. Senate and House of Representatives on the 25th February 1913:

"That it shall be the province and duty of the Bureau of Mines to conduct enquiries and scientific technological investigations concerning mining, and the preparation, treatment, and utilization of mineral substances with a view to improving health conditions and increasing safety, efficiency, economic development, and conserving resources through the prevention of waste in the mining, quarrying, metallurgical, and other mineral industries; to enquire into the economic conditions affecting these industries; to investigate explosives and petrol; and on behalf of the Government to investigate the mineral fuels and unfinished mineral products belonging to, or in the use of the United States, with a view to their most efficient mining, preparation, treatment, and use; and to disseminate information concerning these subjects in such manner as will best carry out the purposes of this Act."

Having thus outlined the general scope and working of the Bureau of Mines, we will now turn our attention to its cinematographic production, and describe some of the outstanding films issued by it in the years 1927-28, during which period fully 150 films were produced by the Experiment Station of Pittsburgh.

THE STORY OF STEEL

This film, made in cooperation with the United States Steel Corporation, affords a comprehensive view of open-pit iron mining with steam shovels, underground mining, transportation of ore to docks, loading and unloading of lake steamers, preparation of coke ovens, and the precautions taken to safeguard workmen in the mills. Later on, the film shows the operations of a blast furnace, including charging, removal of slag, and drawing off of molten iron, and then the manufacture of steel in Bessemer converters and open-hearth and electric furnaces.

The third reel shows the manufacture of rails, rods, and plates, as also inspection, cutting and finishing. It goes on to show the modern manufacture of wire products, preparation of rod, drawing of wire, galvanizing wire, making wire fence, winding of wire, and cold rolling of flat stock. The last reels illustrate the manufacture of steel sheets and tin plate and depict the heating and rolling of bars into sheets, trimming, pickling, annealing, cold rolling, and coating with pure tin, and lastly, the manufacture of pipe, rolling and cutting of blooms, rolling, trimming, bevelling, and bending skelp into rough tube; lap-welding and inspection and testing of completed products.

THE STORY OF FIRE-CLAY REFRactories.

This 4-reel film was made in co-operation with the Laclede Christy Clay Products Co. Reel 1 shows the Laclede-Christy plant at St. Louis, the storage yards and kilns, and the mines where fire clay is obtained. It shows the dynamiting of overburden and the loading of freight cars, the underground workings, sorting of clay by hand, testing in furnace for fusion point, grinding by huge wheels, and sorting of ground clay by screening. Reel 2 shows clay press, drying ovens, and kilns, making of brick by stiff-mud process, mixing of clay and water, cutting
clay, repressing and drying. It shows in detail the moulding of fire clay by hand.

Reel 3 shows mixing, forming and cutting and pressing of clay for "sleeves" and ladle nozzles, process of washing clay, and use of clay in the glass and other industries.

Reel 4 shows building a large boiler setting, relining of recoverable iron furnace, a 350-foot tunnel kiln, an electric furnace, by-product coke ovens, zinc-distilling vessels, rotary kilns in cement industry, rolling plate glass, and school-children modelling clay figures.

**When a Man's a Miner**

This 4-reel "feature" film was taken in the coal fields. Reel 1 introduces the characters: "Lucky" Burns, a careless miner; Mary Kincaid, "Lucky's" sweetheart; Dick, Mary's brother, and Spike Sherman, a motorman in the mine and a trouble-maker in Tippleville. Dick decides to take a safety course given by a Bureau of Mines rescue crew, but Burns scouts the idea. Burns asks Mary to marry him, but she refuses because of his carelessness at work and tells him how her father was killed by a fall of slate. Reel 2 shows Dick and Burns at work. Burns neglects Dick's warning and is caught when loose coal falls and injures his leg. Dick saves his life by prompt first aid. "Lucky" realizes the value of safety measures, and while convalescing reads Bureau of Mines safety pamphlets. In reel 3 Dick and "Lucky" are at work, an explosion occurs in the mine, and they find the entry full of after-damp. Miners assemble and Burns tells them their only chance is to wall themselves in where the air is still good. Views outside the mine show panic-stricken women and children running to the silent tipple. Views inside show the wall completed and the men gathered inside.

Men from a Bureau of Mines rescue car arrive wearing masks. The last reel shows women and children gathered around the tipple in anguish for the fate of their loved ones, anxiously watching the rescue men at work. The rescue men at last discover the barricade, behind which the miners are seen taking turns at hammering the rib. As the air is bad, the rescue party ventilate the entry, then release the imprisoned miners.

The last scene shows Mary and "Lucky" on the steps of their new home. "Lucky" has been made Mine Safety Inspector and has received the Joseph A. Holmes medal for his work during the disaster.

**The Story of Power.**

A 3-reel film. The first reel depicts the early development of the steam engine, a street scene in London, and Stephenson's locomotive, the "Rocket." It also shows modern uses of electricity, giant electromagnets, and sign lighting, and an electric locomotive.

A map shows the distance power is transmitted from the Big Creek Power plant in the Sierra Nevada Mountains in California. Animated photography shows how Faraday discovered that alternating current was produced by rotating a magnet between two coils of wire and how power to turn the magnets is derived from steam and falling water.

Reel 2 shows Niagara Falls and compares them with the fall of water at Big Creek, more than 12 times the height of Niagara, and a view of the Plant at Big Creek; also the power plant and dam on the Mississippi River at Keokuk, Iowa. A map shows distribution of water-power resources in the United States and coal fields underlying 500,000 square miles of land. Improvements made in the steam engine are shown and the working of a steam turbine is illustrated by animated photography.

Reel 3 shows the building of a power plant for the Edison Electric Illuminating Co., of Boston; also the units of power obtained per pounds of coal from 1885 to 1925.

**Twelve Points of Safety**

This is a one-reel film, made in co-operation with the Peabody Coal Co. It stresses a few important safety measures in connection with the daily operation of coal mines, which it illustrates by means of detailed views of safety equipment and animated photography.

The points stressed are: the reading of safety sign-boards; examining details of approved mine lamps; searching for matches and smoking material when miners are about to go to working places; testing for bad roof
and placing of props; taking down loose roof; testing for gas; cutting coal with machine and using water on cutter bar of the machine so as to keep down coal dust; wetting the coal before loading it on mine cars; and passing loaded cars under sprinklers to abate coal dust.

Views are also given of whitewashed shelter holes provided at frequent intervals and an ample travelling way to prevent accidents. The reel also shows cases of permissible explosives, rockdusting the mine so as to prevent coal-dust explosions, the importance of ventilation, and the taking and analyzing of samples of mine air to detect gas.

First Aid in Mines.

This is a sequel to the preceding film. It illustrates the proper methods of emergency treatment for shock, giving stimulants such as coffee, application of prone-pressure method of artificial respiration for electric shock, drowning, or carbon monoxide, poisoning; dressing of open wounds with dry sterile dressing; control of bleeding from capillaries, veins, or arteries; bandaging for dislocation or fracture of bones; bandaging with sterilized picric acid gauze for burns, and methods of improvizing a stretcher and carrying a patient.

Oxygen Breathing Apparatus

A sequel to the last film. Shows details of the operation of the various approved apparatus used in mine rescue work and in deadly atmospheres. All the several processes are shown in detail for the instruction of workers who may be called on to apply the systems. The separate parts depict the oxygen bottle, the reducing valve that lowers the pressure from 2000 to 3 pounds, the regenerator that removes carbon dioxide from the exhaled air, the saliva trap and release valve, and the by-pass valve that permits the wearer to obtain oxygen direct from the oxygen bottle.

The film then shows the charging the oxygen bottle, charging the regenerator with chemicals, sterilizing and cleaning the mouth piece and tubes, and assembling the apparatus.

Further on a mine rescue crew wearing apparatus is seen exploring a mine and testing the mine atmosphere with flame safety lamps and carbon monoxide detectors. A canary used for detecting carbon monoxide is shown overcome by the gas, treated, and then revived.

The Story of Petroleum

A 7-reel film made in co-operation with the American Petroleum Institute. Reel 1 shows an exploration party mapping oil-bearing structures, prospecting with diamond drill, and use of seismograph in determining location of oil-bearing formations. Reel 2 continues explanation of use of seismograph and also shows use of torsion balance. This reel also shows drilling of a wild cat well, street scenes in boom oil town, animated map of oil-fields, and drilling operations with cable tools, animated photography showing progress of bit through strata.

Reel 3 shows shooting a well with nitroglycerine, use of rotary drill, erection of a derrick, running casing, cementing up water-bearing formations, and devices for controlling production. Examples of town-lot drilling in California are shown, with derricks along beaches and among orange groves. A view is given of the deepest rotary-drilled well in the world. Reel 4 shows operation of pumping wells and gives views of pumping equipment, the effect of natural gas in oil sands being also illustrated. Scenes at largest generating plant for oil-field use are given in detail, with pulling machines and compressor plants.

The effect of natural gas in oil sands is also illustrated. Reel 5 shows gathering system carrying oil to refineries, and laying of pipe lines through woods and across rivers is depicted. Animated photography emphasizes the extent of pipe-line systems in the United States. The shipment of crude oil by tankers, barges, and tank cars is also shown. Reel 6 covers treatment of crude oil in refineries in great detail, with animated photography to illustrate steps in refining, while Reel 7 completes the story of refining processes, shows the treatment of natural gas to obtain gasolene, and depicts modern methods of preventing evaporation of oil from tanks. The film concludes with views of tankers, barges, tank cars and other carriers of finished products and summarizes the total shipment for a year.
Films such as these serve the purposes not only of schools for vocational training, as a means of making their pupils acquainted with the practical methods of manufacture in their trades, the industrial development of the country as a whole, the sources of national wealth, and the problems involved therein; but they serve also a more general purpose, and it may safely be affirmed that all the schools of North America now make use of the cinematograph, realizing that it speaks the only universal language, a language accessible to all ears and all minds.

In addition to the offices and organizations above mentioned wide use is made of the film for teaching purposes by the Federal Board for Vocational Training, the Education Office of the Home Department, whose interesting bi-annual report, drawn up by Marie M. Proffitt on «Industrial Education» in the vocational schools of the Republic lies before us. This report stresses the enormous progress made by schools of this type throughout the Country and the merits and defects the writer has had occasion to note in the course of her painstaking enquiries.

This little volume, published by the Education Office of the Home Department, deserves to be carefully read and considered, since the subjects touched on by the reporter are closely bound up with the whole problem of the use of the film for industrial teaching.

**INDUSTRY AND THE FILM.**

The cinematograph screen has by now become a necessary adjunct to lecturers and is widely used by them; it illustrates and completes their ideas, rendering then more realistic and understandable. It has, in fact, been recognised that the public is much better able to appreciate the advantages or otherwise of certain systems when the lecturer dealing with them is assisted by the cinematograph. M. Lydtin, C. I., recently gave a very interesting lecture at the headquarters of the «Industrial Union of Hanover» on «Hydraulic Power and its Utilization», copiously illustrated with motion pictures showing the importance of this power, which in his opinion is not yet sufficiently utilized (Volkswelle, Hanover - F. 5/105).

Prof. Levi, Director of the Institute of Industrial Chemistry and also of the Fuel Section of the R. Polytechnic Institute of Milan, recently gave a lecture in Paris on a «Study of Combustibles in Italy», during which he made considerable use of motion pictures in illustration of the interesting subject he was dealing with; and these pictures gave a convincing proof of the careful study that is being made of combustibles in Italy. (Corriere della Sera, Milan - F. 5/106).

The «talking» feature is of great use in industrial films. In fact, it is frequently necessary to give special explanations when illustrating the working methods of a given machine or apparatus, and the talking film enables these explanations to be given by workmen, mechanics, etc. To this end the «General Talking Pictures» and the «RCA Photophone» have decided, according to «The Billboard» of Cincinnati, to produce «talkies» for industrial use.

The cinematograph offers a very efficient means of general publicity and propaganda. Commercial advertizement is daily shown to be more effective when illustrated by the cinematograph, which gives an exact impression of the extent and practical quality of the subjects treated. The newspaper Métropole, of Antwerp, states that the Executive Committee of the International Exhibition of Antwerp, which is to be opened this year, has concluded an agreement with the Gaumont Establishments of Brussels for the projection of propaganda and advertizement films, which will be shown in the entertainment hall of the Exhibition. (F. 5/104).

In support of what we have continually maintained in this Review, namely, the great pedagogic importance of the film for industrial uses, such as the education of workmen and the spread of technical ideas, we note the growing development in the production
of this type of film. Der Tag, of Berlin, states that the Cinematograph Division of the «Fried Krupp Co.», in collaboration with the «Denlig», has had a film produced under the title, «The Coal of the Ruhr», in which all the proceedings, manipulations and technical operations connected with the extraction and transport of coal from the mines to the coal steamers are illustrated. (F. 5/103).

The UFA of Berlin has also had a film produced recently, «The Motor Cycle and its Uses», which illustrates the modern organisation in Zündap’s motor cycle works of Nurimberg, and also shows the various uses to which this machine may be put. The same firm will shortly present another film, which is now in preparation, illustrating «Pearl Culture» in Japan. This film is sure to arouse considerable interest, for it will disclose the successive labours of an industry that is practically unknown in Europe. This type of film has many fervent supporters in the Austrian Republic also, and «Das Bild» of Vienna states that «The Association of the Scholastic Cinema» has just terminated a film «From Tree to Newspaper», in which the various processes of the work of producing printing paper from the trunks of trees are copiously illustrated. The film is of high instructive value, and is therefore being screened in schools as well as other places. (F. 5/99.100.101).

In illustration of the continual industrial progress, which tends every day more and more to eliminate manual labour, or at least to substitute it in certain works for which man has hitherto been the only instrument, an interesting film has just been shown at Berlin to an audience of manufacturers and tradesmen. The film was produced by the New Terra Film, and is entitled «Blasting Dredger 1,010»; it was produced under the direction of Dr. Duisberg Achaz. It shows the irresistible invasion of modern industry in every branch of activity, which is the real cause of the exodus of man from the land, where he is now pretty generally replaced by machinery. Dr. Duisberg Achaz has tried to bring this fact home to the public in his film, which has aroused considerable discussion. (To Day’s Cinema, London - F. 5/98).

On the anniversary of the «Foundation of the Art of Printing» and of the «Spanish Federation of Graphic Arts», an instructive cinematograph spectacle was organized at Madrid, at which the printers belonging to the above two institutions were present. The films shown dealt with the working of printing machines, the methods of forming printing type, the organization of a model printing office, etc. The spectacle was really a practical lesson, especially in view of the status of the members of the audience, who were able to study the most highly developed systems of work adopted by printers abroad. El Socialista, of Madrid, which publishes this information, expresses the hope that this type of film dealing with the various trades, will be shown periodically for educational purposes to the workmen of the capital and of the rest of the country. (F. 5/97).

Films to assist the Choice of a Trade.

To assist young people to take up the trade or profession best suited to their particular situations and aptitudes is undoubtedly one of the most delicate tasks that faces educators, one of the most serious responsibilities of the profession. The knowledge and tastes gained by young people at school, through the medium of their readings and lessons, may at times lead them to select a trade or profession which later, when facing the realities of life, proves to be unsuited to their natural disposition and often to their physical capacities. At the present day, the cinematograph can give a visual knowledge of the requirements of each trade, and can, above all, awaken potential tendencies in the mind of the looker-on, a fact of supreme importance to all those in need of a stimulus to tackle the problems of life satisfactorily. The film is made use of to-day in many centres, as a complement to teaching and the selection of a trade; and the information to hand on this point proves that cinematograph projections on these lines are very favourably received by young people. We mention with pleasure the production of two interesting films entitled «From the School to the Workshop» and «Unemployed». The Provincial Labour Office of Düsseldorf is responsible for the films, the first of which gives an excellent illustra-
tion of the specific character of many trades, while the second demonstrates the difficulties resulting from the selection of a profession which does not offer many possibilities of employment, and exhorts young people to consider well before deciding on the road to be followed. (Stadt-Anzeiger, Düsseldorf - F. 8/93).

We published some information in preceding numbers in regard to the excellent initiative of a group of cinematograph firms in London for the foundation of a School of cinematograph cameramen. We are pleased to learn, from «The Cinema», of London, that 18 cameramen who had regularly attended the courses at these schools have just received their certificates. (F. 8/90).

To Day's Cinema, London, publishes the important information that a voice-culture course has been instituted in the Technical School of Dramatic Art at Leningrad, for the benefit of those intending to work on the talking film. (F. 8/90).

A film illustrating the duties of nurses attached to ambulances has been projected at Preston. (The Daily Film Renter, London - F. 8/88).

Considering the exceptional development of the cinematograph industry and its continual improvement, it is logical that it should have a technical staff worthy of its position. And it is not only the firms more immediately concerned which are endeavouring to make the best selections, by means of careful examination, from among the cinematograph cameramen; the men themselves are equally interested in the improvement of their methods, because to rise in the ranks means to attain an enviable financial position, especially if the cameraman has a scientific knowledge of his apparatus, which is being continually improved. The institution of regular courses for technical operators for the supply of the best specialised men to the film industry, has therefore become a logical necessity. A short time ago, a technical course on the registration and reproduction of sound, especially adapted for cameramen on the talking and sound systems, was started at the University of California, Extension Division (Exhibitor Herald World, Chicago - F. 8/87).

In London recently, before an audience of members of the London «Film Society», the well known Russian stage manager, M. Eisenstein, gave a series of highly successful lectures in English, on Russian methods of cinematograph production and the best systems to adopt for the staging of film (Film Kurier, Berlin - F. 8/85).

THE SYNDICALIST ORGANIZATION OF THE CINEMATOGRAPH.

The syndicalist organization of the cinematograph is making great strides in Europe; employers and employees are equally interested in having contracts drawn up by the competent offices which coordinate the requirements of the two classes, and in compelling both sides to respect such contracts. The beneficent effects of this solidarity are daily more evident; and the last number of the Kinetograph of Berlin states that the Theatre Builders’ and Proprietors’ Section of the League of Austrian Cinematograph Producers has joined the Spitzer Organization in its decision to employ any actor who has been guilty of infringing a syndicalist contract (F. 35/136).

In Spain, also, the various classes of workers in the cinematograph industry are recognised by law, according to the «Region» of Oviedo, which publishes a communication stating that the Ministry of Labour and Social Welfare has made known the clauses approved by the joint Commission on Cinema Shows in Madrid on the subject of the work and wages of Spanish cinematograph workers. The various classes of workers are specified in these regulations, as also the rights and obligations pertaining to each class. (F. 35/138).

«Le Courrier des Cinémas» of Lille states that the English clerks and workingmen’s Trade Unions have decided to constitute a new Federazione for the employés of places of entertainment. The Association of Cinema Actors will belong to this Federation. (F. 35/139).

In Italy, which is entirely under the corporative régime, there is close collaboration between all parties, and therefore any differences that may arise in the trade unions are always fairly easy of solution, since individualistic interests are lost in the supreme national interest. In support of this assertion,
the "Cinema Italiano" of Rome, states that the assembly of the Latium group of Cinematograph Managers, which met last December, expressed the opinion that all disputes connected with the hiring of films should be decided by joint commissions set up in connection with the central syndicalist organizations and those of the circumference, which, as they are accustomed to settling equitably all questions arising between employers and workmen, will be in a position to settle also any differences arising between the different manufactures who are members of the said organization (F. 35/134).

ITEMS OF NEWS ON LABOUR

Belgium will celebrate the Centenary of her independence this year by a number of manifestations of an international order. Among the more important of these will be the Scientific and Industrial Exhibition to be held at Liege. The organizing committee has decided to reserve a special section for problems connected with scientific management, the training of staff and vocational orientation. Class 94 D of the Exhibition will collect together in suitable premises all documents, diagrams, tables, descriptions, apparatus, scholastic material, manuscripts, photographs, schedules, questionnaires, etc., relating to the various activities connected with labour problems.

Technical specialists will be present in connection with the manufacturing shows and the psycho-technical laboratories for the demonstration of methods of study and results obtained from them, and will illustrate with the aid of modern apparatus the means employed to find out the natural work aptitudes of the individual, on the one side, and, on the other, the application of scientific management systems and the training of the working staff.

In order that these demonstrations may be more effective, films dealing with the problems will be projected. With the object of facilitating the collection of material and ensuring the success of this special section, the organizing committee requests all those organizations and associations which, on account of their particular character are in a position to furnish useful indications and possibly material, to be good enough to put themselves in communication with M. Lucien Wellens, Secretary of Class 94 D of the Exhibition, Rue de Seraing II, Liège.

It is well known that the study of Corporative Law has been introduced into High Schools in Italy. The Ministry of Corporations, whose task it is to make the principles of the new organization widely known, entrusted the editorial staff of the review "Il Diritto del Lavoro" with the compilation of a book to serve as a standard work for upper school students. This book, which was drawn up under the supervision of the Ministry, was published for the first time in 1923 in a uniform edition with the "Edizioni del Diritto del Lavoro"; the title was "Elements of Corporative Organisation", and the book formed an excellent exposition of the principles informing it.

After the publication this year of the official programme for teaching the elements of corporative organization, the Ministry of Corporations arranged for the complete remodelling of the work, in order that it should strictly conform to the official programme and give more prominence to the political than to the juridical element. Thus the second edition of the "Elements of Corporative Organization" was brought out by the editorial staff of "Il Diritto del Lavoro", under the control of the Ministry of Corporations, and published by the "The Rights of Labour" series. Like the first edition, it corresponds perfectly to the objects aimed at.

The matter in kept within the limits proposed, and summarized in short digestes dealing with each paragraph of the official programme, thus making the work better suited to its didactic ends.

The Ministry of Corporations and the Ministry of National Education have arranged for the book to be used in the upper schools
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TECHNICAL ASPECTS.

THE TALKING CINEMA.

Some three years ago, I had a series of experiments on the talking film carried out in the Central Low Current Laboratory, of which I was chief.

Several processes for registering sounds on the film had already been tried, among them the Soviet process, which makes use of the neon lamp, and the foreign process utilising Kerr's effects.

Preliminary trials showed that the most rational process — both from the general technical point of view and the point of view of Soviet conditions — was our own process.

This fact being established, we proceed as follows:

We fix a luminous point «3», the rays of which pass through an optic system «8». Then, a conducting wire of the optical systems «2» and «4» is placed in the magnetic field of a magnet or electromagnet, and an opening «10», a film and a cylindrical objective are arranged in order.

The current passes from the amplifier, which is connected to the microphone, to the conducting wire and creates a reciprocal action between the magnetic currents of the wire and those of the magnet. The wire begins to oscillate. The image of the wire is projected — enlarged, thanks to the optical systems «2» and «4» — on to the film. The beam of light that flows from the source «3» is concentrated on to the film in the form of a narrow luminous ray, and the ray itself is intercepted, at different degrees, by the oscillating image of the wire. We therefore obtain on the moving film the image in shadow of the sound. This is the oscillagram of the sound. The method of registering the shadows is obviously the best possible, because it eliminates the necessity for giving special attention to the photographic processes of printing, developing, etc., a fact of capital importance when it is a question of producing large quantities of cinematograph films.

Naturally, in this, as in all new departures, discussions are continually arising as to the best and most convenient systems to adopt, etc. In order to eliminate such discussions (on the fixed or varied density systems) we add certain optic supplements to our fixed photograph, which allows us to obtain the two registrations by simply turning a handle.

The problem of reproduction is also settled very simply. We establish a lumin-
ous system, before which there is a very narrow mechanical opening. The film runs behind this opening, and behind it again is placed an electric photo-pile, which is connected with the amplifier and the loud speaker. When the film is in movement, the shadows on it cause interruptions of the light, which act on the photo-pile, modifying the intensity of the current in the amplifier. All this has its repercussion on the current of the loud speaker, which reproduces sounds corresponding to the movements on the film.

The above is a brief description of the process.

As we said above, several different system of registration have been tried, but the Chorine system has given the best results; the registrations made by this systems do not necessitate any focussing, they are strong and give out a clear sound, and, in addition, we are able by this system to obtain both the fixed and variable intensity registrations. The Talking Cinema Apparatus Trust makes its apparatus on this system.

The experiments made in the construction of registration apparatus for the neon lamp process and the Kerr’s effects process demonstrated that the latter process necessitates very careful attention to everything connected with the registration and the photographic processes generally. It is also less perfect than the Chorine system in the matter of clearness of sound and graduation of amplitudes.

Synchronisation is realised by the aid of synchronising motors, and in this connection the Chorine process is the same as the processes used abroad. Different types of microphone are used, because experience has shown that certain sounds are transmitted better by some microphones than by others. We have used charcoal microphones, condenser microphones, etc. And experience has proved that the condenser microphone gives the best results. We use transformer amplifiers both for registering and reproducing. A system of degrees is arranged in the amplifier, so that the director and compositor may follow every nuance of the registration.

Takings in theatres are worked by means of a microscopic lens and separated lamps, or by means of a combined cylindrical lens and separated lamps, or by means of a combined cylindrical lens lighted by a lamp and with a conducting wire that is as thick as a hair. The drawings illustrate the arrangement of these two processes. It is difficult to say which of them is best; each has its advantages and its defects. The process with the microscopic lens is the most costly and is also cumbersome. The other
process strikes us as being preferable on the whole, because it is suited to portable apparatus, for work in the country and provinces, where it is very important that the material should not be too cumbersome or necessitate a great outlay of energy to move about.

The studios that we have had built in the Sovkino laboratories are no different from those in foreign countries. We have a cinema-studio which is well protected from outside sounds, and the registration apparatus, with all their accessories, are set up in a corner of it. The edifice is so constructed inside as to deaden sound. A special arrangement of curtains, microphones and lighting is made for each detail. Incandescent lamps are generally used for lighting, but there are times when mercury lamps have to be used, and even, on occasions, arc lamps.

The first films were prepared and projected in the laboratory. It was found necessary, after the laboratory experiments, to modify both registration and projection apparatus. The first set-up was made in Leningrad, at the experimental cinema of the Sovkino. The public warmly applauded this first success of the Soviet cinematograph, and the theatre is still filled daily. The installation has worked without the slightest break from the very first day. It goes without saying that practice has shown the necessity of a series of modifications, in order to improve the sound transmission of the apparatus. At the present, we are working at the improvement of the registering and projecting apparatus, modifying where necessary not only details of construction but also the original design.

We are making experiments in registration by means of cathodic rays. These experiments are not yet complete, but there is no doubt that they are of primary interest. We are also working to make the registering and projecting apparatus of the maximum solidity and minimum volume, so that they may be more easily utilised for expeditions. The stationary apparatus are also being improved, and different kinds of sound amplifier and reproducer are being tried, in order to obtain other sounds and nuances in addition to those we already have. Numerous groups of directors and composers are making researches to discover new sound timbres.

In a word, we are working hard at experiments and trials and making every research possible in the domain of the talking cinema; and little by little as our new models are completed, they will be offered for public projection.

A. Chorine.
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THE DOCUMENTARY FILM.

ABOUT THE WORLD.

The documentary cinema is everywhere gaining in importance and is extending its action beyond the sphere of general enquiry and industry into the domain of pure science, where it is proving its efficiency as an instrument of higher culture.

The growing interest in this type of film has suggested to Jacques Vivien the notion set forth in one of his brilliant cinematic surveys in the Petit Parisien of specializing cinema halls so as to afford guidance to spectators in their choice of a show answering to their individual taste. Thus there might be halls for advanced cultural films, for films of adventure, for comic films, and for documentary films «which have more followers than is commonly supposed».

The cinema can serve the purposes of documentary record in diverse ways. In the form of a «journal» to chronicle passing events, as a record of particular situations which may not recur and which it is worth while fixing on the ribbon as evidence for posterity, or as a picture of some scientific or social phenomenon of actual life, either because it is desirable to show it and make it known in quarters where it does not occur, or because the said phenomenon, though universal, is not of an enduring kind, and it therefore behoves us to record it for reasons of culture and science.

The documentary film may vary in value according to the different forms it takes and according as it is considered merely as a chronicle, or as a factor in the present or future education of the people. But its interest will remain as a document of real life when all the dramatic films have passed gradually into oblivion, having either been killed by a new technique, or because they reflect an obsolete state of mind and feeling.

Collections of documentary films, rich archives of precious material for research and knowledge, ought to be set up in connection with all bodies concerned with science and education, just as disc collections have been formed to preserve for the future the voices of singers and public characters.

Not exactly for this purpose, but in any case with a view to spreading the documentary cinema, a «Cinodocument» association has recently been constituted in Paris, under the presidency of Louis Lumière and Georges Lecomte. The principal aim of this association is to help perfect the education of its adherents by means of films chosen among those dealing with all branches of human knowledge. The films will be accompanied by explanations and lectures by authorities in the university and cinematographic world.

One of the most characteristic event films produced recently constructed on a scientific foundation, is the Ulissea Film (Ciné-filo, of Lisbon, 6/337). This film is made to commemorate the 50th anniversary of the invention of the electric lamp and to celebrate in the most popular way the name of a great pioneer in the domain of electricity and the cinematograph, Thomas Alva Edison, and presents the most characteristic phases of the great discovery in a series of original pictures.

Comoedia, in a recent issue (F. 6/328), calls attention to a commemorative and topical film, of a journalistic and propagandist nature, which will be shown in France on the occasion of the centenary of the conquest of Algeria, when lectures will be delivered, accompanied by documentary films illustrating the works of civilization carried out in Algeria by the French Government.

Another propagandist film is described in El Debate of Madrid (F. 6/355). It has been shown at the Palace of the Presidency and illustrates the progress made by Spain as regards economics, industrialism and tourism. Information which reaches us from America
through a Portuguese paper (Cinéfilo, Lisbon - F. 6/345) refers to a film of an entirely journalistic and topical order. For the first time in the United States the «Embassy Cinema» on Broadway, New York, will be entirely given up to showing daily topical films. Films showing the most important events of the day will be on view two hours after the events have taken place; they will be shown in the other States of the Union on the following day. Films showing foreign events will be screened as early as possible.

Among scientific documentary films, those dealing with water and the infinitesimally small organisms which live in its depths are of special interest to students. The Ami du Peuple of Paris (F. 6/333) records that the club of l'Ecran has held its fiftieth meeting, at which the value of certain films shown there was discussed. «Water» was considered the finest of the lot; this displayed the most beautiful waterfalls of the world, the finest rivers and torrents rushing down mountain-sides towards the distant seas.

Mario Novais and Fred. Kradofer (Cinéfilo, Lisbon - F. 6/336) are producing a propaganda film dealing with the Lisbon Pasteur Institute. Jean Painlevé, scientist and cinematographer, describes in an article in the Joss Journal of Cairo (Nos. 4, 5, 6 of 1929) biological documentary films, their technique and their future.

Jean Painlevé does not approve of the sound film or of the talking film. Especially of the latter, perhaps because he considers «sound» films, which are merely the reproduction of the acoustic phenomena of nature, as a substitute and corrective of orchestral music, capable of rendering with the necessary exactitude the natural music accompanying the scene recorded. He places the action of documentary films in three distinct divisions: slowed-down films, accelerated films and colour films, to which might easily be added stereoscopic films, in three dimensions; he further recognises that the film being more sensitive than the human eye to certain rays, may become a perfect instrument for scientific research. He distinguishes amongst documentary films those which may be used for general teaching and those which are suitable for any public.

There are three types of documentary scientific film, which correspond to three different systems of taking, mounting and producing. We deal first with a purely laboratory film; in this case it does not matter how long it is, nor the indelicacy or inelegancies of the captions. In the second case, the plastic nature of the phenomenon should be accentuated so as to make it of general interest. Thirdly, it is necessary, so as to arouse the interest of the public, to give them the most vivid pictures that can be obtained and to accompany them with captions which can be understood by anybody, without producing the impression of teaching or lecturing.

Jean Painlevé's work, which is not merely theoretical, has had predecessors and imitators. For instance, in Italy since 1926 the National L. U. C. E. Institute has got the operator Omegna, a specialist in micro-cinematic photography, to illustrate life in the ocean depths under the technical direction of Prof. Raffaele of the University of Rome. Many films of great scientific interest have been taken, among others: on the life of bees, wasps, spiders, ants, various plant parasites, and on the circulation of the blood, etc. These were produced in the triple form suggested by Painlevé in his article. That is to say they were more or less altered for schools and the general public and were left uncut for scientific purposes.

Among documentary scientific films of a propagandist type is a recent Russian film, «Turksibe» made by the Vostokkino Co. under the direction of Vittorio Turin.

«Turksibe» is the Turkistan-Siberian railway which is being constructed, extending from Semipalatinsk to Frunze, a distance of about 1500 kilometres. There is, on the one hand, its purely technical value as an achievement of engineering; on the other hand, there is its moral value in the possibility which it creates of sending into central Asia cheap Siberian grain and also of exploiting hitherto uncultivated land very suitable for cotton growing.

The Russian cinematographic technique shows in this film also the two perpetual elements of discord between the static world of former times and the dynamic life of today. The sun has unlimited power, the
mountain snows descend in torrents towards the plains which absorb them, plains which are slowly drying up owing to the death of the plants that used formerly to flourish there. Sand-storms raised by the simoon overwhelm camel caravans and bury them. Life seems halting in its forward march and about to retrogress. One thing is necessary, and that is water.

Man and the power of the human will so as to penetrate endless forests; we traversed stony deserts, and travelled on the Tchokparsk plateau in motor lorries; we flew over the snow-clad mountains of Alma Ata in an aeroplane; we crossed the sands of Illisk on camels and endured the rigours of a Siberian winter.

Documentary folklore films attract much bigger audiences than do scientific films. This may be partly because of the greater

now come into play. He builds roads and bridges, he levels mountains, he lays the iron road that will bring new life everywhere; the Cossacks, who at first used to attack the trains, have by now become farmers and mechanics; they too are starting a new life.

A communication from the "Society for cultural relations between the Union of S.S.R. and foreign countries in Moscow allows us to give some idea of the formidable work which Vittorio Turin has carried out: We have taken films in arid plains where the temperature reached 60° C. during the day. Though worn out by thirst and dust, we were unable to rest during the night on account of mosquitoes. We climbed inaccessible mountains and crossed roaring torrents simplicity of the former and partly because, whilst scientific films can only be appreciated by the public when they display a very high level of art and technique, folklore films, like landscape ones, have their appeal in the subject itself.

The following films aim at recording phases of life which are passing away: "Lisbon » shows us characteristic scenes of local and student life (Cinefilo, Lisbon - F. 6/344) "Old Stambul » (To-day’s Cinema, London - F. 6/346) displays local scenes in the setting of the old streets of the Mohammedan quarters beside the Bosphorus; the scholastic and popular Cinema of Berne gives as « Petronella », a not very logical mixture of religion and superstition centering round Valais
and its popular fêtes (Feuille d’Avis, Neuchâtel - F. 17/74); « Portuguese Folk Dances » is the first of an artistic documentary set of films produced by Artur Costa de Macedo (Cinefilo, Lisbon - F. 6/338); « Winter » by Leon Marten shows us Vienna and the surrounding country under snow (Comedia, Paris - F. 6/351); « Picturesque Roumania » (Adverul, Bucharest - F. 6/354) shown, under the patronage of the Minister for Foreign Affairs, before Queen Marie at the National Theatre of Bucharest, brings before us the natural and artistic beauties of the country; « Pełona » shows us, worked into a simple plot, picturesque scenes in French Togoland (Comedia, Paris - F. 6/352).

Films showing a past mode of life, but which come under the heading of documentary films, comprise: « Inshalla », named after the fatalistic Mohammedan saying, which was filmed in Persia and Irak by Hagewald of Berlin (8 Uhr Abendblatt, Berlin - F. 6/327); « The King of the Bernina », meant to represent a series of Swiss traditions, but which has falsified history and roused a storm of protest from the professors of Zurich University (Il Corriere della Sera, Milan - F. 34/384); « The New Babylon », produced by the Sovkino of Moscow, which recalls the historical happenings in France from the fall of the Second Empire up to the Commune (Comedia, Paris - F. 6/334). « Napoleon at St. Helena » (Comedia, Paris F. 6/353), produced in Germany and shown before the French Ambassador and the Minister of the Interior, is a valuable document owing to its historical accuracy and for the method of cinematic teaching.

« Waterloo » by the Anglo-American Distributors (The Billboard, Cincinnati - F. 6/350) re-evokes the last desperate stand of the French Imperial Eagle against invasion. In Russia « Judge Reitanescu », produced by Lopynsky, shows scenes in the life of Romanian revolutionaries, while the historical film « Zakhan Barkout », also by Lopynsky, illustrates the struggle of Ukrainian Gallicians against the invasion of Mongol hordes, (Comedia, Paris - F. 6/329).

The latest sphere of action of the documentary film is that of landscape and travel; in this branch, as in the historical-folklore film, there is no lack of operators and searchers. The last cinematographic expedition filmed by Metro Goldwyn Mayer, contains many thrilling scenes of wild life in African forests (La Rivista Cinematografica, Turin - F. 6/342). Another film dealing with Africa is the propaganda film « Flying over Africa » produced by the Atlantic Aero Club (Gare de la Loire, Nancy - F. 6/330). Mountain tops and polar solitude are cleverly and artistically treated in « Aerial touring », showing Mont Blanc photographed from an aeroplane; this also is produced by the Atlantic Aero Club (Gare de la Loire as above). The series of lantern slides and films dealing with the Julian Alps, screened at the Alpina of Trieste (Il Piccolo, Triest, F. 6/340) is produced with the greatest technical and artistic precision; the film showing Sedov’s expedition to Franz Joseph Land is by Professor Samoilovic, who rescued the survivors of the air-ship « Italia » (La Cinematografia, Milan - F. 6/332).

From Norway comes the film « Selvig Norges »; which deals with the mountains, the forests and local life of the country (Comedia, Paris - F. 6/339). Switzerland sends us a film, screened with great success at the Grand Cinema of Geneva, dealing with the beauties of the landscape of the lake, (Jornal de Genêve, Geneva - F. 6/341). The Belgian Cinographic University has shown, in a public meeting, a series of documentary films dealing with: New Zealand’s lakes and industries; the typical working of wool in Belgium, in Siam, Newfoundland fisheries (La Metropole, Antwerp - F. 17/73), i.e. a series of ethnographical, ethnological and landscape films of the highest interest.

« In the Mediterranean from Bremerhaven to the East » is a tourist - scenery film of a publicity and propagandist order, produced by « Doring Hanover » and the « Norddeutscher Lloyd Bremen » (Münchner Neueste Nachrichten, Munich - F. 6/343). As regards South America « The Billboard » of Cincinnati (F. 6/347) announces that « the Chromotone Studio intends to send an operator to photograph the mountain ranges, forests and enormous rivers in a natural colour film. The most interesting feature of this undertaking is that, given the difficulty and danger of penetrating the unex-
explored interior of Brasil and Bolivia, the majority of the scenes will be photographed from an aeroplane. Simultaneously the Associated Artists are preparing a historical landscape film named «The Birth of Texas» (The Billboard, Cincinnati - F. 6/348).

Two new experiments have also been tried. The first is that mentioned in the Oesterreische Film-Zeitung, of Vienna (F. 6/348) on the State utilization of the posts and of service cars, distributed in Upper Austria, Salzburg, Carinthia, Stirya and the Tyrol, to present a set of films showing the natural beauties of the country-side. The second film — entirely original and American — represents an attempt by the Paramount Co., to present a sound film taken in a moving train on the railway between Los Angeles and Chicago (Corriere dello Spettacolo, Rome, F. 6/331). The film shows in detail the country-side of Virginia and the daily life of its inhabitants.

The essential object of the documentary film, from a scientific and propagandist point of view, is to reproduce all the characteristic aspects of the life of today and in the past, in order to preserve the record of things and conditions that have passed or are bound to pass.
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LEGISLATION.

CINEMATOGRAPHIC CENSORSHIP IN NEW ZEALAND.

The censorship of films in New Zealand is of comparatively old date. It was, owing to special war exigencies, established by an order in Council of September 1916, the first Censor appointed being Mr. W. Joliffe, who remained in office close on eleven years, until the 22nd April 1927. Mr Joliffe's record must be rare, if not unique, in the annals of the Censorship — and especially of film Censorship; for an official report of the Department of Internal Affairs states that during the whole of this period he filled the position with conspicuous ability. Few of his decisions were questioned and the majority of those appealed against were upheld by the Board of Appeal.

The Order in Council of 1916 was superseded by the Regulations of the 17th December 1928, published in the N. Z. Official Gazette of that date, which are still in force.

** THE CENSORSHIP OFFICE. ** — The above-mentioned Order in Council of the 17th December 1928, which came into force on the 1st January following, establishes a Registration Office for all films intended for public exhibition, the Office of Censor and Registrar of Cinematograph Films being held by the same officer, who became known thereafter as the «Censor and Registrar».

All persons, desiring to exhibit films in the Dominion, are required to make application for them to be censored and registered in accordance with a special form for the purpose, addressed to the Censor in Wellington, the said application to be accompanied by the film or films to which it relates and by the appropriate fees laid down in the Regulations.

These fees are fixed according to the following scale:

- a) For the first examination of the Film:
  - For the first 1000 ft. of film . . . . . . . . . . 5 shillings

- b) For the Registration of the Film:
  - For films exceeding 3000 ft. in length . . . 10/o
  - For films not exceeding 3000 ft. in length . . 1/o

- c) Fees payable on Appeals from the Censor's decision:
  - For every 1000 ft. of film or part thereof (with a minimum of 3.3.0 for any one film) . . . . . . . . . . 15/o
  - On Appeals from decision of Registrar . . . . . . L. 3.3.0

In addition to the above, there is an accessory fee of two shillings and six pence for the certified copy of entry in register; one shilling for inspection of register, if desired, and two shillings and six pence for amended certificate of registration.

For the purposes of censoring and registration, no difference is made between feature films and educational films. These latter — even when intended exclusively for screening in schools, educational institutes, universities, etc., are subject to the same treatment as dramatic and scenic films. Exception is made in favour of films intended for private exhibition only, on the grounds that the State is concerned only with public exhibitions. This view is implicit in the Regulations.

Films for which admission is claimed under the British Preferential Tariff must be accompanied by a declaration by the interested party (producer, renter, or exhibitor), and must bear the indication whether they have been produced in the British Empire or whether they are of local or foreign production.
A special clause of these Regulations dealing with sound films is deserving of note. It seems quite likely that this is the first definite rule that has anywhere been laid down with respect to the censorship of this new form of cinematographic production. Art. 3 of the Regulations provides that in the case of all films the exhibition of which is intended to be accompanied by the mechanical reproduction of sound, the applicant, if required so to do by the Censor, shall arrange, at his own expense, for the examination to take place at a theatre in Wellington adapted for the production, so as to enable the Censor to judge the film as a whole.

A supplementary fee is charged in every case, where the applicant specially requests that the examination and registration of the film be completed within 48 hours after its submission to the Censor and Registrar, and, in cases where application is made for the re-examination of a film in respect of which the Censor has required certain alterations to be made, in order that the Censor may satisfy himself that his orders have been duly carried out. Unless the applicant arranges for the removal of the films after their examination by the Censor he must pre-pay return postal expenses.

Censorship System. — Four different courses are open to the Censor. He may:

a) approve the film for general exhibition;

b) approve the film subject to the condition or recommendation that it be exhibited only to a specified class or to specified classes of persons;

c) approve the film after making such excisions as, in the exercise of his discretionary powers, he considers proper;

d) refuse his approval of the film.

A photographic reproduction of the certificate of the Censor and Registrar must be incorporated in the film to which it relates, so as immediately to precede the cast of the characters; the Regulations require this photographic reproduction to be not less than 6 feet in length in the case of a film exceeding 3000 feet and not less than 3 feet in length in all other cases.

Where the Censor issues a certificate in respect of any film subject to the condition that it be exhibited to adults only, the renter of the film is required to give notice to any exhibitor to this effect, and the exhibitor, before exhibiting it must display effective notices to this effect at the entrance to or in the lobby of the theatre. A statement of the conditions or recommendations in question must further be included in every advertisement of the film in the press.

Where any excisions have been made in a film prior to its submission to the Censor, the applicant shall, together with the film, forward the portions so excised to the Censor. The Censor is entitled to retain all portions of the film that he has himself excised as also all portions excised by the applicant and delivered to the Censor as above.

Films definitely approved as fit for exhibition, whether to adults only, or to the public in general, including children, cannot in any case, as already stated, be publicly exhibited until they have been registered with the indication of their origin, British or otherwise.

Appeals from Censor. — Any importer who is dissatisfied with the decision of the Censor may, within 14 days from the date after the notification to him of such decision, appeal therefrom to a Board of Appeal, consisting of three persons to be appointed from time to time by the Minister of Internal Affairs, one of whom shall be appointed by the said Minister as Chairman.

The decision of not less than two members constitutes the decision of the Board, and members thereof, who are prevented by illness or otherwise from being present must be replaced by persons appointed by the Minister.

The Regulations further provide that any applicant who is dissatisfied with the decision of the Registrar with respect to the registration of a film may appeal therefrom to a Stipendiary Magistrate.

The Regulations do not specify the circumstances in which appeal may be made from the Registrar's decision (failure to register or mistake in registration, etc.); but it is obvious that any decision in this regard must be more or less in accordance with the Censor's decision. This limits itself to certifying whether the film is fit for one
or other form of exhibition (adults or general), and to granting the censorship certificate. Registration is granted in like manner and is subject to the same conditions, restrictions, and prohibitions. Renters or exhibitors, or even producers may however attempt to exhibit in public halls films that have been passed subject to certain conditions, or in respect of which all the obligations laid down in the Regulations have not been duly observed. Now there is an essential difference in character between the first and the second certificate. So far as the registration certificate is concerned, the intervention of a Magistrate is justified by the fact that the conduct of the person thus exhibiting the film amounts practically to an infringement of the law; whereas the ordinary judicial authorities are in no way concerned with any questions arising in connection with the standards of censorship.

In both cases, the appeal must be instituted by lodging a written appeal with the Department of Internal Affairs, which forwards it to the competent authority.

Both the Board of Appeal and the Magistrate, to whom appeal may be made, must in their decisions adhere as far as possible to the principles governing the censorship of first instance. In the case of the decision of the Censor or Registrar being reversed with respect to any film, the fee payable by the applicant on appeal is refunded to him; otherwise the fees, deposited in advance, are retained.

According to official information received from the Dominion authorities, the police have free access to all public premises where films are exhibited, so as to satisfy themselves that the requirements of the censorship and Registrar have been duly complied with.

**Motives for Censoring.** — The reasons governing the decisions of the censorship naturally vary according to the type of film being dealt with.

New Zealand, like so many other countries, has no specific rules of censorship covering all cases; both on account of the relatively small number of films dealt with and also because, as in the case of Australia, the motives for censoring are based on general principles, being expressed in a few clear terms, covering, however, all the contingencies in which intervention may be necessary.

In the first place, the Censor must consider whether the films submitted to him — apart from any distinction as to the public to which they are suited — comply with the requisite moral standards. Approval is never given to films which are considered to depict matters contrary to public order and decency, or that may incite to crime.

In the second place, the Dominion authorities are concerned with safeguarding the good name of the British Empire and the peoples subject to it (foreign political relations) and they ban all that may cast a reflection on the populations of friendly nations or depict them in an undesirable light.

Thirdly, the Censor takes into consideration the technical and artistic value of all films submitted to him.

Lastly, the censorship takes into consideration also the titles and captions, as forming an integral part of the film, and sees that the scenes exhibited are not described in any way that may offend good taste or morals.

**NEW ZEALAND CENSORSHIP STATISTICS.** —
The returns here shown cover the 1927-1929 period; the last year coming under the amended law of 1928. The data are of considerable interest.

During the year 1926-27, 2,751 films, of a total length of 5,415,370 feet, were examined. Of this number thirty-two were wholly rejected and 202 were passed without excision. There was only one appeal against the decision of the Censor, which was upheld by the Board of Appeal.

336 films imported from England and other parts of the British Empire were registered between August 1926 and 31st March 1927, and 1978 films of diverse origin. The average length of the British films examined was 1200 feet while foreign films measured on the average 1987 feet.

During the following year 2,333 films, of a total length of 5,813,846 feet were censored. Of this number 69 were rejected in the first instance, 245 were passed subject to excisions, and 44 were passed for adult audiences only. There were 2 appeals
against the decisions of the Censor. In one case the Censor’s view was reversed, and in the other case it was upheld.

585 of the said films were British Empire films. Feature films (over 4000 feet in length) totalled 268,628, while the remaining 1705 films comprised topicals, scenics, serials, comedies, cartoons, industrials, etc., seldom exceeding 2000 feet each. Of the feature films; thirty five were produced in the British Empire, 580 in the United States, and thirteen originated in Germany, France, Italy and Sweden.

During the last of the three years under consideration, 1671 films were censored, of a total length of 4,373,200 feet. Thirty one of these were rejected in the first instance, 147 were passed without excisions, and sixty five were passed with recommendations for adult audiences only. One decision against the Censor’s decision was lodged in December 1928, but up to the end of March 1929 the appellant had taken no further steps in the matter.

The total number of British Empire films examined was 474. Feature films totalled 448, while the remaining 1223 films comprised topicals, scenics, comedies, industrials, etc. Of the feature films sixty-four were produced in the British Empire, 361 in the United States, nineteen in Germany, two in France, and two in Italy.

The Cinematograph Films Act of 1928 aimed at securing a 7 ½ per-cent renters’ quota of British Films for 1929. The quota films registered between the 1st January and the 31st March, 1929, number 205 and of this number forty-one are British and 164 are foreign. The remaining 582 films are registered as non-quota films for the purposes of the Act. The registration of quota films for the first three months of 1929 equal 80 per cent of foreign films and 20 per cent of British films. The British feature films submitted during the year were considered to compare very favourably with the films originating elsewhere. «Daw» was the only British film rejected; and this was an exceptional case.

* * * * *

It will be seen that in New Zealand as elsewhere the Censor’s scissors have not been very hard on the film trade, while the Dominion has exercised proper care as to the character of the films accepted in the public interest.

ITEMS OF INTEREST.

A survey of the different systems of cinematographic control obtaining in the several countries reveals the existence of two separate and distinct points of view. The one regards the intervention of the State as necessary to enforce legally the decisions of the censorship and is based on the concept that the control of morals and public behaviour generally are matters appertaining to the State, which ought therefore to be controlled, regulated, and sanctioned by the public authorities. The other considers that it is inexpedient to hamper the cinema beyond what is strictly necessary, and that the regulation of morals and customs is best left to public opinion and to organs of a private character, which at the same time represent and have an interest in the nations commerce.

There are convinced and bona fide advocates of both these views.

One side holds that it is impossible to be judge and party at the same time.

A manufacturer or his representative is at an obvious disadvantage in judging whether a film produced by a rival in the trade is or is not undesirable for public exhibition. Nor can he overlook the consideration that if at any time he shows himself severe in judging the work of a competitor, he may in his turn be the object of a judgment no less severe. It is also maintained that the public cannot be a good judge, or at any rate the final judge of the moral principles that are at the basis of social life.

Only a minority of those viewing it is really interested in a film. The mass of the public watch the show with indifference and
react slowly to its influence in a manner that cannot be directly traced.

But the authority of the State is fixed and unquestionable, and is in the last extremity supported by the penal laws. It alone is therefore in a position to lay down definite rules and to guide the policy of its competent organs, not only so as to correct any actual violations that may occur, but also avoid the chance of later infringements.

The views of the other side are based on an explicit premise. Morals, which are a conventional factor of life, are a matter for the individual conscience. The State is concerned only with questions of real and absolute public interest. Freedom of criticism and judgment must be left to the public which, as forming part of the social body, has an unquestionable right to direct its inclinations and its life in accordance with its own views. On the other hand public taste, which is no longer satisfied with watching a puppet show pass across the screen, but seeks to analyze it and understand its inner meaning, it the safest critic. The public itself, through its already formed or developing cinesthetic sense, will abandon gradually of its own accord those types of film that are technically and intellectually out of date.

A natural selection is bound gradually to take place and this law will dictate terms to the industry. Thus it will become the economic interest of the industry itself and of its more or less accredited representatives to enquire into public taste, and dictate to its associates the conditions with which the industry must comply if it wishes to succeed.

In conformity with these views, Dr. W. Zinner of Düsseldorf writes in the Film und Bild in Verein und Schule of Cologne, expressing the hope that clubs of cinema lovers and students may be formed to impart a new form to cinema programmes and combat the present bad taste in films, in order that this may become an object of artistic and cultural enjoyment.

It is obvious that a brief survey such as this cannot convey the full importance of these two standards of judgment. They involve problems which the interested parties on either side must debate. The Rome Institute for the time being is content to take due note of the question, while waiting for the discussion to be opened with perfect freedom. Meanwhile the clash between the two theories is everywhere being felt. Mr. P. Lavis, in a study on the Canadian censorship reviewed in the « Canadian Digest » of Toronto (18/208), upholds the necessity for State control in order to prevent the screen becoming a free field for unscrupulous manufacturers, while another issue of the same Review (18/223) refers to a speech by Mr. Harris Sedewick, of the « Famous Players » in support of the diametrically opposite view, in which he abjured the exhibitors in their own interest to exercise a proper censorship over the films they screened.

Only six of the States of the American Union have any censorship control. In one of these States, Kansas, the Government contemplates rendering the control more rigorous, in consequence of certain scenes having been exhibited in a public cinema hall without having been previously submitted to the Censoring authorities (The Film Daily, 18/198). In Kansas likewise there is a movement of a counter tendency on foot in favour of teaching the ethical and cultural value of films in the public schools in the hope of superseding the need for the censorship by creating a cultured taste among producers and public (Exhibitors’ Herald World Chicago - 18/217). But, after all, as Mr. James J. Walker writes in the Film Daily (18/200) it has yet to be proved that the six States in which a censorship is established are on a higher moral level than the rest !

The producers and renters of South America are opposed to control systems. No. 7 of the Película of Buenos Ayres (1929) publishes a protest which cinema hall managers have lodged with the authorities, threatening at the same time to close down their theatres. It is pointed out that the law contemplates only two kinds of films, those for adults and films for children aged under 15. The Regulations issued however lay down further differentiations, and have, for instance, created a category of film « not suitable for the young person », which, far from reducing the female public, acts as an enticement by the promised savour of forbidden fruit. The protest further avers that the censorship is exercised in an over-
scrupulous spirit as regards religion and morals, to the extent of excising and altering scenes that are in no way offensive to morals, thus producing tedious and disconnected shows that young people shun, preferring to spend their evenings in bars and similar undesirable resorts.

The censorship in Ireland is regarded as particularly severe (The Daily Film Renter, London - 18/215), while, in England, it has been officially stated in the House of Commons that there is no need for a regular system of government control as the present system meets all the necessities of the situation in a very competent and effective manner. The contrary point of view is being stressed in Germany, where the Reichstag has referred to a special committee the question of introducing certain emendations in to the present system of censorship, so as to render it severer, especially for the protection of the young, while vesting the local authorities with powers to prohibit the exhibition of films which they regard as deleterious to public order. The exportation of Censured films that tend to diminish the national prestige, ought not to be countenanced (18/225). The committee on the Cinema Industry of the Berlin Chamber of Commerce and Industry has, however, protested against these proposals (Licht-Bild-Bühne, Berlin - 18/218) and, at the same time, the Political Academy of Berlin (Film Kurier, Berlin - 18/225), the League for Safeguarding the interests of German Authors, held a series of lectures on the question of the censorship, in which liberal views were advocated.

In Spain, on the contrary, there is a tendency not so much to suppress or restrict the censorship as to centralize at Madrid, under the Ministry of Internal Affairs, the two offices now functioning at Madrid and Barcelona, both for the convenience of producers and renters and to secure by this means uniformity of standards of revision, which are inevitably almost wholly lacking under present circumstances (Proyeccion, Madrid - 18/201). In any case, notwithstanding the protests of the trade, there is a general tendency not to exercise any undue rigour in the actual censoring of films, especially in consideration of the fact that imported films have generally already been censored in the country of origin. Thus out of 315 films censored in Berlin during the first 9 months of 1929, 135 were German as against 111 American films and 69 of other nationalities (19/382). To cite two American examples, out of the whole mass of the films examined in Portland, Maine, 177 were passed subject to slight alterations and only 14 were subjected to serious excisions. (Exhibitors' Herald World, Chicago - 18/214). In the State of Ontario, out of 171 films examined in October 1929, 122 were passed without alterations, 44 were passed subject to excisions, and only 5 were rejected (The Daily Film Renter, London - 18/215).

The main purport of world censorship, whether official or non-official, is always the same: to safeguard public morals in the widest meaning of the word; to defend the dignity of the State. This principle is at the root of the proposal put forward by Chiappelli (Vita Nuova, Bologna - 18/219) to the effect that the Italian censors should suppress — without any regard to private interests — all scenes in which the spirit and traditions of the Country are depreciated or falsified and has induced the French Ministry of Public Instruction to notify Sam Goldwyn of the interdiction to exhibit in France, or any French Colonies, the talking-film « Condemned » which casts reflections on the French prison system, and has further urged the International Rhine land Commission, for obvious political reasons, to prohibit throughout the whole of the occupied territory the exhibition of the film « Andrea Hofer » (Licht-Bild-Bühne, Berlin - 18/204).

Moral reasons are sometimes well grounded as in Monaco, where the police prohibited the showing of a film on vivisection (Film Kurier, Berlin - 18/203); but in some other instances they incline towards the grotesque. The Exhibitors' Herald World (18/206, 210) states that under the pressure of the women's associations of his district, the Sheriff of the little town of Lynn in the United States has prohibited the exhibition of films in which women are shown smoking! Thus also the German censorship, according to the Film Kurier of the 7th November
1929 apparently bent on endorsing rather than discouraging the crudest forms of popular superstition, has made some drastic cuts in Eisenstein's film, «Generallinie». The censors were particularly shocked by two scenes. A cat was shown obliquely crossing a street in front of a wedding procession, and this was regarded as being of ill omen and as offending the sacrament of matrimony. Then again a group of thirsty animals, forming part of a procession set out to pray for relief from a period of drought, were considered as casting ridicule on the procession, whereas the only intention of the author had been to stress the distress due to the drought.

DIVERSE PROVISIONS. — The question of the quota enforced by countries that wish to protect their national production and the question of arbitration in all matters pertaining to the cinema, are still at the present time some of the most burning questions in the sphere of film interests.

In Australia, the Film Act requires all renters to purchase at least two thousand feet of film produced in the United Kingdom. The Daily Film Renter notes that this measure has not always been respected (23/170-171). The answer given by the La Palisse firm to a categorical accusation on this point was that the national production was inferior in quality to foreign production, especially to the American, and paid less well.

At the same time, Messrs. Warner Bros. and the Fox Film Co. in America were prosecuted for proved infringement of the «Sherman Act», or Anti-trust law, it having been ascertained that, following on financial agreements, the said Companies had succeeded in obtaining a control amounting to 55% of all the shares in the American film industry (25/149).

Both in Germany and America disputes between renters and exhibitors are submitted to arbitration (Kinematograph, Berlin - 25/150), and the Film Daily, New York - 25/139).

This is one way, and perhaps the most efficacious, of avoiding recourse to lengthy legal procedure.

There can no longer be any doubts as to the value of the cinematograph. It has attained to an economic and moral importance that was not dreamed of in the past. Only now it claiming the serious attention of the legislature — not on questions of detail only — but for reasons of a higher order which place it in the forefront of social problems. A clear view of the position is beginning to emerge from the theories and discussions in the pages of this Review and elsewhere. A Bill has been laid before the United Stated Senate, asking for the appointment of an art commission to study all that might contribute to the progress of the silent, sound, and talking film, and to submit proposals for its protection and diffusion. (25/156). In France they have gone a step further.

The Comedia of Paris states that André François-Poncet, under-Secretary of State for Technical Education and the Fine Arts, declared in a speech in the Chamber that the quota law was insufficient and justified the present provisional understanding with the American industry. He maintained, moreover, that the cinema was a vehicle of culture, and prognosticated the formation of a kind of League of Nations for the Cinema, to regulate fairly the exchange of films between the several countries.

Are these exaggerated imaginings? It is clear that two factors oppose themselves to François Poncet's generous idea. Money and politics. He has idealistic beliefs in a better world in which mens' thoughts are not obsessed by commercial considerations and in which the barriers separating the nations are levelled. It is, in any case, well that a word has been pronounced in a legislative assembly and that this word should come from the land that counts among its sons the precursors of the living and luminous screen.
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<td>Triumph, rose petal-tipped (in packets of 20)</td>
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<td>Trabucos, (in cases of 5)</td>
<td>11.40</td>
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STATISTICS.

THE FIGURES OF THE CINEMA.

The number of cinematograph theatres is closely connected with two problems, one of which is of a purely financial character, while the other is political.

The former problem lies in the possibility of spreading sound or speaking films which have been adapted for a given language; the former is a question of the economic utility of the creation of such films to the screen industry.

It is obvious that where there is no probability of realising at least a reasonable profit from a film, the latter offers no attraction to capitalists, who naturally seek other forms of investment. Altruism is not a noticeable quality of the financial world, and still less of the screen industry.

The problem of the sound films is therefore a strictly economic problem. In another part of this Review (see The Political Film) we deal with its various aspects in the different nations and with its national efficiency. What interests us here are the figures of the cinema.

According to the most recent statistics, as published in the Times (D. 19/386) and the Cinématographie Française (D. 19/386) and verified by the Department of Commerce at Washington, there are 57,341 cinematograph theatres in the world, divided among the nations as follows:

English-speaking countries 29,960, of which 20,500 are in the United States.
German speaking countries 6,293
French » » » 5,184
Spanish » » » 3,074
Italian » » » 2,000
Russian » » » 1,328
Japanese » » » 1,120
Various » » » 8,382

The number of sound films, the majority of which come from English-speaking countries, is in direct relation with the number of cinema theatres. It is affirmed that, by the end of January, the number of theatres which are fitted up to run the sound film will be more than ten thousand. (La cinématographie Française, Paris - B. - 19/384).

It is estimated that in America alone there are 114 new plants set up each week that is to say, about one every 87 minutes. (The Film Daily, New York - D. 19/393).

In Canada and in the Province of Ontario, according to the Toronto Film Board of Trade (D. 19/400) there are more than 390 cinemas which have sound equipment. In England, the officials of the British Film Institute (D. 19/389) have registered 433 films since the passing of the Film Allowancing Act, 163 of which were sound films. The Daily Telegraph (D. 19/398) states that cinema owners in the various parts of the world have paid to the Western Electric Co. alone, in the space of little more than a year, the large sum of 14 million pounds for sound film equipments.

The number of American cinemas is of particular importance on account of the crowds that attend them. The 20,500 cinema theatres existing in the United States have an aggregate of 18,550,000 seats, and they give more than ten and a half million shows per week to more than a hundred and twenty million spectators, who pay a total of eight hundred million dollars for entrance tickets, according to Le Courrier Cinémato graphique of November 16, 1929. The cinema industry has consequently made great strides. In 1929, the number of buildings erected beat the record. New theatres have been opened to the value of 161,930,000 dollars, and the twelve largest cinemas of Broadway alone have been valued at the typically American figure of 53 million dollars.

With regard to the teaching film and the educational film for the young, the Government of the U. S. S. R. has decided to organize, during the so-called cultural five years,
765 travelling cinemas and 194 stationary ones in the districts around Leningrad (Kino, Leningrad - F. 19/383).

In Italy (Bollettino dell'Opera Nazionale Balilla, Rome - F. 16/76) 157 Committees have set up the « Balilla Cinema »(1) for the regular showing of educational and propaganda films. Twenty-six of these Committees have their own theatres and machinery. It is estimated that during the first six months of 1929 the Committees organised 3700 educational spectacles, gratis, for the Balilla and the Avanguardisti (2).

Against this programme of general culture and the education of the young, we have the purely national programme connected with exportation and the safeguarding of the home market. From some statistics published by the Canadian Government Motion Picture Studio of Ottawa (Canadian Digest, Toronto - F. 12/387) we see that 75% of the Canadian production in mute films (that is, 2779 films) is shown in the cinemas of the various countries. In Japan, according to the Times (D. 19/381), the cinematograph is becoming every day more popular. During the year 1928 the various shows were attended by 136 million persons. Whereas, up to about six years ago, 90% of the films shown in Japanese theatres were imported, during the year 1928, 85% of the films shown were of national production. Only 31 out of the entire number of cinemas screened exclusively foreign films, 159 gave both foreign and national, and all the others showed only films that had been produced in Japan.

The development and technical improvement of the cinema have had the inevitable consequence of increasing attendance at the shows and of facilitating also the exportation of home films. As we have already stated, the weekly number of spectators in the cinemas of the United States is 120 millions, against 50 millions in 1925. (Film Daily, New York - D. 19/393).

Attendance at the French cinema has, on the contrary, decreased by 30% during the past year (Daily Film Renter, London - D. 19/401), in consequence of the poor quality of the films shown in the provinces. Generally speaking, there is an idea that any sort of film is good enough for outlying districts. But the public at Nimes, Aix or Toulouse has a much finer taste in matters of the cinema than is generally supposed, and refuses to attend second class shows. The purely economic principle that quality alone is of value in commerce should be especially remembered by producers and managers in the cinematograph industry.

That this is the case is once more demonstrated by the American cinema. The capital invested in this industry recently reached a total of more than two thousand million and a half dollars. While the total exportation during the first six months of 1929 (Times, London - D. 19/386) was increased by twelve and a half million metres against the corresponding period of 1928, even to countries where there is competition with other English-speaking producers, as in Australia, 80.21% of whose imported films were of American origin (Daily Film Renter London - D. 19/396), the victory of the sound film was confirmed. C. J. North, Chief of the Cinematograph Division of the Department of Commerce of Washington, asserts, in fact, that the advent of the sound film has so largely contributed to increase the exportation of films that, out of the eighty million dollars received for the sale of American films throughout the world, England alone paid nearly half (Exhibitors Herald World, Chicago - D. 19/394).

The percentages of the revenue from American films abroad are given in the Película of Buenos Ayres (D. 19-391):

<table>
<thead>
<tr>
<th>In English-speaking-countries</th>
<th>50%</th>
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<tr>
<td>» Spanish</td>
<td>15%</td>
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<tr>
<td>» German</td>
<td>9%</td>
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<td>» Portuguese</td>
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<td>» Dutch</td>
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This revenue from abroad necessarily has an enormous influence on the home production. It seems that for the work of 1929-1930 alone, American film producers (Película, Buenos Ayres - D. 19/390) intend

(1) Fascist Boy Scouts.
(2) Advanced Boy Scouts.
to spend 68 million dollars. This figure is divided among the larger firms as follows: Warner Bros., 12 millions; Metro Goldwyn Mayer, 10 1/2 millions; Radio Keith Orpheum, 10 million; Paramount, 8 millions; Fox, 9 millions; Columbia, 4 millions, and so on. According to Le Courier Cinématographique of November 17, there are more than 350,000 person taking part in the work of the screen industry, which is almost entirely concentrated at Hollywood (about 90%); of these 350,000, 75,000 are concerned with film production. The cost of some of the films reaches a spectacular figure at times. To make a single comparison: while Obel Gance's "Napoleon" cost 18 million French francs and Marc de Gastune's "The Marvellous Life of Joan of Arc" 12 million French francs, the cost of "Ben Hur" in French francs was 150 millions. It is not to be wondered at, therefore, that the American Government is seriously thinking of creating a Film Department.

This flourishing condition of the screen industry on the other side of the ocean enables producers to withstand the convulsions of Wall Street with ease. According to the Daily Film Renter of London, (D 20/322) William Fox lost £20,000,000 in bonds that he had used for speculating, that is, something like 100,000,000 dollars. A committee of administrators was immediately formed (J. Ottersen of the Western Electric, H. Stuart, banker, and William Fox himself) to manage the affairs of the Fox Film for the next five years. It is considered that in this way the firm will not feel the shock, since there have been enormous profits during 1929. Nor will there be any change in the management of the various companies, for William Fox still remains President.

Russian production, on a much smaller scale, is also increasing rapidly. Ninety-five per cent of the production programme of the Sowkino Co. was realised during the commercial year 1928-29 (Kino, Leningrad - F. 17/70).

In spite of this, however, the management does not consider that sufficient work is turned out in Leningrad, and there is a project for transforming the plant. In the meanwhile, arrangements have been made to produce fifty-three films during the current commercial year, for which 950,000 metres of film will be necessary.

That there is a world-wide necessity to battle for the cinema is obvious when it is remembered that, according to Walter F. Eberhardt, of the Electrical Research Products Co., more than a hundred million dollars are spent annually throughout the world for film posters alone, and that 55% of this sum is paid by America. (To-Day's Cinema, London - D. 34/421).

The German industry is taking measures to rectify this state of things, and some of the sounder companies are being reorganized in order to keep up the competition, which is the keener since it coincides with or is aroused by the invasion of the sound film. The Filmbund, an organization of artistic and technical collaborators in cinematograph production in Austria, has decided to form a Committee whose task it will be to provide for the creation of a propaganda fund for the National industry. (Film Journal, Berlin - F. 16/55).

At the same time, according to The Cinema of London (F. 16/56, 57 and 58), three organizations have been constituted in England, the Star Theatre, the Shurlyoung Production and the Coventry Cinemas, with the aim of safeguarding respectively, the hirers and producers of films and the proprietors of the Coventry Theatre, in the interests of the British industry. An Association has been organized in Paris, composed of seventeen producers of European films, Italian, French, German and English, under the name of Union des Producteurs, its aim being to protect and promote the sale of the films produced by the associates of the organization (Daily Film Renter, London - D. 16/60); while arrangements have been made at Budapest for the reorganization of the Hungarian fund for the cinematograph (Licht-Bild-Bühne, Berlin).

While all this shows clearly the struggle the cinema industry is sustaining all over the world, it is far from demonstrating that the industry is passing through a crisis. At the most, there is only a kind of settling down crisis caused by the advent of the sound film. And this settling down will necessitate revising contracts for the protection of those masses of collaborators in the screen who are
threatened with the loss of their job. While, as a matter of fact, the Hays organization has brought about a reduction of 1,300,000 dollars (L'Ecran, Paris - F. 16/53) by revising 3,800 hire contracts, the Australian Minister of Labour, Mr. Scullin, proposes to impose a special tax on all theatres making use of mechanical music and synchronized films, the proceeds to be used for the benefit of the orchestras of the Commonwealth (The Yorkshire Post, Leeds - D. 24/132).

The profits of the larger cinematograph firms are calculated in millions. We give a few of them:

- United Artists Theater Circuit, 1928, dollars 516,019; 1929, dollars 1,113,732.
- United Amusement Corp. of Montreal, 1928, dollars 485,766; 1929 dollars, 43,126.
- Famous Player Canadian Corp., 1928, dollars 1,507,068; 1929, 3,376,845 (increase of 124%).
- Claude Neon Electrical Products of Delaware, 1929, dollars 600,050 (increase of 270 % on figures for 1928).
- Paramount, 1928, dollars 15 millions.
- Loew's, 1929, dollars 12 millions.
- Warner Bros, dollars 16 millions.
- Fox Film Corp, dollars 15 million.

In England, the Ludwig Blattner Picture Corp. has succeeded in realising £2,422 net profit, and the Piccadilly Picture House £24,335, in spite of the heavy cost of the transformation of the plants into sound plants.

The cinema industry, however, cannot be developed to its utmost, especially in countries where production is not so efficient, unless there is a change in the methods of taxation, enabling it to be established on a working basis.

Instead of seeing any signs of such a beneficial change, we have the French Customs, which are threatening to classify sound plant as objects of luxury and to impose a heavy tax on those imported (F. 24/123); while the (Board of Trade Journal, London F., 24/135) announces the following increases in the Customs' duty for England:

from 25 to 45% ad valorem, preferential tariff, from 40 to 60% ad valorem normal tariff, on the basis of 320 b of the tariff.

Blank films, which up to the present have been exempt from taxation, will remain so under the preferential tariff, but will be taxed threepence per linear foot under the normal tariff.

A logical attitude has been taken by French film producers (Bulletin de la Chambre Syndicale Francaise, Paris - F. 24/123) in connection with this new taxation, which is of a strictly protectionist nature. At a meeting held in the Chambre Syndicale in Paris, on November 29, 1929, the question of taxation was again discussed, especially in relation to the heavy expense to be incurred by the cinematograph in France in transforming the cinemas for the sound film. It was stated that the average value of a film is about a million French francs; and it was then asked that the tax should be imposed on the actual ad valorem basis and in the proportion of 100 francs per metre for the mute film and 150 for the sound film, without prejudice to the five years exemption from taxation for newly opened cinemas.

Side by side with this fiscal agitation is the campaign that is being vigorously waged in nearly all European countries for the reduction or suppression of the entertainment tax.

In Germany, the newspaper Germania proposes the total suppression of the entertainment tax and the levying, in its place, of a direct State tax of 10% on the takings. The proceeds from this tax should be used to create a fund for prizes for the best German films, and also for the organization of a State School of the Film and some Film Archives and a fund for encouraging the production of educational and documentary films.

The Committee of the Abolition League in England has sent an open letter to Mr. Snowden, Chancellor of the Exchequer, asking for the complete abolition of the entertainment tax (The Cinematograph Times, London, F. 24/128); and at the same time the Provincial Entertainments Proprietors and Managers Ass. has asked for the suppression of the tax on all theatre tickets costing less than a shilling (Daily Film Reuter, London - F. 23/126).

In Italy, the (Corriere dello Spettacolo, of Rome - F. 24/127) demands a reduction of the State tax on the cinema, in order to facilitate the economic improvement of the national
cinematograph industry, and exhorts the Ministry of Finance to consider the question not only from the purely fiscal point of view, but also from the wider standpoint of the general economy of the country.

With regard to Belgium, a deputation of deputies and representatives of the Liberal, Catholic and Socialist groups interviewed the Minister of Finance for the purpose of convincing him that the promised decrease of the tax on shows should be greater than that proposed by the Government, although perhaps not to the extent of the 40% reduction asked for by the interested parties, the Government proposal involving a reduction of only 15 millions on a taxation return of 180 millions. (Comedia, Paris - F. 24/130)

In Switzerland (Hebdo, Paris - F. 24/121) and in Ireland (To Day's Cinema, London - D. 24/133) there is also a demand for a more or less important reduction on the tax on entertainments; and in France, in spite of ministerial promises, the Government Commission (F. 23/122), after trying every method of reducing this "tax on the poor" by at least 10%, has decided to leave it unchanged, since it proved impossible to make good from any other source the funds that would thus be lacking.

But, until Governments realize that the only way of rendering the battle of the film victorious, in the national interest, is by giving every possible facility of a fiscal nature, the screen industry will never be able to fulfil its mission of propagating knowledge and civilization.
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The President of the International Agricultural Institute.
The Director of the International Labour Office.
The Director of the International Institute of Intellectual Cooperation are present at the meetings in an advisory capacity.

OPRESCU Prof. Giorgio, Secretary.
de FEO Doctor Luciano, Director.
INTERNATIONAL REVIEW
OF
EDUCATIONAL CINEMATOGRAPHY

SOCIAL ASPECTS OF THE CINEMA

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— LEAGUE OF NATIONS —
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I write these pages in response once again to the request of the Director of the International Educational Cinematographic Institute.

The wealth of diverse information with which the authorities on cinema questions the world over supply us through the pages of the Review has inspired Dr. de Feo with the ambition to fill in the scientific gaps that are apt to occur in all documentary material gathered together by the efforts of private and scattered initiative.

For this reason he has asked me to compile a questionnaire the terms of reference of which should aim at elucidating and formulating the educational tactics to be pursued in the domain of cinematographic education.

We must steer clear of two dangers in compiling a document of this kind.

Firstly there is the risk of going too far, and secondly the risk of not going far enough. I have preferred to risk being taxed with incompleteness, and have contented myself with tackling the main aspects of the problem: pre-natal influences; influences on the living child and man; man’s bodily constitution, his psychic constitution (mental constitution and individual characters), vocational orientation and training, and social propaganda.

* * *

I have chosen to lay before the readers of the Review an incomplete questionnaire, rather than burden them with the study of a multitude of queries, the formulation of which would reduce the range of the enquiry.

The value of such an extended questionnaire would consist solely in its appeal to specialists and experts; now all men such as these have already on their own initiative scheduled the problem in its several aspects in a manner which any scheme, however comprehensive, worked out ex tempore, could hardly equal. I feel, moreover, that the questionnaire here required must be regarded as a project or draft. It should be submitted to all those who in their work and studies have grappled at close quarters with the problem of the educational cinema; it ought, in fact, to be completed in accordance with their suggestions before being definitely circulated. To this end, therefore, I appeal to doctors, psychologists, psychiatrists, teachers, sociologists men of letters, men versed in law and equity, film makers and film traders — each of whom will discover in the definitive scheme of an international enquiry the points which have most interested and puzzled him and those coming within his own particular sphere of competence.

Each of these will no doubt assist us to complete the scheme drafted hereunder. This will offer to each a chance of ascertaining the views of his collaborators in all countries on such and such an aspect of the cinema problem heretofore unknown to him, and of putting his own views before them.
The task of codifying answers referring to past studies and enquiries and those suggesting studies and enquiries which it would be useful to institute in the future will be the first task to be tackled. This will facilitate later on the organization of joint efforts in accordance with a comprehensive policy that will not suffer any forces to be dissipated and will not overlook any aspect of the complex question of education by means of cinematographic intuition and suggestion.

Here, then, are the questions which I suggest — not by way of limitation, but by way of example — should be put to those who, all the world over, have realized the formidable power that the moving picture can wield in education.

First of all, I ask them to add any questions which they themselves would like to ask and which they deem it would be useful to discuss. I beg them not to hesitate to emend those drafted here. Educational and social interests are above personalities. I shall be grateful to all those willing in this way, to assist me to get myself a better grasp of the question of the cinema as an instrument of education and teaching.

**Draft questionnaire respecting the educational cinema**

**Pre-natal influences**

Do you know of any instances in which pregnant women have been seized in the cinema by fright, by any kind of crisis, or by morbid hilarity — and whether such incidents have occurred in the case of women whose children have afterwards been marked by bodily or psychic defects? — or do you know of instances in which women in this condition have been affected by crises provoked by the cinema immediately after attending a show? — or of any cases of delirium directly caused by scenes watched at the cinema?

**Influences on children**

At what age do you consider that children are capable of distinctly recognizing moving pictures? What degree of precedence would you attribute to the moving image over stationary images in making an impression on the child’s consciousness?

What, in your opinion, is the earliest understanding that quite young children have of the moving picture? Can you cite any instances of experiment or observation?

At what age approximately do you consider that children are first capable of grasping a scene *as a whole* (instances of experiment or observation)? (I have in mind here a whole series of actions with a synthetic purpose and not a complete cinematographic plot).

**Bodily constitution**

Have you had any experimental or casual experience of the *neuro-muscular tonicity* of children, adolescents, backward or abnormal children, or adults of inferior mental development, following on the watching of scholastic films, or films of a sensational kind (violent action)? What did you note?
Please answer the same question with respect to *dynamometric force*, especially in the case of hyper- tonic cases and nervous cases?

With respect to sick children or adults?

With respect to persons of over excitable temperament and those suffering from vaso-motor troubles: state whether in connection with scholastic, sensational, mystery, or passion films?

Have you, in the course of these experiments, noted any disturbances of respiration, or any differences in systematic spirometrical measurements?

What arithmetical system do you follow in fixing the *vital quotient*? What variations in the vital quotient do you note in the calculations made after the dynamometric or spirometrical experiments following on scholastic film shows, and more especially following on shows exhibiting scenes of violence or of passion?

Have you noted any general *sensorial* decline? any visual decline? after no matter what form of cinema show?

How long do you estimate the period of visual *resistance* (the threshold of specific nervous fatigue) of a child or youth, aged 6 years, 9 years, 12, 15, or 16 years — or of sickly or nervously affected youths or adults? Have you made any differentiation of sex and any comparative observations?

Have you compared *nervous reflexiveness* after a cinema show (especially those screening films of violent motion) with the reflexiveness previous to watching the show? What observations have you made on general reflexiveness — on specific reflexes (cutaneous, mucous, tendonous, ocular)?

Have you noted the nervous condition of hyper-tonic subjects, over-excitables or weakminded persons, epileptics, persons affected with chorea, palsied, neurotic, impulsive, infected, intoxicated, auto-intoxicated subjects, persons suffering from disturbances of nutrition? — of normal children and young persons of various ages? What observations and comments have you to make?

Have you noted in the cinema any cases of nervous crisis of any kind? After the cinema? (what kind of cinema?)

What trials have been made to your knowledge with the cinema in hospitals or cliniques? What good or bad results did they give? What particular cases gave rise to objections after the experiment?

---

**Psychological constitution**

**I. Mental**

How long do you estimate that the *distinct consciousness* of and *effective attention* to the stimulation of the cinematographic image lasts uninterruptedly in persons of weak or backward intelligence? In children? in weak-minded persons? In adolescents? (Recreational shows — systematic lessons).

Have you made any experiments or observations on the gradual decline of *consciousness* and *attention* of the same types of persons watching a cinematographic show or lesson?
What, in a general way, are the cinematographic memories that take hold and endure the longest — (nuances of gesture, sentimental nuances)? Will you indicate these in order of frequency?

In what way do cinematographic memories associate themselves and classify themselves in the minds of children, adolescents, mental invalides, backward adults, psychotics of all kinds — of adults of all ages? In what way are they associated in these persons' minds with their actual experience of life — family life, school, etc.? Will you mention some typical instances that might serve as a guide in the choice and composition of educational scenarios?

What imaginative conceptions have the persons you have observed picked up from the cinema and adopted into their usual or unusual behaviour?

What typical movements, more especially, have you noted in current practice (attitude, gesture, bearing, games, language, writing, etc) in daily life?

Have you got children or youths to re-act any cinema scenes? What typical points have you noted?

Have you got them to describe these scenes verbally, or in writing, by drawings, or words?

Have you noted any spontaneous criticisms made by your patients on the cinema in general, on some particular type of scene, plot, actor or star, gesture, attitude? What were they?

Have you put any questions regarding the cinema, its typical scenes, plots, typical attitudes, etc.? What answers did you obtain?

Have you suggested any themes for compositions derived from films? What?

What typical points have you noted? (in respect of children, adolescents, youths, adults, mentally afflicted...)?

What standardized cinema gestures are most typical to children, adolescents, backward persons, etc.? Have you got them to imitate these, to describe them verbally, or in writing or drawing? What typical points have you noted?

What is your opinion — consequent upon your practical observation of children, adolescents, and young people of both sexes — of the cinema in cultivating attention, memory, imagination? Will you point out its advantages, but also its dangers?

What is your view of the advantages and dangers that the cinema offers for the cultivation of judgment, reasoning, and general intelligence in children, adolescents, and young persons of both sexes? in backward persons?

** * * *

What ideas do you teach by the cinema? What methods do you adopt? (material equipment, part played by the teacher, etc.).

To what kinds of science or ideas do you consider that cinematographic methods of teaching can be applied?

What are your plans or your views with respect to the institution of scholastic film collections? For popular schools, secondary, and higher schools?
II. Characterology

What are the affectivities or basic human tendencies (independent of emotive movement) to which the popular cinema mainly appeals? (inferior appetitivities, elementary affectivities, higher affectivities?) To what order of affectivity would you wish it to appeal?

Have you interviewed any cinema actors? What affectivities are they aware of in playing their parts?

Have you interviewed any scene directors? Have they revealed their affectivities to you? What do they think of the question?

What are the affective demonstrations of the cinema that most appeal to children of 7, 9 and 12 years of age?... to adolescents?... to the young of both sexes?

***

According to your observations and experience, of what nature is the emotive reaction of children, adolescents, and the young generally to the cinema: to its scenes of violence, fantastic scenes, sexual scenes, its suggestions of fear and terror, scenes of boisterous fun, etc.? Will you please differentiate as between external emotive reaction (attitudes, gestures, and words) and the intimate sub-emotive (bio-psychological) process.

Have you yourself experimented or watched any experiments in the use of the cinema in children’s institutes or asylums for abnormal, weak-minded, semi-demented, demented or raving persons of either sex? What immediate reactions did you note? What subsequent reactions? What appreciations were expressed by the inmates?

Have you observed deaf persons at the cinema (deaf mute asylums)? What typical points did you note? What are the results of your subsequent observation of these patients; their remarks on and interpretation of the scenes they had watched, etc.?

Have you any special remarks to make on feminine emotivity at the cinema?

What observations have you made with respect to the regular frequenters of certain cinemas?

Have you met with cases of cinema neurosis or of mania for tragedy and terror? Have you observed any cases of emotive crisis at moving picture shows?

Have you noted among children, adolescents, or young people or adults, any instances of cinema suggestion (general bearing, extraordinary acts, offences, or crimes?

What gestures of the popular cinema, what scenes have such persons most frequently re-acted in their every-day life?

What do you think in this regard of the preliminary censorship of films, of methods of censorship, of films that have been cut to satisfy the censorship and passed at a second screening?

What legal measures do you favour? age limitation for attendance at public cinemas or at certificated film shows?
What rôle do you assign to the cinema in the training of the energies (physical culture, moral culture?) Have you made any tests? If not, what tests would you be inclined to make?
  Ditto with regard to moral teaching?
  Ditto with regard to aesthetic education?

Vocational Orientation and Education

What use do you make of the cinema in this domain? Please describe your methods in detail.

What form of film collection would you suggest as an accessory to an institute of vocational orientation? Do you know of any films answering to the requirements of sound vocational training? to the requirements of sound apprenticeship? to the requirements of vocational improvement of workers? (please specify the technical methods used: accelerated or slow motion pictures, gradual pictures, etc.).

Ditto with respect to vocational hygiene.

Social Propaganda

What is your opinion of existing films bearing on anti-drink propaganda, anti-prug propaganda, anti-venereal disease propaganda, etc.? — Their advantages and disadvantages? To what conditions would you subject their showing?

What films would you suggest for positive social propaganda?

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What are your views on the International Educational Cinema Institute?

In the light of your experience and practice, what rôle would you wish to see this Institute play?

What immediate services might it render to your country or your particular branch of study?

What do you propose to do in its regard, for its propaganda, for the completion of its documentation?

Maurice Rouvroy.
AN ANSWER TO MAURICE ROUVROY'S QUESTIONNAIRE.

(From the Italian).

Although Dr. Rouvroy declares his Questionnaire to be incomplete, it is none the less of an extremely exacting kind and one that students will have great difficulty in answering. It offers, however, valuable guidance for the collection of data.

In my answer I will follow the order set forth in Rouvroy’s questionnaire, an order derived from applied biological sciences. I need hardly say that I shall refrain from answering several of the questions, as my own knowledge and experience of the relations between educational problems and the cinematograph are limited.

1. Neither I nor my entourage have any personal experience of pregnant women present at cinematographic shows being seized with neuropathic crises, nor am I aware of any relation between bodily or psychic defects in infants or children and the emotions experienced by their respective mothers at the cinema. On the other hand, it is not unusual for deranged persons to repeat in their raving scenes they have witnessed at the cinema and to adapt them more or less cleverly to the peculiarities of their fancies and abnormal affectivities.

Let me hasten to state, however, that there is no specific peculiarity about this. Neuropathic subjects and lunatics embroider much oftener on the substance of their own dreams — at least in my experience — than on anything they have picked up from films.

2. I cannot say for certain at what age children distinctly recognize moving

(Ed. Note). The Rome Institute, in the pursuit of its task of enquiry and documentary illustration of the social problems of the cinema, invited Prof. Maurice Rouvroy, of the Moll Institute and Brussels University, to lay down the lines of an enquiry addressed to students and enquirers all over the world and aiming at ascertaining in a scientific manner the benefit or harm that the film may do, directly or indirectly, to the minds and lives of children.

Prof. Rouvroy’s Questionnaire no doubt bears the impress of its rigorously scientific origin and the questions asked in it are of a strictly technical kind. It should perhaps be completed by other forms, setting forth the sociological and educational aspects of the enquiry, so as to render this more complete and free from that unilateral tendency that so often characterises the examination of the problems of the cinema at the present time.

In any case its value as a document and the basis of research in scientific spheres is beyond question, and for this reason the Institute has seen fit to circulate it and publish it in the International Review, in order that students of all kinds may be made acquainted with its terms and be able to inform us of the results of their critical observations and their scientific or practical enquiries.

Meanwhile answers are beginning to reach us and are being sorted and collated to be ready for publication as soon as possible, thus enabling us to indicate the views
images; but it seems reasonable to assume that they appreciate the cinematographic phenomenon as something real and outside themselves (but not as the representation of fictitious or historical persons and happenings) at the same time that they begin to distinguish their own persons from the outside world, which certainly occurs in early infancy. Only later on — a good deal later — does the child recognize the cinematographic spectacle as being a story: this probably takes place after he has begun to realize the fact that his dreams are the product of his own fancy, a realization that comes, in my experience, between the age of two and three to intelligent children. I am of the opinion that the repeated vision of cinematographic representations must facilitate understanding of this sort, and help the child to realize himself as the motor of objects, as apart from other forces operating outside himself. This in itself is highly educative.

From my own observations I should say that children of average intellectual powers at the age of two are capable of realizing the summary meaning of the scenes, that is to say the connection between the preceding scenes of a consecutive film and those that follow.

I have no experience of the state of neuromuscular tonus, the dynamometry of respiration, of spirometry, etc., in the spectators of a scholastic or ordinary film show. In my psychological laboratory I have never made any experiments of this kind, nor regarding the visual resistance of sick persons. I will here repeat a commonplace, namely that the cinema is of the greatest value in supplementing our knowledge of neuropathic symptomology; and if the film is well chosen, it is a first class dynamogenetic means for children and adults, whether sick or healthy. This depends on the interest aroused in the spectator. It is well known how the pleasure deriving therefrom promotes the vital functions.

expressed by scientists on the various problems raised by Rouvroy and on such others as may emerge in the course of discussion.

No conclusions can be drawn at the present stage of the enquiry. All problems must be set forth and dealt with fully before it is possible to pronounce on them. So far this is not the case here, but we hope it may be so soon. Meanwhile the Institute must be satisfied to set forth as far as possible all the manifold aspects of the social problem with which it is concerned in this special March number that is devoted to them.

We have, however, owing to its special character, selected for publication in this same number one out of the many answers that have reached us. This expresses the views of Dr. Sante de Sanctis, the eminent psychiatrist and Director of the Institute of Experimental Psychology of the Rome University.

This answer supplements Prof. Rouvroy’s questionnaire by further questions of scientific value, and may be said to complete it in certain essential parts in such a manner as to be inseparable from the original questionnaire.

It is up to students — both theoretic and practical — of these questions to answer it with absolute freedom and independence of views. The Review is, as ever, an open tribune for debate.
In my laboratory I have started experiments on the psychological influence of cinema shows on the weak-minded, and more especially on « unbalanced » persons and those of violent temperament.

5. I have made some accurate observations on the importance of «motor suggestibility» produced by cinematographic scenes, in which the spectator watches forced or prolonged movements or movements that are in any way tiring or painful. In many instances I have noted that the sight of certain cinematographic scenes tires the muscles of certain spectators.

6. I consider cinematographic representation an excellent means of arresting the attention of inattentive, flighty, and weak-minded children (children on the borderland of mental insufficiency and children of undeveloped character). The cinema is a very valuable factor in developing the imagination; but I do not think it can benefit, or make an artist of a child who has not really got it in him.

«General intelligence» is certainly not decisively developed by the cinema. The cinema does, however, assist in the intensive culture of such general mental capacity as the subject already possesses.

7. The cinematographic method undoubtedly lends itself to teaching, to the correction of characters and the formation of habits. But all this requires systematizing and co-ordinating.

8. The popular cinema may develop and strengthen a number of feelings and habits of an affective type, such as courage, the warlike spirit and the spirit of adventure; it is, moreover, certainly apt to promote criminal propensities, which are so liable to graft themselves on the instinctive sentiments of self-defence, aggressiveness, predatory inclination and sexual appetite, especially in persons of inferior character.

Boys in the pre-puberty period (7 to 9 years) prefer films of adventure, sports, travel, natural history, and primitive life, etc., while boys over 10 enjoy best films with a plot that they can follow; this denotes a purely imaginative or intellectual quality. Girls of the same age, i.e., over ten, also prefer films with a plot to them, but with plots of a more pronouncedly romantic tenour.

9. I am convinced that the most impressive cinematograph scenes have a very great influence on the behaviour of children at home and at school. The salient tendencies of film scenes are evident in children’s games. As regards love, the cinema encourages the young to demand more of life; which does not, by any means, necessarily imply that it refines their aesthetic sentiments! I believe that the frequency of marriage among young men is inversely related to their enthusiasm for the film, of more or less American type; even when the plots are entirely moral in their aims and purposes.

10. There is no doubt that the cinema is a fine school of criminal technique, a fact that is not counterbalanced by the moral lessons inculcated by certain films of religious tendencies. The censorship cannot prevent young people learning at the cinema the tricks and the leger-de-main of theft and robbery and the ways of the bully and the ruffian in getting the better of their fellows.

However much the cinema may teach indifference to life and self-sacrifice
for noble ideals (and I consider that the real moral success of the cinema consists in this), there is no doubt that it is important to instil into the young those milder virtues that promote kindness and unselfishness.

11. It is very difficult for obvious reasons to trace a programme of cinematographic education that could serve as a model and a lesson of equal efficacy in these three regards — all of which are of capital importance for humane and national education: — aesthetics, morals, and physical energy.

The following means suggest themselves:

a) Public cinemas might be allowed a considerable measure of freedom so long as the attendance of children be restricted within certain age limits. Two different age-groups should be fixed: one from the earliest years up to twelve, and the other from twelve to sixteen.

b) Well selected film collections should be annexed to all educational institutes and public and private schools, as well as prisons, and established in country districts, under the supervision of the public authorities.

c) Special public cinematographs should be established for the young.

I consider it most important that vocational orientation institutes, and also certain classes of public schools — especially classes for vocational guidance and schools of arts and crafts — should own film collections to train and perfect learners in the various trades (demonstrating by slow motion films how certain movements and actions should be accomplished); to teach hygiene and the prevention of accidents, and impart moral education, thus inculcating *esprit de corps* and the need of harmony, not only between workers or students of a given category, but between the several categories, and indeed between all the different classes of producers (whether physical or intellectual workers), with the aim of promoting as far as possible a spirit of union and common understanding between manual workers and brain workers.

13. I consider the International Educational Cinematographic Institute as very useful and as having a great future ahead of it.

Sante de Sanctis.
SOME SUGGESTIONS

(From the French)

1. Being brought by my profession into daily contact with children of diverse social classes, I am in a better position than most people to appreciate the full value of the work and studies of the International Educational Cinematographic Institute, particularly in their bearing on the protection of children.

It seems clear that the first aim and purpose ought to be to eliminate as far as possible all the deleterious influences of the cinema:—

1° by prohibiting, for the present, access to cinema halls to:
   a) children under fifteen after 6 p.m.;
   b) young persons under sixteen or eighteen years of age when certain films are being shown;

2° by promoting:
   a) the establishment of special cinemas for children;
   b) the organization of special children’s shows;
   c) the development of scholastic and educational cinematography.

2. The speedier the action taken, the sooner shall we reach our goal. It will take a long time to complete the enquiries that the Institute now has in hand.

These can serve only to reveal the depth and extent of the evil, not its existence; for on this point opinion is unanimous.

Nevertheless the work undertaken is eminently useful, for it should furnish manifold and decisive arguments in support of the views expressed by those who

(Ed. Note) One of the comments called forth by the Rowvoy Questionnaire deserves special attention. In the following brief paper Mme Helène Burniaux, an Inspector of Elementary Education in Belgium and a member of the League of Nations Advisory Committee on Child Welfare expresses the view that this questionnaire can be answered only by a limited number of scientists and experts, whose practical experience may not be sufficient to enable them to deal with the question as a whole.

She also suggests that it might have been well to draw up not a single questionnaire, but several different ones addressed to persons of diverse and special experience.

The criticism and the suggestion are valuable. We have already referred to the need of completing the enquiry from the point of view of social education and perhaps also from that of criminology.

The Institute will provide for this. In any case we are expecting numerous answers to come in which should indicate the further questions necessary to make the enquiry as complete as possible. As soon as the opinions and suggestions from all quarters have been garnered it will be possible to complete our task.
are opposed to children being allowed to haunt the cinema under present conditions.

The draft questionnaire drawn up by Dr. Rouvroy extends the enquiry still further, since it takes pre-natal antecedents into consideration.

If I may be allowed to make a criticism, it is that I should have preferred a less medically scientific questionnaire, emphasizing rather the human and living aspect of the question.

I am afraid that Dr. Rouvroy's questionnaire can be answered by a small number only of persons of specialized scientific training, with little practical experience of child life. I should therefore wish to see the work completed and extended — as indeed Dr. Rouvroy himself suggests it should be — in a less purely theoretic direction.

Might it not perhaps be preferable to draw up two or three different questionnaires addressed to persons possessing diverse kinds of special knowledge and experience, rather than a single questionnaire?

It is in fact obvious that the sort of questionnaire that addresses itself specially to doctors must differ considerably from one addressed to students of social questions or school teachers.

I therefore consider it necessary to pursue this study, but always to bear in mind that both preciseness and simplicity are essential features of all questionnaires addressed to a number and diversity of persons.

Helène Burniaux.
THE CINEMATOGRAPH AND CRIME

(From the German).

The interest of criminologists in the cinema is due solely to the fear that has so often been expressed that films of a certain class are likely to act as an incitement to crime upon both children and adults.

The problem of the relations between crime, immorality and the cinema is one of the widest and the thorniest fields of social investigation.

On all hands it is being repeatedly and insistently asserted that the screen is a systematic school of immorality and that it serves no other purpose than that of corrupting the minds and souls of children and young people.

In another part of the Review we have set forth the views most recently expressed on this question, together with pertinent items of news culled from the Reviews and periodicals which the Institute studies day by day. The Institute has aimed throughout at observing the most complete impartiality, leaving it to those specially versed in such problems — to students of law, sociology and criminology — to thrash it out.

In the following article, from the pen of a recognized authority, Dr. Hellwig, Chief Justice of the Provincial Tribunal of Potsdam, the problem of criminality is dealt with in its relation to the cinema, as also the part that the cinema could play as an auxiliary to juridical practice.

These are two very different questions; but they are related together in a common aim — Justice.

In the first place we are called upon to consider whether and in what way the cinematograph may contribute to lead the young astray, into paths of immorality and crime; in the second to study to what extent the technical media of the cinematograph may be made subservient to one of the most vital social ends, namely the protection of the community against crime.

The first question is undoubtedly the more knotty one and must be approached with the utmost caution owing to the diversity of outlook and the clash of opinions that has long been in progress, which will continue until the findings of an exhaustive enquiry, well equipped with statistical evidence and based on its objective reality, enables us to decide pro or contra.

The second question is simpler. It reduces itself to this: whether legal procedure is bound to remain stationary for ever, or whether it should avail itself of technical advances and seek new and more efficacious means of attaining its ends; whether conservative and often obsolete ideas ought to be suffered for ever to impede more rapid and more sure procedure, that would make it possible to ascertain with the greatest accuracy, in the interests of society, the real responsibility of anti-social acts?

Dr. Hellwig states the question clearly in the light of his long judicial experience, and we herewith invite magistrates and lawyers, police officials and students to express their views on it, whether based on doctrine or experience.
I do not deprecate the importance of this psycho-criminological and socio-
criminological problem, because I have studied it during many years. My studies
have, however, convinced me that though there may be a certain connection between
criminal propensities and the film, especially as regards child crime, it is very dif-
cult to prove in particular instances the existence of any distinct relation of cause
and effect. I am also convinced that the influence of the film in this domain has
been greatly exaggerated.

All students and practitioners of penal law who have devoted themselves seriously
to investigating the causes of crime are aware of how difficult it is to arrive at
definite conclusions.

The one fact that immediately emerges in each case is simply the act committed
by a given individual, an act which, according to the principles of general law, or
the law of some particular state, deserves punishment, and, being contrary to the
fundamental rules of social life, presents the characteristics of a crime.

It may seem an easy matter to determine the motives and the remote causes
of a crime, but it is in fact extremely difficult, and any attempt to be over positive
on the point proves entirely hopeless. We are generally able to discern the
immediate causes — what we take to be the final impulse that urged the transgressor
to commit the crime — but we are very rarely in a position to discern the remoter
and deeper causes that provoked it. However strange this may appear to many, it
very often happens that the criminal himself is entirely ignorant of the essential mo-
tives that urged him to his act.

The motives which, at a later stage, he may confess to the judge or police authori-
ties as being those that induced him to commit the crime are very rarely the true
ones; he is indeed himself often unaware of the real motives, which are latent in
his consciousness.

Psycho-criminological research — which has its origin in the brilliant and va-
luable work of Lombroso (whatever its faults of detail may be) — has shown how
many and what formidable difficulties are in the way of any real and lucid
understanding of the generic causes of crime or of the merits of particular cases.

It is above all difficult to discern the motives that actuated the commission of
particular deeds and consequently to judge how we ought to deal with the guilty, so
as to keep them from further criminal activity in their own interest and that of so-
ciety; and yet this precisely is the task of the forensic profession.

Psycho-criminological research, which is engaging the attention of scientists
in all countries, is in its infancy, and there is great divergence of opinion as regards
both fundamental interpretation and details. Investigators are in any case agreed
that the natural disposition and the characters of criminals — partly congenital
and partly acquired in the vicissitudes of life — are of great, perhaps of decisive,
importance; but that at the same time environment may either incite to crime or
hinder all criminal activity. It is, moreover, never safe to assume that a crime has
been caused by a single one of these motives. We are almost invariably in the pre-

dence of an extremely complicated concatenation of different causes.
Scientific investigation is rendered still more arduous by the fact that the several contributory causes of a crime are obviously not all of equal importance and that it is very difficult to determine, for purposes of comparison, the importance of the several factors. This problem, which is so knotty for scientists, often appears quite simple to the man in the street. One cannot refrain from smiling when listening to the views expressed by the public on the causes of certain crimes or reading the no less superficial pronouncements of the press.

From my earliest years, and later on when I was appointed judge on a penal tribunal, this problem has engrossed me, and I remember clearly that in examining the motives of crimes, I constantly had to bear in mind certain currents originating in public opinion.

At the time that « penny-in-the-slot machines » came into vogue we were constantly being assured by the newspapers that these offered the greatest attraction and at the same time the greatest temptation to the young. The same kind of thing was said of bicycles — that they incited to theft; old books on the life of the Indians (which I too used to read in my youth with great delight and without any particular damage that I am aware of) were denounced at one time; then sensational literature became the bugbear; later on the cinematograph and, at the present time, more especially the newspaper reports of crime. I do not mean to suggest that all these things are beneficial from the point of view of criminal psychology, or that they should be dismissed as unimportant; I merely wish to oppose the idea that some particular factor which — often for fortuitous reasons — has aroused great public interest, is to be regarded as the principal cause of crime, without careful examination and rigid criticism.

I have studied these questions during a great number of years and I am convinced that, in order to avoid falling into error, it is unsafe to attach undue importance to any single factor.

The information that I have gathered from magistrates, police officials, etc., and from societies for the protection of children have enabled me to gather a splendid mass of material to work on, much of which has been elaborated in scientific papers published in psychological and educational reviews. In my own publications «Harmful Films» (Halle, 1911) and «Children and the Cinematograph» (Langensalza, 1914) as also in the preface to my Commentary on the law on cinematography (Berlin, 1921) and the preface to my Commentary on the law on noxious literature (Berlin, 1927), I have set forth these problems at considerable length, and at the present time I am still busy with them in my study of the influence of newspaper reports on crime from the standpoint of criminal psychology.

To come immediately to the point, let me say that I have arrived at the conclusion that there is no doubt that the worst films, like bad literature and the chronicles of crime, may, in certain circumstances, incite to crime.

The influence of such incitement on readers or onlookers in particular instances depends not only on the manner of recording trials or the quality of the films, but more especially on the idiosyncrasies of the particular reader or onlooker and on the environment in which he lives.
Films may certainly exercise an influence on the criminal propensities of the young, but to maintain, as some enemies of the cinema are wont to do, that detective films and films dealing with crime are the essential causes of crimes, is a gross travesty of the truth.

All psychologists who have studied crime and who have devoted themselves to this particular problem are of the opinion that films contribute but a very small share—and that generally a purely auxiliary one—to crime. The hypothesis that a person of unblamable conduct, who would never in all likelihood have broken the law otherwise, can become a criminal solely as the result of watching a film dealing with crime has never, or practically never, been confirmed.

There may, however, be a connection of various kinds between films of this type and crime.

For instance it may happen that the cinema represents a crime, say a railway outrage or an act of arson, and that a psychopathic youth or adult—in all cases a person of inferior mentality and a socially dangerous character—be present, and that he may be excited by what he has witnessed to commit a crime of the same kind. When we reflect on the epidemic frequency, at certain moments, of crimes of a particular kind—arson or railway outrages for instance—occurring immediately after the papers have described some sensational incident of the kind, we are bound in fairness to admit that a cinema drama may act as an immediate incentive. In any case, I am of the opinion that instances of this kind are extremely rare; and, indeed, I know of only two or three that can be taken into serious consideration.

There is more danger attached to the exhibition of films that illustrate in detail the methods used in the commission of crime, or in concealing its traces, the ways and means of dodging the police, and the devices resorted to when on trial to evade the ends of justice.

When it is remembered that a large proportion of the public who are present at trials consists of criminals who are there to enrich their vocational experience; that instances have actually been proved in which criminals have derived their methods from the study of scientific works, and applied them to the commission of crime or the evasion of punishment, it is not reasonable to assume that films of a criminal interest do not contribute their share.

Cinema shows may incite to crime in a third, and yet more dangerous, way. I have in mind films that cannot perhaps be taxed with any particular tendency, but which, owing to the influence they may exercise on a great number of onlookers, may have the effect of encouraging to crime. There is a certain class of films in which a career of crime is presented in much the same light as any other profession—which is in fact the point of view of the criminal classes—films that depict the cleverness and daring of law-breakers, and set before the masses the apparently enviable life led in bars, saloons and similar places.

Even if virtue is made to triumph in the end, and the criminal, either as the result of the cleverness of the police or of some blunder on his own part, ends by being caught and punished, this fact alone does not diminish the bad influence of the film. Any one who presumes the contrary is unacquainted with the psychology of the masses.
Films of this kind are constantly exhibited, and when they are not counteracted by some other factor, such as good home influences and sound education, they certainly have a bad influence on the young and do not help to educate the people.

They contribute to the formation of a state of mind that is prepense to crime, and which, when a favourable opportunity arises, may actually lead to its commission. We are not here dealing with the imitation of a particular film shown in a cinema, but with the spontaneous and gradual blunting or wearing down of repressive instincts, which may lead to the commission of some crime, differing entirely perhaps from that which the criminal had witnessed on the screen.

It is well known that enquiry into the relations between the cinematograph and crime is one of the questions to which the League of Nations is devoting its attention. I have contributed my modest share to the documentation that it has been collecting for some years past. I do not know whether the enquiries of the League have yet been completed, but I feel pretty sure that, on essential points, their results cannot be very different from those that I have reached as the result of long experience and scientific study — results which, in any case, I regard as merely provisional in character.

I am convinced by my experience that the worst films are certainly apt to be conducive to crime, and that, even if they are not its principal cause, it is our duty to take measures against them in the interest of a rational preventive policy.

This view is all the more logical from the fact that it is, and always will be, practically impossible to foresee and counteract efficaciously the immediate incitaments to crime.

Considerations such as these have urged me to take up the cudgels against the worst kinds of film and to do what I could for the establishment of an adequate film censorship.

Enactments on the cinematograph have been in force since many years. The clauses of these laws provide the possibility of opposing with all due rigor the projection of undesirable films, and more especially those exhibiting criminal features.

To judge from the decisions of the examining boards, and from what I have read in cinema reviews, in the daily papers, and in the scientific press, one might assume that psychologists had no reasonable grounds for any objections to the films passed for exhibition by the censorship offices.

In any case it would be a gross exaggeration to regard as applicable to present conditions the pronouncement which Dr. Lange, former Professor at Tübingen, enunciated in his book «The Cinematograph of To-day and Tomorrow», to wit: «If the newspaper accounts of trials have been dubbed «Classes in Felony» surely the cinema ought to be defined as a «High School of Felony».

But I am far from asserting the cinema to be an Institute of Good Morals.

The researches conducted by Prof. Holmes in the United States and published in the «Journal of the American Institute of Criminal Law and Criminology» (1929, page 266) have led to the same conclusions.
If, on the one hand, it has been necessary to study the dangerous influences that the cinematograph might exercise, on the other hand, it is much to be deplored that like attention has not been devoted to studying the uses to which the film might be put as a technico-criminological and psycho-forensic instrument of justice. As long as twenty years ago certain film periodicals called attention to these possibilities and literature dealing with crime has in some instances taken the initiative of advocating the use of the cinematograph for such purposes.

To the best of my knowledge and belief, however, neither German nor foreign literature has dealt comprehensively with this question, and any systematic practical application of the idea is so far lacking. Twenty years ago I took up the matter and published several papers on it; but a complete treatise on the subject, such as I then had in mind, has not yet been seen the light.

I cannot, of course, in this brief study make use of the whole of the material already existing on the subject, so as to make a complete and definitive survey from all the different points of view; I merely propose to draw attention to the various ways in which the cinema might be used as an auxiliary in penal practice. I must for this purpose refer to the few publications that exist on the question, so far as they are known to me, and more especially to such examples as may be culled from the actual experience of police courts and courts of penal law.

When we reflect on the immense importance of photography in the preliminary investigation of crime, it follows logically that the cinema might be used for similar purposes.

Just as photography enables us to record circumstances that could not be registered with a like precision by oral evidence, so the cinema might, in the future, help to record dynamic circumstances of capital importance for the ends of justice.

The essential difficulty with which we are faced is this: that the fact that interests the criminologist already belongs to the past at the time of the commission of the crime, and that it can never be reproduced in its original form.

The periodical press, and even some scientific works, have occasionally recorded instances in which the circumstances of a crime have — by pure coincidence — been recorded on a film. Such incidents have occurred in the case of strikes that have led to violence, demonstrations that have provoked crimes, and other public events, such as the arrival of personalities on whose lives attempts have been made.

In instances such as these the cameraman has photographed the scene without even being aware of its occurrence, and thus fixed responsibilities and contributed to the ends of justice.

I remember, for instance, that some years before the war, the papers stated that a film which had shot the scenes of a strike for a cinema weekly played a striking part in a trial that took place in the Criminal Court of the Berlin-Moabit Provincial Tribunal. It was asserted that by these means the responsibility of a number of accused persons who denied all participation in the events was proved. Alfredo Nice-
foro gives an account of a similar instance in his treatise «The Police and Scientific Aids»; he states that the cinematographic record of President Mackinley’s visit to the Buffalo Exhibition gave a clear view of the assassin who took his life at the very moment that he approached him. The cinematographic reviews also tell us that the savage acts of the Ay (Marne) vineworkers, following on the peasant risings in Champagne in 1910, were clearly recorded on the film in a manner that revealed the actual methods of pillage. On the basis of these statements Dr. Schneickert records in the «Archives of Criminal Anthropology and Criminology» (Vol. 41 page 354) that the Rheims Tribunal had these films screened, so as to obtain accurate evidence of the events that had taken place, and that in this manner it had been possible to identify the pillagers and their ringleaders.

Schneickert adds that in all cases in which it is reasonable to anticipate trouble, as for instance during strikes and public demonstrations and disturbers, the cinema ought to be called into action as a valuable witness.

From a note published in the Licht-Bild-Bühne (No. 119, 1910) it appears that, on the occasion of a general strike in Sweden, a Stockholm newspaper had the idea of taking film records of the conflicts between strikers and police.

The great difficulty with which judges are faced in ascertaining the truth, especially where the reconstruction of scenes in motion — riots, street accidents, etc. — is concerned, makes one hanker after the aid of the film. There is no doubt that it is more especially on occasions such as these that we judges are liable to err, owing to the reliance we have to place on the direct evidence of witnesses who are often untrustworthy. It is unfortunately obvious, however, that even in the future we cannot look to any systematic help from the cinema, because it is only in rare instances that it happens to be there to hand.

But this does not do away with the desirability of registering by the film, whenever possible, the circumstances of a crime — even though we may be compelled to limit ourselves to those occasions when the likelihood of law-breaking may be anticipated.

Although in ordinary cases of crime it may not be possible actually to film its commission, the record of the scene by the cinematograph is always of assistance, it being possible, with the aid of witnesses and experts and the cinematographic record of the surroundings, to reconstruct the action which the objective was not there to register.

We judges know from experience how difficult it is for witnesses of motor accidents to repeat their impressions and to explain what occurred to the judges who were not present at the accident. One is always apprehensive of not having properly understood the witness’s meaning, however painstaking his account may have been. For this reason we have been wont to reconstruct the scene in court by the aid of little toy models of motor cars and bicycles.

Experience proves that with the aid of such means witnesses are able to explain themselves much better and are often obliged to modify their evidence.

But such devices as these are far from perfect. It often happens that situations that were incomprehensible, in essential respects, at the hearing of the oral evidence
become quite clear and comprehensible as soon as the Judge, witnesses, and experts repair to the spot where the event took place and endeavour to reconstruct the circumstances in which it was alleged to have occurred. The judge does not himself repair to the spot in all cases of motor accidents, owing to press of work and lack of time. As, however, in such cases the circumstances of the accident are ascertained during the preliminary enquiries always in the presence of witnesses and experts, the scene and circumstances of the disaster might well be filmed and later on screened in the presence of those who have to adjudicate it.

I consider it most expedient that the fullest use should be made of the film for the purposes of technico-criminal investigation. There can be no question that such projections are legally admissible according to German law. Although, so far as I am aware, the Tribunals of the Reich have not so far given their attention to this problem, the principle of the admission of photographic evidence at trials is indirectly applicable to the cinematograph.

It is sometimes objected that this would tend to increase the sensational aspect of trials; but even if a part of the public would in fact find such an attraction in the projection of films in court, this fact does not deter me from insisting on the evidential value of the method. It is sufficient to reflect that such a reconstruction of the incident may save the judge from incurring the risk of committing an error of judgment, in favour of or against the accused; nor should we ever overlook the fact that the one essential thing about the whole problem of crime is to succeed in ascertaining the truth.

I fully realize, of course, that both police court and criminal court authorities may have difficulty in carrying out this desideratum; but these difficulties are of a purely technical and financial kind and we cannot allow them to be of decisive importance in penal procedure.

I must, however, call attention to a difficulty of a technical order that has been adduced against the possibility of taking film records as evidence of crimes.

It is said that photographic and cinematographic records of facts are not always truthful, but often afford a misleading view, more apt to complicate than to elucidate the facts.

Prof. Bierling in his work on the « Science of Juridical Principles » (Tübingen, 1911, page 98) refers to this problem. In speaking of the written and photographic registration of the facts attested to in evidence, he distinguishes between two main forms of record: one registered by mechanical and the other by intellectual means. He points out that each of these forms has its own advantages and defects. The advantage of mechanical registration, whether by photograph or cinematograph, consists in the fact that the subjectivity of the observor is almost entirely eliminated. I say almost; because even in this case it has an influence at least on the choice of place, the angle of view. Films and photographs, in fact, often record only the phenomena registered in a particular spot and that have an influence in one direction only; but they all have the defect of being unilateral — a defect that can only be remedied by considering in conjunction photographs taken by diverse means and in different places.
There is no doubt much truth in this; but even such considerations do not militate in principle against the idea of recording facts cinematographically. This would be the case only if we had no guaranty that the film did accurately reproduce the facts in all their essential particulars and if the Judge had to decide on the guilt or innocence of the accused on the evidence of the film alone.

In reality, however, every witness views a situation from his own particular standpoint and the Judge can form a safe judgment only by a careful and critical comparison of the several depositions. Thus cinematographic films, however accurately taken, would be insufficient in themselves to demonstrate responsibility. They might, however, form one of the most valuable items of evidence in proving the facts of the case.

The risk of the film distorting the exact truth might in any case be avoided by employing only operators specially trained for the purpose.

The cost of the films would never be very considerable, as they would necessarily be short.

The cinematographic reconstruction of crimes might also serve the purpose of inducing prisoners to confess.

If a note published in the Licht-Bild-Bühne (page 150, 1908) is to be relied on, an experiment of this kind has already been made in France.

A Paris banker, M. Remy, was found murdered, and a servant of his, named Courtois, who confessed to having been a party to the crime, deposed that he had penetrated together with one Küfer Renard into the banker’s bedroom and stabbed him to death. Renard was arrested and denied his guilt. The scene of the murder was then reconstructed cinematographically in accordance with Courtois’ confession and projected in the presence of Renard in the hope that it might induce him to confess.

Notwithstanding the circumstantial preciseness of the names given, I cannot say whether the facts stated are true; but there is no doubt that recourse to such a method might have the effect of inducing an obstinate pleader of «not guilty» to confess.

We need but recall instances in which criminals who have tenaciously denied their part in a crime have ended by confessing the truth when led to the actual scene of it or upon being unexpectedly faced by circumstances similar to those in which it was committed.

There are no logical grounds for objection to such methods, since the use of psychological influences on an accused person cannot be considered in the same light as illicit pressure to make him confess. I acknowledge, on the other hand, that for tactical reasons such procedure may not be generally expedient. We must bear in mind that such reconstruction of the circumstances can be successful only when the cinematographic vision is entirely, or at least substantially, faithful to the truth. If there are any errors of reconstruction it will be very difficult to induce a prisoner who has obstinately denied guilt to confess; he will indeed be encouraged to persist in denial, since the errors made apparent by the cinematographic ex-
periment will convince him that the authorities are in fact in the dark as to what really happened and are relying on his confession to ascertain the truth.

A further method of utilizing the film for the prosecution of crime consists in applying it to tracing criminals.

I wish merely to recall here that it appears to be a fact that the police have for years past tried to trace criminals through the cinema, more especially by placing films containing the portrait of the criminal at the disposal of cinema managers for projection.

The cinema press of Prague states that this method has been in use for years past with the greatest success.

On the strength of this information Dr. Schneickert has made every effort to get the method introduced into Germany (Archives of Criminal Anthropology and Criminology, vol. 41, page 147).

An enquiry made by the Prague police, however, showed that the statement published in the papers was incorrect. But the idea was not without value, and Schneickert states that a similar scheme was taken into serious consideration by the Berlin police in 1910, in connection with the investigation of the murder of a woman. The scheme was not carried out for the simple reason that meanwhile the facts were ascertained by other means.

I have myself devoted attention to this question of making use of the cinemas in tracing criminals and have written on the subject both in the Kinematograph Review and in the Monthly Review of Criminal Psychology (11th year, page 670).

I am of the opinion that this auxiliary method might be used in elucidating doubtful cases.

First of all, it would be desirable to film prisoners at the moment of their arrest, since they usually display idiosyncracies in their gestures, bearing, gait and movements.

From the brief note published by Prof. Saldaña in his work La Criminologie Nouvelle (Paris, 1929, page 112) it appears that on the initiative of the Italian criminologist, Prof. Ottolenghi, this method of cinematographic identification has actually been put into practice by the New York police.

The fact that experiments on the psychology of witnesses and forensic experience show that many persons are best able to identify individuals from their movements, suggests that the use of this method would furnish a much safer means of identification than the mere publication of photographs in the papers or the showing of lantern slides. This, of course, presupposes that the individual in question is already known to the police and that they have had him filmed.

Such cases may not be of very frequent occurrence, but that is no argument against the fullest possible application of the method, in view also of the fact that it obviates the risk of suggestive influences on witnesses. It is, of course, a different thing if the film is shown to the witness subsequently to his having declared that he had seen the accused. In such cases the film may obviously act by suggestion on the witness and have the effect of causing him to believe the suspected person to be the guilty party, when in reality he is not. Caution must therefore be exer-
cised in substituting films for the identification of suspected persons. It is of course always desirable that suspected persons should be placed side by side with other unsuspected persons for the purposes of recognition.

When this for some particular reason is not practically possible, identification by means of the film may serve a useful purpose. In order to avoid all suggestive influence, films showing the suspected person in the company of others ought to be used. Thus the witness is called upon to distinguish the person that he claims to recognize from among many.

The Hanover police made use of the film in a very interesting manner and with excellent results on the occasion of the trial of the murderer Haarmann and his accomplice Grans in order to get hold of witnesses who were acquainted with the two prisoners.

The Review Der Bildwart reported the matter at the time and, at my request, the Chief of the Hanover police, while confirming the statement, furnished me with a number of interesting particulars.

In the first phase of the instruction of the case against Haarmann, when collecting the evidence shortly after his arrest, the police were up against great difficulties owing to the fact that the bulk of the crimes had taken place a long while previously; the clothes and other objects belonging to the victims could not be traced, and several witnesses, who were only barely acquainted with Haarmann and Grans by sight, were unable to identify them with certainty. It was then decided to take cinema films of the accused pair in the courtyard of the police station and to screen them, together with a brief statement explaining the object of the film, during eight consecutive days in the leading local cinema halls. Following on this exhibition, some 15 to 20 witnesses came forward who were able to give information of a generally useful kind or to recount specific incidents that had occurred between the criminals and their victims. These persons declared, moreover, that they had not been able to recognize the accused from the photographs in the newspapers, whereas the cinematographic film had enabled them to identify them, more particularly by their expression and gestures.

The brilliant success achieved by this experiment was such that it induced many experts to have recourse to the cinema in similar circumstances. For obvious motives a sparing use should be made of this method and only in special cases; otherwise public interest would wane and cinema owners would refuse to show the films. There can, however, be no doubt that cinematographic films, by reproducing the natural gait and bearing and characteristic movements afford a much more complete view of a person's individuality than any photograph representing him at a given moment and in an unnatural pose.

It is a matter of old experience that, even though we may recognize the features and other particulars of a person from a photograph, in real life we recognize him, even at a distance, from his gait, from the way he holds his head, from little peculiarities of movement, the swing of the arms, and so on. We are much more rarely deceived by such idiosyncracies than we are by
mere features, even though we may often not be able to specify the peculiarities of movement or gesture that determine our recognition.

For this reason many persons who have seen a criminal in person, but who would not recognize him from a lantern slide, would be able to identify him on a film or walking in the prison yard.

The only doubt that might be raised against the expediency of the cinematographic method of identification is that this form of show would undoubtedly be exploited by a certain number of cinema owners as a means of pandering to the lowest tastes of the public.

Indeed, the experiments made in Berlin and elsewhere of showing photographs of wanted criminals and the attempt of the Hanover police to use the cinema for the same purpose, led to some deplorable consequences. I have recalled the particulars in the above cited article in the *Monthly Review of Criminal Psychology*.

When the police were looking for the notorious criminal, Sternickel, the Chief of the Berlin Police had his photograph together with his description shown in the cinemas. Certain cinema owners improved the shining hour by announcing on their posters that they were authorized by the Chief of Police to show films of the notorious murderer. It was announced in big letters at the entrance to one of the leading Berlin Cinemas «To-day we are showing the most famous murderer of the Twentieth Century!».

Another gentleman, with a still keener eye to business, whose clientèle consisted mostly of criminals and bullies, sought to draw the public by the following announcement: «I am prepared to pay a prize of 10,000 marks to anyone who is able to prove that I have not made every effort to provide my clients with the latest novelty! We are to-day showing in this picture-palace an original film of Augustus Sternickel, the murderer of Ortwig. The Chief of Police of Berlin has granted us permission to show this film».

In like manner a film manufacturer sought to make money out of the film of Haarmann which the police had taken, and submitted to the Censorship a reel with the title «The Haarmann Case». The Censors passed the film for projection because it displayed no events of a kind to disturb public order or to exercise a depraving or demoralizing influence.

The manufacturer chose this attractive title, which as a matter of fact had nothing to do with the plot, in an effort to draw big profits out of the sensational crime. At the instance of the Prussian Ministry of the Interior, the film was submitted again for revision, the permit of the censorship board was revoked, and the public exhibition of the film prohibited throughout the Reich.

«*Der Bildwart*» states that the motive adduced for such prohibition was that the film was of a kind grossly to deceive the public and that the posters announcing it were calculated to appeal to their lowest instincts. These announcements opened as follows: «In the fair City of Hanover...» and after stirring up the unhealthy curiosity of the crowd, the reel merely displayed a series of views of the town of no particular significance. It went on «...there lived for years a degenerate of the name of Haarmann. He frequented the lowest haunts of the Gange quarter...».
Such incidents are no doubt deplorable. But they are sporadic cases and do not come within the usual practice of cinema owners.

The fact of such abuses being committed cannot justify the opposition to the use of the film in the tracing of criminals. The Haarmann experience has proved that they are of great value for the purpose. It cannot, on the other hand, be denied that there are instances in which the cinematographic reproduction alone is in itself insufficient to enable witnesses to identify an individual, while he may be able to do so when brought face to face with him in the flesh. When sound films to boot are placed at the service of the police a great step forward will have been made in the investigation of crime.

In all penal procedure the cross-examination of witnesses makes it possible to judge the accuracy of their statements and of their remembrance of circumstances. Recent research on the psychology of evidence, that has been carried out during these last years in all countries, has proved that the depositions of witnesses, on which we judges have to rely in most cases, are as a rule not of a truthful kind.

* * *

Films can further be used for training police officials and the officials of other organs of penal procedure.

Schneickert has made a brief reference to this in *The Review of Criminal Science*. According to his information, it was purposed to show an instructive film, illustrating not only the technical means requisite for the identification of criminals, but also the methods of investigation on the spot, and in particular the observation of tracks and objects, the examination of evidence, and everything in general that might affords a clue to the police. This film was to be screened in classes for the training of the said officials, in the finishing institutes for the higher officials and lawyers, from which of course the public would be excluded, and was to serve as a means of completing instruction in penal research.

Dr. Kalbus in his book, *German instructive Films in Science and Teaching* (Berlin, 1922, Page 310) mentions a film of this type taken by Engineer Nelken, who has made a special study of this branch of criminal investigation. This film demonstrates among other things how the public can best protect themselves against pickpockets and burglars.

* * *

I find that I have dilated at greater length than I had intended in this survey on the uses to which the cinema may be put for the purposes of justice. And yet I am aware of having called attention to a part only of the material existing on the subject and that certain aspects of the possible utilization of the film for such ends have escaped me.

My profession and my scientific studies have for years past led me to devote my attention to criminal science, and more especially to forensic psychology and the technique of penal procedure. On the other hand, I have for years been interested in the cinematograph and the question of the various uses to which it in.
might be put, so that its possibilities in this sphere are of quite special interest to me.

I hope at a future moment to deal more comprehensively with this complicated question, and I should be grateful to all persons — whether public authorities or private individuals — who would either send me, or communicate to the Editor of the International Review of Educational Cinematography, any facts or suggestions that might be of use for the purposes of this study.

The wider the use made of the film in tracking down criminals, the sooner will the prejudice against it as an instigator of crime be likely to disappear.

ALBERT HELLWIG.

Head of the Provincial Tribunal of Potsdam.
VITAL ASPECTS OF THE CINEMA

« NON OLE T »

(From the French)

We are told that the famous Duke of Buckingham, in token of his wealth and splendour, donned on the occasion of some great reception a suit covered with pearls and precious stones, all held together by a single thread. The inevitable happened: the thread broke and pearls and jewels were scattered broadcast on the ground. And the Duke of Buckingham thus attained his purpose and was able to gaze down with majestic unconcern on fine ladies and noble knights bent double or scrambling on all fours to gather for him the fine baubles that he spurned contemptuously with his velvet-shod foot.

Times have not changed. How many worthy people of the present day would not scramble on a dunghill to gather a few base coins? There are others who are content to seek them in certain cinematographic undertakings.

If we had to deal only with those frankly pornographic films that are shown clandestinely in certain private premises to an audience of initiates on the lookout for filth and accustomed to its putrescence, it might not be worth our while to call attention to the matter. But this is not the case: there is another class of films, labelled « educational films », « hygiene films », or « popular instruction films », the only real purpose of which is to rake in money.

(Ed. Note). In this second part of the International Review attention is called to the different social problems that call for special study and investigation. It deals with the eminently practical aspects of the Cinema and is therefore separate and distinct from the scientific and doctrinal considerations set forth in the earlier part.

The Institute has endeavoured to select the most vital aspects of the social problem connected with the cinema from among the many questions of immediate interest that suggest themselves.

In the first article Mme Eva Elie touches on a burning question, which fortunately does not concern the whole film industry, but only that minor part of it that is bent on exploiting as best, or as worst, it can the baser tastes and instincts of the public.

The examples cited by the writer might be multiplied ad infinitum. They are the symptoms of a condition of things which the cinematographic taste of the public and the interests of the industry itself are gradually purging.

But it is proper that the question should be raised and that the attention of those who have the right to interfere should be called to it, in order that the evil may be cured and that « propaganda » such as this should no longer be suffered to do harm, especially in the smaller and remoter centres where the cinema is under less careful supervision, but where, more than anywhere else, the film should be able to do real educational work and to raise the moral and intellectual tone of the public.
I remember that at one time, when a critic on the staff of a local newspaper, I felt in duty bound by my profession to view all the films shown week by week in the cinemas of the town, a centre of Calvinistic repute. Somewhat against the grain, though quite unsuspecting what would be exhibited under this pseudo-scientific guise, I repaired to one entitled «The Hygiene of Marriage». First came some comparatively inoffensive scenes, touching on the need for the institution of pre-nuptial certificates, delivered by a doctor after the medical examination of the would-be spouses. Here already was a schema worthy of a place in some medical institute, but a trifle too explicit for the taste of the ladies in the audience, who were somewhat embarrassed by the accompanying explanations and the vivid demonstration of certain phenomena of a strictly feminine nature. But all this was but a preliminary — and a fairly innocuous preliminary, to what was to follow.

We were next shown the married couple: the young woman is about to become a mother. Sectional diagrams of the abdomen discover the foetus at its several stages.

Then followed the birth of the baby, no longer shown by means of anatomical plates, but the actual thing. A sheet covers the face and the bust of the mother. A doctor and his assistants are gathered round her. And we behold...

In the humblest homes, even among the very poor, who are as a rule more concerned with hard realities than with the niceties of life, at such moments husband and children are kept out of the way. But here, in the crowded hall where I was seated, young roughs were mimicking with expressive onomatopoeia, the nausea they felt at this vision, enormously enlarged — for it occupied the whole screen and was all the more telling on this account. The mystery of childbirth was profaned and sullied. Sons forgot that they had mothers; mothers hid their faces; girls hoped they would never bear any children, and husbands ordered silence by loud and reiterated hisses.

Popular education? Maybe; but films such as these should be shown in the presence of students of gynecology, not in public cinemas.

The series is being continued. A cinema in this town has recently shown during three successive evenings «for adults» Le Cri de la Jeunesse («The cry of Youth»). A charming title, is it not? — suggestive of sports competitions or some jolly week-end party. But wait a minute! It is explained to be «a film on the rejuvenating of human beings by Dr. Voronoff's method». And what a flare of trumpets in the note that accompanied the announcement of the film... paid for by Dr. Voronoff himself, or by the publishers of the film, I wonder?... the public was told that it was its duty to learn all about these methods and to follow all the phases of the screen.

You can guess the kind of thing! And in instances of this sort has anyone the boldness to assert that the film has a single purpose — that of the diffusion of knowledge! Lies! Under the pretext of teaching the public, such films aim at exciting the sexual instinct; they stir up morbid curiosity; they sully all ideals, all decency, all sense of modesty!

*But they rake in money.*

EVA ELIE.
FILMS FOR CHILDREN

(From the Spanish)

Up to the present time children have received scant attention from the law. The rights of children were recognized only long after the rights of man.

Art, which, according to Melchiorre de Vogue, is the expression of social life, has, like the men who created it, paid little attention to children. The triumphant embodiment of childhood in the person of the Child Jesus and of angels is one of the glories of Christianity. Even literature has been little concerned with the soul of the Child; in the whole of classic literature children are hardly mentioned.

Not until modern times has a child been taken as the hero of a play or a novel as in: David Copperfield by Dickens, Oliver Twist by J. Daudet, or Childhood and Youth by Tolstoi.

In the work of one of our greatest writers, Benito Perez Galdos, there are splendid studies of child psychology. At the present time French writers are much concerned with the life and impressions of children. For example: L'Espace d'un Matin, recently published, deals with the dawn of life.

Literature, like the other arts, however, considers children merely as raw material, and it is very rare for writers to produce works which completely satisfy the aesthetic needs of children.

It is some years since another contemporary Spanish writer, Jacinto Benavente, intensely interested in child life (we must call special attention to Field Ermine and Beginnings of Real Love) tried writing plays for children, and wrote two of which were the delight of the children of his day: The Prince who Learnt Everything from Books and Earning ones Living. Another contemporary poet, J. Ramon Gimenez, has written a delightful book for children I and the Goldsmith. In addition to those mentioned, there are a few others to be found in Spain or in other countries. Apart from a few works like the fairy stories of

(Ed. Note) Juan de Hinojosa is one of the many who consider films for children with particular attention. This again is a vast field which cannot easily be explored. It is by no means a simple matter to identify oneself with the tastes and understanding of little children and to create films for them which are both suitable and attractive.

The International Review has all along devoted much space and much thought to this matter. It will pursue the question yet further and deeper, in the hope that this all-important social problem, which cuts at the very core of the education of the young, may be definitely settled, and the film industry be enabled to play a worthy part in complete harmony with the views of the individuals and institutions responsible for the upbringing of the young generations.

Fun is an essential feature of the education of children. The day that truly recreational films for the little ones are an accomplished fact will be a day of social triumph for the cinema.
Hans Anderson, Grimm, and Perrault, or like «Cuore» by De Amicis, children’s literature reduces itself to the most meagre proportions. (1)

It is the same with the cinema, the new art of the twentieth century.

Almost the whole of contemporary cinematographic production is little adapted for children. Scenes of immorality and acts of cruelty abound in the film, which is often a means of initiation to the mysteries of life.

It is therefore necessary to make special films for children.

I do not refer only to so-called instructional or educational films. It would be useless to attempt to lure children away from the perils of the film by such means. It is essential, not only to teach children, but to amuse them with well presented plots.

The best known children’s stories could be given on the screen: Tom Thumb, Cinderella, Bluebeard and many others. These are all stories which lend themselves to perfect presentation, thanks to the technical means at the disposal of the cinema.

Imagine the joy of small children in seeing fairy tales alive and moving on the screen.

What we have said of fairy tales is also true of stories of adventure. «Robinson Crusoe» and «The Fifteen-year old Captain» on the film! It would be impossible to give the youthful spectators more enthusiasm-provoking subjects, or any more likely to impress on them lessons of courage, determination, pluck and faith in a providence which can create such characters.

Children’s films could also be produced from general history and from that of individual nations, as well as from Bible stories; all these should be presented in a manner to appeal to children, thus combining teaching with pleasure.

The sense of fun and humour should not be eliminated from films for children, if we wish to obtain the best effect.

Charlie Chaplin and Buster Keaton, who have a very subtle sense of humour, might with great advantage produce films for children.

These films could show characteristic domestic scenes, thus promoting the love of home and religious feeling, a sense of brotherhood with those in need, affection for ones fellows and gratitude for life. It would be a splendid means of education, without having recourse to the study of books, and would exhibit daily life with its joys and sorrows and tend to improve the character of the children.

But all effort will be vain without a real love of children and an understanding of their needs and their claims. This must be realized by those concerned in the film industry, by the producers, actors, cinema managers and all those with a proper sense of responsibility towards children. Children’s films should be granted specially favourable terms. This would be helped by governments compelling cinemas to devote certain shows, on specified days, to films for children. Associations of parents could also take steps in this matter. This would be much more effective than forbidding children to attend cinemas, or taking them to shows suited for older people and thus exposing them prematurely to corrupting influences. The education of children should begin with that of their parents. Juan de Hinojosa.

(1) There are excellent grounds for the author’s criticism. Nevertheless, English children’s literature of the past half-century and more is very rich. The name of Lewis Carroll alone should suffice.
THE BEGINNING OF AMATEUR EDUCATIONAL FILMS
IN THE UNITED STATES.

In addition to the specially produced commercial educational films which are becoming increasingly available, simultaneously there is taking place a development of tremendous importance among the present 150,000 personal film makers: — the production by these amateur cameramen of films of educational purpose in many different fields. The term educational is used in this connection in a more general sense, of course, than to indicate films intended only for classroom use. Rather, it is intended to describe the many classifications of films which are designed to mould public opinion along some definite line of human endeavor.

The advent of 16mm. equipment, with its attendant cost reduction, was the

(Ed. Note) The efforts of the film industry to produce scientific, cultural, or educative films are up against infinite difficulties and are hampered by tariff systems which ought properly to limit their action and impose duties only on dramatic or «feature» films, which form the main source of trade revenue.

But it is clear that industrial production in this domain is necessarily incomplete. Manufacturers are mainly concerned with business interests and therefore follow the currents that lead to the biggest and the surest profits.

Hence they tend to neglect lines that appear to be devoid of speculative attraction, and which indeed are so. And yet production of this kind is a matter of capital importance and ought to be cultivated in the interests of bona fide science and culture.

Mr. Bailey tells us in these notes what amateur film producers are doing in the United States for the cultural and educational film.

The work of such amateurs is undoubtedly of the highest value. Even when considered as merely collateral to trade production, it serves the purpose of completing it and enhancing its efficacy. The amateur can penetrate where the industry cannot reach owing to special economic circumstances.

One particular field of activity obviously comes within the scope and the practical range of the amateur: namely to gather and to record the phenomena of life and nature in laboratories and other preserves of scientific documentation that are remote from public life.

In the social domain the amateur can do most valuable and efficacious work. The means of cinematographic investigation are often identical with those of scientific research. An amateur, while recording on the film some phenomenon or circumstance of life, may become an investigator of the phenomenon itself and of others connected therewith. He may thus become a collaborator of the student of social problems and point out facts that have come within his notice but have escaped the observation of others.
element contributing most to this widespread development. Not only was cheaper equipment and operating cost a stimulus to commercial production, because of a greater consumption by the public of such commercially produced films, but it brought to individuals the possibility of using personally produced motion pictures economically, as an educational force along the line of their particular interests.

While much has already been accomplished in the field of personal educational film production, the surface of the possibilities in this direction has, as yet, merely been touched. Let us examine the fields where these possibilities have been recognized and where progress is under way.

One of the most important aspects of personal film production is its use in medicine. Surgery, microscopy and neuropsychiatry, to mention only a few important branches of medicine, are employing films with the greatest effect as a medium for teaching, recording interesting cases for future reference, and for interprofessional exchange of ideas and experience concerning constantly improving medical technique.

In teaching surgical technique, for example, the close-up proves invaluable, in contradistinction to the scant view of the subject formerly afforded distant students in the operating theatre. Now, by means of film, every seat becomes a front seat and antiseptic measures no longer hamper the view of the student. In pictures of micro studies, the close-up enlarges infinitesimal objects so that they may readily be observed by large groups without the necessity for expensive equipment in the hands of each student, an advantage of obvious value. At the same time, identical material is provided for all, thus expediting teaching and classroom discussion.

In recording the reactions of neurotic cases, the camera compresses into a few feet of film significant subject matter for leisurely study which would require days to observe first hand. Concerning this use of film, Dr. Smith Ely Jeliffe, noted neuropsychiatrist of New York City, says, «No phase of medicine has found the cinema of so much value as the field of nervous and mental disease. The student of the nervous system is almost exclusively guided by his studies of sensation and motion. Behavior is primarily founded on sensation and sensation is essentially represented by some form of motion. This simple principle is the basis of all behavior.»

«There is no movement that is meaningless. Every movement, even one that outwardly seems as light and inconsequential as the manner in which a man twiddles his fingers, raises his eyebrows, or taps his foot, tells a story that can clearly be read, provided one has the appropriate training. Motions demonstrate what a man really is — his actual status — and, consequently, nothing is so valuable to the neuropsychiatrist as adequate records of such motion. Cinematography is able to provide and establish these records and, therefore, modern motion picture equipment is proving to be of infinite aid in the interpretation, and hence in the treatment, of mental and nervous disorders.»

With the recent improvements in motion picture equipments — better black and white film, color film and greater flexibility of the instrument — cinematography is, indeed, facilitating medical education and progress.

Personal film production in schools and colleges is beginning to serve a number
of purposes. Professors are commencing to record experiments for personal reference, exchange of ideas and for teaching purposes in their own institutions. Filming of physical education activities by means of slow motion, so as to secure a record for analysis by which faulty muscular control may be pointed out and corrected, filming of activities, such as fire drills and military training, to stimulate interest therein among the students, filming of college structures, camps, commencement exercises and other special fetes to go into periodical newsreels, later to be edited into school film histories, publicity and stimulus of alumnac interest in their schools, constitute the more important aspects of present school and college film production.

Another large group of individual filmers are those engaged in producing films of industry. It is quite natural that business men should utilize their hobby to record the business they have built up and with which they are so intimately acquainted. In large organizations, with widespread branches, a sense of unity and cooperation with the central plant is stimulated by familiarizing employees with other branches and with the officials in charge of the entire organization. Sales forces are shown the manufacturing processes of a product so that they may understand its points of superiority in presenting sales information to customers. Such films can also demonstrate equipment to a prospective buyer in a distant place, thus saving the cost of actually transporting the article there or necessitating the buyer visiting the distributing point in order to see it.

Art also finds an ally in films. As a source of inspiration for workers in the graphic and plastic arts, as a means of correcting technique in the mimetic arts and for presenting production processes of all the arts to students, films serve most admirably. Films, frequently colored, are serving as reference works in the studio. The slow motion camera is exposing faulty muscular control in the mimetic arts, particularly the dance. Likewise film records are preserving for future generations for appreciation and study the work of great artists of the ballet and the theatre — perfection which would otherwise pass with its performance. And educational films in the most definite sense have been produced of art processes, thus giving a background for their understanding, appreciation and execution.

Municipal and civic interests also find personal motion pictures of value in furthering their aims. Court decisions have been rendered upon evidence presented by film. Civic improvement is accomplished in various communities by demonstrating to their governing bodies, considering proposed improvements, films of existing similar projects in other cities. Films have been used to check the efficiency of municipal functions, such as fire prevention, garbage disposal, traffic and other civic services. Chambers of Commerce have employed film to publicize their cities by demonstrating their facilities for conventions, industries and home sites.

Welfare drives are often aided greatly by films. Large amounts have been raised for social work of all kinds, frequently in conjunction with the combined charity drives or «community chests», by means of films which have pointed out
bad existing conditions, the efforts being made to alleviate them, or by visualizing the desired improvements for which the funds are being sought.

In short, amateur educational films in the United States are serving many phases of educational effort and so much good has been accomplished in the short time since their inception that their future holds a promise of service to mankind that is, indeed, encouraging in its magnitude.

L. M. Bailey
Editor Educational Films Department, «Movie Makers» Magazine, published by the Amateur Cinema League, international organization of personal motion picture makers.
SOCIAL PROPAGANDA FILMS.

«MOTHERHOOD».

It is not within the province of the I. E. C. I. to enlarge on the merits of particular films. We cannot, however, refrain from citing by way of example certain cinematographic productions already known to the public which we believe to respond to genuine social needs, either as a means of dissipating the ignorance of the public on matters of capital importance, or as tending to urge society to correct some of its worst shortcomings and to call a halt before it reaches the edge of a precipice where it would be difficult to stop. Such a film is «Motherhood» by M. J. Benoît-Lévy and Mme M. Epstein, dealing with one of the greatest evils of modern society: voluntary barrenness in marriage, which, as a matter of fact, cannot even claim any practical justification in the economic theories of Malthus.

In most instances, indeed, such voluntary sterility is due rather to a form of selfishness that regards children as a trouble and a spoil-sport than to genuine anxieties of an economic kind. A baby is looked upon as a small tyrant who will keep his mother away from dances, theatres and the cinema and interrupt her reading of the latest novel, and whose maintenance and upbringing will curtail her pin-money... The modern outlook on life is such that even in the lower middle classes many have come to regard such frivolities as serious social duties that cannot be neglected without loss of caste. Such is the evil — an evil which must be routed; and the film «Motherhood» is a weapon to hand.

As we have said above, it does not behove us to advertise one film rather than another. And yet we feel it our duty to encourage, as far as we can, the production of works of preeminent social and moral value by calling attention to those really worthy achievements that come under our notice. We hope that the disinterested publicity that we see fit to extend to films of this nature may help to promote a spirit of emulation among film producers of all nationalities and incite them to multiply reels of this sort and to vie with one another in a form of competition in which the survival of the fittest will benefit the race.

If the I. E. C. I. can prove in the near future that it has by such means helped to ameliorate the life and the outlook of the masses, it will feel satisfied that it has not worked in vain.

***

Mark Viguiер, a well-to-do farmer in Auvergne, yearns before he dies to rock a grandson in the cradle that has harboured so many generations of his family. But his daughter, Louise, has no desire to satisfy the old man’s longing. In the great city where she has followed her husband — a «gentlemen», a commercial traveller who is doing good business — children are regarded as encumbrances. Moreover, as a fine lady, she deems it more fitting to parade and pamper a fashionable lap-dog.
In the same town dwells Marie, a former farm servant, whom her mistress Louise had packed off because she had been fool enough to suffer the fruit of a rash love, unblessed by the Church and unsanctioned by the law, to see the light of day. The unhappy young mother had made her way to the town, where she found again the father of her child, a good fellow who at once recognized his duty and married her.

While Louise leads an idle and frivolous life, Marie, like so many poor mothers, has been compelled to work all day and put her baby out to nurse. The poor child, for lack of proper care, sickens and dies.

Thanks to the kind interest of Dr. Laurent, a large-hearted man devoted to social welfare, Pierre and Marie obtain work in a factory affiliated to the Motherhood Benefit Fund. A new life now begins for them — a life in which new lives have their part. The machines halt to allow the mother to nurse her baby...

« When spring had fourteen times renewed the blossoms in the orchards, Marie was the mother of a fine family of six children... »

All this while Louise has been leading a solitary and idle life, more and more neglected by her husband, to whom she is bound by no living bonds. The sudden death of her father summons her back to the farm. Here she finds Jacquot, a little
son of Pierre and Marie, whom they send every summer to the farm to lend a hand with the work; but Louise is more concerned with her sick dog than with the child, who cries all night at being separated from his mother. The old dog — Louise’s only friend — dies. Deserted by her husband, all alone in the world, it is now Louise’s turn to weep. Little Jacquot feels sorry for her and, creeping into her room, he gives her the first child’s kiss she has ever known. Louise at last opens her arms and learns to nurse a child... Shortly afterwards Jacquot, in scrambling up the mountainside, slips and falls down a gully. Louise saves him and looks after him; but the child pushes her off and cries for his mother. Louise cannot refuse the little fellow’s entreaties, and summons to her home the woman whom in the past she had driven out of it. Marie arrives and Louise begs her to stay on at the farm where she can no longer bear to live alone.

Marie and Pierre, who have grown rich on their own and their children’s labours, have bought the Viguier farm. The old cradle still awaits a child: Jeannette, the eldest daughter of Pierre and Marie, who has married Jacquot’s friend, Nicon, gives birth to her first child, and for the first time Louise witnesses the miracle of life. The happy event is celebrated with mirth and music, and Marie dances the «bourrée» with Jacquot, to the strains of a fiddle. Louise envies this woman who radiates
the beauty of motherhood. Alone in the midst of so much love, she quits for ever the farm of which she had never made a home.

Life everywhere! In the attic a cat has produced her family of kittens. At the threshold of the farm the young mother is suckling her baby; in the field a plant rocked by the wind is scattering its seed.

A stranger to the fulness of life, Louise pursues her lonely way. A barren tree on the roadside is felled by the wood-cutters; in an impetus of despair the barren woman rushes forward and is struck down by the fall of the sear tree. But kind Dr. Laurent is at hand; he picks her up, dresses her wounds, and comforts and counsels her, to such good effect that Louise resigns herself to live to « help poor mothers bring up their children, so that life may continue »...

Such is the gist of the fine film « Motherhood ». We are certainly not the first to call attention to this admirable production. Others before us have described it and large audiences have had the good fortune to watch it on the screen and been able to appreciate its moral value and its artistic excellence. We have postponed our comment on it in order that it might find a fitting place in the columns of this special number dealing with social problems; for surely this is a problem of most vital interest and one of the most burning of the social questions of our time.

Motherhood! Pages might be written and miles of film printed to do justice
to so noble a theme at a moment when all efforts seem to conspire to discourage and to belittle it. The good old times are passed when all tales of fortune and misfortune, of escapes and adventures, of the ups and downs and vagaries and vicissitudes of the young lovers closed with these words "They married and had many children and lived happily ever after." Commonplace words and common sentiments perhaps, but not devoid of meaning and of beauty, for they associate the idea of conjugal bliss with that of a numerous and healthy progeny.

But what have the young people of to-day got to say on the matter? They will sneer at such sentiments and regard you pityingly as an obsolete old fogey of antideluvian views, quite out of harmony with the feverish rhythm of modern life, in which speed is all-important and children are a drag and a hindrance. Life moves so quickly that all is fleeting and superficial — including our lawful and unlawful pleasures — and there is no time for that love which should be the purpose and the crown of life.

Can we claim love to be the motive force of those wilfully sterile unions which — with a few rare exceptions — after the first ardours are spent, degenerate into a mere sex association by, no means exacting or exclusive in its clauses? It is rather the negation of love; for unions such as these tend to the moral and physical decline of the race — to race suicide.

Now, is not the cinema largely to blame for the diffusion of this negative in.
conception of life? It is no novel conception to be sure — *nihil novi sub sole* — but at the close of last century it was still restricted to certain strata of the upper classes — the set which is most apt to tell us that « children are an expensive luxury ». Now the cinema, like the popular serial novel, was for a long time content with exhibiting this very class, and especially with parading the « smart set », whose idle and futile lives, devoid of economic cares and family responsibilities, leave plenty of time for romantic complications and lend themselves to more vividly coloured description than laborious and well regulated family life.

Serial novels, which the increased circulation of newspapers during the last fifty or sixty years rendered so popular, have turned the heads of many a well-meaning boy and girl. But can the influence of the serial novel be seriously compared with that of films of the same type? It is a lamentable fact that the early successes of the cinema were largely made out of adaptations of the popular novels of the day. For every hundred persons who had read the story, a hundred thousand, who had not had the time or patience to read it through, went to see it at the « pictures », that is to say to absorb the very quintessence of the rubbish. We may be told that this type of show is obsolete and no longer attracts the public, and indeed it may be true that it is no longer the vogue; but it is far from being the fact that such films are no longer shown. For this very reason the I.E.C.I. is reiterating the necessity of a time-limit to the exhibition permits granted by the film censorship authorities. Pictures of this type are unfortunately still to be found in many countries; they are constantly screened in rural districts, and set before the country folk and peasantry a representation of life that impresses them with the meanness of their lot and the uneventfulness of their life, just as in past days they had this effect on the workers and lower middle classes of the towns and suburbs.

Children play a very minor part in such films. At the best they put in an unwelcome and disturbing appearance. Even marriage is represented as an irksome bond; a bond that may hold the poor in spirit, but which is easily snared by persons of firmness and courage. In any case, it certainly does not present an alluring aspect to men; for while the stronger sex may guffaw at tales of henpecked and deceived husbands, they are by no means inclined to step into their uncomfortable shoes.

In our opinion the cinema is one of the many causes responsible for the diffusion of that view of life which makes men decline the responsibility of setting up a home and makes women anxious to « live their own life » and avoid the impedimenta of motherhood.

It is during this period of aberration that special efforts have been made to develop sexual education amongst the masses. It was inevitable that this should be influenced by the mentality of the period and follow the current of ideas; in fact, apart from some few courageous and praiseworthy exceptions, it took the wrong turning. Through such teachings one clearly perceives the intention of pointing to the means of indulging in sexual intercourse without running any risks, including that of parenthood, rather than any genuine desire to popularize the principles of sexual hygiene and well considered eugenics for the physical and moral benefit
of the race. Is the cinema free from blame in this respect, either in an active or a passive sense?

These questions must be resolutely faced. Moreover, does not the mere fact of recognizing the evil influence of the cinema imply the recognition of its force of suggestion and, therefore, its almost unlimited power for good?

Such a film as that of M. Benoit-Lévy and Mme Epstein shows that this fact has been recognized by persons of the highest moral and intellectual standing in cinema circles. The authors and producers of «Motherhood» place in striking contrast the woman who accepts the universal law of child-bearing and she who is willfully sterile. In the life of Louise Viguier all is dry and barren, even her heart. In their generous optimism, however, the authors of «Motherhood» convinced that there is a mother’s heart hidden in every woman’s breast, still point out the road to redemption to this unhappy woman. Such optimism is not at all distasteful: an optimism which can persist after one has touched a social sore, and recognized its depth and gravity, is a constructive optimism and a valuable counter-force in these days of destructive scepticism.

Another not less fruitful comparison made in «Motherhood» is that between life in a great city and in the country. It is impossible to make too many films emphasizing the superiority of the latter over the former as regards both physical and moral health. Nor can too many films be made to show the peasant how he can develop at the same time his moral and intellectual culture and the healthy and legitimate pleasures of modern life, together with his material prosperity, in short how he may become a «gentleman farmer» envied by all, rich in his work and in his fine, healthy offspring, with the promise of seeing «his children’s children». Another point in «Motherhood» to which we would call attention is the propaganda made by the authors on behalf of modern factories affiliated to «benefit funds». In France, where the low birth-rate gives special food for thought, particularly in view of the rural exodus, a number of manufacturers have united to found so called «benefit funds». These funds are formed by contributions proportional to the wages paid by each manufacturer. The supplementary allowances paid to each father of a family for every child that he has are drawn from this fund. Thus, an unskilled workman, who is the father of a family and whose standard wage is in keeping with his humble capacity, may, when his allowances are added to his wages, be earning more than a skilled workman, or even an unmarried foreman, or one without children, whose wage standard is much higher. It is a recognition of the principle of the right to live. It has been observed in certain industrial districts, where the system of benefit funds is highly developed, that the number of children in the families is increasing.

It is well that the film should contribute towards the knowledge of such social institutions and benefits. All civilized countries have established some forms of organization for the protection of the family: let the cinema make them known. It can and should do so, for the family is the original cell, the foundation of the city, of the small and the great fatherland, and of that greatest of all, the human race. The family is the sum of a number of joys and fears, of cares and sacrifices, of troubles and pains, summed up in the one word: «Motherhood». 
ENCICLOPEDIA ITALIANA

The Vth Volume is out.

The first number came out in March 1929, in quarto format, and contained over 1,000 pages, numerous and beautiful text illustrations, and 200 coloured and black and white full page plates. Since that date one volume has appeared regularly every three months. As the work will consist of 36 volumes, the whole will be issued to the public in the course of not more than nine years.

The text and illustrations of the Enciclopedia Italiana are entirely original. The Encyclopædia is universal: that is to say it surveys the events, the men, and the ideas of all times and all races and peoples. Italy alone, among the great nations, has hitherto lacked a compendium of universal culture of this kind, and has been obliged to have recourse to foreign Encyclopaedias, which often fail to give all the information wanted on the Italian contribution to civilization in its manifold aspects.

Two thousand contributors, divided into fifty-five categories, are at work on the Enciclopedia Italiana under the direction of Senator Giovanni Gentile and Dr. Calogero Tumminelli. The Offices and Secretariat are established in Rome in a historical palazzo now the property of the Treccani Institute. The Institute is not a money-making concern. On this account the Enciclopedia Italiana, the most modern and most perfect Encyclopædia of our time, costs less than any of the great foreign encyclopaedias, and it has been possible to arrange the terms of subscription to meet all pockets.

H. H. POPE PIUS XI has bestowed upon the President of the Institute, Senator Treccani, the gold medal of his Sacerdotal Jubilee in token of his approval of the Enciclopedia Italiana.

H. E. MUSSOLINI has declared that this great undertaking does honour to the Fascist Regime and promotes Italy to the front rank in this field of achievement.

H. M. the King of the BELGIANs in a recent talk with Signor Mussolini described the Enciclopedia Italiana as the finest Encyclopædia in the world.

On the occasion of his recent visit to Egypt, the Italian Minister of Agriculture, Signor ACERBO, presented a copy of the Enciclopedia Italiana to King FUAD as being «a most eloquent document of Italian progress and civilization».

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In the third part of this number the Rome Institute offers its contribution of simple enquiry and research to the study of social problems. This is based on the daily survey of what is being done the world over in all fields of human activity in which the cinema plays a part or might be called upon to play it.

We feel it our duty to repeat that the Institute does not claim to express any definitive or conclusive ideas on matters that are still in debate. We rely on those who are specially versed in the several problems to pursue the discussion which is only now opened and which must be enlarged and developed.

For the moment our task is clear: to gather and condense the great volume of work that is being done in this domain throughout the world. With the aid of experts in its different branches we shall in due course draw our conclusions.

LEAGUE OF NATIONS
INTERNATIONAL EDUCATIONAL CINEMATOGRAPHIC INSTITUTE
ROME

School...........
Form.........
District (Commune)...........

Number of pupils...........
Teacher.........

CINEMATOGRAPH ENQUIRY IN ITALIAN SCHOOLS

1. - Do you go often to the Cinematograph?

2. - What class of cinema hall do you frequent? Popular?
    Medium?
    High Class?

3. - When do you go? Week days?
    Sundays or holidays?

4. - Do you enjoy the cinema?
    Why?

5. - How many times a week do you go to the cinema?
    or how many times a month?

6. - Do you prefer going there in the afternoon?
    or the evening?

7. - Do you go alone?
    Or in company?
    With whom?
8. - Which of the films you have recently watched have most appealed to you?
   Which of the above is your favourite?

9. - Can you remember the plot of any of these films?
   of which?

10. - Have you been more than once to see any particular film?
   Which?
   Why?

11. - What impression does the cinema leave on you?
   Pleasure?
   Why?
   Terror?
   Why?
   Sadness?
   Why?
   An artistic impression — an impression of beauty?
   Why?

12. - Has the cinema ever made you think?
    About what?

13. - What attracts you particularly to the cinema?

14. - Do you feel tired after you have been to the cinema?
    Does it tire your eyes?
    Do you feel tired physically?
    Does it tire your brain?
    Does it weary or depress you?
    Does it distract you from your school work?

15. - What do you think of the lives of the people shown on the screen?
    What type of film hero most attracts you, and why?
    (Try to remember the different kinds of characters: heroes, workers, fathers, mothers, children, lazy fellows, criminals, etc.).
    Who is your favourite actor?
    Who is the actor you like least?

16. - Have you ever felt any impulses when watching a film?
    of what kind?
    What do you wish to do at such moments?

17. - What is your favourite kind of film?
    Dramas?
    Theatrical films in general?
    Adventure films in general?
    Comedies?
    Comic pieces?
    Documentary films (travel, folklore)?
    Historical films?
    Religious films?
    Artistic films?
    Scientific films?
    Cultural films?
    Educational films?
    School films?
    (you may answer more than one of the above questions, indicating the order of your preferences).
18. - What do you think of films dealing with Religious subjects?
Political subjects?
School subjects?
Do you think that more attention ought to be paid to the production of one of these
types of film (which type)?
19. - Do you think that the films can be of help to teachers in their lessons?
In teaching what subjects?
How?
Or do you think that films could altogether replace the teachers' lessons?
For what subjects?
Why?
20. - Do you think that the cinema is a greater help in teaching than lantern slides?
Why?
Or are you of the contrary opinion?
Why?
21. - What do you think of war films?
What thoughts and feelings do these stir in you?
22. - Do you prefer the cinema to the theatre?
Why?
23. - Which do you like better: films or books?
Why?
24. - Which do you like better: sports and games or the cinema?
Why?
25. - Which do you enjoy most on the whole: the cinema, the theatre, lectures, games, excursions into the country, reading?
Why?
(you may mention any or all of these that you care for, indicating the order of your preferences).
26. - Do you know any boys or girls who have been the better for going to the cinema?
Has it improved their minds?
Or their behaviour (morals)?
Or their manners (social improvement)?
(Please mention any cases you know of and give as many details as possible)
Or do you know of any boys or girls who have been the worse for it?
Has it deteriorated their minds?
Or their behaviour (morals)?
Or their manners?
(Please mention any cases you know of and give as many details as possible)
27. - What do you think of public shows for propaganda?
Do you think they do any good, and how?
28. - Do you think the cinema can help to make the different peoples know one another and understand one another's customs and way of life, and thus be of use to the world at large?
How?
29. - Do you think the cinema can be of use in spreading culture among the country workers and in workshops?
How?
30. - Have you ever been present at sound films or «talkies»?
Do you like them?
Do you prefer them to mute films?
Why?
31. - What do you think of musical accompaniments?
   Do you like them?
   How does it affect you?
   Do you think the sound films and talkies can replace it?

32. - Do you like imitating what you have seen at the cinema when you are at home or out?
   What side of it do you like to imitate?
   Would you like to live your own life in the way of your film favourites?

33. - What does your family think about the cinema?

Age of Pupil

Occupation of Father or of both Parents:

Father

Mother

Legible Signature

Date

N. B. for Teachers. — Teachers are requested to adapt these questions as far as possible to the mental capacities of their pupils, considering age and position in class, by giving any explanations that may be necessary to make the questions comprehensible, according to the standard and the mental development of the pupils, and otherwise as his or her experience in teaching may suggest. It would be very helpful also if Teachers would complete the results of the enquiry in their classes by giving any pertinent information on the school environment, the economic and social conditions of the majority of the population and the amusements to which the pupils are mostly addicted.

(Ed. Note) The above Enquiry is being carried out, thanks to the approval and interest of the Italian Minister of Education, in a number of Italian Schools. A selection has been deliberately made among the School Boards (Provveditorati) and therefore among the schools, invited to reply with a view to securing a comprehensive representation of the several geographical, ethnographic, and historical elements.

The range of the questionnaire is beyond the intellectual and moral capacities of the pupils in the elementary classes. For this reason it is accompanied by a circular letter addressed to the teachers.

This questionnaire aims at being a model for enquiries of the kind and care has been taken that it should include all the salient points that distinguished previous questionnaires on the subject with which we have dealt in the columns of the Review; it has not been found practical — especially in view of the exigencies of tabulation — to disconnect the parts that might be applicable to one or other particular type of school.

The Questionnaire as it stands is complete. Teachers must use their own wise discretion in adapting it to the mental capacities of their pupils and in this matter the Institute places complete reliance on them.

This is the first enquiry of the kind to be made in Italy. A French edition of the Questionnaire is already in hand and will shortly be circulated, with the consent of the different Governments concerned, in other countries.

The Rome Institute hopes in this manner to obtain the fullest possible budget of information from all parts of the world, and thus to contribute a direct and most efficacious share to the research work that engrosses so deeply students and sociologists.

The circular that accompanies the Questionnaire is couched in the following terms:

«Dear Professor,

«With the approval of H. E. the Minister of National Education, who has given his valuable support to the initiative of this International Institute, and pursuant to His Excellency’s own suggestion, I have the honour of forwarding to you through official channels a questionnaire atming
at ascertaining the impressions concerning the cinema of the pupils attending your school, what remarks they have to make on the present and future possibilities of the film, and the direct and indirect influences it may have exercised on their individual education, mentality, and behaviour.

«The Questionnaire is addressed to the pupils themselves, as it is bound to be in order to get at their personal impressions. As, however, it is addressed also to the pupils of the lower forms, who are not developed in mind and character to the same extent as those in the higher forms, it is desirable (as stated in the footnote to the Questionnaire) that the teachers should take the initiative of adapting it to the particular mental capacities, development, and social education of their pupils, by cancelling those questions which, in their wise discretion, they deem it useless to put, so as to avoid incomplete or hesitating answers being given, and also the possibility that the reading of the questions may arouse in the minds of the younger children impressions, feelings, and thoughts beyond their years, which might have a disturbing influence on them. Whenever they deem it expedient to do so, teachers are also at liberty to summarise the questions and put them verbally to the children, instead of distributing the papers.

In addressing to you this circular, the International Educational Cinematographic Institute has the fullest confidence that all those whose vocation it is to train the minds and character of our people will use their best endeavours for the success of an enquiry that has been repeatedly made abroad and is now for the first time being attempted in Italy, and thus help us in our work, the purpose of which is to make of the cinema something more than a mere means of amusement and to study the best way of utilising it as an instrument of education and moral uplift.

«Yours, etc.».

CHILDREN AND WAR FILMS.

The July 1929 issue of the Educational Survey, published by the Secretariat of the League of Nations, records the findings of an enquiry carried out in the Schools of Bradford, Yorks., into the effects of war films on the pupils.

The specific object of the enquiry was to ascertain the real views of children, as distinct from those of their parents or teachers, on the subject of war, through the impressions of it they had received by watching war films. The synthetic value of this enquiry, the results of which we give herewith, is open to question, owing to the fact that it refers to a single one of the belligerent states, and therefore reflects very special tendencies, influences, and ideas. It goes without saying that the mental attitudes of the several peoples differ very widely, and that what is true of the feelings and outlook of a northern people may not be at all true of the peoples of the south.

The view taken of a social problem by the former may reflect a particular state of mind and is not necessarily the universal viewpoint; while the latter may consider certain circumstances of life as right and reasonable that others would consider altogether wrong.

The objective value of all enquiries that aim at ascertaining world opinion depends on the possibility of eliciting all the different standpoints — however divergent and contradictory — of the several members of the world community.

The Bradford enquiry is, in any case, of obvious interest; so far as it goes, it reflects faithfully the views of a certain class of child population, and as such is well worthy of attention.

The enquiry was conducted in 76 schools, the children being invited to express their views on a certain number of films divided, for the purposes of analysis, into the following six categories: 1. films of the type of «The Dawn»; 2. American Army type, such as «What Price Glory» and «The Big Parade»; 3. British semi-official films, such as «Arras», «Mons», «Somme», «Coronel and Falkland Islands», etc.; 4. German official films, such as the «Emden»; 5. Comic films, such as
"The Better 'Ole", "Alf's Button", etc.; 6. Story films, such as the "Four Horsemen of the Apocalypse" and "The Roses of Picardy".

The results of the enquiry were tabulated not for all the schools in which the enquiry was conducted, but for a representative selection of 25 schools, 17 elementary (of which six were denominational), two central or senior schools, and six secondary.

The number of replies from these twenty-five schools totalled 1739, out of which 1149 answers were entirely to the point. These answers represent the views of 598 boys and 551 girls.

It would perhaps have been desirable to tabulate the answers according to sex. In any case, out of the aggregate of 1149 answers, 1100 were anti-war in spirit and 49 in favour of war; the respective percentages being 95.70 and 4.30.

The attitude of the belligerents towards their foes, as shown on the screen, was judged, as follows by the children:

Unfair . . . . by 158 children = 13 %
Doubtful . . . . » 241 » = 22 %
Fair . . . . . » 750 » = 65 %

Taking into due account the subsidiary questions put to the children, an analysis of the anti-war answers gives the following results:

Impression of horror and

- Cruelty . . . . . . . . . . . 782 = 68 %
- Loss of Life . . . . . . . . . 459 = 39 %
- Waste . . . . . . . . . . . . . . . . . . . 247 = 21 %
- Loss of Trade . . . . . . 29 = 2 %
- Folly . . . . . . . . . . . . . . . . . . . . . . 168 = 14 %
- Sin . . . . . . . . . . . . . . . . . . . . . . . . 39 = 3 %
- Moral confusion . . . . . . 24 = 2 %

The films themselves were criticised in 150 answers, and 90 answers (8 %) referred to the desirability of other ways and means for the settlement of international disputes and the abolition of war.

Among the 1100 children who returned anti-war answers, a certain number had something to say in favour of the social qualities that war brings out: 50 pointed to patriotism and 28 to the development of character.

Mr. C. M. Wilson, who directed the enquiry and analysed the returns, notes that many of the answers evidently reflect home influences, and cannot be attributable entirely to the impression created by the films. These answers show that the children had some previous knowledge of the question and point to the pacifist tendencies current in Bradford at school and elsewhere.

The minority who were in favour of war — consisting of 33 boys and 16 girls — apart from considerations of patriotism and the development of character, which find a part also in the answers of the young pacifists, expressed the view that war is exciting; that it gives men a chance to earn honours and glory and of making a great name; that it stirs the ambition to defend one's country, and so forth.

The view that war is a cause of moral confusion in the world was taken by twenty-four out of the 1100 children who were against war. These young ones would appear to have apprehended something of the insoluble problems of good and evil in the world — problems that war brings into such prominent relief and that, notwithstanding all the efforts of mankind, seem almost as far as ever from a solution.

The general criticism of the films made by 130 children are particularly noteworthy. They start by objecting that in all cases the films depict artificially staged scenes and are therefore not true to facts or at any rate do not reproduce them faithfully. Several of the young people who had seen only British war films considered that these reproduce episodes of the war in which the soldiers of the Empire stand out in a particularly favourable light.

Among the conclusions that he deduces from the enquiry, Mr. Wilson remarks:

"Moral instruction about the beauties of peaceful co-operation and the hideous results of war is as futile as religion confined to theology and church-going, unless it is accompanied by a general knowledge and clear grasp of the history of the last twenty years, the great war and the political conditions that have arisen out of it..."

"Difficult to teach and too dry for children, say certain teachers. What about the cinema as a help in teaching? Whether we like it or not, picture-houses are exercising a tremendous influence on the self-education
of children. What they see there influences their thoughts, their feelings, and their outlook on life. They are not merely impressed for the moment; they remember and can recall what they have seen. Words may go in at one ear and come out at the other; what is seen may give ideas new interest and new meaning.

Mr. Wilson's enquiry — although it may reflect only one facet of juvenile world opinion — is of special value, among other reasons, as demonstrating the singular efficacy of the visual representation of great historical events that engross the attention of mankind, and it would assuredly be well worth while to prosecute similar enquiries in all countries that took part in the war, thus gathering together a volume of opinion which, though neither fundamental nor final for adjudicating a social problem of such immense scope and magnitude, may influence the thought of future generations through the life and thought of the children of to-day, who will grow into the men and women of to-morrow.

THE YOUNG WORKER AND THE CINEMA.

The 1928 issue of Jugend Führung reports an interesting enquiry carried out by the School Director, H. Muer, of Essen, regarding the cinema and the young.

This enquiry follows very aptly on others of a like nature that have been recorded and summarised in these columns. It throws some interesting light on the attitude of the working class youth towards the cinematograph.

The Muer inquiry took into consideration 500 artisan apprentices aged between 14 and 17 years of age and 500 unskilled workers of the same ages.

Out of these 1000 persons, 41% of the youths aged between 14 and 15 years were found to be regular cinema goers. At 16 years of age the cinema attracted 53% of the young artisans and 69% of the unskilled workers and at 17 years 82% of the unskilled and 28% of the artisans.

In explanation of the difference between the percentages, the author explains that the skilled artisan, even during his apprenticeship days, has a definite goal in view. He realizes that he has a task to accomplish and that his future livelihood depends on it. And his environment offers him other and more positive educational factors.

The untrained worker, on the contrary, regards himself as a labourer and nothing more. He constantly changes his occupation and has no definite prospects. His economic conditions are conducive to a hand-to-mouth existence. It is upon youths of this kind, of little mental or moral stamina, that the ordinary cinema exercises its sway and it represents for them the most practical and the cheapest amusement.

In the second group of workers 45% adduce boredom as the reason for their frequenting the cinema; 19% refer to the various attractions that the cinema offers; 12% speak of the dismal conditions of their home life, and the remaining 24% merely remark that they are quiet and comfortable at the cinema, that it is the only place they can go to with a girl without being bothered by relatives, and that the pictures afford the only relief from home influences.

A comparison between the tastes of the two classes of youths examined is very striking:

Moral films and films bearing on new views of sexual education: Ages 14, 16, 17: Artisans: 15%, 36%, 26% - Unskilled Workers 15%, 33%, 37%.

Adventure and Detective films: Ages 15, 16, 17: Artisans: 21%, 30%, 21% - Unskilled Workers 27%, 40%, 57%.

Comics: Ages 15, 16, 17: Artisans: 22%, 15%, 6% - Unskilled Workers 20%, 9%, 5%.

Nature and Artistic films: Ages 15, 16, 17: Artisans: 10%, 8%, 7% - Unskilled Workers 11%, 13%, 16%.

Mr. Muer records a series of verdicts for and against the cinema pronounced by
the thousand young fellows to whom the enquiry was directed. Some of those given by the first category are of a social importance that makes one regret the lack of percentages relating to the youths who gave them. Apart from the young men who recognized the educational value of the film in such terms as the following —

"I believe the film to be the best means for improving ones education;"

"There is a lot of very poor acting in theatres; at the cinema it is all well done and that's what matters;"

"The cinema is not a resort for rascals; no beer, wine or spirits are served there — we have many answers pointing to a state of mind that is deserving of careful study from the social standpoint. Let us cite a few:

"I like the cinema; it shows how low morals lead to crime;"

"One lives a freer life at the cinema and learns how to get into easy relations with women;"

"I find all the persons I hate and must sooner or later settle accounts with in the films; the smart set with their motor cars and the rich amusing themselves at the seaside."

The following anti-cinema views are worth noting and quoting:

"The cinema tempted me to commit a theft. Gymnastics are a healthier amusement. All the money one spends at the pictures goes into the pockets of the cinema owners;"

"Only scamps go to the cinema; because they see films about crimes, and these lead young fellows astray;"

"The cinema is the most ridiculous pastime imaginable. How many young fellows are led into bad ways by it!"

"Silly fools and shop-boys go to the cinema to empty their pockets and fill those of the actors;"

"The cinemas are centres of depravity."

There follow a certain number of answers from girls aged likewise between 14 and 17, who have been led astray in their youthful ignorance by the lessons they have gathered from a source whence they should have learnt so much about the beautiful side of life. To them, everything the screen offers is viewed merely as a life of careless pleasure and loose morals.

The conclusions reached by Herr Muer rest on too narrow a basis, being concerned simply with the necessity for teaching the young about sex questions. This matter is dealt with in another part of the Review, and it is seen to be by no means an easy question to settle. We would ask a simple question here: If young people were instructed in the manner Herr Muer deems proper on the question that preoccupies him — which is undoubtedly of great importance — does he believe that this fact alone would enable them to perceive and differentiate between good and evil in life?

The sex question claims attention and understanding, but for other reasons. It is necessary, in the first place, for young people who are so often launched into life before their time, to be aware of what life holds for them of good and evil, and to be forewarned, and thus forearmed against its dangers.

But the cinema is not devoted exclusively to sex questions.

Love is not the one and only ruling passion in the world, nor the only aspect of life with which the film is concerned. One might even submit a good case quite contrary to Herr Muer's. The cinema at the present time is more concerned with aesthetic motives than with motives of passion; it is on the look-out for plots of genuine artistic value and is no longer content to set before the audience a picture of everyday, commonplace life, which none of us need go to the cinema to behold.

Erotic, sentimental plots may still go the round of the second-class halls that exhibit old-fashioned films, films passed by the censors at a time when the industry and the captains of the cinema had nothing better to offer the public, and that continue to do service so long as the films themselves are usable, under the protection of out-of-date permits which, in most countries, are not subject to any time-limit.

On this account Herr Muer's enquiry strikes us as incomplete. He had to sift the results of an enquiry referring to a very special public, consisting of young unskilled workingmen and artisans, who were undoubt-
edly at the dangerous age, sexually. Two other questions, at least, should have found a place in the questionnaire:

«On what particular film or films is the opinion expressed by you based?»

«What sort of films are usually shown in the cinemas you frequent?»

Had these questions been asked, the conclusions drawn might have been somewhat different.

In any case, we are glad to be able to set forth here the results of one more out of so many enquiries. They offer further evidence for future judgment — for a verdict that must pronounce definitely on the possibilities of the cinema as an instrument of social and moral uplift.
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THE EMOTIVE INFLUENCE OF THE CINEMA.

The diversity of the emotive powers of music, the theatre, and the cinema depends on the essential differences in the possibilities of expression of these three forms of art. Music, which Schopenhauer defined as the supreme art, because its vibrations produce through the ear on the minds of listeners a direct and pure sensation of enjoyment — whether this take the form of pleasure or of sadness — is limited by the absence of visual impression. To create a form of mental vision, to translate the musical sensation into forms visible to the mind’s eye, obviously demands a certain intellectual and psychic effort. The musical sensation, considered per se, is only perfect when the listener submits himself passively to its emotive reflex and receives it in an elementary state of his consciousness. It becomes complicated and difficult if we seek to translate it into the perceptive elements of surrounding life.

Life is shown in action at the theatre. Unlike music, which acts directly through the psycho-sensorial reflexes, the theatre and the cinema give us scenic reality in motion and produce their effects by means of visual-sensorial reflexes which, in their turn, react on the mechanism of the brain.

There is a net distinction between cinema and theatre due to their technical peculiarities and artistic possibilities, which may arouse one or other emotive expression, but their central action is one and the same, namely, the power of representing life in motion.

In the article on « Children and the Cinema » published in the January issue of the International Review, attention was called to the advantages of visual education by the cinema over the theatre. It was pointed out that the cinema was synthetic in its treatment of the central theme and developed it, together with all its details, in a rapid and comprehensive manner, while possessing a deep and minute mastery of technique — light, movement, and the reconstruction of environment — thus producing less mental fatigue and greater enjoyment.

Painting, sculpture, and other forms of artistic expression have a static value; they do not reproduce the effects of life and movement. In order to be understood and appreciated, moreover, a certain substratum of culture is necessary, and a mental grasp that many people do not possess and the masses of the people may be said to lack altogether. The emotive powers of such forms of art are of a higher order, more complicated and subtle, owing to the amount of thought and reasoning that they demand.

Music, the theatre, and the cinema are simpler and more elementary. Music, even to those who have no understanding of its technique, of its harmonic and instrumental structure, acts by immediate psychic reflex and produces forthwith the impression and sensation of aesthetic enjoyment.

The theatre offers an analysis of life through the slower development of its action, of a kind to appeal to men of culture and the critical mind, but little adapted to children. The theatre, moreover, though a mirror of real life and the tangible representation of experience in thought and action, does not lend itself to the technical marvels of the cinema and has less influence on the emotions. This is at least true of the drama when unaccompanied by music.

It is this technico-artistic superiority of the cinematograph that gives it an emotive superiority over the stage.

In an article on « The Task of the Cultural Film » published in the Hannoverischer Anzeiger of the 20th November 1929, Herr Leman declares that the film offers new opportunities of expression and transmits thoughts and events through dynamic images, independently of the plot, thus exercising a suggestive influence on our sense of sight that gives, at least for the moment, the illusion of reality. The very rapidity of the fleeting vision, he says, deprives us of the power of immediate and efficacious
criticism and stirs the imagination, without demanding an effort of the mind.

By the very fact of stirring the imaginative faculties — as Leman affirms it to do — the cinematographic vision ought to arouse the critical sense. In our opinion, it is not the imaginative faculties of the spectator that are stirred, excited, and put into action, but it is the reality — or its persuasive semblance — of life that identifies itself with the universal sense of life latent in the soul of those watching the film that gives them, during its projection, the impression that they themselves are taking part in the action.

The fact that the theatre and the cinema are expressions of life in movement explains why they make a more direct appeal to the soul of the masses than music — considered \textit{per se} and not as a factor of the stage — and why people derive greater pleasure from them.

Life, in its essential dynamism, consists of movement. \textit{Stasis} is death. We feel less like onlookers than like actual participants in the action when the known phenomena of our daily life and the very substance of our thoughts and dreams pass before our eyes in living motion. In fact, without willing it or being aware of it, we take a living part in the action and experience a complete fusion of our mind and senses with the scene in front of us. When the film is a work of art, we forget that all is pretence and artifice, and we end by living the very life of the persons shown us on the screen and react to their influence as though they were living human beings.

In a striking article on «The Psychology of the Film» by Dr. Paul Schrott, published in «Die Kinotechnik» of Berlin of 5th November 1929, the author puts forward much the same conclusions. He asserts that the artistic influence (we might say more correctly the \textit{effect of the work of art}) consists in exciting the senses. As pleasure and disgust, like all other manifestations of the senses, depend on the satisfaction of our will, Dr. Schrott deduces that works of art never address themselves to our intellect, but only to our will. Thus works of art exercise on us an influence that is all the stronger the more immediately it is grasped and the smaller the part played by other functions, such as imagination and intelligence, in producing the effect.

Schrott distinguishes, however, between the element of volition, deriving from the auto-critical sense, and the instinctive element aroused, with the necessary immediacy, by the visual-sensory function excited by the representation of life in movement.

In short, we either regard the cinema as a creation of art, and then we have all the various elements which we have mentioned — the accurate representation of surrounding life; the fusion or logical identification, in one and the same conception of life, of the soul of the spectator with that of the actors; the formation of the emotive element which is instinctive and unconscious — or we regard the cinema as a mere series of scenes projected on the screen in which art has no part, and then there come into play criticism and will-power and the differentiation rather than the fusion of life experienced and life as represented on the screen.

* * * *

Is the film a phenomenon of the decadence of art? In the above cited article Schrott maintains very decisively the contrary. He recalls that at the beginning of the Roman Imperial epoch, the decadence of freedom was attended by such phenomena as the decline of the expressionistic forms of life, which were also expressive of freedom — comedy and satire — and that the \textit{salutatives pantomimorum} came into vogue; but no form of pantomime can be compared, either in its exterior forms or in its influence to representations of life that are not cabined and confined within the bonds of mimicry. Much might be added to what Herr Schrott affirms. Did mimicry represent at that period a decadence of the expressionistic forms of art, or may it not rather be interpreted as a corrective and a substitution of those forms? Did not satire and the drama that were languishing on the styles of the Latin poets, seek in the mute art a new method of expressing their fettered thoughts by the language of gesture, more telling perhaps than that of words? Did not mimicry from that time forward assume the value of a real and typical manifestation of art, most eloquently expressive of life? Did it not
give rise to real masterpieces? Was it not the first form of language without words which has engendered in direct lineage the cinematograph?

Another observation suggests itself. Dancing itself, in its mimicry, is a representation of life. And yet dancing from the dawn of history onward has exercised an emotive influence most certainly deriving from an authentic form of art, in which decadence has no part. No one contests the artistic value of dancing. We need only recall Isadora Duncan, the last great creator of symbolic motion of unquestionable musical effect.

In his article on 'The mystery of the Cinema' published in the Corriere della Sera of Milan of the 13th December 1929, G. A. Borgese goes further and declares that sports are a form of the dance. He proceeds to combine all forms of art expressive of life, including the cinema, in a single synthesis — the theatre. This is a paradoxical affirmation that we cannot accept and swallow whole as it comes from the author; to accept it is to recognize that all the world is a theatre, — even to the rhythm of walking, the music of machinery in motion and the humming or booming of motors, the rustling of leaves, and the howling of the wind — for all the phases of life and phenomena of nature have a music of their own (1).

(1) From Sven Hedin — Unknown Asia: 'The blocks of ice are about a metre in diameter, and are rounded in consequence of continually rubbing against one another; in striking together they produce a metallic sound, comparable to that produced by bells at a distance, and their crystal spikes glitter in the sun like diamonds.'

I'm Messaggero, Rome, of the 5th January 1930, recalls what was written by Dr. W. S. Tucker, the acoustics expert of the British War Office, in a report addressed to the Lord Mayor giving a musical analysis of 'the bizarre melody sung by London'. He declares that when the electric train starts it gives out too low a note to be caught by our ears, then as it runs rises to d next to middle c on the pianoforte, with 288 vibrations to the second, and when it stops at the station the empty train gives us a good strong g (384 vibrations), while the steam engine whistle cracks our ear drums with a very high c (2048 vibrations); the notes of the taxi trumpet are a continual a and b below middle c (from 210 to 240 vibrations); the Underground railway gives us preferably b above middle c (580 vibrations); while the trains are marvellously constant in their dominant notes from d to g above middle c (from 280 to 320 vibrations to the second).

But we might continue to cite examples indefinitely.

Starting from the dynamic conception of life, that is, from the principle that the phenomena of life in movement alone can be of interest, and are the more interesting in exact ratio as the technical and artistic form (the cinema) gives greater possibilities of expressions of life than the theatre, we cannot properly speak of decadence, but rather of a gradual evolution into what has become the new form of art; a form which responds to the new needs of an increasingly dynamic existence which could not be satisfied by the personal and conventional conception of drama and comedy.

Life cannot be represented by mimicry alone. It contains within it colour, sound (1) speech, the third dimension (which is necessary to detach the object from that which surrounds it), the physical elements of life to which the fourth or imaginative dimension can never be added; this has no objective value but merely an individual one.

When the time arrives that the above four elements are added to a technically perfect mimicry, what difference will there be between the life surrounding us and that projected on the screen? The essential difference in the phenomenon will consist in the fact that the life around us is real and the other artificial (a difference that exists in the theatre also). But the cinema, among its many advantages, will have two clear advantages:

(1) With regard to colour and sound, there is important technical value in some information that comes from Vienna, according to which sounds can be transformed into colour. Baron Vientinghoff Schrott has given a description in the Viennese press of an invention of his which he succeeded in working out thanks to the means given him by the Japanese press for the construction of apparatus. But Vientinghoff's machine was destroyed by the earthquake of 1923, and he therefore left Japan. The invention is as follows: Vientinghoff stretches a cord, in a dark room, which renders sound by means of a contrivance; in front of the cord there is a photographic plate of a certain flexibility, which the inventor exposes to the vibrations of the cord for 30 hours; luminous effects in relief are found on the plate, which demonstrate how the acoustic vibrations are transformed into optical phenomena as soon as a certain limit is passed. Vientinghoff has gone beyond this. Having established which colour corresponds to a particular tone of the musical scale, he decomposed the light in different colours by means of a prism, and caused a luminous ray to fall on a thin gold cord through an extremely narrow opening. While the ray was falling on the cord, he tuned it until he had verified the acoustic vibrations. Thus, after having transformed sound into light, he succeeded in transforming light into sound.
the possibility of projection in a not far-off day, in full sunlight (daylight screens), just as the manifestations of real life take place; the possibility of bringing before our minds and consciousness aspects of life that we could never otherwise see, and of bringing them before us while they are actually happening (wireless cinematography).

This is the reason why, if we accept the cinema as an art and, indeed, the art that represents the dynamic force, it cannot be said to be complete until all the above-mentioned elements combine in forming it: colour, sound, speech, stereoscopy (1).

Schrott, in the article we have cited, states that colour and sound (he does not speak of the three-dimentional cinema) are admissible as a contribution of the characteristic psychology of the film because sound is able to reproduce, by physical means, the various noises and the musical accompaniment. Like Jean Painlevé, the biologist and cinemagist, he is against the talking cinema, preferring the mute film (2).

In his recent book on the sound film, Antonio Giulio Bragaglia, an eloquent and original thinker, maintains a similar thesis to that of Schrott and Painlevé. He declares that the mute film is still the most sincere aspect of the screen, as well as the most interesting and artistic; that the sound film substitutes an imperfect orchestra with no other advantage than that of saving the directors' money; and that the talking film, in addition to not achieving the object aimed at, eliminates all sense of illusion and brings the cinema nearer and nearer to the theatre, which is a vain endeavour (Giacchetti, in the Gazzetta del Mezzogiorno, Naples, of December 11, 1929) (3).

Sem Benelli also, in the Gazzetta del Mezzogiorno of January 3, 1930, when speaking of the crisis in the Italian theatre and the competition of the cinema, says «I do not think that the cinema can destroy the theatre, which will always arouse deeper interest than the cinema, because it brings two absolute verities before the spectator which are the essential elements for reasoning: that is, speech (the opera and poetry), and the living human being, who gives life to the author's creation at the very moment that it is presented to the spectator; and there is no doubt that the audience will always feel that the cinema is but a mechanical and unsatisfactory substitute for these two elements. In fact, the cinematograph is nothing but the betrayal of the theatre. Like many other expressions of American life, it seems to transform life into a crude and systematic expression of being; but we Italians, who are the children and parents of sentiment, are not to be deceived much longer in the highest expression of life, Art».

It is not easy to understand whether such opposition is made on the grounds of the essential artificiality of the talking film, or is in fact caused by defective technique at the present stage of development.

It is easy to reply to the first objection, because the theatre itself is artifice. From mimicry and mute representation we pass on or return to the talking theatre. The

(1) Against. S. A. Luciani, in his recent volume, L'amfiteatro. Il cinematografo come arte, published by Voce of Rome, maintains that the absence of colour should not be considered as a deficiency of the cinematograph performance, but rather as a characteristic specificity, which is compensated enormously by the expressive beauty of the chiaroscuro, which permits the cinematograph to obtain the most unexpected effects of perspective and relief.

He also affirms that light and shadow in the cinema do not, as in painting, determine the static effects, but rather the dynamic effects, creating continual variations according to the movements of the persons and things presented.

(2) See The Documentary Film in the January number of this Review.

(3) Against. Among the most recent opinions:

In the Fayy Journal of Cairo of December 16, 1929, No. 16, reference is made to an important opinion of M. L. Fosquet on the talking film and music.

The talking and singing film, says the author, gives a new vogue to singing. «I firmly believe in a sound and talking production in which the song serves as a motif and will be readily grasped and remembered by the spectator».

Something of the kind has been attempted with the mute film; the film song was created, but it was not synchronized, and frequently did not produce the effect desired.

Herbert Stothart, composer and formerly collaborator of Franz Lehar, acknowledges, in an interview accorded to the Camoedia, that with suitable orchestration, any expression that is desired can be given to a song. Admitting that the singing is given on a uniform motif, every expressive value desired may be given to it by the employment of different accompanying instruments. The English horn can express a real feeling of sorrow, violins express idyllic love and the deepest grief; brass instruments are expressive of force and power; the flute calls up mysterious impressions, and the laugh of the saxophone proves very contagious to listeners.
This observation undoubtedly has force, but it annihilates even the possibility of the theatre. Only mimicry affords the intuitive element and that psychological identification of oneself without reflection, which the mute film gives us. At the theatre, even with the many dubious possibilities of complete and simultaneous independence of hearing and sight, an intellectual efforts is necessary to separate movement from language for our own individual artistic perceptions; that is to say, for our critical sense. If the talking film forces us to think and to reduce — not destroy — visual attention, the same may be said for the theatre, and certainly for the lyric theatre, where the elements of expression are not two but three — music, mimicry and language.

Fortunat Strowski, writing on the theatre in the Paris-Midi of January 9 of this year, tries to find a middle-way solution and to temper each of the two psychological elements. He declares that the theatre must not die and must not be considered merely as a luxury for idle people. Like its young sister, the cinematograph, it is of the highest value in the progress of civilization. Man is no longer satisfied with the solitude of his room, the dreary and depressing modern room. He is in need of that dynamic and universal language which only the theatre and the cinema can offer, able as they are to create within themselves the collective mind.

But if the theatre is defended, it is not easy to understand why we should not also defend the film, since, as we must repeat, it adds its own particular art and its infinite technical possibilities to those of the theatre. Nor can it be claimed that those mysterious vibrations of the soul which merge spectator and actor into a single unity are lacking in the film. It is purely a question of art. The combating the thesis maintained by Dr. Paul Ramain in the Courier Musical on the competition at the cinema between hearing and sight and on the detriment that one of these organs must necessarily cause to the other, that this is a complete error. The complete and simultaneous independence of hearing and sight may be perfectly achieved by a system of gradual training. Generally speaking, the function creates the organ. In the case under examination, as in the case of the lyric theatre, the organ is already in function or is in process of formation.

voice of the actor may be natural, but it is nevertheless the manifestation of an intellectual or spiritual artifice. And if the natural element is lacking in the cinema, we have a magnificent corrective in the technical element and the possibility of having reproductions of the best loved and universally-known voices, even when remoteness in time and space make it impossible for us to hear them naturally.

With regard to the second objection, it will be sufficient to recall three names: Galileo, Fulton and Newton. Their physical or mechanical creations are of such common use to-day that we are almost inclined to doubt the truth about their struggles and efforts and the bitter war that they and their disciples and followers had to wage continually in order to win. Our century is different, we breathe a freer air and have a more dynamic conception of life. We must not repeat the error of the past, since we are sure that the future will bring perfection to cinematographic mimicry, and will endow it with the spoken language.

The modern cinema enthusiast, as Giachetti observes in the article we have cited, is in favour of the mute film. Mimicry, in his opinion, is still the clearest and at the same the time simplest expression of art. The advance guard of the cinematograph cannot conceive the film except in its elementary form.

This point, like a similar observation of Schrott's, has a sentimental and psychological value: sentimental when it invokes a conception of pure art only and renounces all other possibilities; psychological when it asserts that speech is addressed to the intellect and that the intellect is the essential. In visual representation, pure and simple, it is said, that the living image is felt but not understood. The secondary (mediate) effect, through the word that acts on the intellectual centres, is detached from the immediate effect of the pure vision. The continuity of the pure vision is suppressed, the word forces the brain to think and this destroys the visual attention (1).

(1) Jacques Janin, in an article Ear and sight in competition at the cinema, which was published in the Ami du Peuple of Paris, on December 21, 1920, asserted, while
great actor of the theatre alone can bring the spectator to feel as he thinks, to live with him in his inner life. And the great actor of the cinema will obtain the same effect when he is able to unite his art to the marvellous technique at his command, which is not reproducible in the theatre, and to make the spectator hear and feel the things that he expresses with that absolute truth that can be asked only of a great artist. The mediocre is always exasperating, whether in the theatre or the cinema. Art, on the contrary, will always be understood and felt in its entirety and in its full beauty, whether it is manifested solely through mimicry or seeks full expression in sound and in word and in colour.

To cite only one example of a film that may be considered, despite its scenic character, as highly educational; has not Charlie Chaplin, in his «Gold Fever», created a work of art that could not be imitated by the theatre, although it is just a mute film? And if «The Gold Fever» had been a sound or talking film, with appropriate sounds and voices, would not its effect on the spectator have been even more pronounced, his emotions more intense and his feeling of fusion with the scene more complete?

But in all that has been said up to this point, any decisive pronouncement on the question of sound or talking films in comparison with the theatre, is lacking.

According to the latest news, the great violinist Kubelik will shortly interpret the life and music of Mozart in a sound film. His figure, characteristically like that of the dead composer, and his prodigious art as a musician will give unique value to the new film creation. And the film will give the whole world simultaneously a chance of enjoying the performance.

Although the theatre may have a crowded audience, its range is limited to the moment and the locality. The cinema is ubiquitous. While the theatre takes years to reach a numerous public, the screen is here and there and everywhere at once; while the former appeals to a public of one hundred thousand persons, the film has reached tens of millions.

Just think how many works of the great masters who have created the most authentic forms of art through the medium of music — despite the many years that have gone by since their creation — are still unknown to the many. Only a few motifs are widely known; the rest moulder on the dusty shelves of libraries and musical studios.

The sound and talking film can give to a whole world, near or distant, the precise and almost tangible sensation of knowledge voluntarily acquired. Tens of thousands of persons will be able to see and to hear at the same moment or in rapid succession.

Even if we regard this as merely popularizing artistic taste, it is none the less one of the highest forms of propaganda. It gives a chance to the masses to know and enjoy what has hitherto been the privilege and the monopoly of the favoured few.

No other means of diffusion has so wide a range, for the cinema penetrates everywhere and its message is heard in remote corners and in villages where the theatre is unknown and cannot reach. For this reason it will have the victory over the theatre. Despite all that has been said of the different social values of the cinema, music, and the theatre, the cinema will take the lead because it can outstrip all rivals in its colossal stride. Its field of action is infinitely wider and deeper.
SOCIAL ASPECTS OF RUSSIAN LIFE.

We have received from Soviet Russia detailed accounts of certain forms of artistic expression that are developing along new lines and point to a new trend in the culture of the people. These forms of art make a direct appeal to the soul of the masses through music, the theatre, and the cinematograph, which are often understood rather by intuition than by reasoning.

The mass of the people is unable to differentiate owing to a lack of specialized culture. It realizes life, whether real or imaginary, through the impressionistic element, and is content to submit to its reflexes. The sensations received through the eyes or ears — sensations whether of pleasure or of pain — vibrate on the consciousness and stir the latent aesthetic sense, which separates the conception of the beautiful, in its manifold aspects, from the dreariness and monotony of daily life.

Some years ago, at the end of the war, Armenia was a mere mass of ruins whence the residue of a scattered people were in flight. Today, thanks to the efforts of the Armenian People's Commissariat for Public Instruction, with the assistance of the surviving musicians of this many thousand-year old race, national music has revived. The State Conservatoire has been re-opened at Erivan; this counts 365 students, a symphonic orchestra of 67 musicians and choirs of over 70 voices. The same People's Commissariat has founded a musical section of the Institute of Science and Arts. A great number of national songs and folk music, beginning with the popular collections of Van by the composer Komita, have been collected, classified and published. (Bulletin d'Informations, Moscow - No. 41-42)

Owing to the initiative of the said Institute, the first congress of Armenian musicians was held at Erivan in September 1928. The possibility of a musical folk-lore collection was discussed, the work to be assisted by the State Commission under the presidency of the historian and art critic, V. Korgovoy, and by A. Ter-Gevondian, rector of the State Conservatoire.

The whole collection has been put entirely at the disposal of the public, not only in theatres and concert halls, but also in the clubs of the offices and factories which organize musical performances after working-hours.

In White Russia music has for a long time been founded on national and popular motifs, which, since 1846, have been gradually collected from oral tradition by Abramovitch, Ratchenko, Romanov, Schein, Bessonov, and by all those capable of getting into touch with the soul of the peasants and grasping the purest elements of their spiritual life. (Bulletin cit., No. 27-28).

Since the Revolution, the Commissariat for Public Instruction and the Cultural Institute of White Russia have been occupied in collating and scientifically revising the material which it has collected. A special commission, established in 1923-24, by the Institute of Musical Science at Moscow, has harmonized 1250 popular songs.

Instrumental music arouses much less interest than singing owing to the primitive nature of the instruments and also to the fact that the instrumental music of White Russia is purely choreographic, entirely popular, and varies enormously with the dances that it accompanies.

As compared with the remote origin of music in White Russia, the theatre is a quite recent institution (Bulletin cit., 27-28).

There have been only a few sporadic performances since the first play «Salianka» was produced at Minsk on 9th February 1852. The general political situation of the country largely contributed to this state of affairs. It was only in 1910 that the first play was produced in the National Theatre at Vilna. Since the Revolution, a dramatic school for the training of actors was established in 1921. After some years of work in Moscow, it was transferred in 1926 to Vitebsk and turned into a State Theatre. At the same time a Jewish State Theatre was also founded at Vitebsk. In 1927 there were four State theatres. The touring theatre is of special value and importance. It keeps up its popular and national character and
moves from one village to another giving the peasants opportunities, which they would not otherwise have, for aesthetic enjoyment. It somewhat resembles the «Charriot of Thespis» which in 1929 toured the Italian countryside, enabling the people, who would have found it difficult to go to distant theatres, to get some knowledge of this form of art.

Whilst the sources of musical and dramatic folklore were being explored, the Tram (the workers’ juvenile theatre) was founded at Leningrad. Its founders described clearly its objects: «We wish to establish a new public organization which shall unite the elements of clubs and schools with those of a theatre for the propagation of popular art». (Bulletin cit., No. 31–32).

While lacking any special characteristic of its own, the Tram wishes to make young workmen acquainted with dramatic art of whatever school may be best suited to them. All methods of theatrical expression are employed, including music, lighting effects, radio and «Termenvox». This new development of dramatic expression calls for very special technique, but it has led in the last few years to the training of a set of actors of the best sort under the direction of Sokolovski and of the composers Dvornikov and Diechevov, around whom are grouped artists and dramatists of real value.

The cinema is the third emotive factor offered to the public. In Russia, besides the theatrical-cinema, all other forms of film are being developed, foremost among these is the documentary film, reproducing local colour and the several aspects of social life.

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The particular social and political situation of the Republics constituting the U. S. S. R. enable us to analyze the social aspects of the screen and to compare them to some extent with those characteristic of other countries. We therefore deem it expedient to cull from the information kindly furnished to the Rome Institute from official sources all the several points of interest illustrating Soviet cinematographic activity at the beginning of this year and summarize them in a brief note.

CINEMATOGRAPH ACTIVITY. — Politico-artistic councils have been established in connection with the cinemas. The latest is that attached to the Colossus Theatre of Moscow, consisting of workmen delegates from the different factories and representatives of the party.

Before any of the films are screened, one of the members of the Committee explains its purport to the audience and invites it to play an active part in the pursuit of the aims for which the Councils were created.

At the close of the show, the audience is invited to express its views on the films shown and the different opinions are noted on blackboards, so that all new arrivals in the hall may have an opportunity of learning the views of those who have watched the films before them.

The management of the halls is partly under the direction of groups (cells) known as the «Friends of the Soviet Cinema», divided into four sub-groups formed by designers, photographers, authors and cinema mechanics.

The luminous screen has enthusiastic collaborators in the U. S. S. R. A plenary meeting of the art workers’ association, at which representatives of the Sovkino, the Voiko, the Mejrabpomfilm, the Georgian Goskinprom, the Vostokkino and the Belgoskino Companies were present, voted that 16th February should be established as Cinema Day. All entrance fees taken on that day are to be devoted to a special fund belonging to the Palace of Arts, and all workmen employed in cinema theatres and in the film industry are required to pay their earnings for that day into the fund.

Meanwhile a library containing all works dealing with the cinematograph has been set up in connection with the Association of Revolutionary Cinematograph Workers (1). The censorship of films exhibited is still in the hands of the artistic council, formed of representatives of the social, vocational and political organizations. The council recently met at the Offices of the Mejrabpom Co., and Vaévodol Ivanoff read the scenario of his new film «Life is sweet», illustrating

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(1) Association for Cultural Relations with Foreign Countries (Voks) Malaya Nikitskaya, Moscow.
the reading by the projection of some of the pictures.

FILMS FOR CHILDREN AND SCHOOL FILMS. — The management of the Sovkino has issued strict orders that at least 15% of the artistic films produced in the course of the year must consist of films for children. It is calculated that, for the present year, an average of two children's films will be presented each month. The Sovkino has further requested the People's Commissariat for Public Instruction to institute a special commission to preside over the production, not only of these films, but also of all scholastic cinematography. The Methodological Institute of Scholastic and Post-scholastic Work and the juvenile and pioneer organizations have been requested to collaborate in the plans for the production of children's films.

Parallel with the production of recreational films for children, scholastic ones are being produced. The Mjebrapom has requested the People's Commissariat for Public Instruction to set up a commission to decide on the production of a visual and spoken alphabet. At the same time the cinema factory of Kiev has completed the film The Wind, showing the different ways in which the wind can be harnessed to serve the purposes of man. Other teaching films in course of preparation are: The Lives of Butterflies; How shoes are made; White Gold (sugar); How Metals are obtained; Moscow, Centre of the U. S. S. R.; In Central Asia; Food Products: salt, rice, tea, butter and bread.

CULTURAL FILMS. — The cultural films which are being produced in the Soviet Republic are quite distinct from documentary ones. The former are suited to persons who desire precise information on general and particular occurrences. The documentary film deals with folklore, landscape subjects, and travel.

Among cultural films must be counted all those dealing with any branch of knowledge and instruction, comprising both films of a generic type such as Lishez, prepared under the direction of Yakuchkin for the tenth anniversary of the promulgation of the decree for the suppression of illiteracy (intended for cultivated people so as to encourage them to give all their assistance towards this end), and films dealing with special branches of human activity.

Among recently produced films or those in preparation the following are considered as cultural:

a) Films of industrial interest, such as: Minerals and Metals; Leather and Shoemaking; Electric energy; Glass and Cement; Sugar; Graphic Arts; Roads and Communications; The development of economic energy in the U. S. S. R.; Cold Storage; Re-enforced Concrete, illustrating the use of this in Soviet buildings; State Electric Trusts; Automatic Telephones; The Symphony of the Lower Don, showing the work in foundries (a film to be converted from a silent into a sound one); The Sun as a Source of Energy; The Iron Brigade, made in the metallurgical centres of the U. S. S. R., engineers and workers taking part in it.

b) Those dealing with problems of production and labour, such as: Cooperative Trade; Kolkhoz, on agricultural communities;

c) Those of agricultural interest: How to fertilize the soil for cultivation and selected plants; The Film of Agricultural Colonies, which, under the direction of Tretjakoff, will show the workshops for the assembling and repair of agricultural machines, the increase of specialized workers in agricultural colonies, the war against agricultural pests, and methods of cattle breeding; Black Rust, a characteristic disease of corn; The Selection of Corn; Use selected seed; The Cultivation of Cereals; Get the best out of your Seed; The War against Noxious Weeds; Working the soil; Spring work; How to work virgin soil; The Milch Cow; Forage and rational methods for cattle feeding; Your cattle will serve you according to the care you take of it; How to look after a breeding cow; Midday at Zambor, on fruit culture, etc.

d) Those dealing with social welfare and the prevention of accidents: «Precautions taken in coal-mining; Against smoke; Alcohol and work; The Red Cock (propaganda for the prevention of fires in villages).

e) Hygiene films: Typhus and Dysentery; The teeth, the mouth and health; Scarlet fever; Microbes that propagate infectious diseases; Prisoners of parasites (against insects which infest houses).

The technical section of the Sovkino has
held a meeting dealing with the rationalization of labour for cultural ends. All questions connected with the rationalization of cinematographic production, and the consequent reduction in prices, have been discussed.

The following questions have been examined:

a) the scientific organization of work as applied to the film industry;

b) the organization of cinematographic workshops;

c) new methods in cinema technique not yet in use in the U. S. S. R.;

d) report on production.

The practical application of the decisions come to during the meeting should bring about a complete revolution in the methods and technique of cinematographic work. Thus for the first time this industry is about to be rationalized.

**Documentary Films.** — We have already described the criteria governing the making and selection of documentary films. They aim at making known the lives of the less well known populations of the U. S. S. R., as well as of peoples beyond its frontiers. Geographical, landscape and folklore films therefore come under this heading.

A special theatre for cultural and documentary films has been opened at Kiev, by the VUFKU, for the benefit of working men. The theatre is in the Hall of Columns of the Palace of Labour at Kiev and has accommodation for 14,000 spectators. Entrance prices are kept very low. Each projection is accompanied by a lecture and there is a permanent exhibition of documentary films in the entrance hall.

There are many films in this category. Amongst those already produced or announced we may mention:

a) *Territories of the U. S. S. R. The Altay* (author and operator B. Slontzky); *The beautiful children of the sun*. So as to produce this film the director, Blumenteyn, made together with his operators and actors, the journey from Archangel to the islands of Solovky in motor launches and thence to the island of Kolgueff, stopping at the most interesting points of the New Land and of the island of Waygatch. They have thus been able to photograph the most distant places inhabited by Samoyeds, as well as their work and habits of life and the activities of the agency at Gostorg.

Other documentary films worthy of notice are: the film which the operator-director Tiagay is preparing, dealing with Abasia and northern Caucasus — a first effort at tourist propaganda by the Soviets; *Winter Sports* by the landscape photographer M. S. Beutler.

An expedition under the direction of A. Litvinoff is about to take a series of films dealing with the people of the Far East in the regions of Vladivostock, Kharbarovsk, Kamchatka, Khijyg and West-Kamchatka. This expedition which started on the 10th December 1928 will return in May 1930. In January of this year it was at Pandjan.

b) *Africa*. The Colosseum theatre has recently screened the film *In the land of fear and death*, being the record of the Citroen expedition across Africa; it is preceded by a lecture by a member of the expedition.

According to the Soviet’s idea, the cinema must become an instrument for the economic and political transformation of the country. It will be able to do this by distributing films of a political, educative and documentary nature.

The Council of the Peoples’ Commissaries have therefore decided to increase the production of films which contribute to the education and political instruction of the audience, compelling the film-producing organizations to establish special sections for this purpose and to devote 30% of their capital to political and documentary films.

During February 1929 these organizations prepared their scheme of production for the year 1929-30.

Amongst other decisions taken by the council of the People’s Commissaries in favour of politico-documentary films was the ear-marking for their production of part of the sum inscribed in the budget for political instruction; a decree that all screening of artistic films should be preceded by cultural-political films and cinematographic journals; a rebate to be granted on the hire price of specialized documentary and cultural films to touring and rural cinemas; it was even proposed to establish special cinema theatres of
a documentary-cultural-political order for children and young people.

Rural cinemas and working men's clubs were to be granted special donations of lantern slides made by the factories of documentary films and adapted for projection by the Izbatch lantern. The slides were to deal with the following subjects: political and social life in the U. S. S. R., systems of industrialization and rationalization of agricultural production; social welfare; the cooperative movement, the anti-religious and anti-alcoholic propaganda of the U. S. R.

During the year 1929-30, 300 new films (of each of which 3,000 copies will be made) accompanied by explanatory pamphlets, are to be put in circulation.

Religious films. According to the political ideas of the Soviet industries, it would be more correct to talk of anti-religious films intended for popular propaganda. It is often, however, difficult to differentiate clearly between films that aim at wrecking religious ideas and those of a purely artistic nature. The anti-religious element is apparent even in the artistic films. It is masked, to a certain extent, in those intended for exportation. It is clearer and more explicit, as a means of decisive propaganda, in films intended solely for home consumption.

Anyway, differentiating between antireligious propaganda and art, the films most recently produced or in course of production are the following:

The Origins of Man by the stage director Zelonieff, having Darwinistic and propagandist tendencies; The Feast of St George, under the direction of Protozanoff, largely photographed in the south of Russia: The Dream which explains dreams psychologically so as to combat the mystic point of view from which the Russian people are wont to regard them. The last of the Pagans, filmed in 1928, which shows the religion and pagan rites of the very ancient tribe of the Udmurti, who used formerly to inhabit central Russia, but who are now relegated to the Kama district, where they keep unchanged their habits and beliefs. These people believe that the universe is supported by Intar, the god of light, and that family peace is the attribute of another god, Vertudu. On fête days all the inhabitants of the villages go to the sacred woods, where they solemnly recite the ritual prayers whilst sacrifices are being offered. After the religious ceremonies have taken place a banquet is held during which the women offer water to the spectators.

The above three films are produced by the Mejrabpom Co. The Kulturfilm presents «Opium», under the direction of Jemtcujny; it is distinctly anti-religious in propaganda. The director Genk will film «Divine Miracles» with a strong anti-miracle tendency.

Artistic and Social Films. It is impossible in this field of cinematographic activity to distinguish between purely artistic films and those which aim at the propaganda of ideas.

The two types of films amalgamate into a single type of film of social interest with an artistic background. Even those of a purely historical-dramatic order are distinctly propagandist. This is somewhat toned down and masked when they are intended for exportation from Russia, but is more obvious in those for home use.

The cinematographic section of the V. O. K. S. decided at a recent meeting to diffuse their films showing scenes of real life by means of exchanges with similar organizations in Austria, Switzerland and Germany.

The Mejrabpom began some years ago with Aelita, a fantasy taken from a novel by Alexis Tolstoy. This was followed by dramas founded on novels by pre-war authors and on episodes of the Revolution, which culminated in The Mother from the novel by Gorki, under the direction of Pudovkin, in which the highest technique is blended with strong emotive elements.

Among films of a cultural-theatrical order are The White Eagle, a revolutionary episode of 1905, The Wedding of the Bear, the plot being by Lunaciarsky, The House of Ice, other historical films of local interest, The End of St. Petersburg, created by Pudovkin, Moscow in October, a faithful reconstruction of revolutionary events; the extraordinary film The Descendant of Genghis Khan, which transposes Mongol motifs into present day Russian life, Ivan Galai, and the Sailor depicting scenes of present day sailor life, by the author of «The Cruiser Potemkin». In preparation:
The Living Corpse and War and Peace from The Living Corpse and War and Peace from the similarly named books by Leo Tolstoy, besides others.

The latest films and those in course of elaboration claim attention. Amongst them we note:

The Last Pilot, a figure who is disappearing from the sea owing to modern developments in navigation. This film is directed by Kordun and the actor Sadowsky plays a very striking part in it; Suburban Districts mostly photographed at Umanta. The film shows, against a national background, the eternal conflict between parents and children. The principal part, that of the Jewish girl, Dora, who, against her parents' wishes marries a Ukrainian, is taken by Nata Vanciadze; The Soil, by N. Dorjenko, is to be synchronized. This shows the antiquated and modern ways of life amongst the peasants, the modern method triumphing; The Blue Fox directed by P. Malikhoff, The Two Keys by Milkin, The Three Reviews by A. A. Aravsky, intended to illustrate historical-dramatic episodes of the Crimean Republic, Zuordukay, with photographs from the Far East, under the direction of Beknaroff; Eliso by the Georgian Goskinprom Co., a sound film which has had a great success at the cinematographic exhibition at Stuttgart, under the title «Caucasian Love»; The Tragic End of an Alpinist, with photographs from life taken during climbs made by members of the Georgian Geographical Society; The Circus with a scenario by Tretjakoff; Drop by Drop, which shows dramatically the part taken by peasants in the civil war and gives splendid views of the Kuban territory; Rasaya (Russia) a political propaganda film; The Vanguard, with a scenario by Kataeff, recently approved in a plenary sitting of the literary section of the Mejrab- Ponom; The Song on the function of art in the community; Crime and Punishment, illustrating modern Russian penal systems of moral re-education.

Yet others: Life is Sweet, already mentioned, directed by Pudvokin, with a somewhat Bohemian setting, in which the cast lead a careless life, cheerfully, without excesses, but with the one object of enjoying the passing hour; The Way of the World by Spiess, which shows the development of class consciousnes in contemporary working-men, and indicates how the new type of workman is being formed by the influence of the economic and historical environment. There is to follow a whole series from the workshops of the Sovkino: A Great Bore, an anti-alcoholic satire, in which the children try to correct their parents, The Unknown, in which the scene is one of the ports of the Volga; The Life of Enthusiasts, the life of the working classes who have attained power; The Flying Islands, The Don, synchronized films; The First Girl, and Judas, the scene of which is laid in an old monastery set in beautiful southern country. There is a priest, a sincere believer, who, upset by the new ideas, feels compelled to follow the current of the life that surrounds him. Our Ultimate depicting, like one of the above mentioned films, the educational influence which children can exert on old-fashioned parents; The Path of Lenin produced under the direction of Savitzky. For this film the path that Lenin followed to eastern Siberia has been photographed; beginning with the remand prison in Petrograd, then Moscow, the Urals, the prison at Krasnoyarsk, the road by the Yennissey and Chuchenskay, the place of deportation of the creator of the Russian revolution. Photographs have been taken of those people who were witnesses of his imprisonment and of his exile in Siberia; the new schools and charitable institutions erected in memory of the political exile V. I. Ulianoff are also shown.

The social importance of the film in the U. S. R. grows day by day. Although the organization of production seems to be divided between a certain number of independent firms, this is not really so, it being in fact controlled and centralized by State institutions which ensure reciprocal help between the different producers and prevent the possibility of an economic collapse or of any competition.

Technique. An interesting technical item is mentioned by the Association for Cultural Relations in its Bulletin for January of the present year.

The working council of the Sovkino has examined the suggestion of the workman Karpoff, regarding the substitution of wood paving blocks, more particularly for use in
cinemas, by means of a composition of wall-paper and liquid glass. He also suggests using liquid glass for decorations, whereby a considerable saving in oil colours and in

laquers made with alcohol would be effected. Karpoff's suggestion was at once tried and, we are informed, has given remarkable results.

**CHILDREN AS ACTORS AND AS SPECTATORS.**

The use of children as actors, on the stage and for the screen, has always been a subject for animated discussion, and has caused the passing of numerous legislative measures throughout the world; there is scarcely a nation that does not attempt to regulate this business and prevent its abuse.

As far back as 1926, the International Labour Office started a collection of extremely interesting documents, which were published in the «Survey of Industries and Labour». During the same year, at a later date, the first Cinematograph Congress, held in Paris, asked the I. L. O. to continue its work of investigation.

But the retrospective history of legislative measures and the investigations that have been made or are being made now, is of interest only up to a certain point. The problem before us is of another order: that of studying not what is being done but what should be done. The question is to decide whether or no it is socially advisable that children should be employed as actors in film production.

At a conference held at Washington in 1922, Dr. E. J. Lickly, Director of the Child Welfare Department of Los Angeles, gave a clear explanation of the subject. The following is a brief summary of his arguments:

«The motion picture industry offers but a small benefit to the child. Admitting that he may be fairly useful to the screen, his working period during any year is of very short duration, varying, according to the special needs of the industry, from 5 to 60 days.

«If the child is to have a genuine economic value, he must, given the brief duration of his work, be a real little child phenomenon. And it is only very rarely that such a child is met with. The so-called infant stars of the screen (Jackie Coogan, Wesley Barry, Wilfred Harris, Mary Sunshone and others) may be counted on the fingers of one hand. «The great majority of child actors, therefore, is composed of youngsters who have had a bright prospect which they can never hope to achieve held tantalisingly before their eyes.

«The child actor of the screen becomes such for three different reasons. Either his parents are themselves connected with the industry and endeavour to get their children also into it, by straight means or crooked; or they think that, by placing the child at work on the screen, they will ensure to the family a source of income which, by the way, is more theoretical than actual; or, finally, in consequence of the ingenious and universal delusion under which parents suffer, they persuade themselves that the lively intelligence of their offspring is the true indication of a Mary Pickford or a Charlie Chaplin, a Fatty or a Douglas Fairbanks in pose. This is a very human phenomenon, but is none the less a false impression.

«Children who work on the screen are as a rule the most intelligent».

The only interest of the question from the legislative point of view is that of age.

In Austria, The Act of Parliament of December, 19, 1918, which deals with the employment of children in public entertainments, refers only to children under fourteen years of age. There is no legislation of the kind for older children.

In France, there are no restrictions of any sort, with the result that there are many abuses, as regards both children and theatres. The only measure that may be considered as even remotely connected with the subject is that compelling all children between the ages of 6 and 13 to attend school. And on examination, even this indirect measure has but a very doubtful application, for there
is nothing to prevent children from working for the screen after school hours, and in any case, it is open to every child to obtain, at the age of eleven years, a school certificate showing he has passed the necessary examinations and is therefore free to leave school if he wishes.

In Germany, a special law for Berlin was passed in 1924, and a more general one in July 1925, prohibiting the employment of children under three years of age; for children of from three to fourteen, a special permission must be obtained from the police, who give such permission only after very careful investigation and the assurance that the bodily and spiritual welfare of the child will be safeguarded. The part to be taken by the child in the performance must be made known to the police, in order that they may judge whether or not it is suitable. Children are not allowed to be employed on the screen during school hours; the maximum number of hours during which they may be so employed is six, and they are not allowed to work after eight in the evening. There are also other special obligations limiting the intensity of the arc lamp lights; and the police are required to see that all these measures are duly observed. The Law of 1925 makes a special exception in the case of children of less than three years of age, allowing them to be employed when their presence is essential to the production of an art film or a scientific film.

In England, according to a communication from the Home Secretary, the Act of Parliament of 1920 on industry and labour does not deal with the employment of children as actors. The 1921 Education Act, on the contrary, contains certain clauses with regard to the employment of children under 14 years of age, and empowers the school authorities to interfere with the utmost rigour, when they consider it necessary, to prevent or regulate their employment. The clauses are as follows: no child under 12 years of age may be employed without the permission of the Local Government Board; children between 12 and 14 may not be employed for more than two hours on Sundays, and during the week they may not be employed before 6 in the morning or after 8 at night; nor are children between 12 and 14 years of age allowed to be employed before school-closing hours. In any case, the child must not be employed for more than one hour before 9 a.m., in addition to one hour in the afternoon.

In Italy, the Maternity and Infancy Law of December 10, 1925, N. 2277, prohibits children under 15 years of age from taking any part whatever in the preparation of cinematograph films. For certain films, however, special permission may be granted, subject to all the reservations and control which the authorities have the right to impose, with the object of safeguarding the health and morality of children; but in these cases, the written consent of parents or guardians is necessary.

In Spain, Art. 841 of the Penal Code lays down: a fine of not less than 250 pesetas and not more than 1000 will be imposed on any person who employs children under 16 years in public, theatrical, artistic, or literary performances. A similar penalty will be imposed on those who make use of such children in cinematograph films. By express authorization of the government authorities, however, permission may be obtained, in special cases, for the employment of such children, after due proof of the expediency of their employment and the assurance that they will not suffer morally or physically from it.

In Sweden, there are no special regulations for child labour, the only rules that are applied to children being the general regulations governing labour.

In the United States, the only States which have specific laws regulating the industrial work of children are New York and California, in the latter of which States 90% of American production is concentrated. In California, no child under 16 may be employed without special permission from the Commissioner of Labour, who must assure himself that all necessary precautions are taken to protect the health of minors. Children who are thus allowed to be employed must, in any case, have four hours daily teaching by masters selected by the Education Office, who must be paid by the children's employer. The children must also be first examined by a medical man, and must neve
work for more than four hours a day. The conditions for New York are the same.

The above are the legislative measures on this subject which have been collected by the International Labour Office and by the Rome Institute. It may be added that these laws have so far been shown to be inadequate; so inadequate, indeed, that, as To-Day's Cinema (New York, 15/24) states, the English House of Commons recently deplored the habitual and excessive use that is made of children in the variety spectacles given at cinemas.

The problem was fully dealt with by the League of Nations (Child Welfare Committee) during its fourth session of March 19, 1928. The report which the League had under consideration on that occasion was made by Mr. Martin on data supplied by Dr. Lickly and by Miss Minor, secretary of the New York Committee for the Protection of Children.

The principal points that have been considered up to the present in connection with the employment of children as actors (it does not matter whether in theatres or for the screen, since there is very little difference between the two as far as the damage done is concerned) come under two heads: physical and moral.

With regard to the physical side, it has been noted that the children often have to pass hours in the rain or snow or the heat of the sun, and under conditions that would prove fatiguing even to grown-up persons; for the intense light that has to be used in order to get the necessary illumination for the scenes must be very bad for the eyes. Usually, as the Martin Report observes, the actor is bound to stand at a distance of less than a metre and a half from the lamp, and these lamps give off a powerful heat and emit ultra-violet rays, which often cause burns similar to those caused by sunburn. All this has an influence on the epidermis and the nervous system, and especially on the organs of sight.

There is also a further danger from this excessive light. Cinema actors used to suffer from the so-called "Kloeyg's disease", that is, inflammation of the membrane of the eyes caused by the bright light of arc lamps; now they run the risk of suffering from a similar inflammation of the throat, caused by the gigantic incandescent lamps used in theatres.

It is not easy to remedy this state of things. The solution is very largely in the hands of the producers (Martin). They might, for instance, avoid the injuries caused by the light by using glass globes to intercept the ultra-violet rays when using arc-lamps, and substituting crystal tubes for quartz tubes when using mercury vapour lamps. They might also interrupt the projection from time to time, in order to allow the little actors to rest, thus mitigating the effects of the constant strain from the light. But the requirements of the work are often such that, with all the goodwill in the world, it is not possible to avoid a certain risk. Until the matter is regulated by a special legislative system, the only thing that can be done is to endeavour to mitigate the evil as far as possible by existing methods and by supervision by the various organizations for the protection of children.

Moral damage. The International Labour Review, vol. XV, No. 2, states clearly, on this subject: «The greatest evil is due to the fact that the children live in a world of artifice, of accessories and decorations which are intended, by the very vulgarity that distinguishes them, to create an illusion; thus, the Colosseum of Rome, or an ancient cathedral, as projected on the screen, are obtained by a series of accessories which can be contained in a room of normal size. The children frequently grow blasé and seem to be affected by a kind of premature moral age. These hours passed in the midst of actors and actresses, who spend all their time simulating emotions that they do not feel, have the most disastrous effect on the mentality of children».

There are also other points: the life passed in an artificial existence which falsifies, maybe for good, the child's views of the social environment; the atmosphere of luxury which, transitory as it may be, is apt to create, or at any rate to assist in creating, an illusion that is the more dangerous since the children are not accustomed, like grown persons, to differentiate and criticise and master their impressions, and are therefore disagreeably impressed by the violent change
from the scenes in which they have been acting to the modest conditions of their home life; the promiscuity with persons of a low moral tone, who may possibly lead the child to perversions and precocious immorality; and lastly, the scenes in which the children have to act and which may in themselves be a source of immorality or may suggest thoughts and ideas unadapted to the special mentality and psychology of the child.

But all these considerations do not lead to the solution of the problem. They might lead, theoretically, to the absolute prohibition of the employment of children in the production of cinematograph films. But this industry has claims and requirements that cannot be denied and that suggest a different method of reasoning, to the effect that the whole matter might be solved by a simple but rigorous form of protection and control, which should be laid down by law and then entrusted to the proper organizations, which every country possesses, for the protection and supervision of children.

We may first of all consider the film dealing with art pure and simple, the scientific film (German legislation) and the documentary film — the word documentary being intended in its widest sense; in these films the aid of children may be absolutely necessary in order that episodes or scenes of real life may be faithfully presented and, in any case, no moral injury can accrue to the children from participation in such films.

Secondly, we have the feature or dramatic films, in which the presence of children may be necessary in order to represent certain situations. In this case, the presence of the child in the film is an artistic necessity. And those films in which a child is one of the actors, and where the dramatic situation is treated not only with due regard to artistic truth but also with regard to the demands of realism, are more attractive to young people and perhaps even more so to adult audiences, than films which present more or less banal, artificial, or immoral situations.

There is, thirdly, a form of cinematographic art in which the child may constitute the essential part of the production. There has always been a good deal of talk, rightly or wrongly, about the need of a special film production for children. It has never been clearly realized, however, that the old fashioned type of cinematograph « for the young », is not in harmony with the life of the child of to-day, which affords him a variety of impressions and sensations that, however little suited they may be to his age, are in any case a very different matter from the life that children were wont to lead in past times. Not only the adolescent, whose physical and spiritual development is unfolding, but little children also, avoid performances that present dramas, comedies, or farces devoid of all the wealth of art and technique of our time and the plots of which do not give even an illusion of truth; they want films that are equal to those frequented by their parents or elders. The fables of Red Riding Hood, Puss in Boots, and the fairies who live in the depths of wood or under the waters, have had their day. But if children are no longer interested in these nursery tales, we must not fall into the opposite extreme and place before them on the screen situations that should be brought to their knowledge as late in life as possible.

The only remedy is to compose dramatic plots, genuine plays, suited to the minds of young people, in which they will be shown real situations of their daily life, and in which the smallest children may be actors as well as spectators in due course. The industry is perfectly capable of developing this field, and may have the fullest recourse to children as actors, thus accomplishing a fine work of education, entertainment and social propaganda.

The essential thing is to prevent children being overworked at school in such a manner as to render the work they have to do for the cinema after school hours too great a tax on their constitutions.

Overwork is characterised by chronic fatigue, which produces a defective condition of neuro-psychic energy; and this fatigue is caused by excessive and repeated strain. (André Maury: « Le surménage scolaire » in L'Ami du Peuple of December 6 1929). The physical consequences of this, are loss of appetite and a feeble development of the organism.

Excessive overwork is of the utmost gravity, because it is the forerunner of a weak,
apathetic and mediocre generation. It is therefore necessary to arrange matters so that the children feel the burden of this extra work as little as possible; and that the double labour to be done by children working for the screen shall be limited, in both directions, in a manner compatible with their strength.

Leaving aside for the moment any arguments in favour of or against it, the children's cinema originated out of the Children's Theatre, which has made the triumphant tour of the world and is still going strong. The path to be followed bristles with difficulties, but in spite of all these the goal of the new future of the screen for children will be reached.

We have spoken so far of young people as actors. We must now consider them as spectators, a much more difficult matter, because, while the former represent a negligible quantity, numerically, however important it may be socially, the name of the latter is legion. The figures of children's attendance at the cinema — some of which have been published in this Review, while others are to be found in the Martin Report and in another report presented to the Child Welfare Committee in Geneva by Dr. Humbert — are simply astounding.

It may be affirmed with truth that, in the world's average cinema audiences, the proportion of children to adults is two to one. Life affords other distractions to grown-up persons some of them wholesome, like work and study, conversation and sport, others unwholesome. All or some of the wholesome distractions are either prohibited to children or are beyond their reach. As to the others, they, in any case, are prohibited. Some means of amusement is needed, and the most attractive and novel means that presents itself is the cinema. And the attraction is rendered the more easy of access by the fact that children can enter at reduced prices, and that they have not the same objections that adults might have to the cheap seats. In this connection, the New York Film Daily of October 31, 1929, notes that the number of children spectators in the cinemas of Richmond has increased extraordinarily since tickets for children have been reduced to half-price.

One instance will suffice. In suburban cinemas in America, on Saturday and Sunday, children frequently represent from 95 to 99% of the audience.

In another part of this Review we publish an accurate survey of the age of admission of children to cinema theatres, in accordance with the legislation in force in the several countries from which we have been able to get definite information. This legislation, however, has but a relative value, owing to the practical impossibility of enforcing it. Three of the latest items of news, one from the «Region» of Oviedo, November 3, 1929, one from the October number of the Revue Internationale de l'Enfant, and the third from To-Day's Cinema of London (15/146) show, for instance, that in Spain, America and England, the idea that the age limit rule can be enforced is an illusion, and that the regulations in force are continually being infringed. Children frequent the cinema in greater numbers than ever; and it is not merely that the number of young spectators increases, but the number of times that each child goes to the cinema increases also. An inquiry that was recently published in the above mentioned number of the Revue Internationale de l'Enfant shows that 5 to 6% of children go to the cinema more than once a week, while half this number go more than twice. On an average, boys go oftener than girls almost twice as often.

It has been claimed that this produces an injurious effect on the mind and education of children. The question is not a new one and has been very extensively dealt with. The Review puts it forward once more to its readers as a problem to be solved, without pronouncing on the pros and cons, for various reasons: the fact that these editorial notes must maintain an absolutely objective character, the fact that it is a subject for competent persons only to pronounce upon, and the fact that a discussion on this subject could not be contained within the few pages of a special number. It is a question to which we will return later on.

The latest news to date, which we give for what it is worth, leaves the subject in all its uncertainty. The Times Trade Sup-

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plement, London (15/93), points out the danger of giving an unreal conception of life to young people, which prevents them from distinguishing the real from the false. Margaret Furze, writing in the Morning Post, (15/94) is concerned, on children’s account, with the sexual problem that is often, indeed, almost always, the central theme of the dramatic film. The bulletin of the Service d’information du Comité Universel des Unions Chrétiennes de Jeunes Gens, of Geneva (December 1929), states that a vast and noxious propaganda on the sexual question and birth control is steadily gaining ground, even in such remote countries as China, by means of the cinema and literature, and is exercising a morbid influence on youth. The greatest danger lies in the continually growing lack of the home feeling, and in the disturbing increase of divorce.

Whether this state of things depends entirely on the cinema or also, perhaps even mainly, on reading and dancing, is a question that is still to be proved, a question that will possibly be very difficult of proof. Elsie Moore (Natal Mercury, Durban 15/138) limits herself to pointing out that the attitude of children towards life grows more and more flippant; this fact she attributes to the cinema, and suggests that we need films which will raise the child’s mind to nobler ideals. In Russia, (15/137) two well known cinema personages, Madame Nevaijsky and the scene director, Remeseff, are studying practically the possibility of the social training of children by means of suitable films. And the Bioscope, London (15/148), attributes the fact that modern children are livelier and more intelligent than their brothers and sisters of last century to the beneficent influence of the cinema.

This being the situation, it is certainly inopportune to remain inactive; the subject must be studied more and more closely, and an endeavour must be made to introduce more suitable matter for children into the cinema, so that all this diffidence may in time be dispelled.

The idea has been bruited of a specialised censorship of the film as an efficient cure for the present state of things; but there are many who do not subscribe to this view. Henry Meade, in Child Welfare, Philadel-

phia (15/96), maintains that parents are the only intelligent and suitable censors. This observation is true enough as far as considerations of the child’s individual temperament is concerned, but how far can we rely on it?

In England, and generally speaking in all those countries where there are special limitations and where public notices inform the audience in advance whether or not the film is suitable only for adults (see also International Review of Educational Cinemato-
ography - General Information - Censorship - January 1930), such announcements serve the purpose of imparting a particular savour of attraction to the film. Forbidden fruit has in all times proved an irresistible attraction just to those who ought, theoretically, not to touch it.

Our eminent collaborator, Maurice Rouvroy, goes even further, and gives us a series of brilliant definitions which are worth reprinting (Revue Internationale de l’Enfant, vol. 5, n. 29). He affirms that the censor merely aggravates the difficulty. Parents are more ready to let their children go to see films when there is a rigid censorship, while the films still contrive to be as unedifying as possible, in spite of the censor. And there is also the fact that an expurgated film can never be equal to a film which has been purposely created for children. Fancy takes reins to itself, and the child imagines much worse things than those that have been cut out. When children are stopped at the entrance to a cinema by a doorkeeper who is there to see that an announced prohibition is respected, and really prevented from entering (an occurrence that happens but very seldom), the child thus repulsed will always contrive to reconstruct the drama from the photographs displayed outside.

In closing his article Rouvroy declares: «Censorship is a joke. The result of it is that parents who used to be afraid to send their children to the cinema, now take them there ... a film retouched by the censor can never have the value of a film which has been expressly created with the idea of not introducing anything that should not be seen by children or persons whose psychology is similar to that of the child». 
The fact, however, remains that the legislatures of various States have endeavoured to take measures to eliminate the evil. In addition to what we state in our note on "Censorship for Children," the regulations provide three different systems for encouraging the cinema for the very young: namely, exemption from all revision in the case of films intended to cultivate the mind of children and to educate them; special rules on methods of projection, and exemption from Customs' duty for educational and scientific films.

In regard to the latter point, it will be sufficient to refer to the study published in the July-September numbers of this Review for 1929, and to the report, amplified and brought up to date, which the Rome Institute laid before the League of Nations at Geneva last December, dealing with the question of an international convention.

As for exemption from preventive censorship within definite limits and subject to certain conditions, this has been agreed to by Belgium (Royal Decree May 11, 1922, Arts. 13 and 14), by the Free City of Dantzig (Law of December 1, 1925, Art. 6), by Germany (Law of May 12, 1920, Art. 6), by Holland (Law of May 14, 1926, Art. 16), by Norway (Law of July 26, 1918, and that of June 3, 1921, Arts. 6 and 19), by Peru (Statute of July 31, 1926, of the Censors' Commission, Art. 20), and by Sweden (Royal Decree of June 22, 1911, Arts. 4 and 13).

Lastly, in regard to the special modalities, for shows at which children are present, we have some fragmentary information for a few countries only; but these come rather under the censorship system at present in force, or police regulations, which control cinematograph shows from the point of view of public safety, and cannot be considered as constituting measures or a system specifically intended for the protection of children.

In any case, existing legislation, by the very fact of its seeking to regulate these matters, recognizes the impossibility of prohibiting children from access to the ordinary cinema, and contents itself with certain more or less efficacious limitations.

In the above cited number of the Revue Internationale de l'Enfant the following premises were affirmed:

« It would be illusory to try to prevent children from going to the cinema, but certain regulations must be fixed, such as: 1) limiting the hours of admission, for instance, from 10 in the morning to 6 in the afternoon; 2) organizing special matinées for children; 3) establishing a censorship that would indicate the films most suited to young people of from 10 to 16 years age; 4) ordering the separation of children and adults in cinema theatres, in order to preserve the former from moral injury; 5) reserving to children the best positions in the galleries of cinemas, for instance, and those nearest to the safety exits; 6) charging attendants with the maintenance of order and the exclusion of members of the audience who will not conform to the regulations. »

The fact is that, apart from special considerations on the subject of a cinema for children and apart from the two definitely contrasting theses on the question, the prevailing feeling on the matter is that expressed by the Figaro of January 5, 1930, in regard to American films: « They have all the appearance of happiness ». We must keep this aim in view, and endeavour to make people cheerful, to give to the little ones — those who will be the men and women of tomorrow and will be influenced throughout life by the impressions received in early youth — the impression of happiness and goodness, of a life that does not consist of nothing but pain, sadness, and immorality, but also of those finer and purer elements that life offers in abundance to those who desire and seek them.

Mary Pickford, the lively screen actress (Joy Journal, Cairo, n. 4, October 21, 1929) is of the same opinion.

« I think it would be a great pity for films to be made too difficult for a child of average intelligence to understand. I am firmly convinced that when a film does not attract children it is a failure as a means of amusement. And, after all, it is the family cinema, the Saturday evening cinema, if we may call it so, the one to which mothers and fathers take their kids, that keeps the film industry going. »

« By giving children films that they like
producers show their commercial good sense, because they are thus training a faithful public for the future. They are in the same position as a manufacturer of explosives who, according to the way in which he handles his products, may do immense good or irreparable harm.

«I have come to the conclusion that almost everybody is profoundly human and just wants to lift himself above the level of everyday life. In the struggles and dreams of the heroes and heroines of the screen every boy and every girl sees his own fancies realized, his own struggles, his own dreams.

«When a bright-eyed little school-girl watches me jump over a garden hedge, throw stones, and climb over gates, do you think she sees Mary Pickford? Not a bit of it! She sees herself. I am nothing but a pretence, a person who imitates her and all her little companions.»

«On account of this power which children have of placing themselves in the actor’s shoes, I try especially not to wound their feelings.»

Since it is not possible to turn back, and perhaps would not even be desirable to do so if we could, the problem of the child spectator is as urgent to-day as that of the child actor. The screen is playing a part that it is not possible to neglect. It may, in Mary Pickford’s words, produce the greatest good or the greatest evil. What are the possible solutions?

According to Maurice Rouvroy, to cite only one of the greatest psychologists of youth, we ought to have films especially created and projected for children (i).

According to the legislative system in force in nearly all the countries of the world, the fixing of age limits for admission to cinemas, the more or less specialized censorship of films suitable for children and young people and public, information on the nature of the films by means of posters, advertisements, etc., are the most practical means.

According to others, we should strike an average between these two extremes, thus not detracting from the entertaining qualities of the pictures (there is no question here of strictly educational films, which as such, certainly offer no danger to the spectator) but limit the hours when the children may go to the cinema, so as not to interfere with their school duties, and also to avoid the least danger to the sight and health, through lack of sleep and of walks or exercise in the open air.

An inquiry which was recently made by the League of Nations, the results of which are given in the above cited number of the Revue Internationale de l’Enfant, pp. 703-715, concludes:

a) children do not like films for children in which the author takes a low estimate of the taste and intellectual capacity of his young public;

b) films of the Far-West appear to be the most interesting;

c) generally speaking, the films preferred by adults are equally popular among children;

d) children of less than 15 years of age are bored by love stories;

e) greatly to the surprise of the investigators, the children showed a marked preference for things of beauty;

f) a child audience never forgets that it is looking at things of pure fantasy, in spite of the ascendancy the film may have upon it;

g) the most highly appreciated travel

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«We risk falsifying children’s ideas,» he says, «by presenting them with scenes which have not been prepared for them but for adults, with sentiments and situations that are unsuited to their age. The director of a rural school pointed out to me recently that children, accustomed to frequent the cinema in the company of their parents, are soon unable to feel any interest in the documentary films that may be presented to them in school, just as children who are allowed to read stupid novels are no longer interested in serious reading.

«We must repeat, specialised films are necessary for chil-
films were those showing the lives of children in the different parts of the world.

The commission of inquiry proposed:

1) the creation of a series of afternoon spectacles, with programmes suited for children and so arranged as to avoid the harmful effect of late hours;

2) the creation of travelling cinemas to give entertainments to children in villages and small centres;

3) the organization, with the cooperation of the Association for the Protection of Children, of permanent instructive cinemas in the large towns.

The results are apt to be in contrast with the premises, because specialised shows for children must either bear in mind the points set forth in paragraphs a), b) and c), or there is a risk of disappointing the children with the film and so driving them away from it.

Miss J. M. Harvey, Manageress of the Children's Film Section of the Bernstein Theatres Limited — partner of the Gaumont British Combine that controls a big group of London Cinemas — has sent us an interesting report touching on the type of films that are preferred by children.

A series of special shows were organized, at which films suitable for children were screened, and kept open from six to ten weeks. The following results were noted:

a) A larger number of children attended the shows during the first week than during subsequent ones. The children gradually deserted the shows that had been organized for them and crowded into those for the general public that were being given during the same hours on the same premises;

b) The sound and talking films seemed to be less readily taken in by the children, who prefer short and clear captions.

Meanwhile, pending the settlement of this anything but easy question, the cinema for children is making tentative efforts to establish itself in various parts of the world. The welcome accorded to it differs very widely: it was recently denounced in Today's Cinema, New York, (15/123); and it is being supported, in Russia by Grinevski (Kino, Leningrad, 15/141), who insists upon its advantages, especially in the country, where the children, far away from the towns, end by seeing nothing; and in Spain by El Debate, Madrid (15/92).

In Lancashire, at certain hours of the day, some of the cinemas allow children who are accompanied by adults to enter free of charge (The Daily Film Renter, London 15/110).

Special open-air shows for children have been given and are being arranged in Montreal, Canada (Exhibitors' Herald World, Chicago, 15/19); others have been given in America, under the auspices of the R. K. O., to three thousand orphans of all religions brought up in Catholic, Protestant and Jewish homes (Today, New York, 15/155); in England, at South Shields (The Daily Film Renter, London, 15/130), Hammersmith (id. 15/131), and elsewhere in London (The Daily Telegraph, London, 15/149), where films reproducing the life of Nelson and Scott's Antarctic Expeditions, were projected; at Manchester (The Daily Film Renter, London, 15/134) and at Leeds (id. 1/129). The «Cinéma des Enfants» will shortly be open in Paris, its honorary president being M. François Poncet, Under-Secretary of State for Fine Arts (15/147). According to the Film Daily, of New York (F. 15/127), something more is being done in San Francisco. The director of one of the cinema theatres of that city has thought of a means by which mothers with little children will be able to attend spectacles without running the risk of having to go out when their babies disturb the audience. He has built a room with glass walls and supplied with a loud speaker, where it is possible both to see and hear in perfect comfort.

There are other shows for children: at the Royalty of Madrid (El Imparcial, Madrid, 15/116); at Lausanne (Journal de Genève, Geneva, 15/102), where the spectacles are sponsored by the Mouvement de la Jeunesse Suisse Romande; and others will shortly be given in the Zoological Gardens of Rome, where they will be of a nature to suit the environment (Il Popolo di Roma, 15/98). It is also announced that some films which are beginning to acquire a genuine art value, such as those of the Polish star Ladislas Starevich; one entitled «The Little Parade», another taken from «Le roman du rénard» (Il Tevere, Rome, 15/139), and those of Lotte
Reiniger (Regime Fascista, Cremona, 15/152) who, by making use of movable personages taken from drawings, has succeeded in creating «The Adventures of Prince Achmet » from the Thousand and One Nights.

In Russia, the cinematograph movement for children is very active. In 1928, the Goskino began projecting films for children with a serious plot, adapting them to the normal type. Among the best were those by Olga Preobrajenskaia (Bordeaux Ciné, Bordeaux, 15/104). M. Stepanov, writing in that paper, pointed out that, after the satisfactory beginning of this work, it spread very widely and came to be regarded almost as a necessity for the U. S. S. R. At the same time the scene director, Bassalygo, abandoned the dramatic cinema, in order to devote himself to the children’s cinema, and more particularly to topical subjects. Another scene director, Jourtseg, undertook the creation of films illustrating the special and subtle psychology of the child.

The chief producing houses for children’s films are the Pan-Ukrain firm, the Vufku, and the Mejrobpomfilm.

Specialized cinemas and cinemas giving specialized shows are also multiplying: at Minsk (15/100), and Leningrad (Kino, Leningrad, 15/136), where the «Spark» theatre, exclusively for children has been inaugurated, and lastly, at Moscow (Bordeaux Ciné, Bordeaux, 15/111) where the Artés and Taganka cinemas have organized children’s matinées.

The special organization of the Artés is worthy of note. There is a small vestibule on the ground floor, a well lighted library with small oak tables and a room for the meetings of a boys’ club. A wide staircase leads to the first floor, where there is a great hall full of light and also the projection room. All the necessary work is done by children, the balalaika orchestra is composed of children, who play under the direction of a master, while children distribute the books in the library, direct the games of the various groups, and keep order. The youths who are charged with the direction, are selected from among the frequenters of the clubs.

An excellent example of cinema-education for the young is given by the Opera Nazionale Balilla (Young Boy Scouts) in Italy. The supplement of October 28, 1929, to the Bollettino, which is edited by the Balilla, announced that 157 Committees in the Kingdom have instituted the «Balilla Cinemas » for the projection of educational and propaganda films. Twenty-six out of this number have their own theatres and equipment and the Presidency has presented 18 other Committees with everything necessary for a complete cinematographic installation.

Up to the present, the L. U. C. E. National Institute has produced 220 films for this purpose of a total length of 84,000 metres.

During the first six months of 1929 the Committees organised 3,700 instructive spectacles, which were shown free of charge to the Balilla and Avanguardisti (Young and Older Boy Scouts); and they also organized 57 spectacles for the general public, who entered on payment of the usual booking fee.

Something similar to the Artés is being started in Rome, where a childrens’ town is being created in the park of Villa Umberto I, in a sunny section which forms an annex of the Zoological Gardens. Tiny houses are being built which can be either let or sold, little bars will be run by children, as well as libraries, games and cinemas, and lastly, there are the animals of the Zoo, which have all the appearance of being in complete liberty.

But in spite of everything that is being tried and done, the number of those fortunate children who are able to enjoy the results of the untiring labours of the friends of youth, is almost negligible in comparison with the myriad children and young people who are practically uncontrolled and unguided and left to fight their way along the thorny roads of life, alone and unaided.

And this great problem — at least so far as the cinema is concerned — will remain unsolved until the industry itself intervenes and, with the aid of its experience, and its infinite technical and economic opportunities, agrees to find a way out of the impasse that is so sorely troubling all those who have the interests of the growing generation at heart.
IMMORALITY, CRIME, AND THE CINEMA.

The cinema is being constantly arraigned on all sides by persons who suspect it of exercising a dangerous, an immoral, or a downright crime-inducing influence on the public, and more especially on the young. This point of view finds expression in more than one page of the present issue of the International Review. And once again the I. E. C. I., not from any desire to stir up feelings and controversies that have had their day and that would lead merely to repetitions, but in an absolutely impartial spirit, sets forth the terms of the problem and calls attention to what is being said and done of real value on this question.

The readers of the Review are invited to take part, pro and contra, in the debate. As we have repeatedly stated, all information, news, and matter of real documentary value that may assist in the enquiry and afford the material for future study are welcome. It is our purpose to build up as complete a documentation as possible on this question, as shown by the compendium of news and opinions in the present number and all the contributions on the subject that we have hitherto published.

The problem is far from being exhausted. The debate is merely opened. It is the task of the educators of the young, psychologists, and students of criminology to state their views. It is also up to the industry directly concerned to set forth all the wealth of practical experience and observation that has come its way in the course of business.

The new lines that ought to be pursued - if the necessity of such be demonstrated - should emerge as a result of this clash of opinions and of facts.

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A copious volume of literature has been devoted to the real or imaginary perils of the cinema. But while specific remedies are freely suggested, there is still considerable vagueness as regards both the premises and the issue.

The Unità Cattolica of Florence announces the cinematograph as a positive danger to society, while G. Nelli, writing on the perils of the screen in an article published in the September number of the Scena Illustrata, likewise of Florence, expresses himself in these strong terms:

"How many children after being 'amused' by the cinematograph have cried, shuddered, hated and despised the world in which they have to live!"

"All too soon! Let them love it for a while. Take your children to see short films, films that will teach them about the work and commerce of the world, its geography, its skies and seas, films that are not concerned with wickedness, crime, and fierce passions."

In like manner, W. O. Fraser, writing in the Kinematograph Weekly of London, in his capacity of Director of the boys' grammar school at Barrow, examines the influence exercised on children not only by the cinema but by American "reviews", and declares that, unless a change is made, the new generation will learn to see life through American spectacles, thus getting a national rather than a universal view of it, and that the young will end by being more familiar with the slang of Broadway than with any higher and worthier expression of life.

In some quarters the view that the cinema is a powerful weapon of evil for the young is still more forcibly expressed. The London Association of Head Masters has passed a resolution expressing anxiety regarding the noxious influence on children of the mute and talking film and the hope that a suitable list of films for the young may be compiled (Manchester Guardian). Then again, the Publicitat, of Barcelona, declares that even sports films may be deleterious to the young and that a "pure" cinema ought to be set up, which children should be compelled to attend just as they are made to attend school; and indeed it seems obvious that the day the "pure cinema" is inaugurated, the mass of children, unless they are forced to attend it, will remain at home!
In addition to the non-specified dangers of the cinema, the very fact of its popularity—of the frequency of attendance—is adduced against it. The Martin Report, laid before the League of Nations (4th Session of the Child Welfare Committee of the 19th March 1928 - C. P. E. 149), the Report laid before the same Geneva Committee on the 15th April 1929 by Dr. de Feo, Director of the I. E. C. I. (C. P. E. - P. V. 5) and various papers printed in this Review have called attention to this point.

In America, where children are more addicted to the cinema than they are in any other country, a Commission on Crime was appointed, in the State of New York, in pursuance of the 1926 Act, consisting of eleven members, with Caleb H. Baumes acting as Vice President. The Commission carried out its enquiries in Brooklyn and in some country districts by means of two sub-commissions under the direction of Harrys M. Shulman and Prof. Raymond Molley of Columbia University.

The Report of the Commission, published in February 1927, showed that, according to the day of the week, from 50 % to 99 % of the audience in 14 Brooklyn cinemas consisted of children and youths.

An average of the two groups gave the following results:

<table>
<thead>
<tr>
<th>Boys</th>
<th>5 hours</th>
<th>1/4 hour</th>
<th>6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>3</td>
<td>2 1/4</td>
<td>3 1/4</td>
</tr>
</tbody>
</table>

The boys are seen to devote considerably more time to the cinema than to other forms of amusement. In the case of the girls there is a similarity between the first and third group of frequency.

From this and other reasons, which there is no need to reiterate, it has been concluded that the cinema exercises a bad influence on children:—

a) because it distracts them from study;
b) because it draws them away from other recreations better suited to their age, such as games, open air excursions, and walks;
c) because it entices them away from home occupations and from giving such help in domestic work as they might give their parents;
d) because it distorts their views of life and represents it under false colours, both in its outer aspects and its inner, or moral and social significance;
e) because it does moral harm by its direct and indirect influence on the mind and education, and physical harm by its artificial light effects, close and stuffy atmosphere, promiscuous company, etc.;
f) because children—especially those who lack moral stamina and inhibitive powers of self-criticism and self-control—may easily be affected by the anti-moral suggestion of scenes of passion, violence, and crime shown on the screen, and this suggestion be reflected in their daily life;
g) because, in any case, the very technique of the cinema—it's light, colour, and noise—and the giddy effect of life and movement that it produces, is a danger in itself, and may easily affect unhealthy organisms, persons of neurotic tendencies, hypersensitive and hysterically inclined children, and in general all those who tend to be mentally unbalanced, in a most deleterious manner, and produce dangerous nervous affections, due to psycho-visual or psychosensorial impressions, of the most harmful kind during the critical stages of physical and mental development.

Yet further reasons are adduced by students and enquirers and by other persons who are entrusted with the moral and spiritual welfare of the young or who set themselves up as its protectors.

In this connection, the Natal Mercury, of Durban, points out that in South Africa, where the people are in more direct touch with nature and the rugged realities of life, and ought therefore to be fresher, more alert, and less artificial than in the home countries, with their age-long traditions, women are beginning to reflect seriously on the bad influence exercised by the film on the mind and spirit of the rising generation. The paper publishes a number of views expressed by men and women readers, all of which are concordant in denouncing the noxious character of present day film production.
Spain, expresses similar views in an official communication to the Institute and in an article on "The Problem of the Cinema and Children" published in the "Motherhood and Infant Welfare Bulletin" of the 11th November 1928.

In a study of this question, Prof. Théodore of the "Ecole des hautes études sociales" of Paris, affirms that there is a form of cinéma neurosis that contributes to develop morbid passions, and that valuable statistics of the so-called educative cinema might be compiled on the increase of criminal propensities; the cinema is alleged to be one of the most powerful factors of social delinquency and moral depravity of our time and doctors would do well to study the relations between the cinema and hysteria.

"When we seek to combat the drug mania, drink, and vice generally," adds Signor Nelli in the above cited paper, "we are wont to present dismal scenes, visions of the abyss, of horrible depravity and revolting degeneracy which, far from educating and impressing themselves in a wise and helpful manner on the mind, arouse gloom, wrath and a sense of sadness that cannot easily be lifted."

And yet how delightful and good it would be for the young of our time to attain to something akin to the cinegraphic life depicted in a recent film "The Princess and her Taxi" — a story of a young American millionairess of Fifth Avenue and a little Broadway shopgirl — to which the Cairo "Ciné Journal" refers as follows in its issue of 6th January 1930: "It is so very pleasant, even in fiction, to come across people who have only happy experiences!"

In an article appearing in "La Française" of the 25th January 1930, Huguette Champy speaks of the efforts made by André Wanda to create a film for children. Fairy stories and dream countries that give an impression of charm and beauty, as against what André Wanda has come across in his very young cinema life — the ever increasing number of precocious criminals and the disquieting depravity of the young.

The sex problem causes special anxiety to all lovers of the educational cinema. In another part of this Review, examining the results of an enquiry carried out in Germany among a certain number of artisans and workers aged under 17 years of age, it is however pointed out that the sex question, serious and influential as it may be, is far from being the most important aspect of the problem in hand.

Opinion is strictly divided on this point. To quote one among many views, Cecil B. de Mille states in "Comedia" (Paris - F. 33/98) that the representation of sexual problems on the screen is a question of good taste and tact. The same situation dealt with by two different scenario writers may produce diametrically opposite effects. For this reason American film producers have been well advised in laying down a strict moral code for dealing with love matters, this having led to the brilliant progress of the cinema and to the diffusion of sound and healthy ideas on the great sex problem.

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The question of so-called immoral films, which form the main preoccupation of all those concerned with safeguarding the young, is closely connected with the sex problem.

Even before the time when Louis Jalabert launched in the review "Études," his article on the corrupting influence of films, later on published in pamphlet form by the Action Populaire, the cinema was pitilessly denounced as immoral. The industry, on its side, parried the blow as best it could and has denied all the allegations brought against it.

There are faults and exaggerations on both sides. On the one side there is a tendency to lay down the law in too uncompromising a spirit, to argue a priori and even per absurdum, and on the other side to deny the existence of the seamy side of the question, in lieu of any genuine effort to study it jointly and seek the remedy.

According to the Publicitat of Barcelona (33-41), the Rev. Dr. Eduardo Roman, Professor at the Seminary of Garcia, gave a lecture at the Catholic Club organized by the Section of Christian Culture, on the need of improving the moral tone of the cinema.

Mrs. Robins Gilmer, Secretary of the First National Motion Picture Conference, held at Chicago in February 1926, made bold to declare that 80 to 90 per cent of the crimes committed in America were attributable to impressions received at the motion
picture theatres, children being susceptible to all kinds of influences, but to that of the scenes depicted on the screen more than any other. If immorality and crime are displayed before their eyes on the screen, they will themselves become imitators and propagators of crime and immorality.

The Archbishop of Baltimore describes the cinema as immoral and criminal in an article in the « Catholic Review » of February 1927.

The Film Kurier of the 1st February 1929 (33-5) published some interesting facts regarding a crusade started in Berlin by Dr. Ulrich, former member of the Film Censorship Board, against the immorality of certain cinema shows and the mania for building new picture palaces rather than new dwelling houses. It is stated that Dr. Ulrich’s campaign was warmly supported by the German clergy.

An article in the Paris Cinégraph (33-109) deals with the question of morals and the cinema and the unhealthy influence of certain films, the plots of which are based on homosexuality and prostitution.

An Encyclical of Pope Pius XI on the « Christian Education of the Young » stresses the necessity of a more extensive and careful censorship of books, cinema shows, and broadcasting, and declares that these powerful means of popular education, which can be so beneficial when under proper guidance, are too often used as an incentive to evil doing. The Encyclical praises those educational organizations that endeavour to disseminate good literature and to promote really educational shows by opening theatres and cinemas that are not merely inoffensive to sound moral principles, but do much to encourage them.

In the Pax of Paris (33-11), Fred Eric reviews favourably a film on the white slave traffic, while Le Cinema d’Alsace et de Lorraine (33-12) refers to a film on the same subject produced by the Emelka Co., based on documentation gathered by the League of Nations, and Pierre Gille, writing in the Matin (33-17) deals with the new type of American girl, whom he declares to be far from answering to the physical and moral ideals of youth.

Pierre Desclaux, writing in Mon Ciné of Paris (34-475) disputes the view that the cinema is definitively immoral and declares that the artistic development of the screen ought not to be hampered, and that even « daring » scenes may be justified by the artistic value and content of a film, just as in the case of books. He regards cinematographic production as an art that is not concerned solely with children, and the old view of the cinema as a « family entertainment » as obsolete.

Dealing with the question from a purely objective standpoint, an Italian police official, the questore of Imperia, sent round a circular dated 23rd February 1929, directed to all the police officials under his jurisdiction, directing them to take measures against any immoral tendencies of the cinema, not by interfering with the films themselves, which is a matter for the censoring authorities to deal with, but with regard to other matters connected therewith: handbills, posters, and photographs exposed for show, which often exhibit distorted images likely to recall to mind the least seemly and most immoral aspects of the films.

All countries recognize certain reasons for which films may be prohibited on moral grounds. This, indeed, is the main motive for which the right of veto, where it exists, is exercised.

Among the latest films classified as immoral, we have « The Underworld of a Great City », banned at Prague by the Czechoslovak Censorship, because it depicts in too realistic a fashion the immoral and criminal scenes of the so-called underworld (18/221) and « The Road to Dishonour » prohibited by the British Board of Film Censors (18/209), because it depicts a man of British nationality succumbing in an unseemly manner to the lures of a coloured girl amid an orgy of kisses which the censors regard as quite too much of a good thing.

According of the Película, of Buenos Ayres, 33/59, the film « Modern Degenerates », which its author put forward as cultural and scientific, has been banned for general exhibition owing to the fact that it deals with a homosexual theme, and may only be shown to adults.

According to the Critique cinématographique, Paris, of the 13th December 1929,
the film «Chains» produced by the Himalaya Film Co., has been banned in France, amid much lively protest notwithstanding the fact that it had been passed by the Censorship.

This film is accused of approving and displaying pederastic practices under a flimsy disguise of disapproval. Immediately on top of this prohibition, however, according to the Daily Film Renter, of London, (18/244) the film was again passed for exhibition.

The French Chamber has recently ratified a bill, presented by M. Laurent Bonnevoy, tending to the ratification of the international Convention on the traffic in pornographic literature, signed at Geneva on the 12th September 1923. Cinematographic films and all matter that may be published and circulated are included among such literature.

It is a fact, however, that the film industry has not been slow in realizing the dangers to which the cinema might give rise and has directed its production along lines more consonant with social and humane necessities. We need only mention that at Hollywood, the great centre of the American, and perhaps the world film, out of 81 films that are at present in the making, 14 are of a historical character, 44 are based on manuscripts that have been abundantly corrected and purged, 14 on novels chosen from among the best on the book market, and 9 from stories that have been published in magazines. There is an ever increasing slump in films dealing with crime and sexual themes.

We have spoken of the accusation of immorality.

But there are those who assert that immoral films are apt to lead to crime by stirring latent tendencies in the minds of the people, and especially of the young, which may lead to the actual commission of crime, or at least to such moral laxity as paves the way to crime.

The Martin and De Feo Reports, to which we have referred in the foregoing, laid before the Child Welfare Committee in Geneva in 1928 and 1929, dealt at length with this problem. There is no need to repeat or recall all that has been said on this subject by students of psychiatry and criminology. A few references and recent quotations will suffice.

The case is set forth in the following terms.

Cinematographic representation, by falsifying the concept of life in the exquisitely plastic mind of children, by forcing on them new sensations, and opening up new vistas of an unreal world, gradually destroys the respect due to women, the home, and the family. Woman is no longer regarded as the mother, sister, or educator, but under the freer aspect of the girl for whom life is just a matter of enjoyment, who is unacquainted with its intimate and deep sorrows, and is just out to «have a good time». Home and family have no part in the giddy and irresponsible life depicted. Thus the elementary notions of morality which the child’s upbringing gave him are overthrown. Hence it is held that even those films which merely give an unreal and tawdry view of life are essentially immoral.

Then wrongdoing is often shown in an attractive and agreeable light on the screen. Girls who break the ten commandments and all end up happily on the film, as though there were a premium on disreputable conduct, are certainly no school for social education.

Certain mental habits are evolved from the constant watching of films. Both boys and girls develop a craving for attention and a tendency to cultivate false values and emulate the false heroes and false prophets of the screen.

The child mind conjures up visions of the sham hero. The spiritual leaders of mankind take a back seat. When the heroes who replace them are a Charlie Chaplin or a Douglas Fairbanks not much harm is done. But there is a tendency to seek heroes on a lower plane, to raise heroes from a mud.

The confusion between morality and a morality is attested — so we are told — by statistics of crime which point to a steady increase in juvenile delinquency. And the cinema is declared to be one of the main, if not the chief factor responsible for this phenomenon.

The promiscuous life of adults and children in the «picture palaces», the darkness of the halls and all the possibilities of corruption dependent thereon, are said to be a contri-
butory factor of this two-fold evil of immorality and crime.

The erotic element, the sensual side of life which nearly all films emphasize as the central interest of life and its one and only attainable end, is another important factor.

Crime is the natural emanation of the immoral atmosphere with which the child’s soul is now imbued. It arises instinctively (irreflection, suggestion) in the child. It arises as a result of a pathological state inducing conscious reflection or subconscious forms of action in adults.

As far back as 1911 one of the foremost Italian psychiatrists, Dr. D’Abundo, writing in the Rivista Italiana di Neoropatologia (Vol. IV, No. 10), touched on the effects of the cinema on children and asserted that he had on several occasions been consulted regarding children aged between 7 and 10 years of age who, after watching cinema shows depicting tragic or fantastic scenes, had begun to display marked symptoms of nervous disturbance, that took the form of night terrors accompanied by absolute hallucinations, generally visual, which caused them to jump from their beds, a prey to unspeakable fear, and to seek refuge in their parents’ beds.

Since that date the evidence of doctors on such points has been multiplied. The latest statements of the kind are those of Pierre Casabianca in a report laid before the International Penitentiary Congress of London of 1925; that of Paul Wets, in his very fine study on L’Enfant de Justice; Augusto Carelli’s paper published in the February-March issue of Maternità e Infanzia; Maurice Rouvroy’s contribution to the Revue International de l’Enfant of May 1928, Edgar Leroy’s contribution to the same review (October 1929), besides others too numerous to mention.

Further on we will quit these general accusations of immoral and criminal tendency brought against the cinema and pass on to the specific facts of child crime adduced against it. We must first, however, refer to a very important official report of the 15th December 1929 of the President of the Children’s Court of Gerona to the Minister of the Interior and President of the Spanish Superior Council for the Protection of Children, which has been very courteously communicated to the Rome Institute.

It is stated that direct enquiries made by the Children’s Tribunal and information received from the local committees have revealed three main causes of corruption of the young: 1. indifference to the upbringing of their children on the part of parents unworthy of the name, many of whom are degenerates and entirely devoid of religious sentiment; 2. the cinematograph; 3. the frequency with which children attend public dances.

With respect to the second cause, the report states that the cinema is the most popular form of amusement among the poor — that is to say the class that produces the largest number of criminals and vagabonds — on account of its cheapness. This matter has claimed the attention also of the Review Pro Infantia, the official bulletin of the Superior Council for the Protection of Children, and the Children’s Tribunals.

A note published on behalf of the Provincial Committee for the Protection of Children of Huesca cites a circular published by the Official Gazette of the 26th April 1928 that reads as follows: «The fluctuations of light are deleterious to the sight and excite the nervous system, thus causing serious damage, the effects of which are felt throughout life; this tends to arouse morbid imagination and to open children’s eyes prematurely to facts that they have no business to be told about, thus stirring latent passions in a dangerously precocious way, filling the mind with fantastic notions, and arousing an appetite for the thrilling adventures and crimes they have witnessed on the screen».

In the above mentioned report of the Gerona Tribunal, reference is made to three interesting opinions expressed by Henri Velge, the General Secretary for the International Association Pro Infantia; by Dr. Borobio, specialist on children’s diseases and president of the Children’s Tribunal of Zaragossa, and Dr. Martinez Vargas, Professor of Pediatriy and former Rector of the University of Barcelona. The opinion of these three authorities fully endorses the statements made in the Report and, above all, they affirm that the censorship is not in a position to eliminate from films all the
poisonous elements that penetrate the youthful mind and impart lessons of immorality and hypocrisy — brutality, cruelty, lechery, sloth, and general uncontrol of the passions.

The value of a report such as this, based on the daily observation of real life, cannot be denied. In one single regard we may perhaps discern a fundamental error. It is stated that the cinema, being the cheapest available amusement, is the most popular one among the poorer classes — the classes that contribute the biggest contingent to crime and vagabondage. We must first make sure on a point of statistics. Given the ratio of the poorer to the middle and upper classes, is it a fact that the proportion of criminals is so much higher in the former class? Or may not a larger proportion than is generally assumed belong to the latter? Mere tramps and vagabonds are of course a different matter.

We may also further observe: if it is indeed a fact that criminals and vagabonds are mostly recruited from the poorer classes of society, has an increase of crime among them proportionate to the increase in the popularity of the cinema been registered?

Care should be taken that all statements of fact be accurate and borne out by statistics. We may recall the conclusions — that gave rise to much controversy to be sure — of the Babson - Hoffmann - Milliken debate (Crime and the Cinema in the United States) published in the September issue of the International Review.

Mr. Cartenton Smith dealt in a general way with the influence of the cinema on crime in a lecture delivered at Denver, Colorado, on the 25th June 1929, that appeared afterwards in pamphlet form under the title «Crime and Motion Pictures».

Opinions no less authoritative than those above recorded have been expressed against this general tendency to attribute crime and immorality throughout the world to the cinematograph.

M. R. Jaquillard, Head of the Prison and Police services in the Canton de Vaud (Journal de Bex, 28th December 1928) asserts:

«In the course of our enquiries we have sought to ascertain precisely the type of cinema show frequented by children. While 6% of the children had no accurate recollection of the films they had watched, 48% had seen only good films that could not exercise any deleterious influence on them. 16% had been present at films of questionable moral character, if not altogether immoral. These films however, could not produce any ill effect on their still undeveloped minds.

We further sought to ascertain what influence the cinema exercised on the degree of perversion to which young people descended and in what proportion the seventh art was directly or indirectly responsible as the determining cause of criminal behaviour. We paid particular attention to thieves, as these form the great majority of youthful delinquents (from 80 to 90 per cent). While one third were found to have committed thefts in order to get money to go to the cinema or other shows, the other two thirds had been prompted to thief in order to buy sweets or cigarettes. Not one of them had robbed solely with the object of going to the cinema. In one single instance a little thief had been inspired by a scene witnessed at the cinema and had learnt tricks from it which had helped him in committing the offence.

As regards those children who had been present at the showing of immoral films, most of these were already tainted by their environment, and the deplorable lives they led were due to atavism or lack of proper control. They had learnt bad ways not so much at the cinema as in low company, by reading immoral books, and frequenting dancing clubs — those modern caravanserais of all bad morals. The cinema had played a very secondary part.

Hence it would not be reasonable to attribute to the cinema acts for which it is responsible in such a limited measure».

The «Exhibitors’ Herald World» of Chicago of the 6th June 1929 (33/42) further states that Colonel Jasor Joy, in a speech to the San Francisco Policewomen’s Corps, declared that the cinema, in always pointing a moral by the punishment of wrongdoers, was one of the most potent weapons against crime.

The above statements, it will be seen, reflect the opinions of two specialized authorities, one American and the other European. Comoedia of Paris, in its issue of 3rd June
1929 (33/25) quoted an article of M. Boisy-von in which he declared the accusations brought against the cinema as a school for crime to be simply absurd.

The « New York Times » of 4th September 1929 noted that the cinema had a faithful friend in the person of Dr. Phyllis Blanchard, psychologist of the Philadelphia Child Guidance Clinic.

Dr. Blanchard, who has made a special study of child psychology and youthful delinquency, regards the cinematograph as a help in social life. In a lecture she delivered during the Congress on Psychology she affirmed that all the statements put forward by scientists had been unable to prove the influence of the cinema on crime, while the film may render good service in many ways. It constitutes perhaps the best and healthiest recreation for both adults and children, and may be regarded as the most useful of all the available means of expression for impressing notions of morality and good behaviour on the young.

« I have sat in motion picture theaters » she said, « and marvelled at the unanimity with which the children present reacted on the side of law and order. When the villain is caught and punished, as is always the case under the policy of those who make American motion pictures, the applause of the children is swiftest and most enthusiastic.

« The overwhelming cause of child delinquency is maladjustments or neglect of training in home life. The plain truth is that the child's behaviour patterns are formed before the age of picture attendance and that at least 85% of child delinquency is traceable to home influence which took shape in a generation before the motion picture's popularity afforded a convenient alibi for those who do not or cannot provide healthy stimuli for their children ».

Dr. A. Jastrow, speaking on the same occasion, expressed himself as follows:

« The motion picture is here to stay. Nothing is more futile than to attempt its improvement by harassment. The only effective way to achieve constantly improving pictures is the organization of public support for the best of the product.

« I am thoroughly convinced that those charged with the making of motion pictures in America earnestly desire the help and cooperation of leaders of thought toward a fine and psychologically useful output. We must not let the making of motion pictures degenerate into a game between the less scrupulous producers and the censors, with constant attempt to « get by » with something. The community should constructively support the efforts of the responsible companies to make, and secure support for, better pictures ».

« As for the cinema » writes Clement Vautel in the Paris Journal of the 1st December 1929, « it is highly moral. It is indeed the only form of spectacle left to us in which we are always sure to see vice punished and virtue rewarded. Nothing could be less encouraging to the budding criminal.

« Most of the old and the new explanations offered for the existence of wrongdoing, which is as old as the world, are equally futile. The annals of crime interest only the respectable bourgeoisie. Only the most virtuous persons enjoy the chronicles of causes célèbres; it is a well-known fact that murderers prefer sentimental literature. I doubt whether a single one of them has ever cut a wealthy old woman's throat after reading the account of some horrid deed, the revolting details of which fascinate respectable persons.

« What does really favour the development of criminality is the state of savagery in which an ever increasing number of our contemporaries live and the shortcomings of a justice that has been weakened by misplaced humanitarian sentiment ».

We have cited here only the most recent and authoritative views expressed on the matter, and these are seen to be diametrically opposed one to the other; some regarding the cinema as the only or principal source of immorality and crime and others denying it. Once again the problem is put forward for the consideration of students, lovers of children, and the authorized representatives of the industry, that they may submit their views and defend them by well authenticated facts and figures.

A good deal of evidence is put forward to associate the cinema with various forms of criminality. It would, however, be necessary
to complete the case by making the requisite comparisons and statistical parallels.

It should be completed by an enquiry as to how far other intellectual, spiritual, or purely material factors of the life of our time may be responsible for the increase of crime: books, newspapers, dancing clubs, the negligence of families and of society.

A comparison should be drawn between the increase of crime caused by one or other of these factors. It may well be that the cinema would not be found to be the prime offender that its detractors would have it to be.

The cinema is often judged in the light of a series of isolated facts. Although such evidence counts for something, it does not afford absolute and definite proof. It consists of disconnected circumstances, unsupported by statistical percentages, by the organic comment of figures. These are episodes that serve merely to confirm the principle that the screen may be one of the many factors in the corruption of youth, but not necessarily the only one or the biggest.

In July 1910 Dr. Mario Ponzo, in an article on the « Cinematograph and child delinquency » published in the Infanzia Anormale referred to various instances met with in his first hand observation of individuals who appeared to have been directly or indirectly influenced by the film.

Paul Wetz, writing in the Bulletin de l'Office de la Protection de l'Enfance (No. 14-1920) and recalling an enquiry that had been carried out on cinematographic shows in Brussels, cited certain characteristic instances of crime attributable to the immediate or indirect influence of the cinema. The same writer recalled other observations recorded in his work L'Enfant de Justice, published in Brussels by the International Association for the Protection of Children.

Maurice Rouvroy also dealt with this matter in a masterly way in the Revue Internationale de l'Enfant, and quoted therein the precise definition given by Maurice Maeterlinck: "The cinematograph is life enlarged and projected across an unlimited space; it is an accumulation of all the examples and all the experience of thirty persons and thirty years of life concentrated together in a single instant."

Carelli in the article already quoted also records cases of neurosis, hysteria, and crime attributable to the cinema.

The Report of the Children's Tribunal of Girona to which we have referred in the foregoing further states:

"This Court in the course of one year and a half has judged five bands of young thieves, many of whom confessed that they had learnt from the cinema how to appropriate other peoples' property. In our penitentiary we had a boy of 12 years of age, a young thief who confessed to the court that he used to scale the wall of his garden to go to the cinema and get home again in the same way and that his bad conduct was due to the films he had watched."

According to the statistics of Prof. Mumblebac with respect to the students at Berne, published in the Swiss Pedagogical Review and quoted in the Report, out of 8300 children in the elementary schools of the Federal capital, 2700 were enthusiastic cinema goers and had watched in the course of a few years 1350 films reproducing scenes of drink, 1165 scenes of rape and abduction, 1120 adulteries, 1224 murders, 1719 scenes of robbery, 1171 fires and homicides of various kinds, and 765 suicides.

Dr. Martinez Vargas, Professor of Pediatry and former Rector of the University of Barcelona, in the course of his professional practice, came across a little girl who attempted to take her life as a result of suggestion by the cinema.

In an article on "The Child and the Cinema of To-day" by Edgar Leroy, published in the October 1929 issue of the Revue Internationale de l'Enfant, the author notes that recently at Saint Nazaire a boy of less than 15 was caught ransacking a neighbour's apartment. On being arrested and adroitly questioned, he confessed to being the author of a number of thefts, on one occasion having rifled the till of a shop. He admitted that he had committed these thefts in order to be able to amuse himself with his friends and go to the cinema.

Colonel Dr. Escandre de Messieres, in his Psychologie du Criminel, published in the Echo Medicale des Cevennes (April 1929, p. 92) notes that all too often the malefactor who breaks into a room armed with a revolver,
shouting «hands up» is shown in the guise of a hero. His pluck in defying the police earns him the sympathy of the young onlookers and often their enthusiasm.

Considerations of this sort recently induced the Greek Parliament to approve a decree absolutely prohibiting the publication of books and stories for children dealing with robbery and other crimes. It is announced that measures of a like kind will be passed with respect to films touching on such subjects.

Alexis Tolstoi in his story «The Basin Street Crime» referred to in the Elkin enquiry published in our January issue, had already described influences of this kind on the young, and cited instances of children who had committed crimes under the sway of the cinema.

Here are some further cases of the kind. At Valencia, Spain, a boy aged 13 committed a theft under quite romantic circumstances, and declared that the idea of it had occurred to him when watching a detective plot film (El Imparcial, Madrid - 15/09).

A school of some two hundred girls, aged between 12 and 14, who were taken to the Alhambra Cinema Theatre in Berlin to hear a lecture on coal mining illustrated by motion pictures, disappointed at the tediousness of the show, gave vent to their disappointment and annoyance by an outburst of rowdyism and destruction (La Gazzetta di Venezia, Venice, 15/101).

The Paris paper, «L'Ami du Peuple» (15/105) cites two characteristic episodes. A little waif who was taken in charge by the police said:

«What could I do? I was fed up with being constantly scolded by my master and parents. So, as I felt that I had got something in me, I thought I'd live like the Kid — you know, Charlie Chaplin's kid — and live my own life...».

A well-dressed little girl of ten was found loitering at a street corner and taken by two policemen to the nearest police station. The child stated there that she had been during the afternoon to a cinema in Grenelle when a film was shown depicting the marvelous adventures of a little girl like herself. And she too had been moved to live her own life...

The December 1929 issue of Politica Sociale examines the problem of the artistic education of young people. The following considerations are put forward on the rôle of the cinema in connection with crime.

«The Belgian judge De Rychere states that two youths aged seventeen, under the influence of the cinema, had abandoned their home and dressed themselves up as brigands, armed with daggers and pistols, and roamed about the countryside attacking wayfarers.

The «Times» reports that another young fellow, who was addicted to the cinema, tried to rob some money out of a chest belonging to his father, and being scared by the appearance of a small brother, he bound him to a bed and stabbed him to death with a kitchen knife. Then, having fled from his home, he wrote a letter to his father defending himself by a farrago of fantastic tales suggested by cinema shows.

«In Rome, thirteen boys aged between 10 and 15 years, who were caught picking pockets, confessed that they had been moved to do so by watching films.

«At Mantua two boys, with intent to steal, killed a shopman under circumstances almost identical with the plot of a film «A Convict's Adventures».

«And recently a youth of 16, who was charged with burglary, on being asked by the Judge where he had learnt such a trade, replied that he had learnt it at the cinema».

According to official information communicated to the Institute by its Austrian correspondent, the Vienna Children's Tribunal recently had to judge an apprentice of 18 who spent all the money he earned in cinemas to watch adventure films. He was present one day when a burglary film was being screened and being penniless at the moment, he decided to put into practice the performance he had just witnessed. Together with two young friends he broke into a smith's shop and pocketed 195 shillings.

The court sentenced the accused to five months' imprisonment with the benefit of conditional freedom for three years, the non-execution of the sentence being made subject to the youth's refraining from attending cinema shows during this period.

In like manner the Stuttgart Tribunal (33/6) sentenced several youths who were
charged with offences apparently connected with films to six months imprisonment and several years exclusion from cinema theatres.

Apart from the doubtful corrective efficacy of such precautious measures in the case of youths supposed to be suffering from the ill effects of the screen — it being only too likely that boys thus forcibly kept away from the cinema will resort to other and more harmful means of diverting their minds and imagination — the obvious question arises: how can it be possible to make sure, especially in a big town with its multitude of cinema halls, shows, and spectators, that the orders of the Tribunal are actually carried out?

Now all these facts claim attention, but they are episodes that may perhaps be but of casual occurrence. In all times and under all social conditions there have been manifestations of art that have pointed to the existence of certain facts, but it has never been considered proper to hold these directly responsible for the occurrence of mere episodes that may have an indirect connection with them.

Literature and all other forms of entertainment have played a considerable part in creating similar conditions. To-day it is suggested that the whole fault lies with the cinema. When will crime throughout the world — or at least the crimes committed by the young — be analyzed in a scientific spirit? When will it be possible to determine definitely the exact part played by these several moral and immoral factors of life in the criminal propensities of the young?

The Children's Courts that have been established in so many countries and which are constantly gaining in importance could contribute most valuable evidence.

According to the latest information to hand, there is a demand in Brooklyn for the establishment of a special magistrature to deal with young people aged between 16 and 18 years of age, the present children's courts dealing only with children under 16. Brooklyn already possesses also its so-called Good-Will Courts, extra judicial organs that deal with all matters that call for preventive or repressive intervention, where the circumstances are not of sufficient gravity to warrant recourse to the ordinary courts of justice (Revue Internationale de l'Enfant, Vol. VIII, nos. 47-48). The regulations require that one of the three judges should be a Protestant, one a Catholic, and the third a Jew; they are assisted by attorneys, well versed in social problems, and by the local clergy.

In Greece, M. Petrides, Minister of Justice, has laid a bill before the parliament for the creation of a children's tribunal. Under the proposed law, the Judge would be vested with a certain freedom of action in dealing with children aged less than 12 years at the time when they committed their offences. In the case of offenders aged between 12 and 16 years, the magistrate could order them to be detained in a reformatory for a period varying from 6 months to 10 years according to the gravity of the offence. Children guilty of crimes which, in the case of ordinary criminals would be subject to the death penalty, would be liable to such detention for periods varying from five to twenty years. The said Bill contemplates also liberty on probation on the advice of the director of the penitentiary.

Recent enactments in Indo China contemplate the Institution of special children's courts in that country, which would provide for children under thirteen years of age to be dealt with by special magistrates.

In Italy, Children's Courts have recently been opened in Rome, Turin, Milan, Florence, Naples, and Palermo, and the Public Prosecutors have been instructed to coordinate their jurisdictional functions with measures for the welfare and re-education of morally abandoned and delinquent children.

These Children's Courts are in a position of advantage in ascertaining the original causes responsible for young people going astray.

It is of course not possible to observe the special psychology of children in the same manner that we can the psychology of adults. The child is at all times a potential criminal. The education given him, his chances of adapting himself to his environment in accordance with his wishes and his needs, may make him a man possessing the inhibitory powers to exercise self control or may make a criminal of him.

The children's judges are not so much
concerned with repressing crime as with seeking out its original causes; this is all the more necessary owing to the morbid emotivity of children which renders them so peculiarly susceptible to outside influences and so peculiarly apt to tell lies.

The child is of imagination all compact. Even when, in obedience to unconscious instinct, he has committed some offence, he seeks to idealize, to enrich, and, so to speak, to ennoble what he has done.

He has only to attribute his action to the doing of some hero conjured up by himself, and to embellish it with fresh and fictitious details for it to acquire a quite romantic interest in his excited fancy.

He does not care whether the action be moral or immoral in itself. His one object is to magnify it.

The history of crime is painfully rich in this respect. The child criminal is always, more or less, a liar.

How much, therefore, of the case made out against the influence of the cinema—considered apart and not in relation to all the other social activities that may incite to crime—would stand against severe critical examination?

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The film nowadays is actually finding its way into the severe halls of justice and the fastnesses where men suffer the penalties inflicted for misdeeds committed maybe in a moment of aberration of their normal conscience. It may well seem an anomaly that the screen so often denounced as a potential incentive to crime, should constitute one of the most efficacious instruments in re-educating the abnormal and the criminal; but such is indeed the case.

Just as—quite apart from the question of criminality—it is necessary to supervise films intended for children in order to make sure that they are adapted to educating their minds without wounding their sensibilities, thus also the screen may be utilised as a means of humanising those who, even if they have sinned against society, are themselves the disinherited and the outcasts of life; as a vehicle of knowledge that will open up to them the vision of beautiful things and of a pure and healthy world they hardly know of, and thus be the means of intellectual and spiritual re-education.

In Spain, Dr. Figuerido has suggested a new method of combating the germs of insanity in children (La Tarde, Bilbao - 33/33) and the Commission for Public Instruction has recently been invited to set up a special school for abnormal children. The cinema will be one of the main features of this school.

The Chez Nous Establishment for abandoned children at Clochette (Lausanne) has published a film showing how the children are brought up and the manner in which the little inmates who give evidence of moral degeneracy are treated in accordance with the most recent methods of child psychology. This film has aroused the greatest interest and there has been a demand for it in the United States (Journal de Payerne, 15/118).

Abnormality in children is often due to some physical defect, to poor circulation, and consequent low vitality, caused by the diminished or disordered functioning of the heart.

Another cause, according to Alice Raven, in « Normal and Abnormal Psychology in Relation to Social Welfare » (Sociological Review, April 1929) is defective mental capacity, which is hereditary like physical qualities, and prevents the individual from being at ease in his social environment.

Abnormal persons, whose minds are obsessed by fears and a sense of hostility, are dangerous not only on account of the anti-social actions they may commit under provocation, but owing to the emotional atmosphere they create.

In this respect the screen has unlimited re-educational possibilities. Films of a suitable kind are most efficacious in guiding mentally and psychically inferior children into normal ways, and by so doing render great service in the prevention of crime.

A noteworthy study of the possibilities of the film in the re-education of abnormal children appeared recently in the Jovy Journal of Cairo (33/99). At the same time the Juvenile Recreation Clubs of Saxony have released a film named «Ottendorf, Health and Recreation Resort for the Young» illustrating the good work done by this institu-
tion. We further learn that the Prague Lunatic Asylum has had a cinema installed for the entertainment and possible re-education of the inmates (34/498).

But the reforming powers of the film do not apply to the abnormal alone. Sound equipment has been installed in Sing-Sing prison penitentiary for screening films specially suited to the re-education of the prisoners. A gaoler in one of the Paris prisons (Josy Journal, Cairo - 3rd December 1929) recently stated that one of the prisoners had appealed to the Director saying that he had some serious revelations to make to him. Upon being questioned, the prisoner said that he only wished to call attention to the fact that all means of distracting the mind were lacking in prison and that it would be desirable to organize a series of cinema shows for well-conducted prisoners. The director merely laughed at the prisoner and his "revelations."

But was he right? The cinema in prisons and penitentiaries is not merely a means of distracting the mind, as the Parisian prisoner erroneously put it, but a means of moral re-education and intellectual development. To segregate law-breakers from society is one thing; but it does not mean that they should be subjected to moral torture.

What is needed is to re-educate criminals in such a way as to enable them to return to social life and to take a worthy part in it.

We may be sure of a serious decrease of crime when prisons and penitentiaries shall admit work of all kinds, books, and the screen, with its radiant visions intelligently explained by lecturers. At the present time the majority of criminals are or become old offenders. But the prisoner who leaves gaol after receiving a humane general re-education that gives him a chance to understand what an honest life means, will realize that freedom, work, and a sense of duty are the greatest blessings on earth.

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Experiments in this line are everywhere on the increase and — notwithstanding the scorn of the Paris prison governor — they are proving most successful.

In the Plotszensee Prison in Berlin, a cinema show was given to a group of prisoners as a reward for their good conduct. A sound equipment has been set up in the chapel of the Leavenworth Penitentiary in the State of Kansas (Exhibitors' Herald World, Chicago - 12/506).

The prisoners most willingly contributed towards the cost of installing it and its upkeep by paying small instalments out of their monthly wages for work done.

Other prisons, especially in America, are following suit.

Thus we are informed by the Film Daily of New York that during 1930 the American film industry will supply free of cost one thousand million feet of film to be screened before an audience of 500,000 prisoners in the United States and Canada (33/107).

A quite exceptional application of the film for prisoners has been essayed in Russia for propaganda purposes, according to the Rome newspaper Il Tevere (33-63).

The Sovietian cinema industry has produced a singular film intended to demonstrate the humanity of Russian punitive methods. This film purports to reproduce the conditions of the Solovetsky prison on the Black Sea, of gloomy memories.

A Russian officer who succeeded in escaping from this prison in 1926 recounted that the prisoners detained there were constantly subjected to floggings and other tortures. Numbers of them had died as the result of ill treatment, and others from the atrocious cold. The Isvestia newspaper, in announcing the exhibition of this film, states that it had been produced to demonstrate the falsity of this allegation.

The film gives a picture not of a prison, but rather of a colony, the inhabitants of which pass their lives in a pleasant alternation between work and saunterings in gardens and orange groves. The appearance of the colonists suggests that they are being brought back to a state of bodily and spiritual beatitude.

However this may be, there is no doubt that this is the most convincing way for the U. S. S. R., as for other nations, to give the lie to all the stories that are circulated about them and to show how things really stand.

Lastly, we may mention that the Metro
Goldwyn Co. is about to release a film of a propagandist type, more or less akin to the Russian film, depicting the life of convicts in the various American penitentiaries. (Variety, New York - 33/100).

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The function of the cinema as a means of judicial investigation and as an item of evidence has been shown by recent experiments, which are growing more and more numerous.

The German police, like the American, make considerable use of the film for propagandist and preventive ends. The Berlin Police and Prefecture, in collaboration with the UFA Company (33/27), will release a film on the duties of the police, and the work done by them in the repression of crime, and more especially crime among women. According to the Licht-Bild-Bühne of Berlin, the Saxony higher police officials have produced a film entitled «The War on Crime», in order to instruct the public and to urge them to collaborate with the police in combating crime.

The cinema offers the judicial authorities the elements of voice, sound, and moving representation. A distinction must of course be drawn between the theatrical and the documentary film. In the former the whole action is performed by actors, according to a scenario drawn up by specialized writers in elaboration of a plot. The film is staged in a cinema studio, only certain scenes being shot in the open air. In what way could such a form of representation be of service to the ends of justice? Only in the event of an offence or crime being committed in the particular vicinity in which the drama is staged, by one of the persons taking part in it; for the public is necessarily excluded from the studios, or at least the operators photograph only the scenes in which the actors alone appear. So much for the cinema drama. Some time ago, when staging Quo Vadis, under the direction of Gabriellino D’Annunzio, at the Rome Stadium, a supernumerary was mauled and killed by a lion. The scene director and other persons responsible for the arrangements were subsequently charged with manslaughter. The Court ordered that a section of the ribbon, which the cameraman had continued to turn notwithstanding the accident, should be seized. Thanks to this photograph the precise details of the accident could be ascertained.

We are here limited to culpable or criminal acts committed by the actors themselves who take part in the drama or in a particular scene, and to the visual aspect of the film.

The talking or sound film of a theatrical type may, in the reproduction of natural and artificial noises in the vicinity (sound films), or the human voice (talking films), offer evidence of a like kind, and reveal the auditory elements of a crime or misdemeanor committed — the words, phrases, and sounds that took place in connection therewith. But here the range is still further limited, since, for strictly technical reasons, the spoken scene must be enacted in rooms specially adapted from the acoustical standpoint, the smallest possible number of persons being present, thus rendering it still less likely that any occasion for judicial evidence will arise.

In the sphere of civil or commercial contestation, theatrical films afford more valuable evidence, especially in the event of disputes arising between producers and actors (the execution and rescindment of labour contracts), producers and technicians, producers and intellectual workers (scenario writers). In such cases, the film may well afford sufficient evidence on technical or artistic points or other matters connected with claims for appraisable damages.

Documentary films may be of the greatest value in questions of penal responsibility. Professional actors do not take part in these. The masses of the people themselves in their daily avocations are the actors. Films of this kind may constitute a record of facts that could not possibly be ascertained otherwise, as was proved in the case of the recent film taken by the Luce Company at the Milan Commercial Exhibition when an attempt was made on the life of King Victor Emmanuel, and during the Arctic exploration of the Italia airship.

A crime may be committed in a street or public place, during a ceremony or the passing of a procession, some popular fête, or public or private meeting. The cinema
operator turning the handle of his camera records the scene. A criminal or offender may thus be caught in the very commission of his act and the circumstances be recorded and proved beyond doubt. By separating and enlarging some particular photograph, it may be possible to distinguish and identify the offender.

Thus, with the object of arresting a thief, the Salzburg police made use of photographs in their possession and had a short film screened in the various cinema theatres of Salzburg and Innsbruck. The audience were at the same time requested to lend a hand to the police. The experiment was crowned with success, and at the third exhibition of the film in Innsbruck a man and a woman came forward who were able to give full particulars enabling the police to arrest the offender. (The Daily Telegraph, 33/86).

Here are some further instances of the kind. During recent demonstrations in Berlin made by Communists on the one hand and Nationalists on the other, the police squads were followed by cinema operators who photographed the scenes of the encounters. Thus the police were able to identify demonstrators and arrest them later on in their homes (La Cinematografia, Milan - 34/424).

A certain M. Lecouvreur, whose pocket was picked during a ceremony at the Arc de Triomphe in Paris, dropping into a cinema theatre a few days later, saw a film of the ceremony he had attended that reproduced the very scene of the theft of which he had been the victim. He at once informed the police, who were actually able to identify and arrest the pickpockets (La Cinematografia, Milan - 34/425).

We have here a means of identification and of judicial evidence akin to scientific anthropometrical police systems, in which photography plays a part, that offers the greatest possibilities for the future.

In the domain of the documentary cinema, the sound and talking film does not afford much chance of positive evidence, at the present stage of technical development. Sound and voice, cannot yet be reproduced with perfection in the open air, owing to the diversity of noises and the impossibility of differentiating and selecting sounds and words of casual occurrence from the central and essential part of the film.

In the matter of evidence, while the Budapest police are satisfied with registering the confessions of criminals on gramophone discs, so as to obviate the possibility of the accused later on denying the value of his confession on the plea that it had been incorrectly or unfairly recorded in writing, at Philadelphia, U. S. A., the sound film has played a new and important part as witness at a trial. A certain Harold Roller, who was charged with burglary, made a complete avowal of his crime during his examination by the police, and his confession was recorded on a sound film. Judge Gay Gordon allowed this film to be screened during the hearing of the case, notwithstanding the protest of the Counsel for the defence. He declared that he could see no reason for excluding such evidence. "Photographs have always been admitted as evidence" said the Judge "and it is the duty of the Court to avail itself of new inventions." Thereupon a screen was installed in front of the Judge, the projector was put in motion, and the film shown in six minutes. It showed at first a room in the Philadelphia police station, in which the Inspector and a stenographer were seated. As soon as Roller was brought in, the Inspector addressed him and offered him a seat. Roller's confession was next heard; the accused admitting to the Inspector that he had committed over forty crimes. The exhibition made the greatest impression on both judge and jury. The Chief of Police of Philadelphia, Mr. Shofield, who had had the film taken, declared that henceforward he would always have recourse to this method for taking a verbatim record of his examination of accused persons.

This latest system of police investigation has been the subject of much criticism. The District General Attorney of New York, Mr. Banton, declared that he could see no advantage in a confession recorded by a talking film over a written confession. He averred, moreover, that it is necessary in trials to avoid anything that bears the semblance of a theatrical show. In like manner the English magistracy and police
have found fault with the Philadelphia experiment, and hold that nothing should or can replace oral evidence and cross examination in demonstrating the truth or untruth of a deposition, and that the screening of films at a trial is not compatible with the dignity of a court of justice.

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It is not the business of the Rome Institute in the initial stages of its enquiry and documentation, to offer any opinion on the several questions briefly referred to in the foregoing, which are all matter for the competent authorities to consider and pronounce on in the light of their practical experience and statistical evidence.

We cannot, however, fail to note how the conservatively minded are as ever diffident of availing themselves of new discoveries and raise their voices in protest, as they have ever been wont to do, against all that is new or suggestive of revolutionary change to their fossilized minds.

The laudatori temporis acti are always with us. Their restraining influence, indeed, may be of value in life because, if we proceed by degrees, we avoid the ill consequences arising from the hasty application of new principles and new discoveries.

In any case their world and their outlook is being rudely shaken day by day, for there is no halt to progress, and progress will not suffer social life to proceed in ignorance of the realities of existence and of all those new developments that may be of such incalculable service to the community.

**A TIME LIMIT TO FILM CENSORSHIP CERTIFICATES.**

One of the least considered, but most important questions connected with the cinema, in all countries having a regime of cinematographic control — whether by the State, as in Germany, Italy, Russia and France, or officially recognized, but of a private character, as in England — is the length of time that the Censors’ Certificates shall hold good.

All legislation dealing with films is comparatively recent, but everywhere it has the same defect: that of believing that things come to a standstill and are capable of remaining stationary for many years, or that they will only alter so slowly as to allow time for the gradual evolution of thought and the revision of the law itself.

At the time when laws dealing with the cinema were passed, the possible future developments of the screen were disregarded. Apart from the possibility of such new developments as colour, sound, and the third dimension, which, as they are still in the future, could not be the subject of legislation, the question of technique, which is constantly improving on what has already been achieved, and also the rapid formation of the cinematographic taste of the people, were neglected.

World cinematography has, in its thirty years of existence, gone through two distinct phases. In the pre-war period it progressed by such comparatively slow stages that it was impossible to foresee the rapid strides it would subsequently make. In the first period, it was of an essentially experimental nature owing to the researches and experiments which were patented by the thousand all over the world.

After the war, when life had greatly altered from what it was formerly, the cinematograph, after many years of slow technical development, suddenly blossomed out.

If statistics for the two periods be compared, it will be seen that the number of cinemas, the size of the audiences, and the amount of capital invested has increased more than threefold in the ten years between 1920 and today from what it was in the first twenty years of its existence.

Legislation, however, sees fit to remain stationary and to consider only one side of its social duty, the most obvious and immediate one. The censorship regards the film as it was when first it was introduced to the public; further developments have been overlooked.

The importance of this question was stressed in an article by De Vicente in the
July 1920 number of this Review, as also in an editorial note on the article by Kiritsescu in the number published last January. A film which has passed the Censor obtains, by that fact alone, a patent of infallibility as regards technical, artistic, and moral qualities that holds good for years, in fact for as long as it is possible to produce copies from the negative. The law fixes no time-limit to the duration of the censor's verdict, and pays no attention to the most obvious fact: that if relativity exists, it is just on points of technique, art, and morals which are always changing. What is the result? The fight for the so-called moralization of the film, the need or desirability of the enquiries which are constantly being made all over the world, the campaigns for a reform of the cinema, are the logical results of the posthumous survival of films which have once passed the censor and are still being screened.

Laying aside documentary films, which are unrepeatable and permanent, theatrical ones (apart from those intended to represent historical episodes or which are of high artistic interest) reflect states of mind corresponding with certain conceptions and particular situations of public thought and feeling.

We had the period of the detective film, corresponding to a phase of literature which is now a thing of the past, the period of cowboys galloping over prairies, the sentimental and romantic period, the erotic period, the war-film period: a whole series distinctly reflecting situations in thought, literature, and life.

With the change of public interests and public tastes, books mouldered in booksellers' cellars, but the films continued to be screened. From the first-class cinemas they passed to second and third-class ones, and thence to the provinces, to make a show of their artistic and technical errors. After some years they reappeared again, to go the same dreary round before a public which it was hoped had forgotten them. The out-of-date censor's permit accompanied them like a mascot and the hirers of films continued to let them out as long as it was possible to make a penny out of the more or less dilapidated objects.

The intellectual classes, schoolmasters, psychiatrists, and all those who live in contact with the mind of the people and of children, rebelled against this and took up arms and instituted enquiries and investigations against the abuse.

The campaign turned against the industry which, really, was not at fault. None, or few, realized that steps should be taken to put a time-limit to the original permits, so that, when these expired, the censors could again examine the film in the light of the more efficient technique and artistic effects achieved, as well as new social, moral and political points of view.

Further, one should consider the decadence of the film in countries where production and exportation are but little developed. The other countries, which have conquered the world markets, have a free path for expansion and conquest: i.e. constantly to improve production, whilst adapting it to the various contingencies of life. The old stocks representing the screen of past days no longer satisfied the home markets. Fresh stuff was wanted in keeping with present-day life. The old junk was good export. It represented the economic, moral, social and political possibilities of penetration. Little matter if it represented the demoralization of the screen, whether originating in the east or the west.

In the countries having great production and a well-developed export trade, things are looking up, the film industry among others. Attacks against it are easily repulsed as the industry is in good order.

But in those countries where the struggle for life makes things difficult and compromises have to be adopted, the market is invaded by films which may have been representative of feeling at a given time. These are made to drag out a miserable existence as long as their celluloid bodies will hold together; they thus interfere with the diffusion of the films of home production and make a parade of obsolete sentiments. This makes it difficult for the cinema to establish itself and flourish; it makes it impossible for it to revive where it has collapsed.

To-day the Rome Institute sets forth the problem in the interests of the cinematographic industry itself.

So far, the inquiry launched by the In-
stitute shows three countries to be on the right road:

Romania, where the censor's permit is valid for five years. This is too long perhaps, but, at any rate it is a time limit.

Russia, where the permit allows of any number of representations, but is valid for only eight months. (Collection of decrees 1923, N. 14, p. 177, art. 8), Hungary, where the permit is valid for ten years from the day of issue. (Circular of the Minister of the Interior. N. 25500, 1924).

Others countries will follow suit. The cinema is life and life changes perhaps more rapidly than thought.

But until a time limit is placed on permits, the cinema will remain, what it is at present, a perpetual cause of discord and suspicion.

CHILDREN AND THE CENSORSHIP.

The records of the Advisory Committee on Child Welfare of the League of Nations include a document on the cinema drawn up by the Child Welfare Committee, dated the 10th. December 1928, when the Rome Institute was barely one month old and engaged in tracing the rough lines of its future programme.

At that time, it was already possible to tabulate a mass of interesting information resulting from the Committee's enquiry directed to the several Governments by its circular letter of July 1925, and thus open the way for debate and enquiry among students of social problems.

At the same moment — December 1928 — the Rome Institute in its turn started an enquiry of a more comprehensive kind, that helped to complete the previous one. This enquiry surveyed the whole question of the censorship in all its aspects, and ever since the month of October 1929 the International Review has published the results, month by month, as received from the various countries. The Institute's enquiry further completes that set on foot by the Committee by bringing up to date, revising, and filling in the gaps in the information gathered in the Committee's report.

We are now in a position to give an accurate digest of the returns of this enquiry (1).

TOTAL PROHIBITION AND ITS LIMITATIONS.

In certain countries children up to a given age are not allowed under any circumstances to attend cinema theatres. This prohibition is not based so much on moral considerations, since any objectionable or dangerous points in the films would be quite beyond the grasp of very young children and could make practically no impression on them — as on considerations of health and hygiene; it being universally recognized that the young and developing organism requires all the fresh air, daylight, and freedom of movement it can get, and it being considered undesirable that children should be shut up, even for a short time, in close, dark, and often ill-ventilated halls, in a promiscuous stew of persons and odours that may injure their health, and under lighting conditions that may be deleterious to the eyesight.

In this connection it is worth noting that, according to official information received from the President of the Hungarian Censorship Commission (the Horvith), the exhibition of a film that was considered particularly bad for the eyes was prohibited in Hungary in 1929.

The countries that fix an absolute age limit for cinema attendance are few in number and are in all cases concerned only with the earliest years of childhood.

The age limit in the Republic of Salvador is fixed at three years, in Hungary at five, in the Free City of Danzig, Germany, Latvia, Nicaragua, Holland, and Peru at six.

(1) Wherever no amendments have been introduced into the legislation on these matters, the International Review has merely reproduced the information recorded in the above mentioned document (C. P. E. 134) of the League of Nations.
years, in Greece at ten, and in Luxemburg at seventeen.

In other countries the youngest of children are allowed into cinemas, subject to certain general conditions for their protection.

This matter has not received all the attention it deserves. Out of thirty-seven countries, from which more or less accurate information has reached us, twenty-seven have not enacted any laws for the control and protection of young children's health, one fixes the limitation at three years, seven between five and six years, one at ten, and lastly one, perhaps over zealously, at seventeen.

This is one of the most delicate problems touching on children and the cinema. The six-years limit would seem to be all too low when it is considered that it does not refer to special shows for children, of a suitable tenor, brief duration, and showing short reels, separated by intervals that give a chance of rest to the young brains, but also and mainly to ordinary shows, screening feature films, of a kind to tax the minds of children, who are physically wearied and mentally exhausted by efforts of attention which, rightly or wrongly, are supposed to be all right for adults.

PARTIAL PROHIBITION

Europe. - 1. Austria. There is a Censorship Commission in this country to which persons of special competence in matters of education and child welfare are appointed, the regulations of which are based on Art. 38 of the Cinematograph Act of 11th June 1926. This Board revises, from the educational standpoint, all films to be viewed by children under 16 years of age.

This limitation applies to Vienna, and the shows, the programmes of which must be explicitly passed as suitable for children, are required to end at 8 p.m. at the latest. In the Tyrol the age limit is fixed at 17 and at eighteen in the Vorarlberg.

2. Belgium. The Cinematograph Act of 1st September 1920 prohibits children of both sexes under the age of 16 from attending cinemas unless accompanied by adults. The more recent Act of 1928 provides for the appointment of a Censorship Board, not so much with a view to promoting the development of educational films as for the more effective protection of the young. The task of this Board is in a certain sense of a negative kind and consists in rejecting films that may be hurtful to children and passing only such films as may have an educational and moralizing influence. Thus the theatrical cinema alone is subject to its control. About 30% of the films submitted to the Board have been rejected as harmful for children. Producers and renters are not compelled to submit films to the Board, but unless they do so they are not authorized to announce publicly that the films exhibited are suitable for families and children.

3. Czechoslovakia. According to the provisions of the Ordinance of the Ministry of the Interior of 18th October 1912 (N. 191) the public exhibition of films in the presence of children aged under 16 may be prohibited whenever, in the opinion of the advisory committee on film censorship appointed in connection with the Ministry, the films shown are likely to produce a pernicious moral or intellectual influence on the young.

4. Danzig. According to Art. 2 of the Cinematograph Act, the of 1st December 1925 Communes or Communal Committees, at the request of Communal Offices for the protection of Children or of the scholastic authorities, in consultation with the organizations for child welfare which regulate matters connected with public health and good behaviour, may lay down special rules governing the admission of children to cinemas, which film renters are required to comply with, subject to the right of appeal to the competent authorities.

Art. 3 of the Act of the 1st. December 1925 on cinema exhibitions lays down that no films may be exhibited in the presence of children aged under 16, unless they have been sanctioned for the purpose by a special license.

Art. 4. Children under 12 years of age are not allowed to be present at cinema shows after 7 p.m.

5. Denmark. The ordinance of the 5th July 1913 of the Ministry of Justice authorizes the Censors to prohibit the exhibition of certain films in the presence of children under 16. The Censors may moreover cut certain scenes from films to be shown in the
presence of young people aged between 18 and 20 years.

6. England. The British Board of Film Censors issues two kinds of certificates: the first, known as Certificate U (i.e. Universal) applies to films that may be exhibited before any kind of audience; the second, known as Certificate A (i.e. Adult) applies to those that may be shown in the presence of adults only.

7. Estonia. Permits allowing children to be present at cinema exhibitions are granted by the Ministry of Public Instruction under the conditions laid down in the Order of 31st July 1928, No. 21701. The Commission that decides on the matter consists of five members, one of whom must be a representative of the Ministry and one a representative of the Scholastic Department of Tallin.

8. Finland. The Government Commission for the examination of films is authorized to prohibit the exhibition of certain films in the presence of children under 16. Children under that age are further prohibited from attending cinema shows after 8 p.m.

9. Germany. Art. 3 of the Act of the 12th May 1920 on Cinema Exhibitions provides that all films exhibited during shows at which young people aged under 18 are present must be endorsed by special licences.

Without prejudice to any more rigorous measures that may have been adopted by the legislature of the several States of the Reich, the Communes, or inter-communal associations may, upon the application of the communal offices for Child Welfare, or of a district office, or at the request of the scholastic authorities, and after consulting the representatives of the organizations for the protection of the young, issue further regulations to control the admission of young persons into cinemas, with a view to their physical and moral welfare. Film renters are required to observe these regulations, subject to the right of appeal to the competent authorities.

10. Greece. Art. 10 of the Cinematograph Act of September 1926 lays down that all children without exception, of either sex, aged under 10 years of age, shall be excluded from public cinema halls; from the age of 11 to 15 they may not be admitted unless accompanied by their parents or guardians, or by adults expressly authorized by the latter to accompany them.

Special shows for children and school shows, in which films suited to children and families are exhibited, form an exception to the rule.

11. Hungary. According to official information from the Hungarian Ministry of the Interior, the National Council of Cinematographic Censorship notifies in advance what films are suitable for exhibition in the presence of children under 18 years of age, particular attention being paid to films that may exercise an undesirable influence on the moral and religious feelings of the young. In the case of films that are regarded as fit for public exhibition, the National Committee must specify whether or not they are considered fit for young persons under 16, and in the case of educational and scientific films they are required to specify which sex and what type of audience they are suited to.

12. Ireland. The 1923 Cinematograph Act provides for the issue of two different types of certificate, one applying to films fit for exhibiting to any kind of audience and the other to films considered fit for adults only. In the case of the issue of the latter form of certificate, notices interdicting the attendance of children must be posted outside the halls and proper police precautions be taken to make sure that the law is duly observed.

It has, however, been pointed out that the posting of such notices serves the purpose of stimulating the morbid curiosity of the young and is likely to incite precocious children to dodge the law. As a consequence, the censors pass only films that are suited for family attendance.

13. Italy. Art. 22 of the Act for the Protection and Welfare of Mothers and Children of the 10th December 1925 (No. 2277) provides that the special committee for the control of cinema shows shall decide upon what films are suited for exhibition in the presence of children and young persons of either sex.

The Royal Decree of the 15th April 1926 (No. 718) approves the regulations for the enforcement of the Law of the 10th December 1925. The exclusion provided for in
Art. 22 of the Act relates to young persons under 15 years of age.

For the purposes of Art. 22, all children and young persons measuring less than 1 and a half metres in height shall, failing proof to the contrary, be regarded as under 15 years of age.

14. Latvia. Art. 9 of the Act of 15th February 1926 published on that date in the Valdības Vestures (Official Gazette), lays down that children aged between 6 and 16 years of age may not be admitted to cinemas exhibiting films that have not been passed as favourable to the moral development of the young by the Ministry of Public Education.

Art. 15 of the same Act prohibits variety performances — with the exception of musical accompaniments — at all entertainments intended for the young.

15. Luxemburg. Art. 1 of the Act of the 13th June 1922 on the Supervision of Public Cinema Halls and Shows prohibits children of either sex under 17 years of age from attending them.

Art. 2. The above prohibition does not apply to cinema halls that exhibit only films passed by Commissions, the organization and functioning of which must be determined by administrative regulations.

16. Netherlands. Art. 4 of the Act of the 14th May 1926 on the campaign against the moral and social perils of the cinematograph, lays down that without prejudice to the censoring of the films exhibited 2nd of the posters and advertisements relating thereto, the Municipal Councils may, under special regulations and subject to superior approval, subordinate the granting of certificates for film exhibitions to the conditions laid down in the said Regulations. The said conditions shall not apply to shows to which young persons under 18 years of age are admitted.

Art. 16. Only films that have been passed for exhibition before children under the age of 14 may be shown at cinemas, when children whose appearance suggests that they are younger than 14 are present. In the case of cinema shows at which only persons aged over 18 years are entitled to be present, only films which the Commissions have passed as fit for exhibition before young people aged between 14 and 18 may be shown, if persons are present whose physical appearance does not suggest that they have attained the age of 18.

Dutch Colonies:

a) Dutch East Indies. Articles 7 and 10 of the Cinematograph Ordinance of the 19th September 1926 provide that the Commissions may, at the request of the producers or renters, decide whether the exhibition of given films is likely to have a bad influence on young persons aged under 17 years of age. Film exhibitors are prohibited from admitting children aged less than 17 years to shows, unless certificates granted by the Commissions specify that these are suited to persons of their age

b) Curacao. Children aged under 16 may not be admitted to public cinema shows, except when only those films that have been passed as suited to children by the special Censorship Boards are being shown.

c) Surinam. Films may not be exhibited in the absence of the previous permission of the General Attorney. The said magistrate cannot grant such permission until the special Film Censorship Boards have passed the films as fit for exhibition. These Boards are required to differentiate films fit for adults only from those suited to children.

17. Norway. Art. 9 of the Cinematograph Act of the 25th June 1923, amended by the supplementary Act of the 3rd June 1921, provides that children under 16 years of age may not be admitted to cinema shows in which films regarded by experts as suited only to adult audiences are shown.

In like manner, children under 16 are not allowed to be present at any cinema show ending after 8 p.m. unless they are accompanied by their parents or guardians.

18. Poland. The Decree of the 7th February 1929 on public entertainments prohibits the admission to cinema halls of children aged under 17 when the censoring authorities consider the films exhibited as deleterious to young persons of their age. Students who have attained the age of 17 may be admitted to cinema halls only with the consent of the school authorities.

19. Roumania. The admission of children to cinemas is regulated by special provisions...
laid down by the Ministry of Public Education. Pupils attending secondary schools (that is to say up to the age of 18 or 19 years) are not allowed to attend cinema shows which are not of a strictly cultural or educational tenor. These students wear special uniforms and are therefore easily identified (1).

20. Spain. By Royal Ordinances of the 27th November 1912 and the 31st December 1913 unaccompanied children of less than 10 years of age are absolutely excluded from all evening performances, whether cinematographic or variety, given indoors.

Special cinema matinées may be given for children; these are not subject to any special control.

21. Sweden. According to Art. 3 of the Royal Decree of the 22nd June 1911 on cinema exhibitions, children under 15 may not attend shows the programmes of which include films that have been declared unfit for children. Children unaccompanied by their parents or guardians are not admitted to any shows that end after 8 p.m.

22. Switzerland. Most of the Swiss Cantons do not prohibit in a general way the attendance of children at cinemas, especially when accompanied by their parents or guardians, or other adults. They may freely attend all shows specially organized for the young by the school authorities, at which films passed by the latter are shown.

The so-called age of protection varies from one Canton to another. At Fribourg in Thurgau and in the Unterwald the prohibition is extended to all school ages. In Aargau children attending the communal schools and other schools in the district are excluded from the cinema. The great majority of the Cantons extends the prohibition to unaccompanied children under 16 (Bâle, Solur, Vaud, Ticino, Valais, Glaris, San Gallo). Other Cantons such as Luzern, Uri, Schwyz, Zug and Zürich have fixed the age limit at 18. Neuchâtel does not allow children under 12 to attend the cinema even when they are accompanied by adults.

23. Asia - British India. Official intelligence states that films for exhibition to children are not subject to any special control, but the public is informed which films are suitable or otherwise for children.

24. Japan. A system of control having a double purpose is exercised in this Country. According to the regulations issued by the Ministry of the Interior, the several departments are responsible for the control of public good behaviour. Certain of these departments have passed special measures regulating the attendance of children at cinema shows. These rules may be briefly summarized as follows: Children under 15 are not admitted to cinema theatres unless they are accompanied by their guardians or other responsible persons. Children under 14 years are not admitted to cinemas after 9 p.m., and ten minutes before that hour the managers of the halls are required to give proper warning so that children under this age may quit at 9 p.m. sharp.

Six departments out of the 47 regulate the admission to the cinema of students from the higher schools, but in other departments this matter is left to the discretion of the school authorities. 43 primary schools out of 25,000 and 51 grammar schools out of 2,000 have issued strict injunctions against their pupils attending cinema shows, while 50 primary schools and 50 higher schools have adopted a system of conditional prohibition.

25. Africa - French Morocco. Since the close of 1916, a special Commission has been in function at Casablanca to censor rigorously all films that may have a bad influence on the young.

26. Union of South Africa. The admission of children to cinemas is subject to a certain control. The Censorship Commissions have the right to restrict shows to certain age groups and to the exhibition of given films.

27. America - Argentine Republic. The Censorship Boards are required to express their opinion as to whether privileged treatment should be accorded to films of an educational tenour, suitable for exhibition to children.

28. Brazil. Art. 59 of the Decree of the
4th September, 1924 (Rio State): when certain films are being shown, children aged under 15 must be accompanied by their parents, guardians, or other responsible persons. This applies to all shows in which films that are regarded as dangerous or unsuitable for the young are exhibited.

3. Canada - Provincial Enactments.

**Alberta.** School children are not admitted to the cinema during school hours unless accompanied by their parents or guardians.

**British Columbia.** Children under 14 are not admitted to cinema shows unless accompanied by adults. Subject to the sanction of the Lieutenant Governor, children may attend cinema shows between the hours of 3.30 and 6 p.m. on week days and up till 6 p.m. on holidays. In the event of uncertainty as to the age of a child, this may be determined by a Justice of the Peace or a Magistrate, according to the child’s physical appearance. (Section II of the 1914 Cinematograph Act, amended in 1915).

**New Brunswick.** Children under 12 years of age, unaccompanied by their parents or guardians, or other responsible persons, are not admitted to any shows where entrance fees are taken. Children under 16 are not admitted to such shows during school hours (Act of the Assembly of the 30th April 1927 amending Chapter 6 of the Act of the 16th June 1926 on Cinematographic and other Entertainments).

**Nova Scotia.** Children under 10, when unaccompanied by adults, are not admitted to theatres or other pleasure resorts at which entrance fees are booked. Children under 16 are excluded from all entertainments given during school hours. They are likewise excluded from evening shows, unless they are accompanied by responsible adults (1922 Act and Regulations on the Cinema and Theatres)

**Ontario.** Children under 15 who are not accompanied by adults are not admitted to cinema shows where entrance fees are charged except on Saturdays and holidays between the hours of 9 a.m. and 6 p.m. During these hours a suitable person, paid by the management of the cinema, is required to supervise the behaviour of both children and adults (Art. 10 of the Theatre and Cinema Act).

**Quebec.** Children under 15 are not admitted to cinema shows unless accompanied by their parents or guardians or by persons acting on their behalf. They are however admitted alone to shows that have been specially authorized for children (Chapter 174, Art. 2, of the 1925 Cinema Act).

**Saskatchewan.** Children under 14, who are not accompanied by their relations, are not admitted to cinema shows after 8 p.m. (R.S. S. 1920, Section 18).

4. **Ecuador.** Art. 5 of Section No. 19 of the Decree of the 15th February 1927 provides that only films made specially for children and specially licensed by the censorship commission may be shown in their presence. Otherwise children under 14 are not allowed into the cinemas.

5. **Nicaragua.** According to Art. 43 of the Regulation of the 8th August 1927 on theatres, public entertainments and cinematographs, cinema shows are divided, for the purposes of this Act, into two categories: i.e. exhibitions suitable for children and exhibitions suitable for adults only.

Art. 44. Children between 6 and 13 may not be admitted to cinema shows that are considered by the censorship as unsuited to children. Children must in all instances be accompanied by their parents or guardians. They are not admitted when accompanied by servants only.

Art. 49. All cinema theatres must give at least two shows for children every month.

6. **Peru.** Statutes of the Cinematograph Commission of the 31st July 1925: The censorship is required to draw a distinct line between films suited for children and those suited for young persons and adults. Children under 6 years of age are excluded from all cinema shows. Children under 16 are not admitted to shows that are declared to be suited to adults only.

7. **Salvador.** Decree of the 7th February 1924: Children under three are not admitted into public cinemas and those under 8 are not allowed to attend evening shows. Afternoon performances to which children are admitted must exhibit only instructive and moral films and on no account films that might be conducive to vicious habits.
5. United States. According to official information, certain of the States of the Union (New York, Maryland, and Virginia) have censorship offices that prepare special lists of films suited to children. The National Censorship Commission furnishes information respecting all classes of films, publishes a bulletin in which the different pictures are analyzed, and divides the films into two classes: films for general exhibition and films for family shows. Some states prohibit the entrance to cinemas to children under a certain age during school hours, or at any hour of the day unless accompanied by adults. At Paterson, children unaccompanied by their parents or guardians are not admitted into cinemas. At Birmingham all children under 12 must be accompanied by adults. At Los Angeles children under 14 must be accompanied by adults after 9 p.m. At Detroit children under 16 may not attend cinema shows between 8.30 a.m. and 3.30 p.m., except during the holidays, nor after 8 p.m., unless they are accompanied by their parents or guardians. In Chicago special certificates are issued for films intended exclusively for young people under 21 years of age.

9. Uruguay. There is a Board known as the Child Welfare Commission, consisting of the President of the Municipal Council and four delegates appointed by the departmental administrative boards. These boards are required to supervise the enforcement of the ordinance of the 5th May 1922 respecting films suited for children.

Oceanía. - Australia. Art. 8 of the 1926 Film Censorship Act of the State of Victoria provides that, without prejudice to his normal rights of control, (namely, the unconditional approval of films, approval subject to special conditions, or rejection) the Censor may make the exhibition of certain films subject to the observance of specific limitations of age and sex.

Art. 9. Where the Minister of the Interior entertains any doubts as to the desirability of certain films being shown in the presence of children under 16 he may, by a written order, delegate some person or persons of his choice to get the film revised by the Censors.

The Commonwealth Government classifies films in different groups according as to whether children under 16 should or should not be admitted to their exhibition.

2. New Zealand. 1928 Cinematograph Act: The Censorship is required to differentiate clearly between films that are suited to children and those suited only to adults.

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The usual method of enforcing the Censors' decision is to require the posting of public notices outside the cinema halls; cinema managers being required to provide for this under pain of the administrative or penal sanctions provided for by the laws in force.

The special censorship regulations for the protection of children come within the comprehensive study of film censorship which the Institute is carrying out, country by country, from one issue to another, and publishing in the columns of the Review.

The main cause of anxiety in this connection is the possibility of the film exercising a dangerous influence on the education and minds of the young by presenting false views of life, thus exciting their fancy and inculcating ideas of crime and immorality, habituating them to impressions and sensations out of all harmony with their years, which may scar and mar them for life.

We may here call special attention to the importance of the Italian Decree of the 15th April 1926 (no. 718), approving the Regulations for the enforcement of the Law of the 15th December 1925 on the Protection of Mothers and Children. This decree may be said practically to include certain censorship provisions. Without prejudice to the restrictions of a general tenor laid down in Art. 3 of the Regulations of the 24th September 1923 (No. 3287), art. 158 provides that children and young persons of either sex shall not be admitted to exhibitions of films depicting violent passions or detective films which are liable, in the opinion of the Censorship Commission, to overexcite the feelings and corrupt the ideas of the young by the effect of suggestion.

Films reproducing works of art, cities, scenery, scenes from history and national customs, natural history, scientific phenomena and experiments, agricultural works,
industrial works and factories, or films consisting in any way of scenes and subjects of a kind to arouse civic and religious virtues, to exalt the love of home and family life, maternal devotion, the spirit of self-sacrifice, acts of heroism or acts of a kind to promote happiness, goodness, energy and courage—all such films are held up as examples of what should be put before the young.

But the peoples themselves, no less than the Governments, are devoting their attention to the safeguarding of the young. Physical considerations play no less important a part than moral ones. At all costs the health and innocence of childhood must be preserved.

There is no need for the Rome Institute to comment on the laws and precautionary measures that it is to-day able to put before the readers of the Review: like all matter of profoundly human interest they offer their own commentary. They stress, moreover, a very simple, but a very vital fact: the fact that everywhere, throughout this vast and populous and diverse world, amid its manifold and cruel cares and soaring aspirations, the one supreme preoccupation of the race, the centre of its hopes and the very reason of its being is the future of our children and the loving care that they claim.

It is all important to cultivate the soul of the child, for on it the whole future of the race depends. Children should be taught to know and to love all beautiful things, and to this end the new and marvel-creating industry can collaborate with the teachers and trainers of the young, whose task it is to plan and direct their education.

The education of children—if once we grasp the full meaning of the words—is the sum and the synthesis of all our social problems. The child of to-day is the man of tomorrow, who will guide destinies and govern nations, and man is the creature of his earliest impressions—those impressions of joy or sorrow, of comfort or of horror that mould the character and shape our lives.

The children will sooner or later judge their parents and who is the parent that is willing to be found wanting?

In «The Child’s Soul», H. Lhotzky writes:

«Do you possess the love that knows neither bitterness nor impatience, that conceives no holier occupation than that of sacrificing itself to the new soul that has entered upon life?»

***

The movement of public opinion and of social organization in behalf of the wellbeing of children is ever active in support of the efforts and enactments of the State.

We learn that in England the Hammerton Amusement Co. has been fined for having screened, in the course of a special show for children a film that had not been submitted to the Censors. («To-day’s Cinema», London, 15/113). Meanwhile the Home Office addressed a letter to the appropriate authorities, recalling the terms of the Cinematograph Act of 1909 dealing with films suited to children. «The necessity of exercising rigorous control in the interest of children over all films exhibited in their presence, is being more widely and more fully recognized every day».

The circular draws attention to the fact that some parents allow their children to attend cinemas where films fit only for adults and exhibited under certificate A are being shown.

«These regrettable occurrences» says the circular «might be avoided if the posters indicated the Class to which the film belongs, and if the same thing were announced clearly and at proper length on the screen at the beginning of the show. It is to be hoped that the local authorities will enforce measures to this effect and see that they are duly observed».

The following are among the conditions laid down by the Home Office, subject to which certificates are granted:

No films may be exhibited that are offensive to morals, that encourage or incite to crime, that offend public opinion, or show living persons in an objectionable light.

No films except topical reels may be shown unless they have been previously submitted to the Censors.

No films, with the exception of topical films, that have not been passed for Universal exhibition may be exhibited without a special permit in the presence of children.
under the age of 16 or of children whose appearance suggests that they have not yet reached that age.

Before the films are shown the certificate granted by the British Board of Film Censors must be projected on the screen, showing in which Class the film has been classified. In addition to this, accurate particulars as to the different classes of films must be exhibited at the entrance to the cinema ("Educational Times", London, 21st December 1929).

At a lecture delivered at the Catholic Workers' Association of Danzig, protests were registered against undesirable cinema shows and against the evidence of moral decadence displayed on the screen, especially at evening shows, and the hope was expressed that the law prohibiting young persons up to a certain age from attending them might be extended to embrace all ages up to 18, the age limit laid down in Germany ("Licht-Bild-Bühne", Berlin, 15/125).

With a view to preventing children from playing truant from school so as to go to the cinema, the Naples police authorities have prohibited the cinemas to start any shows before the hour of 1 p.m. ("L'Am- brosiano", Milan, 15/141).

In Spain, the two Child Welfare Committees of Gijon and Gerona have protested to the public authorities against the constant infringement of the law regulating the admission of children to public entertainment halls ("Region", Oviedo, 15/114).

Certain Members of the Turkish Parliament, being seriously concerned with the rapid decay of national feeling among the younger generation and the tendency to emulate western morals and social customs, have laid before the Chamber in Angora a draft bill, in which, among other measures, it is proposed that children under 16 should not be admitted into cinemas ("Giornale di Sicilia", Palermo, 15/145) (i).

(i) According to the latest statements in the newspapers, Bulgaria also is concerned with the danger of the cinema acting injuriously on public morals, and the need for government measures to correct the evil. The Minister of Education, M. Naidenov, has laid a new Bill on cinemas and theatres before parliament. Among other measures it is suggested that children under 15 should be excluded from cinema halls, subject to certain exceptions provided for in the bill; that the diffusion of scientific and instructive films should be encouraged; and that private, scholastic, and travelling cinemas, public libraries, and military clubs should be placed under proper inspection.
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MICHELET.

Definitions. — A representative of the world of labor: Albert Thomas. — «One evening in a remote village of the Argentine, I went to the movies. It occurred to me that the same pictures which were stirring the souls of the rough comrades at my side were at this very moment possibly awakening the same emotions in Paris or in Shanghai, thereby creating, though thousands of miles apart, communion of feeling, the symbol of the mission of the cinema, which has the power to bring all peoples closer to each other»!

A representative of the cinegraphic industry: Will Hays. — «The film has an international function. I do not consider I am speaking irresponsibly when I affirm that the cinema is one of the best instruments for the pacification of peoples. By getting to know each other they will begin by tolerating and end by loving each other».

Here two men, representing two different and magnificent forms of energy, are speaking. Different words from the camps of industry and labor, for the same conception, the recognition of the cinema as the supreme social problem, capable of creating fraternity and mutual comprehension between the peoples of the world.

The screen, which should know no limits, can make all familiar to all, illustrating and rendering in all its poignancy the life of those who are distant, our brothers in human labor and suffering. By means of the cinema the home country, sacred within its boundaries, will become gigantic, by reason of the very fact that everywhere and by everyone it will be seen, studied and loved.

Its labors and achievements are no longer confined within the limits of its boundaries, but, crossing seas and summits, will go forth to the conquest of a larger sphere.

Among modern statesmen Benito Mussolini and Georges Clemenceau have recognised the tremendous propagandistic power of the movie. For these two men the picture ranks higher than the word, being more universally comprehensible. Perhaps for this reason all the Governments of the world are giving so much attention to this universal means of broadcasting human thought. State control for the cinema is vigilant, no matter what the policy of the country. For the masses and their conception of unity, as for individuals, the screen can be the source of the greatest good or the greatest evil. Every imaginable social situation can be studied and propagandised by the cinema. Only one thing is necessary, that the propaganda be used exclusively for the highest social good.

**

The Political Film. — One of the most important fields to which the cinema can contribute its full activities is that of political relations between states; by so doing it can simultaneously make propaganda for its own country.

It cannot be denied that the film, even when considered as merchandise and taxed by the customs, has a pronounced political value.

Despite all the good will of the producers to internationalise the film - possibly for commercial rather than for sentimental motives - some traces of its national origin must necessarily remain, and with these elements which cannot be eliminated are mingled the mark, manners, customs and ways of thinking of the people among whom it was produced.

A film made in America will always be an American film, even if the majority of those who produced it belonged to other nationalities.

It is right and necessary that this should be so. Unvarying uniformity of thought and action would be flat and colorless, and the film, unless it resorted to other, exterior or centralising means of suggestion, would
be tedious. On the other hand if the original notes that characterise the life of a people and give it its peculiar interest, are retained, the film not only gains a special value for those spectators of other nationalities desirous of becoming acquainted with the habits, customs and views of foreign peoples, but also gains in interest color and efficacy.

To make oneself known by means of the screen beyond the boundaries of one's country does not mean to suppress oneself. It means holding one's own and merely seeing to it that the film is artistically adequate, a work of art, capable of penetrating everywhere and of awakening response in the soul of the spectators.

This general political function is specifically carried out by the pictures in determined activities which the governments are interested in controlling or limiting, in order to avoid an invasion of ideas or sentiments that might prove ridiculous.

There is the Propaganda film. — Virtually every state controls this, by directly or indirectly subventioned bodies that modify and direct the open or veiled propaganda of ideas acting as a tonic or a menace on the spectator. More than the film drama, in which the central idea is often veiled and invisible to those spectators who have not superior culture or intelligence, or to those who seeking the plot interest, fail to use their faculties of analysis and criticism, the documentary film and the news reel are particularly indicated for political propaganda.

Processions of working-men, headed by their banners, powerful, silent or accompanied by the authentic strains of their songs reproduced by means of the sound film; the army or navy of any nation in full equipment and potency, events, public works, ranking as social achievements, methods and process of work, are all propaganda, suggestive propaganda, capable of disquieting and rousing the spirits, more especially on the eve of some international conference, by the contrast awakened by the presentation of the formidable reality of life and thought in a distant country, as compared with the meanness and misery of surrounding conditions. Political propaganda par excellence! In such cases the control the governments can exercise through the medium of the censorship or the agencies becomes dangerous and difficult, all the more difficult as everything can develop into propaganda and if there is a danger in all propaganda, this would entail the necessity of suppressing all or nearly all exportations from abroad, which is naturally impossible, in the interests of the film itself. There is, as has already been said, a work of mutual knowledge and approach between peoples, knowledge from which may spring a mutual comprehension of collective or particular needs, leading to the blotting out of the sentimental and egoistic forms of life that estrange the peoples of the world.

Many nations, more especially those with vast colonial and commercial interests, are preoccupied by the so-called color problem. Admitting that the color contest is inhuman, anti-social, a barbarous survival, from the days of our ancestors, still it exists and it would be absurd to deny it. It exists just as, in other forms, the religious contests between Christian and non-Christian confessions exist under different aspects but in unmitigated force.

Politically speaking, the film endeavors to establish the supremacy of one people over another and also to establish the domination of one race and to prevent the prestige of that race from being lowered in the eyes of other races.

Without entering into complicated and subtle details, it may be said that in several nations one of the more specially delicate tasks of the censors is directed towards this end. An eminent statesman stated recently that the diminution of every form of prestige of the West, military, economic, social, moral, was comparable, as regards its effects, to the opium traffic. It would be irrelevant to question the correctness of this statement. It might easily be inverted.

One of the chief political difficulties and reasons of opposition to the film comes from the false impressions it is said to convey of certain situations and certain countries.

In Spain, Italy, and France, to cite three European nations, there have been vigorous protests because Spaniards, Frenchmen, Ita-
lians have been represented in non-national films, in a totally arbitrary manner, inspired by conceptions based on legends or diffama-
tions and which even if once true, had long ago been superseded.

China, some years ago, also protested on her own account. Switzerland protested in a somewhat spectacular manner against a film reducing her people to a nation of hotel-
keepers.

All these phenomena are due to a basic error of technique or artistic conception. Either the film is representative of the people who made it, and in this case the people will judge itself, and the censors will, if necessary, suppress the auto diffamations: or it is representative of other countries, in which case the scene directors should be guided by two principles. Either they should keep to general lines of conduct, without offending in any way the susceptibilities of a nation that, whether friendly or not, has a right to the utmost respect (a paraphrase of an evangelical maxim not often applied in politics), or they should first study in all its details the life of the nation or people to be reproduced, and give it a fair showing.

The most recent information collected by the Institute in the political field enables it to give indications of considerable value.

The economic-social problems, so closely connected with political forms, have always interested students and interest film producers to-day from the stand-point of propaganda. Karl Marx's « Capital » was to be filmed by the noted scene director; Eisenstein, but Emile Van der Velde, one of the leaders of the second International, raised objections and reserves (Le Peuple, Paris - D. 9/29) as to the technical artistic success of a film that would threaten to become an overwhelming load of erudition and would probably bore the public, thereby obtaining the opposite effect of what was intended.

The firm Low and Co. of Berlin have made a film « Poison Gas » based on a plot illustrating the political ideas of the author Lampel. This attempt (Cinema Antwerp) failed before production, because the film, although particularly recommended by the « League of the Rights of Man » was almost completely destroyed by the censor's scissors.

The Soviets still continue their attempts to conquer public opinion by the political propaganda film recalling the years of the revolution. The « Cine Siberia », collaborating with the Sowkino, is preparing a giant film dealing with the civil war provoked in Russia by the intervention of Admiral Koltschak (D. 9/989).

« The Arsenal of Human Material » adapted by the Sowkino from a novel by Henri Barbusse, gives free expression to the oppositional tendencies of the Soviet towards American capitalism and more particularly towards the magnates of the Petroleum Industry. (Deutsche Filmzeitung, München - D. 9/95).

Finally George Asgaroff in his film, « Rebellion in a Boarding School », a picture well nigh perfect from the technical and artistic point of view, attempts to spread abroad communistic ideas combatting the life and thought of modern Society (Nacht Ausgabe, Berlin - D. 9/108).

Other films and cinegraphic forms of a purely political character include: « Eisen-

stein's « Ten Days that Shook the World », from the fall of Kerensky to the advent of Bolshevism (The Cinema, New York - D. 9/117). Furthermore the opening of a communistic cinema « Acro » at New York is announced. The first picture to be projected there, a Soviet propaganda-film, will be entitled « The Wife of the Russian Communist ». Members of the Red Army and Students of the Workers' University will appear as actors (The Film Daily, New York - D. 9/113).

Other cinematographic forms regard not propagandas but the defence and culture of the race, or serve to illustrate it: - In the United States there are 501 theatres which show exclusively films dealing with the colored race and with colored actors (D. 34/451).

Speeches by leading statesmen reproduced by the film, with the aid of modern mechanical means for the diffusion of sound and voice, are now the order of the day.

The Exhibitioners' Herald World of Chicago (D. 9/100, 101, 102, 103) mentions among political leaders who have appeared on the Talkies, Hindenburg, President of the Reich, Hanisch, President of the Austrian
Republic, Hoover, President of the United States, Ciang Kei Shek, President of the Chinese Republic, and Benito Mussolini, Prime Minister of Italy, who was the first European statesman to address the world from the screen.

From Geneva comes the report that under the auspices of the League of Nations a film showing the Palace of the Society, the Congress of Diplomats and the speeches of the Heads of the government ratifying international treaties is being made. This film is intended for the propaganda of the diffusion of the plan and purposes of the League of Nations in the United States, a country which has not yet joined it (Variety New York - D. 9/116).

Supplementing the political tendency of the film is its nationalistic aspect, tending to obviate the gradual swamping of the race and its industries by the diffusion of foreign films, representing the customs, costumes, thoughts and language of another country.

This subject has already been touched upon in preceding numbers of this Review. We simply mention it here as a subject of political interest of great social significance.

Every nation is attempting to open out a future for its cinema by means of direct production. The chief difficulties lie in the high cost of film-production and the problem of covering it, with a certain profit to the producer, either in the country itself, or by diffusion abroad. Diffusion becomes exceedingly difficult in foreign countries using a foreign language. On the other hand not all the nations using their own language are a good market for home production.

In Spain sound projection has been begun. Eva Bohn, Director of the Spanish Latin Film Bureau, demands of the film artists the purest Castilian accent. (The Film Daily, New York - D. 7, 10/284 and Region, Oviedo - D. 10/2947) in order to avoid the error deplored in New York, of entrusting the talking rôles to people whose language borders on dialect (D. 10/275). Obstacles of this kind are encountered in the sale of American films in other English-speaking countries.

In Italy, as has already been announced in this review, the Pittaluga Company has initiated the creation of Talking Films in purest Italian. Simultaneously the «Italotore», the only Latin firm producing films in Hollywood, is making a picture, «Red Roses», with music from «Aida» and «Pagliacci», a film that will have three versions, silent drama and talkie, in Spanish and Italian (Arte y Cinematografía, Barcelona - D. 10/2387).

Vibrant protests from different responsible federations have induced the producers, among them Americans, to make several «talkies» in French.

The Paramount (Kinematograph, Berlin) has produced in America the first «Talkie» in the Czechoslovak language. For Japan the Kleng Film has produced two short «Talkies» in Japanese, to form the basis of local production. (D. 10/274).

Again for Japan, Wong Howe in collaboration with the Indian producer, Tom White, has created a society for the production of Talking Films in the language of the land of the rising sun. Artists of Japanese nationality only will act in this film (Variety, New York - D. 10/299).


A national movement, in which the ancestors and descendants will participate: In honor of the former, the American Classical Association has undertaken to produce, with the collaboration of Hollywood a «Talkie» in Latin, taken from the «Aeneid», in celebration of the Virgilian Bimillennial. This film has been estimated at the value of a million dollars (The Yorkshire Post, Leeds - D. 10/285).

The Esperanto Union, in honor of the descendants, has made a «Talkie» in Esperanto which was splendidly received in China and Japan, where the Esperanto movement is most developed. (Nieuw weekblad voor de Cinematografi, Amsterdam - D. 10/293).

The Minister of Public Instruction in France has been requested to make a report on the sale in Alsace by German firms to local schools, of cinematographic apparatus which can only be used for German films,
a circumstance, which might, it is feared, cause «irredenta» propaganda in favor of Germany. (Comoedia, Paris - D. 34/348).

In the February issue of this International Review there was a resume of short notices regarding the distribution of cinema theatres and halls in various parts of the world.

New and precise reports, received partly from official information from the Department of Commerce in Washington (Bureau of Foreign and Domestic Commerce), are responsible for a rectification of the number of the world’s moving picture theatres for the year 1929: this rectification is of the greatest significance for nationalistic aspects of the film, showing the possibilities of its diffusion beyond frontier limits, in countries speaking the same or foreign languages.

Divisions according to language are the following: the number of the principal cinema halls, including those of the chief clubs, churches and working men’s assemblies:

<table>
<thead>
<tr>
<th>Language</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>27,641, 20,500 of which in the United States and Canada.</td>
</tr>
<tr>
<td>Russian</td>
<td>7,200</td>
</tr>
<tr>
<td>German</td>
<td>6,602</td>
</tr>
<tr>
<td>Spanish</td>
<td>5,509, 2074 of which in Spain.</td>
</tr>
<tr>
<td>French</td>
<td>4,073</td>
</tr>
<tr>
<td>Italian</td>
<td>3,229</td>
</tr>
<tr>
<td>Portuguese</td>
<td>1,575</td>
</tr>
<tr>
<td>Japanese</td>
<td>1,120</td>
</tr>
</tbody>
</table>

and another 6,267 halls, divided by twenty three different states.

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**East and Australasia**

<table>
<thead>
<tr>
<th>Country</th>
<th>500</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAPAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NETH. EAST INDIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHINA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIAM</td>
<td></td>
<td>412</td>
</tr>
<tr>
<td>BRITISH MALAYA</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>FRENCH INDOCHINA</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>CEYLON</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>FIJI ISLANDS</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>SOCIETY ISLANDS</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>SUD AFRICA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. AFRICA (NORD DEUTSCHES ALBANIEN &amp; TURKISH COUNTRIES)</td>
<td>203</td>
<td>480</td>
</tr>
<tr>
<td>EGIPTEN</td>
<td></td>
<td>69</td>
</tr>
<tr>
<td>OST AFRICA</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>MADAGASCAR</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>SYRIEN</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>PALESTINA</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>IRAK</td>
<td></td>
<td>17</td>
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## Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>Germany</td>
<td>8,168</td>
</tr>
<tr>
<td>Great Britain</td>
<td>5,564</td>
</tr>
<tr>
<td>France</td>
<td>2,145</td>
</tr>
<tr>
<td>Italy</td>
<td>1,867</td>
</tr>
<tr>
<td>Russia</td>
<td>1,876</td>
</tr>
<tr>
<td>Spain</td>
<td>1,297</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1,193</td>
</tr>
<tr>
<td>Sweden</td>
<td>310</td>
</tr>
<tr>
<td>Poland</td>
<td>107</td>
</tr>
<tr>
<td>Austria</td>
<td>779</td>
</tr>
<tr>
<td>Belgium</td>
<td>759</td>
</tr>
<tr>
<td>Hungary</td>
<td>597</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>532</td>
</tr>
<tr>
<td>Romania</td>
<td>448</td>
</tr>
<tr>
<td>Switzerland</td>
<td>291</td>
</tr>
<tr>
<td>Finland</td>
<td>270</td>
</tr>
<tr>
<td>Denmark</td>
<td>234</td>
</tr>
<tr>
<td>Holland</td>
<td>190</td>
</tr>
<tr>
<td>Greece</td>
<td>132</td>
</tr>
<tr>
<td>Norway</td>
<td>126</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>116</td>
</tr>
<tr>
<td>Portugal</td>
<td>110</td>
</tr>
<tr>
<td>Turkey</td>
<td>104</td>
</tr>
<tr>
<td>Latvia</td>
<td>69</td>
</tr>
<tr>
<td>Estonia</td>
<td>65</td>
</tr>
<tr>
<td>Lithuania</td>
<td>46</td>
</tr>
<tr>
<td>Malta</td>
<td>44</td>
</tr>
<tr>
<td>Canary Islands</td>
<td>14</td>
</tr>
<tr>
<td>Azores</td>
<td>16</td>
</tr>
<tr>
<td>Danzig</td>
<td>14</td>
</tr>
<tr>
<td>Gibraltar</td>
<td></td>
</tr>
</tbody>
</table>

## Latin America

<table>
<thead>
<tr>
<th>Country</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>615</td>
</tr>
<tr>
<td>Mexico</td>
<td>400 (972)</td>
</tr>
<tr>
<td>Argentine</td>
<td>350</td>
</tr>
<tr>
<td>Cuba</td>
<td>215</td>
</tr>
<tr>
<td>Chile</td>
<td>207</td>
</tr>
<tr>
<td>Columbia</td>
<td>112</td>
</tr>
<tr>
<td>Uruguay</td>
<td>121</td>
</tr>
<tr>
<td>Venezuela</td>
<td></td>
</tr>
<tr>
<td>Porto Rico</td>
<td>31</td>
</tr>
<tr>
<td>Peru</td>
<td>17</td>
</tr>
<tr>
<td>Salvador</td>
<td>70</td>
</tr>
<tr>
<td>British Antilles</td>
<td>67</td>
</tr>
<tr>
<td>Panama</td>
<td>56</td>
</tr>
<tr>
<td>Dominican</td>
<td>51</td>
</tr>
<tr>
<td>Bermuda</td>
<td>27</td>
</tr>
<tr>
<td>Honduras</td>
<td>27</td>
</tr>
<tr>
<td>Guatemala</td>
<td>35</td>
</tr>
<tr>
<td>Equador</td>
<td>35</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>25</td>
</tr>
<tr>
<td>Bolivia</td>
<td>20</td>
</tr>
<tr>
<td>Paraguay</td>
<td>9</td>
</tr>
<tr>
<td>Haiti</td>
<td>9</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>8</td>
</tr>
<tr>
<td>British Guiana</td>
<td>8</td>
</tr>
<tr>
<td>Dutch Antilles</td>
<td>6</td>
</tr>
<tr>
<td>British Honduras</td>
<td>3</td>
</tr>
</tbody>
</table>

(*) The figures in parentheses include the leading scholastic and club cinemas.
In the field of political statistics, the figures of a big American firm, the Paramount, are of symptomatic eloquence. Of the 2989 employees in various branches of production and sale, including, of course, those dedicated to minor branches in different parts of the world, there were, in 1928:

817 French speaking individuals, 67 of whom, Belgians;
757 English speaking individuals, 481 of whom from the United Kingdom, 182 Australian, 59 American and 35 from New Zealand;
384 German speaking, 30 of whom Austrians;
321 Portuguese speaking, 298 of whom Brazilians;
313 Spanish speaking;
67 Italians, and finally;
330 divided among 14 nationalities.

Impossible as it is to draw definite deductions from statistics of this kind, because they give no indications as to the nationality and number of persons engaged exclusively in production, there is no doubt that although the Americans in an American firm number only 99, the production of the Paramount could not be more American than it actually is.

***

The Historical Film. — The film for historical instruction is closely allied to the political film. History and politics have identical elements in common and in some cases it is difficult, if not impossible, to differentiate between a purely political manifestation and the mere historical recreation of an event.

Topical cinematography has had to confront the indignation of the usual adherents of antiquated ways and modes of life, of those who take a static view of life, as incapable of change, and consequently consider historical instruction as something intangible and immutable in its exterior forms, despite the change of times and the consequently necessary change in thought and action.

In the February number of this Review attention was drawn to the historical moving picture and to the hostility it has encountered.

Today among all its assailants, the voice of one expert has been raised in its defence. In the London Times of Jan. 8 of the current year, Sir James Marchant draws attention to some observations made in regard to an experiment carried out in America by the Troup Junior High School of Newhaven, Conn. Apart from the greater interest contributed to the lectures and discussions by the students, the following results were statistically certified.

The ten films submitted to examination afforded an ample contribution to the instruction of the study course, increasing the comprehension of the pupils by nearly 19 per cent, with the result that the average of the children taught by means of the cinema was vastly superior to the average of the others.

The films contributed considerably to the practicability and facility of instruction, with a saving of time estimated as equaling a working week and a half, over a period of forty weeks.

The superior utility was shown in the knowledge of:

a) the general and special causes of historical events and facts;

b) the life and deeds of the most noted personalities of history;

c) historical geography.

Marchant observes that films of the historical type provided by the University of Yale were projected with the greatest success in November and December for twenty thousand children. In a polytechnical school 160 pupils were questioned as to the their impressions, and 130 of them voted the historical films to be interesting and instructive.

The influence of this method of instruction is also demonstrated by the fact that wherever films were used for historical instruction there was a greater demand for them in the schools than for any books and literature on historical subjects.

To these remarks on the utility of the cinema for the teaching of history, should be added those of Mr. Wilson, reproduced in another part of this publication (The Cinema and War) and it should further be observed that, despite the hostility of a few pedagogues the historical film now has a diffusion and value that nothing can arrest.

The most recent films on historical-

In the last mentioned film the action begins with the disagreement between Wilhelm II and Bismarck, the Iron Chancellor, and ends in our own times with the proclaiming of the German Republic.

Then there is a film of national and patriotic character, reproducing the life of Cristo Boloff, the Bulgarian revolutionary, who succeeded in conquering the independency of his country (D. 9/107), two Belgian films, one revocating the martyrdom of the national heroine, Gabrielle Petit, (L’Étoile Belge, Brussels - D. 6/367), and another «The History of Belgium», from the Roman period to the death of King Leopold, for which the Belgian government has offered seven thousand costumes of different periods (D. 6/399), the film «The New Babylon», illustrating the events of the Franco Prussian war and the taking of Paris (D. 6/377).

Then the pupils of the school of Altrincham (Manchester) have made a film entitled «The Gleaming Sword», in which they themselves are the actors. The picture, directed by the professor of historical science of the institution, gives a realistic reproduction of the Middle Ages (Movie Makers, New York - D. 6/411).

Atlanta Films have recently produced «The Tartars», a film showing the Ukrainian people oppressed by the Poles and menaced by the Turks, a picture of the greatest dramatic and artistic interest (Ciné, Brussels - D. 9/114).

***

MILITARY FILMS. — The military film is legitimately included in the historical political category, whether it be dedicated to the training of armies, to the facilitation of general and specialised instruction of the officers and men, or whether, in still closer connection with the historical film, it produce the episodes and happenings of war.

Jean de l’Hospital, in the Ami du Peuple of Paris (D. 7/42), points out the inopportune-ness of reproducing on the screen the tragic aspects of war, on account of the almost total impossibility of showing their real and impressive truth and efficacy; he indicates the risk incurred by the reproduction of such scenes of making an involuntary caricature of one of the greatest, if not the greatest, social factor of universal human life. Except when applied to documentary films of pure historical and documentary interest made during engagements in war by the various army head quarters, which must necessarily be incomplete, in view of the impossibility of taking a picture in the first lines, but which nevertheless, have an absolute truth value, the remarks of the French cinematographer are by no means irrelevant. The exact reproduction of a war episode would require a wealth of means, technical direction and mass movement, such as it is rare, and even impossible to assemble for a set purpose; and if it is not possible to create things with authentic truth values, it is better to renounce them altogether.

Among the most recent war films are those produced in India by the Mehrastra Film Company, entitled «The Valley of the Immortals» (Today’s Cinema, London - D. 7/40); one of them is entitled «On the Bolshevist Front»: the figure of Marshall Pilsudski appears in this picture, which conjures up the miseries and horrors of the struggle between the Red Army and the Poles (Fílmel Meu Illustrat, Bucarest - D. 7/50) the film «Westpont» 1918), recalling the Great War in France, England and Germany, a talkie in the respective languages, now being made under the direction of G. W. Pabst, (D. 7/43), lastly «Fighting for one’s Country», a German film, which will depict the German front during the Great War. (The Film Daily, New York - D. 7/108).

Alongside of the military film comes the picture merely revocating pacific events such as those collected by the Fox Movietone News (The Exhibitors’ Herald World, Chicago - D. 7/41) of the Czechoslovak military parades, in the presence of President
Masaryk on the anniversary of the constitution of the Republic, those of the Luce newsreels for Italy, and newsreels of all other parts of the world, besides, as has already been mentioned, military instruction films.

The results obtained in this field are of great and authentic value. To quote only one example (Comœdia, Paris - D. 7/49), the Belgian Minister of War, in consideration of the remarkable results obtained in the army by the use of the cinema for military instruction (see also the article published in Number 4 of this Review for 1929), proposed to quadruple in 1930 the subvention granted for the aforesaid instruction and to proceed to a new selection of cinema actors and instructors.

In Scotland a cinematographic company has been formed exclusively for the purpose of the creation of films for military instruction (D. 7/45) and a bright picture, with a picturesque background has been «turned» by the synchro cine (Comœdia, Paris - D. 7/55), to illustrate the sailor’s life.

More particularly in America the cinema keeps abreast of military instruction and of the presentation of the armed forces of the nation. Military films of manoeuvres are exchanged for similar ones from other countries, for the study of the progress made in foreign methods, and the creation of a military historical cinotecs (The Film Daily, New York - D. 7/38).

A recent American film, «Flight», was made with the collaboration of the naval authorities and of the warships and aeroplanes of the U. S. Navy. This film, which gives a magnificently realistic reproduction of theory and practice in air warfare, was «turned» chiefly at the Naval Air Station of Pensacole and was shown with great success in London in the presence of Lord Thompson, British Air Minister (The Daily Telegraph, London - D. 7/39).

Again in America, the government runs forty-five cinemas situated in the most important military centers, in the Philippines, and in Hawaii, to provide the troops with pictures, not only of a professional, but also of a recreational character. (The Kinematograph Weekly, London - D. 7/49).

In England the Western Electric and the British Instructional Films Limited in order to demonstrate the usefulness of the cinema in troop training, and to stimulate enthusiasm for the military career, have projected sound films of the military manoeuvres in the presence of the British Minister of War. (The Kinematograph Weekly, London - D. 7/47).

Religious Films. — Closely allied to the political and historical field is the teaching and propaganda of religious ideas. The possibilities and utility of the cinema for this factor of social life have been emphasized in this Review from its very first number, both in the news columns and in special articles.

Used either as a simple means of propaganda and information or for documentary or dramatic renderings, the film is capable of rousing the highest response of religious sentiment and emotion, becoming a potent element of social elevation.

The religious sense is universal and, even in the souls of those who are apparently most refractory, there is always a latent something, vague and uncomprehended, that is awaiting its awakening. The wealth of form and substance inherent in all religions, from the most ancient to those prevailing today, the sense of mystery and symbolism which they diffuse and which links them inevitably, though vaguely, in the eyes of the uninitiated, with the idea of the Divinity, their ritual, unchanging, however varied in its expression, their mystic value, make religion a vehicle of expressive and emotional qualities superior, perhaps, to those of any other social factor.

The religious film has now become a definitely recognised and established factor in the best cinema production of the world.

Though intolerance and incomprehension may impede its complete exploitation, aspects of religious thought entrusted to the screen have been filmed in Japan, India, Europe and America; genuine works of art with propaganda values for historical knowledge have been created with quite simple resources.

The cinema is, further, the means by which propagandists of the teachings of Christ, no matter in what form, carry their message to remote and inaccessible countries.
The cinema supplies the illustration and topical comment to the incident, and the explanatory words. What would otherwise often have to remain unsaid or incompletely expressed, on account of a lack of linguistic possibilities, is said by the screen. The cinema again captures and assembles the most characteristic traits of the life of the people of the same remote countries, thereby substituting for its hitherto purely religious, also a documentary character.

While for the dramatic artistic film or fantasy, the scenario is of the greatest importance, only one thing is needed for the religious film — scrupulous historic accuracy.

The subject of the religious film has been exhaustively treated in the January number of this year of our review, and in view of its importance it will also in future be the subject of systematic comment and elucidation; in this bare summary of the phenomena of social life, available for, or accessible to, the cinema, it will be sufficient to briefly indicate the most recent information received at the Rome Institute.

The Church now makes a thorough study of the cinema, a problem of the first importance for her work of propaganda. The Cardinal Archbishop of Milan (Osservatore Romano, Città del Vaticano - D. 11/89), has even nominated an advisory legal technical commission for theaters and cinemas of Catholic institutes. This commission is composed of priests and eminent personalities in the field of education and religion. Contemporaneously, in Germany, the Volks- und Volksbildung of Cologne (D. 11/87) publishes a report on the German Catholic cinematographic movement, revealing, on a statistical basis, its continual endeavor and magnificent achievements.

Among films of a purely religious, propagandistic character are those made by the Fox Movietone News (The Exhibitors' Herald World, Chicago - D. 16/84), illustrative of ceremonies at the Church of the Nativity of Bethlehem and at the Church of the Ascension, on the Mount of Olives; the picture "The Island of the Lost" (Film Rundschau, Essen - D. 11/81) of the firm Vaudel and Delac of Paris, which is not only artistically superior, but inspired by the ethical principles of the Catholic religion; the film, recently shown in Algiers to a party of prominent ecclesiastics and layman, reproducing the apostolate of Father de Fouceld in the Sahara, and the work and faith and religious struggles of the White Fathers. This film includes the first moving picture of a process of Beatification (Comedia, Paris - D. 11/86).

But the Catholic idea in religion and film representation is not shared and followed by the whole world. Other forms of religion demand the intervention of film makers and of an illusion, imparting to all, irrespective of their faith, the sense of a life transcending the simple limits of daily existence.

The Fox Movietone News (The Exhibitors' Herald World, Chicago - D. 11/33), has reproduced the sacred dances performed in Siam, at Bankok, in the temple sacred in the Buddha, and the same day they turned at Bombay (Exhibitors' "cit) the ceremonies and ritual of the Moslem cult, penetrating for the first time into the interior of a mosque. At the Hague there was a representation of "Maahasett, one of the films of the Maya cycle, turned by Mr Ochs in the Dutch East Indies, reproducing the local festivities, scenes of the Wajangs pel, the indigenous theater of Diokja, and the Hindustanee cult in the island of Bali. (Nieuw Weekblad voor de Cinematografie, Amsterdam - D. 6/400).

The cinema artists of the Soviets are moving in battle array against the religious film, no matter of what persuasion. The Sovkino has made a film "The Crime of Citizen Surkow", of decided propagandistic tendencies, opposing antisemitism, and with an anti religious background. (Lichtbildbuehne Berlin - D. 11/90).

The scene director Protanow has left for the Crimea, where he has a commission to direct for the Sovkino a film, entitled "The Feast of St. George", in which its "originator intends to hold up to ridicule the new phraseology of the Christian mentality, and the empty pomp of the Catholic church" (Reichsfilmblatt, Berlin - D. 11/85).

Despite the use of the film to illustrate, but also to depreciate, the value of such an idea as that of religion, which is as old as the world, it is certain that, on the contrary, it inevitably contributes to the revelation of its
true value, and its unquestionable efficacy as an element of social life.

The documentary film. — From its first number the International Review of Educational Cinematography started in its article and news section a series of indications and hints regarding the documentary film. Although the different fields have been carefully divided up, to prevent overlapping with other cinegraphic activities, it may safely be affirmed that all expressions of life are fundamentally documentary, and that a restriction of the boundaries of this section of the film would amount almost to cutting its wings and reducing it to minimum terms, out of all proportion to the facts.

However that may be, even when the field of the documentary film is restricted to doings in the journalistic, non-specialised scientific field, and ruling out didactics, medicine and hygiene, and when it is considered from the wider viewpoint of folklore culture and travel, its possibilities of development still remain unlimited. Perhaps it is for this reason that no branch of cinematography has been able to command such unanimous consent, and such a maximum number of film lovers and supporters.

In a recent article in the Mon Cine of Paris (D. 6/36) Pierre de Kerlon declares himself of the same opinion. He discusses the documentary film in a minor tone and with reserves, as doubtless most attractive but as its very name implies, ephemeral and transitory. He only pauses to examine it from three points of view: the scientific, the industrial and the geographical.

Scientific: that is to say revelatory of those hidden elements of life, those secrets of nature that can be externalised to all in the moving picture, by making use of the technical improvements of cinematography.

Industrial: for the knowledge of national labor, carried on beyond the frontiers and for professional training in the arts and crafts. For the latter purpose the film collaborates with modern systems of rationalisation of labor.

Geographical: in order to enable the spectator, comfortably ensconced in his easy chair, to see the life of the world pass before his vision. In this connection de Kerlon appropria-

tely remarks: how, after having seen them on the screen, can we ever forget the Sahara deserts of Atlantis, the boreal solitudes of Nanuk, or the Alpine landscapes of Jocelyn?

a) Newsreels. A recent, original newsreel, which follows the system introduced some time ago in all the chief foreign centers, is that shown in Rome (Il Tevere, Rome - D. 6/386) by the National Institute Luce, and under the auspices of the Tramway Companies of the Governorate, to illustrate to the public the new tram reform.

The idea, as we have already pointed out, is not new, and with suitable corrections and modifications it might be used, as has been done elsewhere, to teach the pedestrian his duties, if not his rights, and to inculcate in all a sense of discipline and conformity to the traffic regulations obtaining in big cities.

Another film of equally Italian origin is that of the National Institute LUCE, reproducing the solemn marriage ceremonies of the Crown Prince of Italy to Princess Marie José of Belgium (La Tribuna, Rome - D. 6/391).

b) Folklore. The folklore film has always been one of the most popular, not only on account of its variety as a creative factor but because it rescues from oblivion elements of life localised in certain districts, which are doomed to die out and disappear.

A folklore film «Caucasian Love», has been created by Aminskuro. The picture, reproduces the life and customs of the Mahometans and the events of their exile in Turkey caused by the Czar's edicts. (The Film Daily, New York - D. 6/30).

Although belonging to the folklore family, another set of films has a definitely social value. The Russian Ukrainian Wulku has edited «The Paper Boys», reproducing characteristic nocturnal scenes of the life of the young newsvendors. The National Bulgarian Society has illustrated the painful and fatiguing life of the miners of Porne (D. 6/308): the Jewish Amateur Film Society has assembled in a picture «The Ghetto», the most singular among the singular Jewish traditions. (The Daily Film Review, London - D. 6/392).

The Fox Movietone News has made three
films of pure folklore, according to *The Exhibitors' Herald World*, Chicago - D. 6/372.

One of them reproduces the religious festivals, military manoeuvres, pearl fisheries and other manifestations of Japanese life, another, the characteristic markets of the city of Colombo in Ceylon, the laden elephants and the strange songs of the coolies; the third, a soundfilm like the others, deals with the life of the Bedouins and depicts the various matrimonial ceremonies of a Sheikh.


Dr. Paul Wirz, of Basel, in his costume research work, assembled in the islands near the coast of Sumatra, and especially at Mantawai and Nias, a series of cinematographic documents, which he showed during a lecture at Zuerich (*Neuer Züriicher Zeitung*, Zuerich - D. 6/382).

The Maharajah of Lysore ordered from the scene director, Bhavanin Mohan, an exclusive Indian film, entitled "Vasabatsma". It is entirely documentary, with a slight artistic plot, illustrating particularly picturesque costumes and religious customs (*Ciné Journal* - Paris - D. 6/402).

The Paramount has made a collection of films, for use in the future, of another genre of folklore, based on elements of music projected in a sound film, in which the dance and songs of six different countries, German, French, Spanish, Italian, Russian and Irish, are reproduced (*La Película*, Buenos Ayres - D. 6/395).

By this method it has achieved the fusion on one single ribbon of two distinct elements of folklore, music and the dance, separated up to now, which would have been lost to the studies of future generations, unless preserved by a duplicate and clearly distinguishable means of reproduction. When it will be possible to give to the film the other two elements that are still lacking, color and plasticity, the life of any period will be able to be reproduced with perfect historical accuracy and lucidity.

c) Propaganda and Tourism. The reel is the most adequate means for making known beyond the frontiers the touristic and picturesque aspects of the life of a country, its labor and social and economic progress. The public institutions which exist in every country for this purpose and nowadays the governments themselves superintend this form of divulgation and knowledge, once effected with much greater effort by photograph and book.

The photograph represented one particular phase of vision, a picture that, while technically speaking it might be a masterpiece, remained limited to its own little sphere. A book, no matter how complete and analytic a description it afforded, could never adequately replace the animated vision of the scene itself. The film, by uniting these two descriptive forms, has created the most efficacious means of propaganda.

A recent circular of the National Fascist Party commented on in the *Giornale d'Abruzzo e di Molise*, of Jan. 26 1926, stresses the necessity of collecting a documentation of folkloristic and rustic costumes and customs and of the scenic beauties of the various districts of Italy, for the purpose of preserving to the future the historical record of events that will eventually become superannuated and for making them known beyond their regional boundaries, thereby contributing by the preservation of local custom, to the campaign against urbanism. The Empire Marketing Board, some time ago, in England, gave a series of propaganda films to illustrate the life and industries of the Dominions. (*Today's Cinema*, London - D. 6/363).

Other pure propaganda and tourist films are "Bells and Laces" reproducing the most characteristic costumes and the most suggestive haunts of Belgium (*l'Indépendance Belge*, Brussels, D. 6/387), The River Elbe from Mountains to Sea, created by the Institute of Cultural Research of Berlin (*Lichtbild Bühne*, Berlin - D. 6/380), and the film "Vagabonding in Europe", showing the life of some European capitals with their chief buildings and monuments. In these films the most celebrated personages of Europe also appear. The Prime Minister of Italy, who posed for some of the scenes, granted the greatest facilities for turning
the Italian sections of this film (La Tarde, Bilbao - D. 6/390).

d) Scenic and Geographic. Created for the sole purpose of collecting elements of scenic beauty, this type of documentary film is nearest to the propaganda film. The only difference lies in the purpose for which it was created and in the necessity of colorful touches, essential to the travel film. Some of these films have also an emotional artistic value, such as «The Song of London» by the Parkinson firm, illustrating varied and original aspects of the British capital (The Cinema, London - D. 6/393).

At the Théâtre des Champs Elysées, Paris, the film «The March of the Sun», was shown before the President of the Republic and numerous other personalities. This picture was created under the auspices of the French Colonial Union, and illustrates the great colonising work of France in Central Africa (Figaro, Paris - D. 6/401).

Among films recently projected are: «The Romance of Rio Grande», describing the life of the South American haciendas, and reproducing the wild beauty of the banks of the South American rivers (The Daily Film Renter, London - D. 6/376); «La Bora», which is a film of the picturesque scenes of Greece (Deutsche Allgemeine Zeitung, Berlin - D. 6/368); a reel on Tunis, illustrated at Sophia by a lecture held in the premises of the Alliance Française by Henri Cambon, Minister of France (La Bulgarie, Sophia, D. 6/369); «The Heart of Mexico» in which David Kirkland shows the country in its true light, though the medium of its natural beauties. The plot of the film was written by Juliet Barret Rublee, an American educationalist, who also financed the production. (The Film Mercury, Hollywood - D. 6/394).

Films coming under the heading of documentary-scenic, are in preparation by the Fox Movietone News (The Exhibitors' Herald World, Chicago - D. 6/375), on Russia and Siberia, another on Greenland, now being produced by the Danish scene director, Schneevoigt. The last mentioned picture will be a combination of a sound film and a talkie. The expedition, conducted by Schneevoigt, is financed by a company of Danish capitalists, who have placed at his disposal a provisional sum of half a million crowns. The talkie scenes will be done in German, Swedish, English and French (Le Courier Cinématographique, Paris - D. 6/381).

e) Travel. This aspect of the film, also like the scene film, belongs to the wider sphere of geographical research and knowledge. With regard to Africa (The Film Daily, New York - D. 6/319), the exploring couple Mr. and Mrs. Johnson have left for the Belgian Congo, taking with them several highly perfected apparatus for sound and color films, and a film of 70 meters, considered capable of making stereoscopic pictures.

For Asia Commander Dyott has furnished the film «Tiger Hunting in India» a picture of impressive realism, made with 65 natives and 110 elephants, (Popular Film, Barcelona - D. 6/397).

The desolate ice regions where the midnight sun illuminates solitary fields with its cold rays, are again attracting seekers of impressions and unusually beautiful outlines.

A Sovkino company is turning a film «Life among the Ice» at Murmansk, with the cooperation of the most noted scientists and explorers of the Russian Arctic regions (Kino, Leningrad - D. 6/357).

A series of films already announced or produced, although belonging to the travel document category, is in reality closely related to the study of history of art.

Among them is that illustrating the raising of the Roman galleys of Tiberius from Lake Nemi, made by the Istituto Luce and shown at the Institut des Savants, Paris L'Italie, Paris - D. 6/378), and that shown at the first Deulig week at Berlin, (Uefautilton, Berlin - D. 6/379), of the colossal pyramids near Tenayco, dating from the Aztec period and brought to light by the Mexican Government.

f) Scientific Films. This is the type of film that most interests students, on account of its infinite variety and the possibilities it offers for investigation and study. By means of accelerated or retarded takings, color, sound and stereoscopic technical inventions, permitting of daily increasing perfectionment, the documentary scientific film represents the most reliable research aid for scientists, and the most valuable element for the instruction and popularisation of natural phenomena.
By means of the scientific film it is possible to know the world of nature and the most varied manifestations of life. As regards this category of films, it is remarkable that by means of modern technical appliances, the phenomena of life and nature can be shown at every stage of their development, not only at the normal speed of continuity, but accelerating or retarding the formation of the phenomenon, to enable the spectator to examine it with the accuracy necessary for the study of detail. The development of a fact of biological or mineralogical life, for instance, or the formation of the phenomenon itself, a process which is evidently too slow for a student to be able to follow with the necessary accuracy and attention, may be accelerated and shown in immediate and consecutive vision of its development in a representation covering days, weeks or months.

Acceleration, retardation, microcinematography are the three fundamental points of the scientific conquest of the film, which has now become common in all circles of culture.

A notable picture, synthesizing all the endeavor and progress of science and of humanity during the last century, will so be made by the Italian government. At the suggestion of the Council for Scientific Research, an educational and cultural film is being prepared, dealing with scientific life from its earliest beginnings to its present prodigious and almost fantastic development. The film is to make its debut at the Chicago World Fair of 1933, and will doubtless represent one of the greatest boons that Italy can offer to the universal scientific world.

All the aspects of science are closely linked up with the screen. Natural science has been illustrated in moving pictures that are nothing less than artistic extracts of life. All the goes on around us in nature, the development of the plant, from the germination of the seed (accelerated motion) to the diseases and life of metals and crystals, liquid crystals, life and growth in the deep sea regions — the exploration of which, especially in Italy, France, and Spain, has led to the discovery of hitherto unknown elements of life of a superb beauty capable of giving a new inspiration of form to lovers of pure art — everything can be, and is, discovered and fixed on the film ribbon.

Microcinematography studies the hidden life of water, earth, human and vegetable tissues, explores the causes of phenomena that escape normal investigation because invisible to the naked eye. It suffices to recall the fact that it has been possible to film by means of a microscope applied to the cinema with enlargements often on a thousand fold scale, and there is no reason why the improvements in technique should not permit a millionfold scale of enlargement, making visible to the spectator the life of the infinitesimal beings that inhabit the world and live by millions in every single drop of water.

A series of films now being made by the Manchester Corporation to awaken the interest of the public in its own fields of activity has a generic scientific cultural character (The Daily Film Renter, London - D. 6/36). Specialised Films deal with the study and treatment of meteorological phenomena, for instance Clouds, Wind and Atmosphere, created by the scientific section of Ufa, in collaboration with the experimental laboratory of the electro physicist Baron Manfred von Ardenne, a film which, besides showing the electric elements of the atmosphere in the process of development, gives the demonstration of the existence of atmospheric electricity, even when the sky is clear (Kinematograph, Berlin - D. 3/253) "The Dew, when first the Sun Appeared" by the British International Films (The Film Daily, New York - D. 3/2561) or the astronomical phenomena realised at Princeton University or at Mount Wilson Observatory, California, by filming the sunset on the moon by means of a special apparatus furnished with a teleobjective of 250 centimeters (Osservatore Romano, Citta del Vaticano - D. 13/99), Movie Makers, New York - D. 13/102), and pure and simple natural phenomena, such as the high seas in all their phases, filmed by Jean Epstein on his long cruise, (Figaro, Paris - D. 3/255), "Fighting the Sand", taken for the Ufa in North Africa by Martin Rickley, in order to convey an idea of the progressive method of advance of the shifting dunes of the desert and fore desert of the Sahara,
and to indicate the best methods of combating the danger (D. 6/358) and finally two films created by the British International Films «The Falcon» and «The Bath at the Zoo», of the cultural zoological type category (The Film Daily, New York - D. 3/256).

Specialised films of scientific research, studying animals and their different aspects of existence by means of the microcinematographic method, are appearing daily.

In the last two numbers of this Review this branch of microcinematographic activity was exhaustively covered. Other films of the greatest interest have been made or announced meanwhile.

W. S. van Dyke spent seven months in Africa to make the film «Trade Horn» for the Metro Goldwyn Mayer. He took the fauna scene in the interiors of Congo, Uganda, Tanganyika, and Kenya, and succeeded in registering forty-two different voices of wild animals and several songs of savages. (Today's Cinema, London - D. 636).

In the studio of the Palais de Beaux Arts at Brussels a film of the flight of birds of prey and the characteristic customs of the swan, was shown (L'Independence Belge, Brussels - D. 6/360).

The cultural section of the Ufa has completed four new zoological films, «Technical Construction of Animals». The first deals with the little known types belonging to the order of mammalia; the second, with the life and work of the tiniest animals and insects, marvellous builders of imitable nests. (Ufa Dienst, Berlin - D. 3/248). The other two, of biological character, deal with the «Secret of the Egg shell» and «How Animals Laugh and Cry». (Der Montag, Berlin - D. 3/250).

In a microlaboratory of Neubabelberg two other purely scientific films are being made «The Hands of the Ocean» and «The Curiosity Shop» (l'Independance Belge, Brusselles, D. 3/361).

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THE FILM AS PROPAGANDA OF LIFE AND WORK. — In the social field of life and work, used in the highest and most human sense of the expression, the cinema can be representative of environment in the interest of a gradual improvement and progressive elevation of methods of life.

The life of the working man, of the woman who is called upon to give her full share of activity for the future; the supervision, protection and continual assistance to the worker to perform his labor in a better and more lucrative manner, all these problems have always been objects of unremitting study to which the Institute in Rome proposes to draw renewed and increased attention.

Later a brief statement will be made of everything appertaining to the work of assistance for the child and the laborer. For the moment it will suffice to emphasize a fundamental aspect which is frequently forgotten. Every man and every woman is a human being, with special gifts of sensibility and intelligence, for those who demand to work are generally more or less sentimentalists, in order therefore to perform his work well, a workman must be able to understand it and love it, if he is to avoid becoming a human machine. The more he is able to use his intelligence and his control of the mechanical means entrusted to him the more he will accomplish.

A propaganda of work and social life, apart from the providential and auxiliary aids, and the rationalisation of work itself, must exalt human labor, insist on its value and secret beauty, point out that life is work for everybody and that only a conception of work as an absolute unconditioned duty and its fulfilment entitle one to the rights of a citizen of humanity.

The Bureau of the Department of Commerce at Washington has organised an enquiry to ascertain the importance of the cinema as an impetus to social life, but life is not only joy, and the cinema can bring a smile of joy to those who are deprived of the joy of work. The relief of misery is one of the noblest forms of social propaganda. The Leonard Wood Foundation in America has obtained from seven cinematographic firms over 250,000 meters of film for the lepers' colony, cloistered for life in the Philippine Islands (Annals of Hygiene, Rome - D. 34/439).

Mary Anderson, the Director of the Women's Bureau of the Labor Department in
Washington, has offered with her colleagues to make a film, illustrating the history and activities of the office she directs, as a contribution to the demonstration of women’s possibilities in the world. (The Exhibitors’ Herald World, Chicago - D. 6/326).

In the little town of Abtheide, in Silesia, a woman has opened a cinema with 619 seats. The operator, the members of the orchestra and the whole staff are women (The Cinema, London - D. 34/415).

For some time at Buenos Ayres, municipal motor lorries have been showing gratis films in the, poorest quarters (La Película, Buenos Ayres. D. 34/423). Naturally, the cinema industry has promptly protested against this form of public entertainment, which had its precedents in Italy, Russia and elsewhere. But is not this form of diffusion, which offers recreation to many who would not be able to afford it for themselves, a recreation and release from the fatiguing hours of work, constituting one of the most sympathetic forms of social propaganda?

Social life and work are closely connected with the social factors of marriage, birth and the demographic problem in general.

In contrast to a film on abortion, produced by a Russian firm (D. 33/9), antidesmographic and therefore anti-social, recent news brings word of a film from the opposite bank. (The Exhibitors’ Herald Chicago - D. 33/38) quotes the judgment of Judge Herbert Rhoades in support of the view that the sight of couples being married is an antidote to the spread of divorce. In another film, turned by Dr. Rothe of the Medical Cinematographic Institute of Berlin, the problems of matrimony illustrate a book of that title and subject by van der Velde (La Deutsche Plätzeitung, Buenos Ayres - D. 33/62). The Alliance Française is about to compose a film for the increase of births (Film Kurier, Berlin - D. 33/31), a problem that is the order of the day in the Republic. In the Monde Médical of Paris (D. 33/14), Henri Bouquet treats of a film of social prophylaxis and of demographic propaganda, entitled «The Future Mamma».

An interesting report has been officially communicated to the Rome Institute by the Cooperative Societies Department of Kuala Lumpur in Malay, regarding various aspects of social life in those regions, and the possibilities of the cinema. Films already produced or in course of preparation, include some illustrating the advantages of cooperative work, and the possibility afforded by the system to the Malay peasants to obtain property, pay their back debts, put their houses in repair, and put by something against their marriage.

The cooperative principle, like that of savings, the danger of waste, of matrimony, and the urge to a better standard of life, with the respective risk of economic breakdown, of child welfare and the combatting of disease, can be built up and most efficiently impressed by collateral cinematographic elements.

The department attends to all this, not only by producing suitable films but with ambulant cinemas with lecturers.

These are aspects of a social life to which the screen can contribute a high percentage of all its possibilities of information and propaganda.

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Work. — In the field of work, understood as professional training and rationalisation, already dealt with in this Review by special articles and in the notice columns, the development of the film is progressing splendidly.

The film can fulfil its tasks from several angles. In its initial phase it will be merely a means of information and diffusion within and without the boundaries of a country, of what has been done in the field of Labor. It then assumes a treble, didactic, selective, and documentary form and in the last hypothesis, confirms, by the exhibition of work, its purely political character.

The educational film must necessarily be short, explanatory of a certain type of work, and of a certain system. It should combine the elements of a larger demonstration that will serve wider ends. It can be used as the most useful complement for industrial schools technical instruction whenever it is necessary to illustrate the teacher’s words by visible and almost tangible demonstrations.
In a second phase the reel can be used for professional training in the arts and crafts guilds. A cinematographic exhibition of the various fields of work will facilitate the selection of values and contribute to the specialisation of the workman.

In a third period it will be merely demonstrative. Its utility will appear under the aspects of information and propaganda. Information, because it will enable all the industrial enterprises similarly engaged and working along similar lines to follow the development of the working methods, which are often diverse and still more often contrasting; propaganda, by means of diffusion beyond the boundaries of the activities themselves. The film illustrating work therefore assumes in such cases an economic value which is unique for the possibilities it affords, both to the industry itself and to the nation at large.

In another aspect it demonstrates rationalised methods of work indicating the completions, achievements, transformations and changes necessary to bring about the highest productive efficiency.

All manifestations of work can be and are film objects. From the hydroelectric industries that exploit white coal to the preparation of minerals and metals, to the industries applied to road making and means of communication (telephones, telegraph radio, posts, railways) from the ice industries, the wood industry, the clothing industry, the art of furnishing, mural and decorative art, and so on, down the varied and infinite scale of human labor.

Many of these possibilities are due to the merits of the industries themselves. Employers have realised that by using the film in order to obtain specialised apprentices, to make their activities known in different countries they would achieve not only a patriotic purpose but would be rewarded a hundred per cent, by the wider market possibilities. For this reason they spontaneously met demands and, by financing the film, simultaneously did a good stroke of business and financed culture and human labor.

Under the auspices of the Labor Office of Dusseldorf two films have recently been made From the School to the Factory, and Unemployed. The former illustrates in a series of pictures the opportunities afforded by the various trades. The matter teaches the apprentice the importance of choosing an occupation that presents possibilities of development. (Stadt Anzeiger, Dusseldorf - D. 8/93).

Special professional training schools, where the cinema is widely used, have been founded in Roumania, Chile, in America, Belgium, Switzerland, besides those already existing in other countries. The office formed for this purpose at Zürich organised forty-eight lecture in 1928, with slides and «surlieu» in forty factories. (Informations Sociales of the B. I. T., Geneva - D. 8/94).

For the specialisation and training of firemen, the Fire Department of Paris has collected a series of films illustrating conflagrations (The Film Daily XX; New York - D. 8/98), and Samuel B. Schofeld, Director of Public Safety, New York, has publicly announced that he intends to utilize the Talkies for the same purpose and also for police purposes. (Daily Review Today, New York - D. 8/95).

For cinematographic professional training in London and also at Orangeburg there are courses, conferences, schools, for the illustration of which all the possibilities of the cinema are exploited. (The Cinema Daily, New York - D. 8/96 and The Billboard Cincinnati - D. 8/97).

With regard to industrial specialisation and the special branches of labor, the film is used almost without exception as a means of propaganda abroad by the bodies interested in production (Organisation, Berlin - D. 5/115), especially for fairs, festivals, exhibitions (Metropole, Antwerp, - D. 5/104); also the talkies are employed (The Billboard, Cincinnati - D. 8/97).

The film has also penetrated into the banks. (Banque, Paris - D. 5214) for the diffusion of the systems followed in the diverse operations (as pointed out by the table of films reproduced in the last numbers of the issue 1929 of this International Review, and in the technical preparation of newspapers, according to a recent experiment carried out at Washburn College, Topeka, Kansas in the Journalistic course (Movie Makers, New York - D. 8/10).
The means of telephonic communication have been treated in recent films in Switzerland, which has the highest telephonic station in the world, 3308 meters above sea level (Journal de Genève, Geneva - D. 5/112), in Asia to illustrate the air service of Polygoon between Holland and her colonies (Nieuwe Weekblad voor de Cinematografie, Amsterdam - D. 5/113) and for the portual regime of Singapore in the Talkie «East of Suez» (Exhibitors' Herald World, Chicago - D. 5/108).

The work of land reclamation and agriculture is exhaustively examined in a film made by the Dutch operator, Joris Sven, to show the processes used for the drying of the Zuyder Zee (Nieuwe Weekblad voor di Cinematografie, Amsterdam - D. 5/116), in a film on tobacco growing in the Aegean Islands and on the Black Sea, the first part of which shows the growing, gathering and sale of tobacco, and all the processes of lading the steamers; the second part, the complicated manufacture of cigarettes, the cutting machines and different blends (Kinetograph, Berlin - D. 5/102); in a film on the production and preparation of oil in southern Russia and the Ural Mountains, made by the Russian, Shelia Bithsky (The Cinema, London - D. 5/019), in another on the preparation of wool, from the shearing of the sheep to the finished costume (Kinetograph, Berlin - D. 5/110).

Alongside of agricultural processes are those of mineral, metallurgic and siderurgic processes. In Russia a film of social propaganda is being made «The Iron Brigade», reproducing the factories of Kertch. Contemporaneously, the extraction and preparation of black coal is dealt with in the film «The Ruhr Coal» (Der Tag, Berlin - D. 5/103), and in a cinematographic examination of Italian combustibles, made to illustrate a lecture of Professor Levi, Director of the Institute of Chemical Industries, and of the Section of Combustibles of the Polytechnical Institute of Milan, (Corriere della Sera, Milan - D. 5/106).

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The Agricultural Film. The possibilities of the cinema for rural life and vice versa have for many years engaged the attention of the experts.

The application of the screen to this section of social life covers: a) Information and diffusion of agricultural methods. b) Specialisation and systems of instruction for the intensification of agriculture itself. c) Maximum possibilities for the combating of urbanism.

As regards the first point, the screen can impart information, popularised according to the mental standard of the spectator, of agricultural conditions and methods of cultivation. Further, it can spread in cities the clear notion of the battle that is daily being fought in the countryside for the maintenance of the life of the nation, especially for the edification of the uninformed, who while they may have some idea of the value of agricultural economy for a nation, have none of its efficacy and possibilities.

From this angle the agricultural film is both illustrative and propagandistic, and should again be classified under the heading of the documentary or cultural film.

The more it specialises, the farther away it gets from the uninformed, and the more it approaches the workers’ film under the double aspect of professional guidance and rationalisation.

For all industries, no matter whether of the soil or not, the scientific organisation of work is the necessary basis of existence. For the agricultural industries, where the conflict is incessant between the earth’s productivity and the supply of hands, often exceeding the demands of economic necessity, a rational organisation of the production itself, tending to intensify qualitatively and quantitatively the culture and products, is the first necessity, and only possibility of existence.

From this angle the agricultural film can achieve an unrivalled efficacy of suggestion and education, incomparable to that of any other means of propaganda, and with a double value, didactic and economic.

Didactic, because, used by the ambulant chairs of agriculture, by the special training schools, and by the specially fitted cinema lorries, teaching for the peasant’s benefit
the best and most modern methods of cultivation, the intelligent and selective choice of seeds according to the soil of hill, or mountain plain, the seeds, the agricultural machines, the rational distribution of manure and water, the protection of the plants from disease and parasites, from overgrowing weeds and the protection of field and forest, obviating the crumbling of rocks and harnessing and directing the water collected after the winter rains.

Economic, because in the agricultural field everything tends to form not only the type, parallel to that of the workman, of the specialised agriculturist, but by furthering better and bigger production, also brings about a quantitatively superior economy, forming a strong and possibly insuperable source of national and individual wealth. Industry and the single industries, literally and potentially, may flourish or become supernannuated. Above all in countries poor in material and dependent on other countries, industry is in continual difficulties and the quality of production must compensate for greater cost, beat the competition of foreign markets, richer in raw materials, and therefore possibly resolved to be content with mere quantitative production. But the earth cannot die. She is the mother and cannot become a stepmother to those who understand how to love and assist her. If, inspired by a Utopia, we could envisage the day when industry is doomed to die, and when in a regression of the human race, the largely artificial scaffolding created by the machine were to disappear, the earth would always remain to give bread to her sons. After the intensification and specialisation of cultivation, the reclaiming of marshy mountainous and barren land, we are faced by the problem of integral reclaiming, not only of the land but of the human race.

Urbanism, the depopulation of the countryside, to the benefit and detriment of the towns, rural exile, corresponding necessarily in the future to the creation of a new industrial civilisation, useful for those countries that have materials at their disposal and that, by the exchange of the products of the soil and of industry can provide for their own necessities, dangerous for the nations that, poor in natural products, can extract nothing more from the soil than the possibility of their own future.

In the last number of this International Review in an editorial note to an official communication of the Polish Government on the educational film in the Republic, we briefly drew attention to the problem of urbanism, supremely social in its aims and characteristics. It is a problem worthy of the thorough examination of the competent. Certainly it is closely allied to the increasingly intensive employment of ambulant cinemas, taking into the countryside not only agricultural elements and technique but also carefully calculated flashes of city life, which by giving the agriculturist the impression that he is not entirely cut off from the world, will restrain his instinct to precipitate himself into the adventure of the mirage of city life.

Supplementing what has been done so far for the ambulant cinema as a factor in rural life, in Italy, Bulgaria, Poland, Russia, India, the French colonies, other nations also insist on the advantages of this system. The Greek Ministry of Agriculture has decided to create ambulant schools for agricultural instruction (on the model of the Italian ambulant chairs) making a generous use of the cinema (Journal d'Agriculture Suisse, Geneva - D. 1/71). In Belgium the necessity of using the rural cinema is felt to restrain emigration from the countryside. (Le Cine Educatif: Bruxelles - D. 1/741) and in Russia, as announced by le Cineopse of Paris (D 1/740) the battle is intensified by the preparation for the current year of seven thousand ambulant cinemas, destined for the projection of agrarian films.

The great propagandistic value of the ambulant cinema for the technique, general and specialised culture of the rural populations, is demonstrated by the fact that not only the cinema lorries are continually increasing in number in nearly every country, but that, furthermore, ambulant forms of advertisement and propaganda follow other methods of motion, such as the train, the steamer.

In America and Russia there are projection machines and slides on the trains to bring to remote regions elements of cultural and social
life that are lacking there. The steamers of the Dollar Line will soon be equipped with the sound projectors of the Western Electric, which has already installed a sound distribution and projection plant on board the President Fillmore «This is the first steamer to cross the Pacific with a sound film» (Variety, New York - D. 12/351).

Meanwhile, according to the latest information, agricultural films and pictures illustrative of methods of cultivation and irrigation of arid soil, have been made in Egypt (Bourse Egyptienne, Cairo - D. 1/72). In Italy, La Rivista Cinematografica, Turin, (D 1/73) points out the desirability of giving the agriculturist not only instruction and cultivation films but also recreation films, and in France in the presence of the Permanent Commission of the Agricultural Cinema at Paris, some films of Jean Renoir have been shown, illustrating the cultivation of vegetables. The C. U. C. showed others on «Cattle Raising» and «Horse Breeding» (Le Cinéma, Paris - D. 1/69); news from Washington communicates that the requests of the Department of Agriculture for agricultural films exceeds the supply. In 1928 twelve new agricultural films were made, and at the present time the Ministry disposed of films on about 250 different subjects. (Exhibitors' Herald World, Chicago - D. 1/75).

**Hygiene and social prophylaxis.**

The two fields of hygiene and prophylaxis, not to be confused with the field of propaganda, do not consider only the human being in his life environment. They should therefore be directed simultaneously towards the preservation both of man and of society as a whole. Hygiene and personal prophylaxis; hygiene and social prophylaxis.

The human race needs to provide for its future, which is the future of the race. The race has need of protection from the moment when the child opens its eyes to the light, and is accompanied by protection and assistance to the end. Protection and assistance do not permit of a physical selection, on the Greek system, that was also capable of being barbarous, but a more human form of selection giving possibilities of life and development to those who might appear marked as unfortunate or outcasts of nature and society.

Our habit of life does not permit of our observing what is going on around us. The very fact of our living in habitual surroundings dims our perceptions by the force of habit. What we see seems logical and normal, thus the injury done to mankind is multiplied through false vision.

Hygiene and social prevention must step in to raise the veil, showing us the normal as abnormal, worthy of blame, needful of correction. This must take place so that remedies may suggest themselves and suitable preventives, to avoid the starting of the evil, or if it has already started, to prevent its spreading among us and our neighbours. For this reason we have specialised fields of hygiene and social prophylaxis.

The specialised branches refer to maternity, the child, the man. Without enumerating the endless variety, it will suffice to mention with regard to the subject of maternity that if the mothers expecting babies, above all among the people and the working classes, could see films, showing the necessary hygienic precautions before and during childbirth and during the first period of nursing, infant mortality would decrease at a high rate and the improvement and organic resistance of the race would be relatively increased.

The care of the nursing mother, and the birth, after-birth period, the assistance we owe a child during the period of its spiritual and physical evolution, the hygienic assistance of the adult, are all arguments widely exploited by the possibilities of the film, but which, owing to the continual variation of hygienic methods, present constantly changing fields of exploitation.

Fields less specialised, because not so entirely personal, are the hygiene of street, the home, factories, towns, in a word urban and rural hygiene, which find their logical complement in the physical education of youth.

Sport is indeed a form of hygiene. When it is restricted to the recreative side or kept within the limits of physical training and does not degenerate into pugnacious manifestations, that may have their emotive
attractions but are in contrast to the strict principles which rule health and physical culture, it aims at the physical perfection of the race.

There is the hygienic prophylactic and assistential field for the avoidance by means of universal propaganda of the formation or abuse of certain morbid phenomena that interest the collectivity — tuberculosis, cancer, syphilis, venereal disease in general, or of the use and abuse of certain methods of life — drugs, alcohol, tobacco — that harm the individual.

Among recent films produced by the section of prophylactic hygiene are «The Russian Refuge», (Kino, Kiew - D. 14/38), propaganda films edited by the French Open Air Society for Unfortunate Children, advocating the advantages of the country derived from the little citizens deprived of fresh air (D. 33/40), another, also a propaganda film, created by the Movement of the Romanic Swiss Youth (Journal de Genève, Geneva - D. 15/102), also the films made by the Institute Luce in collaboration with the National Work of the Balili for open air life in the sun, at the seashore for the benefit of the young.

The problem of youth and the screen which, among the other organisations, the «The Motion Picture Relief Fund» has made its special care, is allied, as has been said, to the problem of the physical development of the race; wholesome and moderate gymnastics, sport as physical training, excursions. In a recent lecture at Barcelona Professor Pende of the University of Genoa, spoke on the medical social applications achieved in Italy by the Orthogenetic Biological Institute of that town, stressing the importance given today to the physical and psychical development of the young.

Simultaneously, Jean Benoît Lévy, with the collaboration of the Algerian Prophylaxis Office and the Algerian Office of the Educational Cinema, has made a propaganda tour of cinematography in Algiers, covering the general fields of social hygiene and education (Cinema Spectacles, Marseilles - D. 14/67), and while all the other governments and industries, from Chile (D. 14/66), to Germany (Germania, Berlin - D. 13/97, study the hygienic fields and the special possibilities of certain curative medicines, such as iodine, on the interior secretions of the human body, and on the functions of the thyroids, one of the basic elements of physical development; in Germany (Filmkurier, Berlin - D. 33/10), a central propaganda office is in creation for propaganda films in the towns; the University of Yale is considering the creation of an institute of Human Relations with an endowment of sums amounting to the respectable figure of 7,500,000 dollars, for the most essential studies, and the Health Department of New York has authorised in favor of the improvement of individual and collective health, a regular health campaign in all the institutions of sanitary and social assistance, and is availing itself of every modern means of propaganda, and more particularly of cinematographic projections. (D. 14/65). Two recent films have particular reference to maternity. One, shown in the Institute of Child Culture at Saigon in Cochinchina, «The Future Mother», giving practical demonstrations of the best way of bringing up a child (Courier Saigonais, Saigon - D. 14/46), and one by the Sovkino, «Mother and Child», giving the mothers instruction on the upbringing of their little ones during the first period of nursing.

In the specialised sections of hygiene there is a film on cancer, of prophylactic character, filmed at the initiative of the Triest Section of the Italian League in the Railwaymens’ Afterwork Halls (II Piccola, Triest - D. 33/77), and three films shown in the municipality of Buenos Ayres, at the request of the Argentine League of Social Prophylaxis, entitled «Syphilis», «Venereal Disease», «Gonorrhea» (La Película, Buenos Ayres - D. 33/106).

Again in the prophylactic field, an article published in the Bulletin d’Information (Moscow - D. 33/13), referring to the campaign against drugs and other vices and abuses undermining humanity, is worthy of note. It emphasises the participation of the Soviet film in the campaign against alcoholism. At Buenos Ayres the film «White Poison», showing the dangers and snares incurred by society by the abuse of opium, cocaine and morphium, has been shown with even
greater success. (Imparcial film - Barcelona - D. 33/103).

Husseim Bey Helboani, director of cinema services at the Ministry of Agriculture in Egypt, prepared a film for propaganda against drugs and during the spectacle himself explained the aims it was proposed to achieve by this method. (Bourse Egyptienne, Cairo - D. 33/105).

A recent film shows sport as a physical training and cultural method with respect to sailing. The Austrian pilot Kronfeld, third victor of the Adler Plakett, illustrated at Vienna a film showing his flights. This film reproduces the flights made during the cold period of last winter with a temperature of thirty degrees below zero, in the district of the Rax, and Kahlenberg's voyage on the completely icebound Danube: these are reproductions of flying that may be considered completely satisfactory, not only on account of their informational merits, but also of their artistic standard. (D. 3/529).

In the field of social prophylaxis there are two distinct elements of cinegraphic potentialities. That having reference to the prevention of more or less communicative and contagious diseases, and that referring to life insurance against accidents during labor.

Two distinct fields of action and accomplishment. In the first it is a question of spreading the best methods, general standards of hygiene being useful for the masses, and especially for the indication of the most adequate means for the prevention of the spread of contagious disease. The aim of the second is to preserve the life of the working man from the dangers inherent in labor.

If in the first branch the film activity is actuated by mere social motives, the second includes principles that are both social and economic. It is, as a matter of fact, in the interest not only of the worker's environment that his strength and working capacity should remain unimpaired but also of the economic system to which he contributes. The greater or lesser unity in the creative and productive scheme of industry and work has an immediate effect both on the demands of the working man and of the productivity of the firm and therefore of the general economy of the country.

The logical consequence of this is that the industrialists are the first to give their attention to these matters, and that, in several countries preventive accident insurance systems include methods of propaganda to acquaint the workingmen with the dangers to which they may be exposed, and enable them to take timely precautions. Attempts of this kind have been carried out by the leading industrial firms, by Krupp and Ford, with the best results. Apart from the possibility of replacing compulsory accident insurance methods by the prophylactic propaganda film, which would border on the ridiculous, and could scarcely give the worker an insurance of immunity and protection, the experiment has realised a considerable reduction in accident statistics and has spread a greater sense of security among those who are liable to be the victims of such accidents.

The preventive system, therefore, should run parallel to the insurance system. It will, to say the least, be in the interest not only of the industrialists, but of the insurance companies themselves, to use the most ample forms of preventive propaganda, in order that both from the economic and social viewpoint, the aims of these charged with the protection of the worker be fulfilled as satisfactorily as possible.

The advantage of preventive accident insurance methods is, of course, beyond discussion. According to E. Hoult, President of the National Industry Safety Committee, it has been calculated that England has three times as many labor as traffic accidents. Statistics of the Home Office reveal that during the last eight years, about three million English working men received indemnities for labor accidents and that 2200 women were killed.

Also for accident prevention propaganda there are various types of films;

a) those destined for the mere information of the public, and consequently of a documentary character;

b) those destined for the workmen in their different categories of activities, which are of a purely didactic character, because based on the principle that it is in the interest of the workingman himself to be acquainted with the dangers he is liable to incur, and
to avoid them as far as it is in his power to do so.

c) Those intended to show, once the accident has occurred, the best systems to adopt in order to reduce the unfortunate consequences to their lowest limit.

Among the most recent studies dealing with preventive systems against the various dangers by which man is menaced, and not only labor accidents, there is the initiative of the French Railway Company du Nord of circulating on their lines a cinema wagon in which lectures are given, illustrating the methods of manouvrering and the prevention of accidents ("L'Usine, Paris D. 33/95). Regarding safety in the cinema itself, in Germany regulations have been enforced to intensify the guarantee of safety in the public halls (D. 33/91). In America the Fire Department of New York has also issued a veto against smoking in cinemas ("Variety, New York - D. 14/34) and other similar measures have been taken at Philadelphia ("Daily Review, New York - D. 33/104 and in England ("The Daily Telegraph, London D. 33/94/96).

For accidents, pure and simple, and generally speaking for first aid to all victims of accidents, a recent film by Jean Benoît Lévy, "Measures before the Arrival of the Doctor" has been produced in collaboration with Fraulein Epstein. ("La Critique Cinematographique, Paris - D. 14/34), and also the film "First Aid in Cases of Accident", by Dr. Bolle, shown at Neuchatel and demonstrating the most suitable way of giving assistance in accidents of asphyxiation, burns, serpent bites, drowning, fractures, etc. ("Suisse Libera, Neuchatel - D. 14/64).

**The Medical Surgical Film**

Medical surgical reels form one of the sections of the greatest activities in the cultural scientific field.

From mere psychological studies, an advance has been made to such subjects as the operations of the Russian scientist Pauloff, and a film of the most subtle artistic refinement and the most dramatic interest on the "Mechanics of the Brain".

The study of mental disease and nervous phenomena has induced the investigators to produce a film of research on the functioning of diseased nerves, to combat neurasthenia, the various forms of Psychophysics and derangement of mind, with the endeavor to penetrate the hidden essence of these morbid forms, and if not to completely cure them, at least to give a high measure of active assistance.

In this way, as has already been done in America, Belgium, Russia, and England in observation institutes, nursing homes and whereever the abnormal, the deficient, the mentally infirm are gathered, the best curative methods can be studied on the film, which, adjusted to the particular psychology of the spectator, is capable of reeducating diseased hearts and minds.

Besides those already mentioned, the field of scientific medicine may be briefly recalled.

We have medical anatomical films showing the human anatomy and its various organs, the stomach, the heart, the kidneys, the intestines, in their functional activities. We have embryological films, reproducing the development of the existence of man and of the human being from the first moment of fecundation to the establishment of the circulation of the blood. We have films of technical, radiological perfection, with special procedures permitting of the registration of radio photographs on a celluloid ribbon and the reproduction of the movements of the internal organs of the human body.

We have surgical films of the highest interest for the technique of the operations (instructive matter) and for the field of specialised culture. Recently color films on surgery have been made for the more precise and better demonstration of the act of operation and the diseased organs. Worthy of particular mention are the films on the objectification of normal and abnormal rhythm in contractions of the heart, experimented in the large amphitheater of the Faculty of Medicine at Paris, and even a sound film, reproducing not only the picture of the motion, but also the characteristic beat of the heart, of great intuitional value for the study of heart disease.

Vivisection, scientifically indispensable and doubtless barbarous for those whose sensibilities are not proof against the sight of suffering, will be superated by the film
reproducing surgical experiments which will be able to substitute to a great extent, if not entirely, the study now made on the living bodies of animals.

Among recent medical surgical films is one by Dr. L. J. Dunn on some operations of the dental apparatus (Movie Makers, New York - D. 13/104), one by two German technicians, who have succeeded by a special application of X Rays in cinematographing the internal organs of the human body, one improving a method which allows of reproducing the heart in its movements and the other organs functioning, thereby obtaining absolute visibility; (D. 36/431) another, by two scientists of the Western Research University of Cleveland, who, also by using X rays, have obtained film registrations of the different reactions of the stomach to fear, fright and various emotions of a similar kind. (La Metropole, Antwerp, D. - 13/101); one by Sir John Thompson Walker who, at the Royal Society of Medicine, showed a Talkie reproducing some operations he had performed (New Jersey Journal of Education, Newark - D. 13/96).

Other films are devoted for cultural or didactic purposes, to medicine and surgery in general in its transference to the screen. This field includes the films shown by Dr. Herman Goodman, specialist in skin diseases, to the students of Columbia University (Movie Makers, New York - D. 13/104). The film recently acquired by the hospital of Birkenhead, representing the progress of surgery from the reign of George II to our days (The Daily Film Renter, London - D. 13/95), and finally, the film series which will be produced under the auspices of the League of Nations, and exchanged between the League of American surgeons and a group of French surgeons, the news of which is announced by the Film Kurier, Berlin - D. 13/98).

THE CINEMA AND MENTAL PSYCHOLOGIC HYGIENE.

The influence of the cinema on the mental hygiene of the child, and its possibilities in the field of psychology are closely allied to the problem of overwork to which the child is frequently subjected and to which the cinema can contribute for good or evil. For good, by demonstrating tangibly to those who, though interested, for lack of special competency are unable to understand the psychological questions concerning childhood, the most suitable methods of following the mind and soul of the child in its various stages of evolution and rendering it more responsive to the perceptions and right reactions to its surrounding. For evil, because the cinema and its frequentation by minors can be productive of a form of mental or physical fatigue that necessarily reflects on their vital strength and capability for work.

In an article by André Mauroy, published in « the Ami du Peuple » of Dec. 6 1929, it is pointed out that according to a definition of Boncourt, fatigue resulting from excess of work is characterised by a feeling of chronic lassitude which leads to a diminution of nervous psychic energy, and that such fatigue is not incurred except by disproportions and constantly repeated overwork.

Parallel to this form of cerebral fatigue produced by overwork, which might be defined as fatigue from excess, there is a form of fatigue from defect, due either to a deficiency of physiological metabolism, resulting from the enforced immobility, or from an unsatisfied desire of movement from a lack of reaction expressing itself by a want the emotive intellectual elements, producing prejudices forms of cerebral inactivity and passivity.

This constitutes a maximum danger, as it is liable to lead to the creation of uninspired, apathetic and intellectually and spiritually mediocre forms of being.

Remedies for this form of cerebral fatigue and methods of recognising them, no matter whether for psychological practitioners or mere parents and relations. Leaving aside school programs, with which the cinema is not concerned, the necessarily brief investigation made in these pages and apart from systems of homework — completing the school programs, and referring to supplementary forms of activity which are equally fatiguing — the principal remedy is to be found in forms of recreation permitting the child to alternate his physical and brain work with distractions liable to readjust his nervous tension in a measure that life no longer ap-
pears to him as one unending fatigue, and to permit his mind to react and gain equilibrium.

In a note of the Courrier du Cinema Educateur December with 1929, it was pointed out that the best means of raising the tired spirit to a normal standard of life was to provide it forms of art that, by reason of their differentiating influence on habitual modes of life, might represent the greatest contribution to mental hygiene. Starting from the now generally accepted premise that the cinema is a form of art, the writer considers the screen one of the contributing factors of the tonic elements of mental life. The cinema, it is indeed asserted, is a powerful means of stimulation of the brain of the masses and at the same time, one of the most efficacious forms of recreation.

But with reference to the child, it should be borne in mind that not only should the cinema be particularly adjusted to its needs, so as to avoid adding, with the moving picture another over-exertion, aggravating already existing conditions of physical or cerebral fatigue, but that it should, on the contrary, be made a factor of mental hygiene for those not yet of age. The necessity of adapting accessory elements, such as the musical accompaniment, to the educational standard of the people, offering pleasant and profitable stimulation and not an aggravating depression, should be borne in mind.

In the field of mental hygiene, as envisaged by the cinema, is a notable article « Persecution by the Image » in the issue of Nov. 21 1928 of the Presse Medical of Paris, by Dr. S. Abbatucci. Among other authors who have given attention to this subject are Dr. Toulouse in La Griffe Kinematographique of Paris, 15 Dec. and Leon Mussi-nac, in one of his recent publications, « The Birth of the Cinema ».

Whether the cinema is a boon or an evil for the child and whether it is suited for his particular psychology and for the formation of habits of healthy mental hygiene, are questions which have been debated at great length, but which, as yet, are far from any possibility of definition. The « questionnaire » proposed in this number by our collaborator Maurice Rouvroy, places the question within its proper scientific limits.

In any case the cinema gives a maximum contribution to the examination of psychological problems, concerning not only the child but the public in general. Dr. Charlotte Bühler, of the University of Vienna, proposes the introduction of the Talkie for the study of child psychology. She holds that it would be extremely useful and instructive to parents, to show them their children’s conduct by means of the film, and that this method will become a didactic family means of procedure, running parallel to and not opposing the specialised didactics of instruction. (The Film Daily, New York - D. 15/132), Harold Ellis Jones, Director of the Research Institute of Child Welfare of the University of California, deplores, in his turn, that so far the Talkies have not, or scarcely at all, been used in the field of psychologic study. (The Film Daily, New York - D. 15/143).

He asserts that the difficulties opposing the use of the screen for this purpose are:

a) financial and technical difficulties;
b) difficulties depending directly on the choice and possibility of employment of the objects of study;
c) conditions of environment favorable or the contrary, to methods of research.
d) difficulties of temperature and light intensity, and other factors derogatory not so much to the conditions of taking, as to the organism of those submitted to the process.

He therefore considers it necessary to eliminate as far as possible the above mentioned obstacles while leaving as much liberty as possible for psychological observation, also to isolate the child who is to be the passive object of the experiment as far as possible from the disturbing influence of noises in the neighbourhood.

After this, the author (whose chapter » Documents for Collection » contains most of the elements of Maurice Rouvroy’s questionnaire ») points out the advantages to be obtained by such a method of research.

a) The possibility of seeing, if necessary several times running, the reactions obtained by the effect of a stimulation and examining each part of the body of
each of the children that have been the objects of the examination.

b) The possibility of analyzing for an unlimited period, one or more of the pictures following, picture by picture, the results of the reactions, and of tracing the beginning of a reaction and its immediate precedents.

c) The possibility of taking several times and with different persons, the same subject at different stages.

d) The absolute and irreplaceable value of the cinema for demonstrations of psychological character during courses of lessons or lectures.

Art.—In an article published in a pamphlet of the VOKS (Society for Cultural Relations between the Soviets and Foreign Countries) S. Tretjakoff says that the cinema, like its sisters, music and literature, represents an act of the greatest mercy of fate towards the human puppet. "I fear," he writes, "that if only for one week one were to close all the theaters, suppress all the papers and novels, smash violins and saxophones, a world revolution would break out among all those who would have no further possibilities of dreaming.

"The cinema knows how to calm. It may be likened to a form of nourishment administered to humanity while rocking it. It forms a nourishment necessary for all those who prefer not to rouse the masses from their rosy dreams, but it is always a mental food that is not at the command of everybody and acts purely according to the laws of the greatest human mercy."

Art is congenital to the cinema. It is impossible to conceive of a film, the basic conception of which is not art. If this were not so we should have cold, insipid, lifeless pictures, because the life and ultimate expression of the film are given to it by the cineast, who wishes to project into the ribbon his own soul and his own thought.

Art is the natural element of the film. But, on the other hand, the film in its turn can give life to art. Recently, Gaston Paulain in Comedia, quoting the case of an autodidactic who, taking up the ancient tradition, sculped straight on to wood and stone, without the aid of models or casts, getting his inspiration from his imagination, enamoured of beauty and in perpetual contemplation of the beauty of its constructive elements, expressed the wish that the film, and more especially the stereoscopic film of tomorrow, could offer a method of instruction, giving the necessary emphasis of the object to art students, the teachings of the great masters and the means by which they achieved their masterpieces.

And it is right that one art should assist and support another.

The cinema is a painting of living objects like photography, only superior because it can paint them in movement. And for this reason it needs music more than words because music is the form of art closest to painting.

As art, the film exercises a vast influence on the life of peoples. It would be sufficient to reflect how many stylisations of the decorative and architectural arts had their beginnings in the cinema. It suffices to remember that to remote provincial centers, to the country, where life is simple, the film carries its creations, which, although they may be phantasies, respond by reason of their modern technic, to artistic creations.

It would again be sufficient to reflect that, as and because it is a creator of art, the film is the destroyer of the personal element, of that individualism which at one time was the rage, but which is now a remembrance of the future. The modern screen actor will prepare himself to give a veristic interpretation of the scene he is to film, which is natural and which, like all natural and simple things, is art, not artifice.

In another article of this Review a brief examination is made of the value of the cinema as an element of art, compared to other representative and emotive elements, which are representative in proportion to their emotional possibilities of life.

It is therefore sufficient to show here how, according to the most recent information received at the Rome Institute, the cinema presents itself to the world not only in its experimental and documentary form, but in a higher and more human aspect which is derived from its artistic form and inspiring ideas.

At the University des Annales, Abel Gance gave a lecture on "The Cinema of Tomor-
The captions, therefore, must be prudent and lucid, in order to avoid inevitable collisions of thought and feeling that might one day give the film a significance and value that were very far from the intentions of its originator. Not long ago the Russian producer Petrova Betova, made a film taken from a story by Gorki, entitled "Cain and Artemis," an admirable example of what art can do when serenely dedicated to the needs of the people. (The Times, London - D. 2/114). On the other hand, Rabindranath Tagore, the dreamer of poems in accordance with the purest art principles, has himself adapted from his latest drama a reel that is shortly to be presented and in which in order to enhance its characteristics, he intends to play the chief part himself. (Nieuw Weekblad voor de Cinematograaf, Amsterdam - D. 2/117).

The Franco German publishing firm, Defra, is making an artistic Talkie reproducing the "Kreutzersonata," by León Tolstoi. (D. 2/116).

***

CULTURE, EDUCATION, INSTRUCTION. — The opinions of certain pedagogues, fanatical adherents of antiquated views, have now been relegated to the depths of some obscure journal that no one reads except its writers, or to some third class review, edited in a provincial city where life takes on the color of a dead leaf.

The cinema today as a cultural agent and means of instruction has penetrated everywhere without the possibility of encountering opposition, and has found recognition as the best means of developing and stimulating the attention of students. As an educational factor the cinema has a psychological value derived from its persuasive and suggestive influence. The teacher’s word can be greatly enlivened, the master can try by its means to transfer into the souls of his young listeners all the passion for and sense of the things that animate him, but of the intimate beauty of which his words and arguments can impart only a pale reflection, however un-tiringly and inexhaustibly he may draw on that wealth of soul and light of thought which may be his, but is not the gift of all teachers.
The American Department for psychological and educational experiments has recently examined the results obtained by cinematographic films lent to the schools of Los Angeles by Yale University, and has calculated that visual instruction proves to be approximatively 15% more profitable than oral instruction.

Here is, in fact, the struggle between the book, the word and the cinema, which has existed from the first moment that visual instruction made its appearance. It should be remembered in this connection that the efficacy of the diffusing elements of incidents in the spirit of a passive observer is all the greater in proportion to the possibility of the expansion of the elements themselves.

The book permits of expansion limited to space. By reason of its comparatively high price, when compared to that of a cinema ticket, and also on account of the difficulty it presents of conveying impressions of environment (one need only compare the immediacy of a luminous scene on the screen with the prolixity of the written description, even while conceding the artistic value of the latter), further on account of the impracticability of making it serve more than one person, while the cinema pours its light simultaneously on thousands of spectators, for all these reasons, the book is doomed to have a very relative influence.

The same applies in a limited degree to the newspaper, doubtless more expanded than the book, but still relative on account of the variety of its columns, the impossibility, under present conditions of censorship and control, of giving written statements of false or dangerous situations, and finally on account of inadequate visual representation, a defect which is found also in the book and the spoken word. The word, again, is the least suitable means for awakening emotional states of mind, being generally used for communication in purely cerebral manifestations of political, artistic, literary life that do not awaken much interest and cause fatigue on account of the cerebral effort they demand. In a word the element of immediate representation is lacking in the word.

The efficacy of the cinema in reproducing life as it really is, is therefore incomparable. In some countries there is still a movement of opposition to cultural film. But only in sporadic cases. Everywhere the film that radiates elements of information, finds enthusiastic reception and has the rights of citizenship. Thus in America 15000 institutions, from the Kindergartens to the Universities, have adapted instruction to the use of the film. Even in England, where it finds the most opposition, it has been certified that children who frequent the moving pictures show, both at home and at school, a more alert intelligence and a quicker appreciation of things and the world in general. In Russia, where the fight against illiteracy is almost exclusively conducted by means of cinematographic propaganda, and the culture cinema is upmost in the solicitude of the governing class it has been ascertained that 30% of the edited films shown during the past year, were of a cultural character and at least 15% of recreative character, suitable for children.

One drawback has been pointed out: the drawback of the caption. In the case of cultural films, that is to say pictures calculated to awaken not emotions, but merely interest, and meant for the information of the spectator, the comment of the titles and subtitles must be very different from the normal. They must be sober and unadorned, conveying exact and comprehensive ideas, in a brief and precise manner.

All superfluity would jar, as out of place. The cultural film has nothing in common with the artistic dramatic film, that seeks the emotional appeal and, whatever it may be, exploits it in the best or worst fashion for the benefit of the spectator. It is a film spui generis, both as regards form and content, that must maintain the spontaneity and freshness of the things it represents, without any trimmings. In the cultural field an educational film that in itself has no special didactic value, but that may serve directly or indirectly as an aid to instruction, has an increased diffusion. In India, a country comparatively remote from the world's highways, the authorities responsible for education and culture have collected a very considerable sum of rubles for the acquisition and distribution of educational films.
Where, one may ask, does the field of culture begin and where does it end? It is not quite easy to define it, also because by so doing one runs the risk of giving to the definition of culture an extension of meaning which, though intrinsically absolutely true, might be dangerous, because either a film is educational or it is not so. In the second hypothesis one might paraphrase the saying of a Mahometan conqueror of Cairo, affirming that such films as have not an educational value have no rights of citizenship in the life of a people.

The educational and cultural film has now a recognized status in the schools. In Russia, in 150 schools lessons of cinematography are apparently held, and by degrees all the schools will be provided with projection plant. In America, as has already been said, thanks partly to the merit of a captain of cinegraphic industry, William Fox, who has turned over the sum of one million eight hundred and twenty five thousand dollars for twenty five years to institute a system of instruction by means of the Talkie, the development of fencing in schools has become almost organic. Sweden has collected as many as two thousand films of an educational character. It is even being discussed whether the human fencing master could not be dispens ed with and substituted by the film. This would undoubtedly be premature, for although the injections of the master may or be indispensable, they will always add an integral value to the instruction of the moving picture.

The American firm, de Wry and Ford, has actually created a system of films accompanied by pamphlets containing synthetic explanations. These collections cover all branches of culture, from history and geography to specialised instruction.

It is the technical field where discussion is most animated today. Which, it is asked, is more useful for this form of cultural diffusion, the film of normal size or the film reduced to 16 millimeters?

Motives of convenience, of economy, of facility, of use would doubtless suggest the latter system, all the more as technical resources obtaining today make possible a mathematical reproduction of the scene and the picture, even on a screen of minor and undersized dimensions.

This is, in any case, a problem of minor importance. Whatever may be the diameter of the film, it is certain that it has today invaded the field of didactics.

At Athens last year 25000 children followed, for five consecutive months, a course of moving pictures with such success that leading Greek schools now feel called upon to come to an understanding with the office of production of educational films for a systematic and qualitatively adequate supply.

The vocabulary, the alphabet, mathematics are today a subject of attention and examination for the cinematographic educators. A recent Russian report announces the imminent introduction into the Soviet schools of the alphabetic «Talkie».

The penetration of the film in the schools is allied to the specialization of courses and the formation of a body of teachers who can at the same time act as operators. Note worthy in this connection is the creation of a section of cinetecnics of the higher school of phography in Munich, in which university students can follow lessons in dramatic and cinematographic criticism, history of art and costume, cinematographic, esthetic, and political economy. In Saxony alone there are 762 school masters who have the cinema operator’s certificate.

The cinema, then, is one of the most valid psychic factors of instruction. The so called cinematic attention, its character, how to awaken and maintain it, constitute elements that have a definite didactic value.

At this rate it will not be difficult to attain to specialised courses, teaching the young what appears an easy art, but as a matter of fact is most difficult and complicated, the art of knowing how to see.

Among recently received news are precise details regarding the educational and didactic value of the film.

While the Ufa announces that it has prepared 50 cultural films of short meterage soon to be distributed to American centers of culture (The Kinematograph Weekly London - D. 3/243) and Dr. Hans Gurlis, President of the League of Authors of Cultural and Educational Films in Germany, publishes a list of all the desiderata of the cultu-
eral film for the year 1930, *(Film Kurie*, Berlin - D. 3/249) the *Film and Picture in Club and School of Cologne* (D. 37/158) expresses a series of opinions regarding the value of the centers now existing in Germany for educational films and the necessity of accurately selecting and coordinating their output, opposing the intentions of the Reich government to use the activities of the *Emelka* for this form of creation (*Der Bildwurt*, Berlin, D. 37/54).

The confusion between elements which are purely cultural and the propagandistic element is pointed out at Luchtenburg (D. 37/130), where in a school hall, films of a commercial character were presented as cultural films, provoking the protests of the audience.

Cultural propaganda by means of the film is ubiquitous. In London (*The Cinema*, London - D. 37/161), in France (*Cine Paris* - D. 37/132), in Belgium (*l'Indépendance Belge*, Brussels - D. 37/137) in a lecture by André Cauvin in Italy (*Regime Fascista*, Cremona - D. 37/159), where it is desired that the schools should be completely equipped with didactic material composed of films and diapositives, in Russia (*Kino*, Leningrad - D. 3/249), where the necessity is stated that not only the big schools, but also those remote from cultural centers, should be furnished with cinematographic educational material, in America, where, as has been said (*Los Angeles Education Research Bulletin*, Los Angeles - D. 37/166) the profit to be obtained by the scholars from visual instruction rather than from the normal oral process, has been accurately calculated.

Again for educational cultural instruction by means of the film, a chair for Cinematography, given to Dr. Schrott has been instituted at Vienna. Dr. Schrott classes will be held in the new hall of the Vienna Polytechnical School (D. 8/100). Similar courses already exist in the upper schools of Darmstadt, where every year Professor Fritz Limner alternates a course on « Colored Cinemas » with a course, « Introduction to Cinematography ». In Egypt Hafez Hsen Pasha, Minister of Public Instruction, is studying a project for the extension of cinema instruction to all the secondary schools of the nation. *(Bourse Egyptienne, Cairo - D. 37/153).*

In America, Professor Harry D. Kitson (*Educational Screen*, Chicago - D. 37/170) has prepared the first educational Talkie, and has spoken on the advantages of this new type of film, not only for education itself but for professional instruction. Of the 6700 teachers who assisted at the 56 presentations, 98% gave their unreserved approval of the application of instruction by the Talkie, while only 2% expressed the fear that the cinema might distract the attention of the children. At Buenos Ayres (*La Pelicula*, Buenos Ayres - D. 37/162), the President of the National Council of Education has approved the project presented by Drs. Rueda and Rodriguez Juaregui, for the creation of an office of school cinematography. The project makes a lengthy examination of the educational functions of the cinema and the achievements of other countries.

In the various branches of specialised instruction, the film, according to Professor Barrière (*Revue de l'Enseignement Secondaire*, Paris - D. 37/156), has held its own for literature; according to Professor James Marchant (*The Times*, London - D. 37/156) and according to the University of Leeds (*Christian Science Monitor*, Boston - D. 37/133), for the teaching of historical discipline. On the occasion of the Assembly of the Historical Association of Great Britain, the application of mechanical means to the teaching of history was examined. The discussion closed by drawing the attention of the public authorities to the absolute value of this new means of diffusion. (*The Times Educational Supplement*, London - D. 37/160).

Again, with reference to history, the film « Disraeli » was shown at Texas State College for the students. The Director of the Institute admired it so greatly that he enjoined on the students compulsory attendance and the writing of an essay on the British Premier's Life. (*Exhibitors' Herald World*, Chicago - D. 37/144).

M. André Cauvin has pointed out the value of the application of the cinema to the field of documentation, always within the limits of instruction in a lecture held at
Gilles in Belgium. (L'Indépendance Belge, Brussels - D. 37/137).

Others have examined the possibilities of the cinema with relation to physical and natural science. See the New Jersey Journal of Education of Newark (D. 37/140) and the Lavoro Fascista, of Rome (D. 37/136).

A typical episode which took place in America, has served to illustrate the educational and propaganda value of this vehicle of instruction. In the Museum of Natural History of New York, four thousand five hundred persons forced down an iron railing and a heavy mahogany door in order to achieve an entrance at a representation of a film on the Einstein Relativity theory. (The Times, London - D. 3/352).

Also in social branches of instruction and propaganda the film continues the intensification and development of its activities. In Russia, as has been said elsewhere, the film is one of the most powerful arms in the antireligious campaign, while at Madrid during the fifth day of the medical pedagogic week, Dr. Julius Bravo gave a lecture supplemented by cinematographic projections, regarding the didactic possibilities of the film with reference to sanitation. (El Debate, Madrid - D. 37/143).

Cinema and cultural propaganda. In France it is proposed to distribute the cinematographic cultural films to the trams and omnibuses (Comedia, Paris - D. 3/247); in England, in the churches of Hull (The Daily Film Renter, London - D. 3/257), and at St. Jude's Parish Hall in London (The Cinema - London - D. 3/254) the showing of cinematographic cultural propaganda films to the members of the congregation has been proposed.

The technique and, generally speaking, the specialisation of cultural cinema are in close relationship to the necessity of work in the field of didactics and education. Recently in the Crimean, at Simferopoli, a hall dedicated entirely to cultural projections has been inaugurated (Comedia, Paris, D. 3/244). A student like E. Paul Liesegang, of Duesseldorf, examines the essential details of apparatus for school projection. (Der Bildwart, Berlin - D. 37/153); in the Italian schools in Tunis, following the initiative of Professor Piovano, a periscope apparatus has been installed which permits the pupils not only to see but to impress on their memories figures, writings, drawings, projected on the screen, and illustrated by the master's words. (La Tribuna, Roma - D. 37/142).

The Sound or Talking Film has been used, or is about to be used, in the schools of Texas (The Daily Film Renter, London - D. 37/142) and of Chicago (Exhibitors' Herald World, Chicago - D. 37/152).

Simultaneously for propaganda purposes, the direction of Phonocinetics of the Royal Inspector of Studies in Tuscany (The Lights of the School, Rome - D.37/135), has started for the Tuscan schools the gratuitous loan of a rich assortment of his films and diapositives, and, according to Variety (D. 15/165), New York intends to present American children with a million dollars' worth of cheap photographic apparatus. Probably the motive of this offer is to increase the consumption of photographic films, but this does not detract from its great cultural value. In the opinion of Jesse L. Lasky, one of the cinema kings of the United States, «there is no limit to the development and possible practical application of the Talking Film nor to the recreational spectacle, the only one which is at present exploited on a grand scale. There is, for instance, the educational field, offering possibilities of practical application, all of them most advantageous, above all, the teaching of a special subject which, thanks to the Talking Film, may be entrusted to a professor who is a world authority in his own field. The same method can be applied for lectures, and the system should be particularly feasible in the instruction of scientific subjects, which are generally accompanied by designs, diagrams, etc. Once the voice of the lecturer has been added to the accompanying pictures, the possibilities become infinite.

The day is not far off when university halls will be so many moving picture theaters fitted up for the Talkie, and when all the universities and other institutions where learning is imparted by lectures, will be equipped with a cineteca, provided with stocks of talking films, representing a complete course of instruction in a given subject for each single faculty.»
In England, finally (The Times, London - D. 17/68) a congress of representatives of cultural societies and institutions held at Burlington House resolved to form a committee of study and research for all subjects appertaining to the field of cultural cinematography, with the aim both of extending as far as possible the use of this type of film and of creating a permanent organisation charged with the publication of news of cultural films already in existence, the revision of edited films, the classification of subjects suitable for instruction by means of the cinema and the encouragement of a better distribution throughout the United Kingdom of films of a cultural character.

The interest of the film reaches every field of culture. It should not, indeed, be forgotten that visual instruction was precisely the origin of the needs and aims of education and information.

A friend and collaborator of our Institute and of the International Review of the Educational Film, in a notable article on the separate evolution of the motion picture and the educational function of the cinema, started from a premise that cannot lead astray, if only one is careful to consider it from the viewpoint of its relative importance in the times and culture of the peoples.

He traced the creation of pictures back to the unexpected and spontaneous vision of the cave man, the progenitor of the human race, of the first glimpse of his own face reflected in the water. He saw his companion's face reflected next his own in the limpid mirror, he saw the trees of the virgin forest and the twinkling stars. If his first impression was that of some supernatural force, of which he was afraid, by repeating the experiment he succeeded in understanding the possibility of reproducing a picture on a flat surface by means of one's own memory and the recollection of others. From the vision he passed to the reproduction on polished slate, on the horns of the wild aurochs to the graffiti of the caverns and mountains.

Thus the first element of the visual figure appeared, limited for the moment to the holding fast of the episode in a circumscribed surface, but which in the course of the tens and thousands of centuries that elapsed in the development of the history of life and human evolution, eventually led to the creation of the image and the endowment of the image itself, artificially produced by technical and cerebral means, with the qualities and characteristic elements of real life and motion; and after experiences accumulated and laid up against a far or even near future, to the discovery of color and plasticity.

The history of art is a history of ideography. The cuneiform hieroglyphics are graphic expressions of an idea. The mural painting, the bas relief, more particularly the glass paintings through which in cathedrals the light filters in a prism of color, in their representations of the Virgin, the saints, the passion of Christ, are documentary illustrations of events and of the very life of things in their succession.

At Angkor Val, in Cochinchina, at Burubudur, in Java, entire temples are covered for hundreds of meters with great plaques of granite reproducing from life to death the Asiatic but most human story of the Life of the Buddha, the perceiver of truth.

The Egyptian hypogea, the Mexican pyramids, all tell a tale in their sculptured or painted pictures of the life of the peoples of the Nile and of the Aztecs, who perhaps were descended from the inhabitants of Atlantis, the lords, according to Plato, within their golden gared cities, of the mythical submerged continent.

In the Vallé des Merveilles between Nice and Ventimiglia, near Slonto, in Cyrenaica, on the rocks that precipitate themselves into the African Seas, in the desert of Libia and Auneat, the ancient fathers impressed on the living rock the history of their lives, according to Rosita Forbes and Hussein Bey.

In the eastern friezes of the Parthenon there is a precise chronographic analysis of movement in the horse races and the gestures of the riders.

Sarcophaguses in general, and those of Alexandria in particular, found at Sidon in 1877 and now preserved at Constantinople, the mosaic called «The Battle of Alexander» discovered in 1831 at Pompei, are characteristic representations of life.

Trajan, the Roman Emperor who was born at Italica in Spain, 52 A. D., ordered
the creation of a series of scenes which from the artistic and historic view point, have a tremendous value and which visualised in rapid succession, give an almost absolutely talkful impression of movement. They represent his victories in Dacia on the column which is called after him in Rome.

Quintilian and Saint Jerome treated of visual instruction, as did Amos Comenius, grammarian and pedagogue; Komenski the Moravian, born at 1592 at Niwnitz, gives with his orbus pictis an almost modern example of visual educational and cultural instruction by figures.

In the course of centuries this method of instruction has been improved upon. Photography and the Magic Lantern, the first element of projection, have contributed prominently towards opening to culture, to science, to didactics what are the most unlimited possibilities and will remain so as long as no limits are recognised to the efficiency of technique and the progress of the world.
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PUBLICATIONS OF THE I. E. C. I.

Institut International du Cinématographe Educatif (Inauguration).

Enquête sur le cinéma faite dans les écoles de Neuchâtel, Lausanne et Genève (par A. de Maday).

Social Aspects of the Cinema.
Aspectos sociales del cinematógrafo.
Gli aspetti sociali del cinema.
Le cinéma sous ses différents aspects d’ordre social.
Die socialen Aussichten des Kinos.

ABOUT TO BE ISSUED

The Cinema and Eyesight.
El cinematógrafo y la vista.
Il cinema e l’igiene della vista.
Le cinéma et la préservation de la vue.
Das Kino und die Hygiene des Auges.

Cinema and Hygiene.
El cinematógrafo al servicio de la higiene.
Igiene e cinematografo.
Le cinéma au service de l’hygiène.
Hygiene und Kino.

The Cinema and Scientific Management.
El cinematógrafo al servicio de la organización científica del trabajo.
Organizzazione scientifica del lavoro e cinematografo.
Le cinéma au service de l’organisation scientifique du travail.
Das Kino im Dienste der wissenschaftlichen Arbeitsorganisation.
THE EDUCATIONAL TALKING-FILM

(From the French)

Writing for a Review of this kind there is no need to start with a lengthy preamble stressing the importance of all the problems connected with the cinematographic art and industry. Elsewhere it is necessary to take certain oratorical precautions and respectfully to call the attention of the serious reader to the unsuspected importance of the subject. One has to be careful to emphasize the innumerable incidences in the intellectual, moral, social, political, and economic domains, of the luminous ray, reminiscent of the invisible finger that wrote the fateful message on the white wall under the terrified eyes of Belshazzar.

The League of Nations has been wise enough to realize that, amid the international problems of armament, the picture-machine-gun claims attention and requires supervision. I am therefore aware that, in writing for these pages, I am addressing enlightened readers who are fully conscious of the exceptional importance of the question.

Since the birth of the International Educational Cinematographic Institute a new event has occurred, destined to extend the field of action and increase the efficacy of its labours. The first infant and inarticulate wails of the new-born miracle, the talking-film, are now reaching our ears; it has been born at a happy conjuncture to give full scope and force to the Institute's enterprise.

This is a momentous date in the history of the educational screen. The eye and the ear are the two main-roads to the brain. The cinema has long conquered one of these approaches, and being now in possession of the other, is henceforward master of the situation.

At the present time, all the world over, millions of human animals are brought together between closed walls, seated side by side on electrocution chairs, and plunged into darkness; a button is pressed and a mysterious machine charged with imponderable forces is set in motion; it vigorously peppers the brains of the herd, exercising a sort of subtle and insidious vibratory massage on retina and tympanum. The treatment lasts three hours, after which light is re-admitted, and the patients let loose again, after their brain-cells have been well saturated with a powerful admixture of images and ideas.

Never before was so vigorous and rapid a process of mental nutrition — we might say of mental cramming or forcible feeding — known to man. Never before did pedagogue handle so powerful and efficacious an instrument of teaching. Hence it is that all moralists and philosophers, who are not blinded by mechanophobia, are so anxiously awaiting the diffusion of the educational film. Never till now, indeed, have mechanics achieved a victory comparable to this collective «motorization» of the mind.

The early attempts have not always been very encouraging. It must be acknowledged that the international cinema is not always in the hands of representatives
of the élite. While our intellectuals were smiling disdainfully at the success of the popular magic lantern, cute business men where cornering studios and dark halls and organizing a demagogic regime which is still, at the present moment, subjecting us to its hateful law.

No effort was spared to flatter the bad taste of the crowd and to win its suffrage by appealing to its most mediocre instincts. In such circles artists were at once viewed as enemies, and educators held in like suspicion. The one and the other are still living under an exceptional regime. The illiterates of the film clasped hands across the frontiers. And they built up around the cinematographic studios and publishing houses a sort of rampart to repel the advances of all men of culture, whose least success would have shattered for ever their omnipotence.

Realizing, however, that they could not for ever bar the way to the advent of films of a less degraded intellectual level, the manufacturers of the screen thought well to quiet public opinion by adding «educational sections» to their businesses.

It was then that that dreary apparition styling itself the «scholastic film» appeared on the scene, to betray a noble cause rather than to serve it.

These deplorable «harlequins» addressed to studious youth, devoid of all attraction and all educational value, were faked out of the mis-fits of commercial films, the trimmings of documentary films, and the sweepings of film-mounting studios. It was in fact an expedient for making profitable use of the by-products of the industry and turning an honest penny out of unproductive stock.

It is hardly necessary to emphasize all the injury done to the advocates of teaching by images by this misleading and disappointing realization of their programme.

Then followed the crops of so-called «propaganda» films, which, by their name alone, defeated for ever the ends that they claimed to pursue. It is preposterous to expect useful results from a technique that consists in telling the crowd: «I am going to make you change your opinions, and to stuff into your craniums five or six ideas of my own choice». Genuine propaganda should leave its visiting cards at home. It fulfils its mission only in so far as it succeeds in dissimulating its presence.

There is plenty of propaganda — and what propaganda! — in many an American «movie», hopelessly puerile in theme, but staged with such cunning and sorcery and such lordly self-confidence, that the simple of all countries flock to it to learn lessons in the ways of the world, to study deportment, and to learn how to think, how to amuse themselves, how to eat, how to dress and to decorate their homes. How many housewives, how many petites bourgeoises, how many servant maids have acquired from films of this kind false notions of «good form», pronounced ex cathedra by scene directors who are totally ignorant of the subject they are teaching!

We must therefore interpret the educational cinema in its widest meaning. The screen must not be turned into a school accessory as depressing as the blackboard of old. The luminous picture must be a window opening onto life; a window full of sunlight, to which the eye turns with avidity, with perennial curiosity, and an ever keen appetite for beauty. The I. E. C. I., has clearly realized this and its success ought therefore to be assured.
The problem has at last been stated correctly. The invention of the talking film and the lightning progress it is making in development, might have jeopardized the whole initiative, by compelling the Institute to make a rapid volteface in plans and methods. But in truth I believe that not only has it nothing to fear from this evolution of the screen, but that it will be the first to gain by it.

In the first place, it is quite obvious that the silent film is not yet dead. We may even hope that the vulgarization of the « talkie » may enable the mute screen to grow more aristocratic, and, far from the madding crowd, to push ahead its researches in transposition and refine its language of shadows and light.

We must fully grasp the fact that we are here dealing with two totally different techniques, which share in common only the rectangle of white stuff on which their performances are recorded. With their habitual carelessness, the mediocre masters of the silent screen have not hesitated to improvise themselves as stagers of talking films. This is a radical mistake, which at the present time is doing great injury to the new invention. A spoken scenario demands qualities altogether different from those which have, up to the present, triumphed in the art of the mute screen. New men are needed to take charge of this new instrument.

Herein lies a secret reason for hope. Up to the present, thanks to the omnipotence of the dollar, America has been able to perfect the technique of her film manufacture in a manner that was obviously somewhat crushing to Europe. But ever since the début of the vocal film, it has been obvious that this industrial mastery was not sufficient in itself to solve all problems.

The Americans have proved themselves singularly inept and clumsy in handling the vocal film. The reason is not far to seek. A young and ardent, people, they were at once at their ease in front of the camera, and able to exteriorise by gesture their simple and ingenuous mentality. But they are ill at ease when compelled to give up gesticulating and to use articulate language to express their thoughts and feelings. America is not a country of dramatic authors and lecturers. Their fine athletic young men and their pretty girls, with their pure lines and graceful figures, lose all their assurance when called upon to make a speech. Then again, these charming girls are often endowed with characteristically nasal and raucous voices. We have seen and heard some amusing specimens on the music-hall boards. Thus the New World, that was so expert in handling the view-recording apparatus is seriously handicapped in the presence of the sound-recording one.

Europe, on the contrary, has long been accustomed to self-analysis and to expressing itself in dialogue. Its theatrical and literary culture permits it to evolve freely in a domain that intimidates the Hollywood scene-makers. The Latin nations in particular ought to find in the new film immediate and brilliant scope for their natural gift of eloquence. The famous « Mediterranean rights » which Nietzsche talked of have here a splendid field in which to assert themselves. We may look for the re vindication of a whole culture that seemed menaced by mechanical arts. And lastly, just as the plastic education of an Italian or a German, who lives surrounded by masterpieces, ensures him an obvious superiority over an
American technician, when it comes to creating the environment and decoration of a film, so also the musical culture of the Old World is far superior to that of the New. No serious American can deny his handicap in this field. Now the «auditory» film will consume a large amount of music. The lyric and the choreographic film will assume considerable importance. The diffusion by the screen of the masterpieces of the great composers should take a place of honour in the future programme of the International Educational Cinematographic Institute. There is nothing more educative than the musical thought of a man of genius. The singing film will become one of the most precious auxiliaries of the fine work undertaken here.

Is not Europe quite specially designated to play a leading rôle in the film record of the treasure of its scores? We will return later to this very important question, but it is well right from now to be getting ourselves ready. America has already undertaken the production of a number of musical films. Do not let us be outdistanced in this domain! It is on this shore of the Atlantic that the symphonic screen should assert its authority and efficacy as a medium of higher thought.

We have seen many sound reasons for confidence in the future. The task to be accomplished is formidable, but it is so grand that it should galvanize all our courage. The advent of the vocal film points the way of the future. At a moment when the exaggerated industrialization of cinematography seemed to have bereft artists and thinkers of all chance of successful competition, this marvellous gift of science enables them once again to hold up their heads.

Without renouncing the splendid silent language of shadow and light, the vocal film should become a precious instrument in the hands of all those who aspire to restoring the magic lantern to its high mission. For the cinema resembles man’s destiny: it deceives and misleads only those who do not ask enough of it.

Emile Vuillermoz.
ARTISTIC PROBLEMS OF THE SOUND FILM

(From the German)

With the advent of the sound film the cinematograph was at once faced by a number of new, serious, and very diverse problems of a technical, artistic, aesthetic, and, last but not least, a commercial kind — all problems which no one interested in the cinematographic art can overlook.

Ernst Lubitsch, a leading authority on film theory and practice — and a fervent believer in the sound film — expressed the situation very clearly in a recent talk with the writer of this article: «The general upset», he declared «which the sound film has caused in the whole artistic sphere of the cinematograph is so complete that it can be confidently asserted right from now that this new development, whether it remains as it is or takes on some new form, will certainly leave an indelible mark on the art of the cinema».

The silent film also will undoubtedly benefit steadily from the influence of the sound film.

There is something grotesque in the way in which the film, so mute until yesterday, and with which we were long familiar in that form, has suddenly begun to speak. It is asserting itself in a most unexpected manner, no longer content with being «seen and not heard» like the good child of past days. I myself can bear direct testimony that its voice has been heard loud and clear at Hollywood. It may be said without exaggeration that the sound film has turned the Cinema Capital upside down and that the whole technique and practice of the business, no less than all the traditional values of the film, have been radically altered.

The scenarios already bear the impress of this change.

Hitherto it has been the custom to adhere to the author’s manuscript only as far as was found convenient. All scene directors have felt justified in acting in this way. Thus, for instance, an author in his scenario brought about the meeting of a young couple at a dance. The cinematographic studio was promptly arranged to represent a ball room, and for several days the actors, attired in elegant evening dress, were busy dancing, flirting, and pursuing the pleasures and frivolities of society. The scene director, however, notwithstanding all the metres of film and the money spent on it, was not satisfied, and it was suddenly borne in upon his mind that it would be much more telling for the lovers to meet in a street accident, the hero coming to the rescue of the young lady. And without further ado the ball scene was cut out!

I have been assured by leading Hollywood stars that in this way it has often happened that the best scenes have been excised — scenes into which the actors had put their whole soul.

The sound film cannot be treated in this arbitrary manner. Under present technical conditions, at any rate, it is impossible to alter or cut sound films,
while in the taking and making, without interrupting or spoiling the musical accompaniment.

The footage of each single photograph must, from the very start, be made to correspond perfectly with the music. All those taking part in it — authors, scene directors, composers, and photographers — must arrange in advance all the details of each scene. The most efficacious and concise form of the future film must be settled in the scenographic section before any start is made to photograph the scenes.

Another important factor in artistic cinematography has to be re-tackled afresh: the architecture of the cinematograph. Aesthetic considerations are no longer the only ones to be borne in mind; acoustics have become a matter of yet greater importance. Innumerable artistic difficulties have arisen which I have not the space to go into here, but which I shall deal with at length in my forthcoming book «Hollywood, City of Illusions».

The General Staff of the Cinema is busy re-estimating all these values. Hitherto the scene director has been monarch of all he surveyed. Things are different with the sound film; the scene director has to abdicate much of his powers in favour of new collaborators. And the author, with whose work so many liberties have been taken in the past, is now beginning to assert his rights and to come into his own.

The composer and the director of the orchestra now take their place beside the scene director as artistic partners on the same footing as himself; their opinion is of the greatest importance and must be consulted in preparing the scenes. Then a quite new figure has arisen in the staging studio: the director of the musical film who, from his cabin, well removed from noise, its walls padded with several strata of thick wool, directs the scene from behind thick glass panes. The scene director first stages the scene in the studio; but it is not photographed until the musical director has examined the vocal effects by means of a telephone.

In time, there is no doubt that the scene director will himself have to learn to take charge of the sound and talking features of the scene as well. According to the latest information from Hollywood, some scene directors, such as Cecil De Mille, Ernst Lubitsch, and his countryman, Friedrich Zelnik, now also at Hollywood, have acquired by now such competence in the matter as to be able to take charge of the sound as well as the visual direction. Since absolute silence must reign throughout the studio during the taking of sound films, luminous electrical signals, similar to those used on the railways, are now employed to direct the rehearsals. By these means the sound director signals his instructions to the actors from his cabin: «Speak up!», «Come closer up!» and so on.

It is obvious that in these circumstances cinema actors must rehearse their parts with the same care as dramatic actors, and must indeed commit their rôles to memory with all the greater care owing to the disadvantage they are under of not being able to look to the prompter for a reminder.

While the new art offers a vast field of action to dramatic actors, who for years have been accustomed to speak for hours at a time, it is clear that it does
not offer much chance to those who are lacking in stage experience, for the sound film demands special aptitude in both delivery and pantomime, such as can be found only in experienced dramatic artists. Hitherto, scene directors have preferred actors who were content to renounce all personal initiative and to place themselves supinely in their hands. Rodolfo Valentino, the beloved of the ladies, is stated to have been the ideal marionette of this type; Adolphe Menjou is now following in his footsteps. Like wax in the hands of the modeller, actors of this type obey the will of the scene director and move and grimace with the precision of mechanical toys. Films of this kind were taken as follows: The scene director shouted through the megaphone: "Turn your head!" - "Look towards the door!" - "Now you hear a noise!" - "Smile wistfully!" - "Rise deliberately!" — and so on.

Let us now glance at the fundamental difference between the American cinema actor and the European actor — and first of all the German actor.

In most cases, the European film actor has been recruited from the theatrical stage, which is not the case with the American actor, except in very rare instances. There is therefore little matter for surprise that the successes of the transatlantic film favourites have been very modest on the microphone. It may be said with confidence that 75 per cent of the American favourites have been unsuccessful in sound films. So far we have seen that, in the sound film, a good dramatic artist eclipses all the film stars who are lacking in stage experience — even the most renowned ones.

It must not be assumed that the ill-success of the majority of "movie" stars on the sound film is due to the inadequate adaptation of vocal means. The essential reason lies in their lack of individuality. The public was wont to raise its eyes in ecstasy to the film star of the mute screen, to idolize her as queen of an unreal world, and burn incense at her feet. None of the greatest heroes of the dramatic stage was ever accorded such apotheoses!

But the actor in sound films is a mere man more or less like ourselves, who lives in a real world, and who talks and shouts, and laughs and sighs — whose art, in short, is entirely individual.

The moment that an actor passes from the mute to the sound film, the illusion that he or she is a superior being vanishes. Mary Pickford, for instance, is revealed to be a quiet, resolute lady, with a somewhat harsh and deep base voice, and Adolphe Menjou, a handsome and elegantly dressed gentleman as ever, but — with all the good will in the world — not highly interesting when he opens his mouth.

There is therefore no cause for surprise that some of the most skillful and experienced cinema actors, such as Mary Pickford and Henny Porten, who are too intelligent not to be aware of their limitations, do not take kindly to the "talkies".

Very few persons in the cinema world are in a position to stand against the current and remain faithful to the mute film. One of these, the greatest of all — Charlie Chaplin — has repeatedly declared that he will not abandon the mute
art. Let us hope he will remain firm in this resolve, lest the mystery that surrounds his art should be destroyed. But if Charlie Chaplin, and here and there a few others of the really great film favourites (Greta Garbo, Buster Keaton) may continue still to score successes on the mute film, they are the exception. The minor stars are accepting the new terms of the vocal film.

Work for the sound film is no easy matter, even to the experienced stage actor, for he has to count with the petty treasons of the microphone. Just as the camera so often distorts a beautiful face and makes a plain one look lovely, so the microphone — as indeed the gramophone and broadcasting — has its snares. Some of the best voices in the world sound bad on the film. It is impossible to tell why. On the other hand, the microphone of the sound film has led to some surprising discoveries of new talent. It is true, however, that these, as compared with the legions of new «film stars» arising, are but very rare exceptions.

There are such a host of film stars that it is impossible to recall them all. It is obvious that one much oftener comes across a pretty, expressionless face than a beautiful and agreeable voice.

Another risk that besets the actor recruited from the stage is the temptation to exaggerate dramatically both pantomine and words. In some ways, the present position of the sound film recalls the early days of the cinematographic art, when few apart from dramatic actors had been recruited to the screen. It was so common among them to exaggerate mimicry that the effect was often grotesque and ridiculous.

But the talking film has its own aesthetic laws. Just as the dramatic stage actor had to learn to moderate the mimic language of the film, he must now learn to adapt his vocal organs to the microphone; otherwise his voice is delivered in an unnatural and over theatrical style. The microphone registers the lightest breath with meticulous care. To sing and speak quietly and naturally is the supreme law of the vocal film.

Let me say a word here regarding the plays themselves. I am certainly not giving away any secret in stating that hitherto the intellectual level of the «talkie» has been distressingly low.

The sound film came upon us unexpectedly like a midsummer thunderstorm, with the result that scenarios intended for the mute film were hastily adapted to its vocal countertype. This system gave rise to sloppy, colourless plays, of no intrinsic merit, the principal aim of which was to give some theatrical star a chance of singing a topical song. Luckily enough, «talkies» of this kind are on the wane owing to the desertion of the public. The sound film must comply with specific aesthetic laws in the selection of plot, as in its other features. Noises, dialogue, and songs cannot be mixed up in a general jumble; care must be taken that each separate feature fits into its proper place. There must be no excesses and no deficiencies. It is the job of the artistic direction to prescribe the correct doses and the correct mixture.

The fact that the dialogue was often not placed in sufficient relief, because the play was too much taken up with the visual effects, was responsible for many
contradictions. At the present moment, when everything connected with the sound film is in course of development, it is possible only to point to the aesthetic possibilities of its future.

One thing, however, is abundantly certain.

The sound film has come to stay; but if it is to justify its existence it must discover its own aesthetic laws, which should lead neither to the mute film with dialogue interpolations, nor to the dramatic theatre, but to its own proper goal — the goal of a new cinegraphonic art.

Dr. Erwin Debries
Among the national legends that embody the salient traits of Polish life in past times and that are most closely connected with historical recollections of a more or less credible kind, none is more widely known or more typical than that describing the marvellous adventures of Twardowski. It is a question whether this miracle-working doctor, alchemist and astrologer in one ever really existed in the flesh, and indeed it would be rash to vouch for it, notwithstanding the fact that the Twardowskis are a historical Polish family, whose descendants still live in Po-
land, while legend affirms this remarkable ancestor to have been a contemporary of King Sigismund Augustus (1548-1572).

Twardowski, who had mysterious ways of his own of curing the sick and even of giving his patients back their youth, and who spent his leisure in manufacturing gold and predicting the future by the stars — all this in virtue of a pact with Satan — belongs indisputably to the illustrious lineage of the Fausts, whose origins are lost in the remote middle ages and whose progeny still turns up in the nineteenth century, at least in the literature of a hundred years ago.

This Polish Faust, however, stands out as something apart from the rest. He was a member of the old nobility, proud of his lineage, which the Devil himself respected; indeed, we are told that, in drawing up the pact that secured him the possession of his victim’s soul, Satan was not satisfied with his signature alone, but required his word of honour as a gentleman. We shall see in the sequel that this was a wise precaution. Twardowski, apart from his hours of philosophical meditation and scientific research, was full of good humour, wit, and go, always ready to make fun of people and play tricks on them. It is, indeed, this careless fun that has won for him so much sympathy and popularity.

Twardowski has passed from legend into literature; he is the hero of fables and anecdotes, of stories for children and of all sorts of poems, lastly of an opera which is still very popular in Poland, and of many excellent novels, the last of which was published this year. In these works the Polish Faust appears under the most varied aspects: as a doctor and scientist misunderstood by his contemporaries, as a benefactor of his species, on whom he lavishes the gold he has acquired through Satan, and, finally, as a good sort who ends up by getting the better of the Devil himself, as in the celebrated ballad by Mickiewicz.

In attempting to present this life and these deeds in a film scenario, we have but touched upon this traditional conception, which, is so much more complex in that it enables us to evoke the whole of Poland in the great century of its history, the golden age of the last of the Jagellons, the period when the Italian Renaissance exercised so powerful an influence on our country, without destroying its intrinsic spirit. As a mere historian, unversed in the technique of the art of the cinema, we should have been unable to accomplish this difficult task without the kind assistance of Mlle Sophie de Szarlowska, a Professor at the Cracow School of Applied Arts and an expert in all that concerns educational cinematography. We wish to tender her our sincere thanks.

PROJECT FOR THE FILM

PROLOGUE

Picture I

A Polish gentleman’s simple home at the beginning of the XVIth Century. It is a rustic house, built entirely of wood, with one row of low and narrow windows. Its owner, old Twardowski, returns from a journey. He is greeted by his
retainers according to the custom of the country. His wife appears on the threshold and, full of joy, holds out to him the long awaited son, who has been born during his absence. Twardowski takes him in his arms and shares the general joy; however, unaccountably to the others, his joy soon changes to dismay.

**Picture II**

The father recalls that during his journey he had been set upon by brigands and that, in order to escape from them, he had invoked the help of the Devil. With the latter’s assistance, he had come off safely, but he had had to promise the Devil, in return, the full possession of whatever he should unexpectedly find on his return home. He has just found a new-born son; it is therefore the soul of his own son that he has sold to the Devil.

**Picture III**

Such are the sad reflections which occupy the father’s mind as he and his wife lean over their child’s cradle.

**PART I**

*Twardowski’s Childhood.*

**Picture IV**

The baby has grown into a young boy of precocious, almost uncanny intelligence. We see him in his room, absorbed in reading a large book, without perceiving the other children playing round him, nor his father who gazes on him, full of sadness.

**Picture V**

We see young Twardowski wandering around his father’s fields. He carefully observes the flowers and plants and the habits of birds and insects. A thunder-storm breaks; he follows its phases with lively interest, but with no sign of fear. Night falls; he contemplates the stars and tries to trace a path amid their multitude.

**Picture VI**

Tormented by remorse, the boy’s father falls dangerously ill. On his death-bed he confides his secret to the village priest and to his family; he implores his son scrupulously to avoid everything that might expose him to diabolical influences.

**Picture VII**

The mother also is now dead. The priest who has hitherto looked after the education of the young man advises him to leave his native village and study at Cracow. We see him depart towards his unknown fate.
Part II

Twardowski the student

Picture VIII

Twardowski has arrived at Cracow, the capital of Poland in the XVIth century. He wanders through its narrow, winding streets, admiring the old Gothic churches, beside which appear the first of the new buildings in the Renaissance style. At last he stops at the foot of Wawel Hill, from the top of which the royal palace dominates the city and the Vistula.

Picture IX

Twardowski presents himself to Martin, the old doctor, for whom he has an introduction from the priest of his village. He is received in a vast and gloomy laboratory, full of stuffed beasts, owls, and curious instruments and, above all, of books and manuscripts. The young man is to live with his master and help him with his work.

Picture X

He is now inscribed as a student at the old and glorious University of Cracow. We see him being admitted as a member of a student’s confraternity. He has to submit to all the usual ceremonies, the last of which is a feigned execution: a student pretends to decapitate him with a wooden sword.
Needy students are given free meals in the houses of citizens. Twardowski dines every day at the house of a shop-keeper, attracted not only by the plentiful food, but also by the beauty of Miss Neta, the shop-keeper's daughter. He goes there in the evenings with his fellow students; they dance and all make love to the young girl.

PART III

_The Outset of his Career._

PICTURE XII

Twardowski has completed his studies, but he still works with Dr. Martin, who has complete confidence in him. We see them both engaged in trying to discover
the secret of how to make gold, but their efforts are in vain; they labour fruitlessly, bent over a great alchemist's brazier.

**Picture XIII**

There is only one book that the doctor will not shew his pupil. He, himself, pores over it in the silent watches of the night. Twardowski, unseen, manages to observe him one night; he sees how the old man, after studying his mysterious book, conjures up the Devil himself. In the midst of smoke and flames, threatening figures appear and surround the sage. In a few seconds all vanishes and the young man finds only the dead body of his master.

**Picture XIV**

Twardowski has inherited the laboratory and carries on his profession as doctor. We see him deeply meditating on the unfathomable secrets of nature, thus disregarding his father's advice.

**Picture XV**

He is very successful as a doctor. Neta, therefore, decides to marry him. We assist at their marriage at the church of Our Lady at Cracow. Noblemen, relations of the young doctor, mingle with the burghers of the city and University students.
PART IV

The Fatal Pact

Picture XVI

Twardowski's married life is unhappy. His wife wants him to earn more and more money. Discontented and impatient, she sees him constantly buried in his scientific books and reproaches him for his useless work.

Picture XVII

Whilst her husband is out one day, Neta goes into his laboratory, smashes his instruments and burns his books. Twardowski returns just in time to save the book the study of which had brought about the death of his master. Sick at heart, he decides to leave his wife.

Picture XVIII

Twardowski, all alone in a new laboratory, takes up his studies again and, wishing to satisfy his unholy curiosity, repeats the gestures that he had seen his master make to call up the Devil. He appears, but, instead of killing Twardowski as he had killed Martin, he promises to reveal to him all the secrets of the world, to be constantly at his orders, and to heap glory and riches on him. In payment of this, the Devil demands Twardowski's soul on his death.

Picture XIX

They both sign the fatal pact. Twardowski inserts the clause that the Devil can only claim his soul when they meet in Rome. The Evil One consents, but, on his side, he insists on Twardowski giving his word of honour as a gentleman to carry out the engagement.

PART V

First Exploits

Picture XX

Twardowski immediately asks the Devil to teach him how to obtain gold by means of alchemy. From this moment he has boundless wealth. Dressed in splendid clothes, he drives about the neighbourhood of Cracow in a fine chariot drawn by four black horses. He stops wherever a great nobleman is celebrating some festival or giving a banquet.
On his return from such expeditions he likes to amuse himself at the expense of the good people of Cracow. One Sunday he is walking in the chief square when crowds of the faithful come out of church, rejoicing in the glorious sunshine of a cloudless sky. Twardowski, by a little sign, makes it rain cats and dogs. In a minute the square is swamped in water and everybody drenched; directly the fine ladies have with great difficulty kilted up their dresses, Twardowski makes another sign to restore the fine weather, leaving the ladies high and dry.

It is market day and Twardowski is in the same square. He notices Neta's shop, which she has set up since their parting. Her shelves are loaded with valuable china and glass and pottery. What a chance to pay her back for sacking his laboratory! Twardowski makes a sign, all the fragile objects seem to come to life; they clatter down on to the pavement and begin to dance, knocking up against one another and smashing. The crowd laughs and Neta is frantic.

Twardowski, however, is not bad-hearted. He remembers that he once loved this woman. He goes up to the top of the church tower and again causes a heavy shower to fall in the square; but this time it is a shower of gold. He makes the finest ducats fall near Neta's shop. She hastily gathers them up and is amply repaid for the loss she has suffered.

PART VI

*The Miracle Doctor*

Twardowski is, however, not satisfied with these childish amusements, nor with the luxury with which he has surrounded himself. So as to get about more rapidly, he asks the Devil to teach him how to fly. Astride a black cock he cleaves the air.

Let us accompany him on one of his flights. From high up we contemplate the changing Polish country-side: first the tops of the Carpathian mountains, then the Masovian forests and plains; at last the Pomeranian lakes and the shores of the Baltic. On the horizon is the great port of Dantzig.

But this is not all. So as to exercise his profession with more éclat, Twardowski gets from the Evil One the secret of the elixir of youth. An old man, anxious
for the future of his children, comes to Twardowski’s laboratory: he wishes, at all costs, to regain the strength of his earlier years. The master has pity on him and gives him the elixir; we see the marvellous transfiguration of the man, who becomes a youth in the fullness of his strength. He effusively thanks his benefactor. Hardly has he left, than another old man appears; he is a notorious miser anxious to enjoy still longer his hoarded wealth. He, also, is given the elixir, but the doctor advises him to take it only after he has reached home.

**PICTURE XXVII**

The miser returns home delighted, and at once takes the elixir; hardly has he done so than he falls into a deep sleep. Meanwhile robbers break into his house and steal all his wealth. He awakes rejuvenated, but poor and forced to earn his living.

**PART VII**

*The King’s Astrologer*

**PICTURE XXVIII**

The climax of Twardowski’s ambition is reached when a royal messenger arrives to take him to the Palace. Let us accompany him to the Wawel: across the great court-yard and up the celebrated marble staircase we go to the audience hall.

On our way, we admire the works of Italian artists, architects and sculptors, who during the life of Sigismund I restored the old residence of the Kings of Poland.

**PICTURE XXIX**

Sigismund’s widow, Queen Bona, who is an Italian and one of the Sforzas, accompanied by her son, the young King Sigismund Augustus, receives the homage of the Senators of the kingdom. Queen Bona, who is still beautiful and, more especially, majestic and commanding, thoroughly appreciates the solemnity of the occasion. For his part, the King, who is worried and preoccupied, seems to be looking for or awaiting someone. At last he brusquely interrupts the reception and leaves the hall.

**PICTURE XXX**

He goes to his private apartments where he finds his beloved wife, Queen Barbara. She is still more beautiful than Queen Bona, but she refuses to appear at official receptions, knowing that she will only be treated in a humiliating way if she does. For the last of the Jagellons has, by marrying this daughter of a Lithuanian nobleman, George Radziwill, made a mesalliance for which there is no forgiveness. Bona meanly persecutes her daughter-in-law and the Diet is opposed to her coronation. Sigismund Augustus again tries to console her, but he knows very well that his wife’s future is uncertain.
It is for this reason that he has summoned Twardowski. It is night time; the king and the astrologer are at the window of a room known as the «alchemist's room» and consult the stars. The astrologer points out to the king from among the others, a small star: it is Barbara’s. Suddenly the star shines with extraordinary brilliance.

A happy presage. The king is exultant, but in a moment the star has entirely disappeared; Twardowski hardly dares explain to the king the meaning of this phenomenon.

PART VIII
The Summoner of the Dead

PART XXXII

The stars foretold the truth. The opposition to Barbara died down. We see her in the old Cathedral at Wawel, seated on the throne beside her husband. Acclaimed by the people, she is to be crowned at last. The archbishop — Primate of
Poland — places the royal crown upon her head. At the end of the ceremony the courtiers crowd around her, as they used formerly to crowd round Bona, who alone is absent. The king is at the height of his happiness, but the tears of the young queen, signs of her sad forebodings, mingle with the pearls with which she loves to deck herself.

Picture XXXIII

Ever since her coronation, Barbara has felt her strength failing her. She now lies on her death-bed. The king is alone at her bed-side in her chamber, hung with the celebrated Gobelin tapestries that he has procured from Flanders.

Picture XXXIV

They recall the happy days of their early love. The king in despair sees, as in a dream, his second capital, Vilna, and the gardens which stretch between his palace and that of the Radziwills. It was there that he used to meet his beloved, and to listen
at her side to the song of the nightingales, of which the Jagellons were passionately fond.

**Picture XXXV**

The queen is dead; her funeral procession leaves the castle of Cracow, where she has known such sad hours, to take her body back to Vilna, which saw the dawn of her brief and precarious happiness.

**Picture XXXVI**

Twardowski has again been summoned to the king. Clad in deep morning, which he will wear to the day of his death, Sigismund Augustus receives him in the room in which his wife died. The windows are darkened, the Gobelin tapestries shrouded by heavy black hangings. It is not to the astrologer that the king now appeals: it is to the man who can evoke the dead. Twardowski mutters some incomprehensible spells; from the depths of a mirror, in which the king gazes, the radiant figure of Barbara Radziwill, in the full flush of her youthful beauty, seems to emerge. Sigismund Augustus frantically stretches out his arms towards her, but at that moment the deceptive vision vanishes and the king falls down in a swoon.

**PART IX**

*Twardowski's End*

**Picture XXXVII**

Twardowski has grown old and Satan becomes impatient. He calls on Twardowski to enquire when he means to start for Rome, thus fulfilling his engagement. But the master has no intention of giving in so easily. He goes out of the room for an instant and returns rejuvenated. He too has made use of the elixir of youth, and all has to begin over again.

**Picture XXXVIII**

Some days later an unknown gentleman comes to fetch the celebrated doctor to the bed-side of a sick friend. Twardowski steps into the gentleman's carriage and the horses start off at full speed across gloomy country and through endless forests, and draw up at last in front of an inn. They enter, but hardly have they crossed the threshold, than the gentleman's face assumes a more and more diabolical expression, and he points out to the doctor the sign of the inn, on which one reads in large, red letters the word «Rome». Lucifer in person has come to the appointed spot to fetch his victim. Twardowski could easily escape, for in a few steps he could leave this «Rome» which is only a country inn. He hesitates; whereupon Satan reminds
him, not of his signature, but of his word of honour as a gentleman. No further hesitation is possible: with a weary and discouraged gesture, Twardowski puts his hand into that of his enemy.

**Picture XXXIX**

The Devil has seized upon his prey. With incredible swiftness they once again make the aerial journey over Poland that Twardowski had so often enjoyed. They are over Cracow: the spires of the Church of Our Lady come into view, the cross glitters, the bells ring. At this moment the wretched man remembers his pious youth and begins to sing an ancient canticle, imploring the help of the Virgin. His hope is justified. The diabolical figure disappears and Twardowski is left between heaven and earth, hanging on to a horn of the crescent moon.

Men say he sits there awaiting the Last Judgment. The Polish people declare that on clear nights they can see him perched on the moon, reciting prayers so as at last to obtain forgiveness for his sins.

**Oscar de Haleckhi**

Professor at Warsaw University.
Scholastic Films in Austria.

(From the German)

It would be hopeless to attempt to deal fully in a few lines with the whole question of the scholastic film in Austria. We merely wish to point out that, in the Republic, the scholastic film is no longer a utopian vision, but an accomplished fact.

Scholastic cinematography was started in Austria in 1905. In that year the Vienna institution for popular education, the Wiener Urania, used the cinematograph for the first time in its lectures. This work was developed later by Prof. Arche and by M. Kopetzki, Director of the Communal School, who may be rightly considered as the originators of the teaching film in Austria.

Prof. Arche founded the Kosmos Association, which is still in existence, for the screening of good teaching films; it has its own theatre. This cinema, which at the beginning was of a purely scholastic order, is now, like all the other 200 cinema halls in Vienna, industrialized, with this difference, that, on certain days of the week, it gives shows exclusively for students.

The Kastla Association, founded with the same object by the director Kopetzki, came to an end on the outbreak of war.

Besides these associations, we should mention the Wiener Urania, founded in 1897 on the same lines as the Berlin Urania; it is an association for the public good, which has rendered fine service to the scholastic film and numbers at present over 60,000 members.

Whilst all other associations, apart from the Urania, were but short-lived, the school-masters' organizations have established themselves in a very satisfactory way; after the end of the war the movement for scholastic cinematography was zealously taken up again. In a very short time ten cinemas were opened; to-day there are fourteen scholastic cinemas operating permanently in Vienna, and forty-six throughout the whole of Austria.

The permanent working of scholastic cinemas has imposed on the school masters the difficult task of finding out which films are suitable; the often still more arduous job of procuring them also falls to them.

Later on, further difficulties arose from the fact that the authorities responsible for public order and safety began to stir up over the advent of scholastic cinemas. It therefore became necessary to protect the interests of the patrons of these films, not only against film renting firms, but also in their relations with the authorities. The new-comers were in need of advice, owing to new undertakings following one on the other at fairly frequent intervals. For this reason, school-masters interested in this movement formed, in 1923, the Guild of Photographic and Cinematographic Workers («Film und Bildarbeitsgemeinschaft») of the Viennese schoolmasters. As the name of this organization implies, not only the interests of scholastic cinematography were considered; the Workers' Guild looked after all initiatives...
connected with static pictures also. However, in time it was seen that it was more especially necessary to attend to the progress of scholastic cinematography, as the numbers of scholastic cinemas constantly increased.

The Guild of Photographic and Cinematographic Workers was obliged to set-up a branch the sole object of which was to attend to the needs of scholastic films and cinemas, which it was impossible to include in the Guild programmes.

In order to secure more rapidly the official recognition of the films as a means of education, those interested in scholastic cinematography separated themselves in 1926 from the others and founded the Scholastic Cinematographic League. This, with the participation of the cinema halls of all the public schools and of the *Wiener Urania* and *Weinener Volksbildungswerein*, rapidly became one of the leading organizations for reviving interest in the scholastic film, which had greatly decreased during and after the war.

Unfortunately there are very few really good teaching films; that is to say exclusively adapted to the understanding of children. On account of this deficiency, the Ministry of Instruction applied to the School-masters' Guild of Cinematographic Workers, asking them to draw-up a statement of their requirements. This was completed within two years. At the same time the Ministry had to subsidize the Scholastic Cinematographic League to enable it to produce various experimental films now being shown.

The League scored another success by founding the Cinematographic Seminary, which they were able to do in 1928 thanks to the co-operation of the *Urania* of Vienna.

The first important work of the Cinematographic Seminary, carried out on the request of the Federal Ministry of Instruction (Department of Popular Instruction) which seems to be giving good results, was that of drawing up projects dealing with the normal film requirements of communal and public schools. Another of the Seminary's undertakings is the study of the principles of teaching by the film, including the problems of projection, that is to say theoretic considerations and experimental ideas connected with the concrete task of instruction.

I would wish, finally, to draw attention to the Review «The Image as an Auxiliary to Schools and Popular Instruction». This Review, which is published by the Scholastic Cinematographic League, deals regularly with problems in scholastic cinematography and is widely read. The organization for screening films in the school cinema halls calls for some comment. In these halls various sorts of films are screened. The most important group is that which shows films during lessons. These projections are naturally adapted to the curriculums, and, in order to make this possible, the schools sharing the same cinema halls united to form scholastic cinematographic guilds. These guilds are formed by schools which are not more than twenty minutes' distant from the hall.

The lectures last usually one hour, so that two hours at most are occupied in attending the show.

The Scholastic Cinematographic Guilds occasionally hold meetings at which the programme for the three following months is settled; this is then communicated
to the schools which form the guild. Each school sends at least one master to these meetings. The proposed lectures are critically examined at the meetings in order that they may be classified according to their merits. The lectures which are approved are selected for the following year, better ones are substituted for the less successful.

The children have to make a small contribution (usually 10 groschen) to most of the scholastic cinematographs; those children, however, who have not the means so to do may attend free of charge. Whole classes, accompanied by a master, attend the projections.

The Scholastic Cinematographic League has been able to select from the films presented to it some which are suitable to public and primary schools; this has been done by the Scholastic Seminary with the aid of the *Urania*. The latter, assisted by the Scholastic Cinematographic League, has founded the «Austrian Cinematographic Archive» where all films considered suitable by the Cinematographic Seminary are registered, so that films intended to be screened for schools can be hired at reduced rates from the hiring department of the scholastic Cinematographic League. At the present time, about 50 short-length films are available; also a series of cultural films. Austria entirely lacks those short films which repeat a given movement over and over again; e.g., the movement of a machine or the walk of a camel, etc. Special slides are needed to illustrate such subjects. Scholastic films are remarkably popular in Vienna. During the last school year nearly 100,000 persons attended 400 screenings of films.

This brief account cannot, as we have already remarked, cover all there is to say on the subject; indeed we have been obliged to pass over many important matters. None the less, we hope to have been able to prove that in Austria the scholastic film movement has a splendid future and that many efforts are being made to lead it to victory.

Prof. Eugen Schober.
 Optical demonstration is undoubtedly one of the most effective methods of teaching; it is still more persuasive when an appeal is made simultaneously to eye and ear, and the two impressions merge to form a single combined perception.

Words make a lesser impression than graphic illustration or the representation of real things. Experimental methods are based on this principle; while the new Italian school that has emerged from the recent reform is based on the principle of concrete perception.

Exemplification affords a very considerable impulse to knowledge, feeling, and will, just as language is more effective when it appeals to associative imagination through the medium of parable, simile, and example.

On this account the phono-visual representation of the stage exercises a suggestive influence all the greater on children, who have not yet developed the critical powers that enable us to separate truth from fiction and the concrete from the product of fantasy.

For this reason also the auxiliary paraphernalia of teaching — maps and pictures and other scholastic aids — are so useful; educators claim the help of object lessons; children's literature is constantly increasing, and fables are as popular as ever with the little ones, while the projection of moving pictures is now being requisitioned: the cinema thus becoming a didactic instrument of primary importance. For this reason also the "children's theatre" is now coming back to life as a feature of the school treats that are being organized every year with growing success, from the big towns to the humblest villages.

We must remember that children's games are a universal vent, as well as a food for, their imagination; on the one hand they reveal the tendencies and capacities of the little ones, while, on the other, under proper guidance, they may be a great help in education.

Imitation is one of the main features of children's games. They imitate robbers and policemen; soldiers at their manoeuvres; war, the chase, the adventures of Indians, which they have read of in books or watched on the film; the best-known trades, domestic occupations, and the habits of their parents and teachers.

The cinema is another example of the power of the imagination. And if we wish to accomplish a real work of education, we must take care that this new environment is really a healthy one, that the deeds performed by the heroes of the screen are worthy of imitation, that faults are shown up in a way to be readily recognized and criticized by the onlooker, that the pictures shown give a clear notion of the truth.

Thus, on the one hand, we shall accomplish a moral and mind-developing work of education, and, on the other, arouse the visual intelligence, that must
always precede the motor intelligence, according to the nature of the spectacle displayed to the young audience.

2. IMAGINATION AND EXAMPLE AS IMPULSES TO THE CONDUCT OF THE YOUNG.

Let us take a glance at the theatre of to-day. It undoubtedly exercises great ascendancy over both children and adults.

First of all, we are struck by the change in public taste: musical comedy has a greater vogue than the grand opera of old; variety shows are more popular than the drama, which is passing through a serious crisis. Then again, the cinematograph is playing a very important rôle, having attained to an unparalleled ubiquity, that leaves all other amusements in the shade, with the single exception of sporting events, which are most popular also among children, owing to the competitive spirit and esprit de corps they arouse, kept alive by long drawn-out matches that go on from month to month owing to the system of competitions.

We often meet with children who make a very poor showing in class, but who follow the sporting news with avidity and are familiar with the names of the leading sports' champions, which they bestow on their comrades who belong to their squads. These groups are due to the spirit of association, that develops early in weak children who are not properly protected by their parents or masters, and who therefore club together in self-defence or not unfrequently to coerce their fellows. Thus our children are forming sporting teams which adopt the names of the best known teams, just as, in past times, groups of Italians, Germans, or Frenchmen were formed, whose squabbles, harmless enough in the early stages, often ended in formidable shindies.

So much for the spirit of imitation.

Imagination is a higher gift. It often takes a reconstructive form, utilizing the elements of our experience; more rarely it assumes a creative form, which though based on known elements, forms a new world of its own, bearing the impress of the personality of the individual thinker.

It often happens that what we attribute to imagination in children is in fact merely imitation. And as children are wont to act through imitation, it behoves us to place worthy and useful examples before them.

Thus the stage is most efficacious because it offers example without coercion. The young aspire to the joy of conquest, to assert their own personality; on this account they are disobedient and want to choose their own path.

But the child is not yet able to create his own method of life; his character is not yet formed. He cons the examples that have come his way and imitates those that have most impressed themselves on his mind.

Hence educators should place a variety of the best examples in front of children and not let them know the worst, unless in the light of the suffering caused thereby. The theatre, by re-creating situations, can do this.
3. Children’s Theatres throughout History.

a) Shows attended by children together with their elders.

Among the theatres of the ancients we need only mention the glorious Greek drama, which is to-day quickening to new life, thanks to the efforts of Romagnoli, whose translations are staged year after year in the Syracuse and other ancient Amphitheatres.

The Greek drama had an enormous influence on the Roman theatre, which was lacking in originality. The fact that the Greek tragedies had a great moral purport, albeit through ideas inspired by the heroic, and that the performances were given by day, leads us to presume that children were often present at them. During the Republican age some classics of the *comœdia* flourished in Rome: Plautus, Caecilius Statius, Terence. The Roman people was ever a lover of shows, and flocked in great numbers to the performances of imitations of the Greek plays and the popular *Atellannae*. Later on the indecorous and lascivious *Mimes* began to fill the public theatres.

The Italian theatre first saw the day under the arcades of the Christian temples. From the earliest simple liturgical forms of the second century, we come, in the fourth century, to the celebration of the sacred mysteries, afterwards the *homelies*, which, however, were not attended by catechumens, energumens, those preparing for baptism, penitents, etc.; and we may therefore doubt whether children were allowed to attend regularly.

In later centuries, liturgical practices assumed an increasingly dramatic form, till in the tenth century we have actual sacred dramas that were attended also by children. And they must no doubt have been present in ever growing numbers at the liturgical dramas of later times, in which the profane element became more and more mixed up with the sacred plot, and the Italian language gradually usurped on the classical Latin, which the people were no longer able to understand. Then again, when the *laudi dialogiche* were superseded by real acting in costume by persons of both sexes, the sacred drama, which had now entered into its historic phase, must certainly have attracted the children of the period.

Later on the satirical element entered into the sacred plays, and then the gay laughter of children must surely have resounded to the grotesque posturing of some of the actors who surrounded the saints whose lives were being portrayed.

In the fourteenth century, when the humanistic drama was developing thanks to Petrarch, Pier Paolo Vergerio of Capodistria wrote a comedy for the education of the young, in which he aimed at depicting wealth as the enemy of study, and how the love of gold in servants and unworthy parents urges the young to evil doing. A young university student was the hero of this five-act play. University life is reflected in a number of other humanistic plays of the fifteenth century.
To the fifteenth century belongs also an electoral comedy, depicting the jests and practical jokes played on one another by the students of Padua University. In his book: Storia dei generi letterari in Italia: la Commedia (History of Literary Forms in Italy: the Drama) Ireneo Sanesi recalls a play belonging to the flourishing days of the erudite drama in the sixteenth century: « La Cecca dei Razzi », which, like the other, was, however, addressed rather to youths than to mere children.

But there is no doubt that this type of performance, which was usually given in the houses of the wealthy citizens of the big cities, was not in a general way frequented by the young. Easy-going as the parents were wont to be, children, especially in their earlier years, were handed over to the care of tutors and their lives kept separate and distinct from that of their elders. This, of course, applies to the children of wealthy families.

The poor were not in a position to attend performances of this kind; nor were they much worse off for the privation, since it was the custom to depict men in the light of their basest passions and youth as ever loose and prodigal.

A form of popular drama, however, came into being in the sixteenth century, especially in Venetia, which was very greatly enjoyed by the whole people. Nor must we forget among the dramatic forms that were most in vogue in the Middle Ages, and which must undoubtedly have been one of the great amusements of the children, the performances of strolling players, bards, and clowns, who roamed the streets and entertained the public - consisting mainly of children - with their songs and none too chaste foolery.

The streets were the cradle also of those masques which came to play so important a part in dramatic art, and which were put on the stage by the regular dramatic companies, of which we find traces towards the close of the sixteenth century.

With the birth of the earliest companies, masques came into great vogue; we meet with il povero Pulcinello (Punch), whose origin is still a subject of warm debate among critics. As we are not, however, concerned with criticism here, but solely with the relations between theatre and children, we will leave the critics to dispute over Punch’s birth certificate, and proceed to take a glance at the other masques of the early days: Pantaloon, the Zanni, and Meneghino — the latter owing his name to a printer’s error in a reprint of Plautus, which turned the word Manechmi into Menechino (short for the Italian name Domenico).

b) Performances for Children.

There can not have been many performances intended especially for children, even though the burattini (puppet) theatres set up for children in the days of the Romans beneath the stage of the general performances, soon had to introduce political satire into their performances so as to attract the favour of grown-ups.

The Church, with its pastoral dramas and catechistic dialogues, must have arranged some performances addressed entirely to children, who — so we are told
by the old chronicles — greatly enjoyed watching a certain character who plays an important part in these performances being divested of his horns.

In any case, the presepi, which date as far back as the thirteenth century, remain to this day the delight of children in all Christian countries.

c) Child Actors.

Children have always played an important and welcome part in public performances. For while we may be hyper-critical of grown-up actors and inclined to deride them and hiss them off the stage for their short-comings, a multitude of faults are forgiven the child, and its naïve attitude is always pleasing.

Choruses of children are often to be found in the Greek tragedies of the classical writers, and there were many children among the Roman actors.

In the Italian theatre, and more precisely the liturgical drama, the part of the angels was played by children. We have a good deal of evidence to this effect, even though the actors were all members of the clergy in the earliest times.

There in an inventory dated 1339 among the deeds of the Confraternità dei Disciplinati of Perugia, in which a number of costumes for angels are included.

In the cyclical performances of the fifteenth century we find a number of scenes in which angels play a part. According to Sanesi, scenes from the Old Testament were performed on twenty-four stages erected in the Piazza dei Signori in Florence in 1454 on the occasion of the festival of St. John the Baptist; among others, Lucifer being driven out of Paradise — a scene which must have required the presence of a great number of children.

When the comic element came to play a part in the drama, children often played the comic parts; thus in Castellani's «Prodigal Son» there is a scene of a quarrel between a good and a bad boy.

Boys were also the heroes of more than one play, as in the «Paulus» of P. P. Vergerio, in the university dramas, and the electoral comedies.

Glancing at these productions in chronological order, we find Il Ragazzo («The Boy») by Lodovico Dolce, among the erudite plays of the 16th Century. The plot is distinctly on the obscene side, and the boy who played the leading part was certainly taught a lesson in bad morals, as in so many other plays of the kind. Indeed the theme of this play is to be found in Plautus' Casnia and in Machiavelli's Clizia. Again we find children on the stage in the spiritual dramas of the Cecchi, playing the parts of Angels and of children (1500).

Glancing at the popular drama, in its several stages, we find the plays of Giovanni Giorgio Alione which - according to Sanesi - must have been performed at Asti by a band of young fellows (Abazzia di stolti) similar to those which flourished in France.

On the modern stage, children do not play much of a part in the dramas for the general public. But there is a rich collection of plays written especially for boys and girls, intended mostly for schools and children's institutes.
4. THE «BURATTINI» THEATRES.

a) History.

The *burattini*, or puppet theatre, is the children's theatre *par excellence*.

Historians of the theatre have often disdained to pay any attention to mere marionettes, though, many celebrated men have delighted in their pirouetting and laughed at their jokes, while some distinguished playwrights have written plays for them. And then again, while many have denounced the theatre, with its flesh and bone actors, the marionette theatres have always been viewed with the indulgence that we are wont to accord children, in whose regard criticism is tempered, however biting it may be for their elders.

How far do the *burattini* date back? Their stolid nature has enabled them to resist the insults of time, and however up-to-date they may still be, there is no doubt that their natal day dates back to remote antiquity. One of their first appearances may be traced in an ancient custom recorded by Herodotus of passing round among the guests at a banquet a statuette representing a dead man lying in his coffin. In the tombs of Thebes and Memphis, as indeed in those of later periods of the Roman and proto-Christian epoch, only recently explored, puppets with jointed limbs have been found among the toys there sepulchred. The collections in our museums are there to prove that puppets abounded in Greece; indeed it is said that Archimedes himself was a skilful modeller of such. There is little doubt that Greece had its own little marionette theatres, which were set up in the streets. At Syracuse, in Magna-Grecia, there dwelt a *neurospastema* (a puppet maker) who confessed to Xenophon that he lived by his wits on the fools who, in ever increasing numbers, attended the shows he gave with his dummy men.

Not without reason have I mentioned this puppet maker of Syracuse, for even in our own time Sicily is still the centre of the *burattinai* who are now scattered over the globe.

In Rome the marionettes respected the caste divisions of the people; there were marionettes for the patrician and marionettes for the plebeian. Before they gave their performances on the miniature stages erected at the corners of the public squares, and even for some time after this innovation, strolling players were accustomed to make two *burattini* recite dialogues and sing songs in the streets. The puppets' stage had its stand beside the grand stage in the amphitheatres. Here the puppets performed their pantomime, dances, fantastic shows, parodies and counterfeit dramas, tragedies, satires, etc.

In the Middle Ages it became the custom to perform Mystery Plays, or certain of the parts therein, by puppets. This was more particularly the case when it was sought to impart a realistic aspect to scenes of torture, martyrdom, and beheadings.

On the puppet stages erected in the public squares, it was at first the wont to perform scenes from the Old and New Testament; later on farces were per-
formed; then politico-religious-social satires, parodying the most salient and tragic episodes of public occurrence. Indeed the habit of making use of puppet shows to diffuse a satirised chronicle of the events of the day actually went the length, in later times, of representing the decapitation of Louis XVI at the very moment and in the same square in which the regicide took place! The showman responsible for this grim initiative got Punch to play the part of the unfortunate monarch.

There is, however, a difference between puppets set in motion by poking ones fingers into the sleeves of their clothes and «marionettes» worked by wire-pulling from above. But we are little concerned with the distinction between marionettes and other puppets, since their repertories and characteristics are very much alike.

As for the origin of the name «marionette», a number of dictionaries inform us that this is derived from the name of a French player, «Marion», who introduced these puppets into France. Signor Ferrigni, who writes under the pseudonym of «Yorick», the only complete puppet historian up to the present, disputes this origin, and declares that the name «marionette» is derived from the famous Venetian celebration of the Festa delle Marie. This fête commemorated the rape of twelve girls by pirates, all of whom were captured and put to death later. The girls were represented by mechanical figures.

During the Fête of St. John the Baptist at Florence, in addition to the performances given in the Piazza della Signoria, as above stated, the public were given puppet shows performed by mechanical dolls mounted on big cars that toured the city. It is also said that the gardens of Florence, like the theatre of the Palazzo Vecchio, gave hospitality to puppet companies.

Later on, the cleverer burattinai improvised performances after the manner of actors, and thus the puppet dramas arose: Harlequin (Arlecchino), Trappolino, and Punch (Pulcinella), whom many believe to be descended from Roman or Greek puppet ancestors.

In the seventeenth century children used to amuse themselves in the public places watching puppet shows given by very clever artists, such as Massimo Romanini and Bartolomeo Neri.

And thus we come on to the time of Goldoni, whose childhood was delighted by the performances of puppets made by his father. It may well be that his great love of the theatre was partly due to the shows that so delighted his early years, just as the actor Yambo tells us of a puppet that has its post always at the head of his bed, placed there by his renowned father, Ermete Novelli, that fervent lover of the stage, who imparted a like love to the son who now delights the children of Italy with his famous marionettes.

From the time of Goldoni onward, puppet theatres have sprung up all over Italy, and some of those in the big cities have attained considerable fame. In Rome it was allowed to keep these theatres open even during Lent, while living actors had to hold their peace.

The shows were given in the evening, even starting as late as ten p.m., that is to say at a later hour than the grown-up theatres ever started their performances.
The masques, of whom we have already spoken, had their native countries and a whole history of their own. *Pulcinella* is Neapolitan; *Gerolamo* is Turinese and Milanese; *Gianduia* belongs to Turin, but his people came from Cagianetto d’Asti in Monferrato; *Meneghino*, too, is Milanese; *Stenterello* Florentine; *Brighella* and *Arlecchina* (Harlequin) Venetian, Dr. *Balanzone* and *Fagiolino* are Bolognese; *Sandrone* is a native of Modena, *Rogantino* is Roman. And what hordes of masques there must be, considering that the leading *burattinai* dispose of as many as one hundred actors! And the stars, of course, have a number of under-studies and doubles.

b) Repertory.

We have already said above that the earliest puppet performances represented Bible stories, the Miracles of the Faith, and the lives of the Saints. The *laudi* and the most celebrated Mysteries, such as the life of Jesus, the Prodigal Son, and the Magdalen, were adapted to the puppet stage. At a later date, after the Goldonian reform, the *burattini* inherited the whole repertory of the stage.

To give some notion of the diversity of dramas which the puppets gallantly tackled, I will cite some of the leading titles of the plays most in vogue: *The Flouted Lovers; Misunderstood Love; Harlequin, the Make-Believe Prince; The Sleeping Princess in the Wood; The Love-silent Eulalie; Rosalba the Sorceress, and the Slave*.

There used to be an *Accademia dei Ripitti* at Florence, in which improvisation was practised in the puppet plays; these were often based on the fables of Gozzi and other *novellieri*, or on such dramas as: *Genoveffa; Bianca and Fernando; The Count of St. Germano; the Daughter of the Siberian Exiles*. All of these performances comprised burlesque masques bearing the stamp of the popular philosphy of the day.

The events of the time were in fact depicted in the *burattino* theatres by satire and parody, which often invaded the political or historical field, to demolish all the leading lights in these domains.

c) The Puppet Theatre Audiences.

The use made of the puppet theatres shows that the main object of their impresari was ever to amuse the children. Nevertheless, we find numbers of grown-ups among the audiences, drawn there no doubt by the need we all feel of mental relaxation and of diverting our thoughts from daily cares — the need of recovering for a moment the soul of our childhood that lived on illusions. And what more thorough-going illusion can there be than puppet shows, in which wooden dummies represent living persons?

But grown men and women have other needs, very different from those of the child-like soul, that demand satisfaction: a morbid craving for lascivious things; the social passion that seeks what it may devour. Hence the less scrupulous showmen, who gauge the success of their work by the moneys booked and the number of spectators, have been wont, side by side with shows intended especially
for children, to present bawdiness and sarcasm; to invade the social field and depict all that which is most likely to foment popular passions.

Much of the success of the puppet theatres has been due to such means.

Sometimes, more especially with the Romans, children were not only spectators, but they were also the actors who, from behind the scenes or from the sky of the little stage, performed the spoken parts of the *burattini* or marionettes.

Servants, slaves, and gladiators were wont to foregather with the children of ancient Rome in front of the puppets’ miniature stage. Later on, some of the patricians entertained the puppets in their castles, and many celebrated persons did not disdain to assist incognito at their performances.

d) *Moral Characteristics.*

We have already referred to the moral content of the puppet performances. At one time the idea of amusement and material interest prevailed over artistic or educational ones. The showmen of the past were drawn almost all from the people and devoted themselves to their puppets after the manner of tumblers and clowns. The sole object was to make people laugh.

Philosophers and scholars were not interested in the matter. They looked upon the *burattinai* as poor wretches who led a penurious existence—as migratory as strolling acrobats, and like them fated to play to poor little audiences. And yet among them were men of real talent. Such an one was the renowned Campogalliano, who may perhaps have come of some illustrious but decayed family of the Castle of Campogalliano in Reggio Emilia; nearly always on the rocks, and a spendthrift whenever his pocket was not empty, he it was that imparted a quite new character to the *burattino* theatre, creating a number of masques, *Sandrone* among others, this name being a skit on the name of a friend’s father, Sandrino, a typical specimen of the boorish peasant who is not lacking in horse sense.

But what lessons were the people to learn from this celebrated *burattinaio*, who did not scruple to abandon his wife and children after long ill-using and betraying them, who squandered all his money, and was ever ready to pick a quarrel and indulge in a scrap whenever an opportunity arose?

But not all the *burattinai* were of this kidney. I have known men among them who, however modest their pretensions, really had educational interests at heart. And at the present time many real educators have recourse to the medium of the children’s theatre.

5. **The Present Theatre.**

a) *The Cinematograph.*

Let us here take a rapid survey of the entertainments available to children at the present day.

One of the most attractive and entertaining of all is the Cinematograph. Indeed the love of cinema-going often amounts to an absolute passion.
I once knew a child of very weak and emotional temperament who was easily amenable to authority. But he had grown up in a vulgar and corrupt milieu, which allowed him to commit any bad action with impunity and to take the dangerous liberty of absenting himself from his home for days at a time without giving any account of himself. In order to attend the cinema this youngster often committed thefts at home or among his companions, and on several occasions used to resort to the ruse of weeping bitterly outside the entrances to cinemas, informing benevolent persons who enquired into the motive of his grief that it was caused by seeing other children going in to enjoy themselves while he — poor little wretch — was unable to afford it. Some kindly greenhorn usually paid for his ticket.

Such incidents point to the great ascendency exercised by the cinema and suggest how valuable and efficient it might prove, if guided by sound educative principles.

It is my intention to enquire into what children themselves have to say on the cinema. This alone can give the true clue to their habits, the views of their parents and of other persons who have influence over them; they themselves should inform us of their preferences, and from their own word we can deduce what impression the cinema has left on their minds and character. This, however, is all matter for further study.

b) Variety Shows and Circuses.

In spite of restrictive legislation, variety shows, especially matinée performances, attract a number of children. The immoral content of the programmes, pernicious even to adults in the opinion of persons who are by no means prudish, is obviously harmful to the little ones, whose lowest instincts it stirs precociously, while arousing the yet dormant passions in their souls.

There is not much to be said against the circus, if we leave aside the outrage against all aesthetics of bodily contortions of an excessive and agonising kind, the sight of which turns children who have no natural inclination for healthy gymnastics still more resolutely against all physical exercises, while it stirs up a dangerous spirit of emulation in youngsters who have a bent that way.

Clowns, whose name may perhaps be derived from ancient spasmodic contortions caused by magnetism, are not always strictly chaste in their sense of humour, and children are apt to imitate their movements, thus tending to contract bad habits.

c) The Educative Theatre.

Educational theatres for young people are at the present day, as everyone is aware, very often to be found in boarding schools and institutes of a religious character. They command a very rich repertory, part of which is of considerable literary value. The excessive effort to point a moral and adorn the tale by presenting unreal or positively sickly exaggerations of virtuous example, and to
create heroes and heroines altogether too pure and good for human nature's daily food, tends, however, to defeat its own, together with all aesthetic ends, and does not carry conviction with young people of a critical turn of mind.

d) Child Actors.

Some ten years ago a Roman review started a crusade against the unisexual theatre in the interest of child actors. It was asserted that boy actors felt their parts so deeply that it was necessary to introduce the feminine element onto the stage in order to safeguard them against the risk of degeneration, to fulfil and crown in a befitting manner the passions aroused by the drama. Otherwise, far from ennobling the soul, instinct would find a natural vent in social hatred, pride, and ambition.

We may here point out one ill effect that acting so often has on children. The parts they play accustom them to assert themselves and take on an independent attitude, with the result that they often grow restless and recalcitrant to discipline; the applause of the crowd tends to turn their heads.

Stage directors can in part obviate this drawback by not allowing too great a freedom in the rehearsals, distributing the most coveted rôles between the different actors, alternating the unattractive with the attractive, the leading parts with the «walking on» turns, so that all the young actors will be equal in the eyes of the public and not lose the modesty we associate with childhood.

e) Children's Theatres.

At one time it was believed that the day of puppets and marionettes had set for ever. In 1913, indeed, when Vittorio Podrecca opened his «Children's Theatre» in one of the halls of the Palazzo Odescalchi in Rome, many persons smiled incredulously as to the possibilities of success of the enterprise. As a matter of fact, however, the puppets' theatre was never dead, for it still languished in remote villages in the Neapolitan and Emilia provinces.

The Teatro dei Piccoli (Children's Theatre) met with all the welcome of former times, both in Rome and in the other Italian and foreign cities where it sojourned. The repertory of the Teatro dei Piccoli consists of humourous productions of the works of Goldoni and Molière, as well as some comic operas of Donizetti and Rossini. As a further attraction to the young audiences, the children present were invited to write their impressions of the show on a slip of paper and drop it into a box on their way out. I do not know whether this idea of gathering the impressions of the spectators is still being carried out.

This theatre is undoubtedly inspired by admirable artistic taste and it is earnestly to be hoped that its success will never flag.

We must not pass over in silence here the interesting initiative of the Lupi Brothers of Turin, who carry on the Gianduja Theatre of much renown in Piedmontese circles, where they have installed a marionette theatre, of which the celebrated Turinese masque Gianduja is the protagonist.
This theatre has been most successful: besides giving more than one hundred replicas of the same work — a rare occurrence indeed in Italy — it has a very fine repertory, consisting of fantastic tales taken from classical children's literature, full of most effective scenes, rendered yet more attractive by charming musical accompaniments.

I must also recall Yambo's puppets, to which I have already alluded. Comm. Enrico Novelli (Yambo) has a peculiar gift as a whimsical writer for children and as an artist; he arranges his own scenes and creates his own puppets, some of them — that well-known character, Guffettino, for instance — are quite original creations; and he devotes great care to the preparation of his shows, alternating burlesque playlets with performances of the classical opera, the romances of Jules Verne, and the virtuosity of conjurors, dancers, and acrobats. Sometimes Yambo has not succeeded in emending all the defects of the original works in his new editions; but these are trifling faults that can easily be set right, as compared with the excellence and originality of the shows.

The old Emilian burattini have not died out, and they still attract a public, which takes a keen interest in Rizzoli's shows, and has a still livelier memory and admiration for Cuccoli's puppets, who were the finest interpreters of Fagiolino ("Haricot"). Cuccoli according to some, was also the progenitor of this Bolognese masque, who enjoys so great a fame for the comicality of his gestures and attitudes — roguishly logical for all their crudity and lack of decorum — for he always manages, either by cunning or resounding blows, to secure the triumph of justice and the punishment of tyrants and rascals.

During these last years other children's companies have sprung up here and there; but these have all been short-lived, their main object being to "feature" some child prodigy.

The Theatre of Sto — the actor-author Sergio Tofano — is, however, deserving of special mention; he has staged the well-known figures of Signor Bonaventura, Barbariccia, and other personages, whom he presents week by week in the Corriere dei Piccoli (Children's Paper).

The marionettish movements of the actors, the wild and strange adventures they go through — always comical, however far-fetched — never fail to delight the little ones.

The moral content is flimsy, and yet the show is not devoid of educational value.

6. Opinions on the Theatre.

a) Premises.

Many and varied are the opinions expressed on the theatre.

There are those who depict it as an agency of hell on earth, and those who regard it as the fountainhead of the finest teaching. Nor can it be affirmed that such diverse views deal with performances of different kinds or diverse historical epochs; in all times there have been the champions of the theatre and those who have denounced it as anathema.
b) *The Church and theatrical performances.*

The Church has not pronounced itself officially and finally on the theatre. It has on many occasions condemned illicit shows, but it has never placed a ban on all performances; indeed these have been tolerated even within the sacred precincts of the pontifical domain, sometimes in their least chaste renderings; but this is of little account. St. Paul said: If the ministers err, we, who know their error, shall disobey them.

Sacred performances have been given in the temples, and have endured to our own day, continuing to survive in the form of the catechistic dialogues between the indoctrinated and the ignorant still in vogue in Italian country parts, and even in some important centres, particularly in Piedmont; or in the performance of the traditional celebrations of the Mysteries and the Passion, that still take place in South Italy.

Several Popes have pronounced themselves severely on the theatre. Among these we may mention Innocent XII, Clement XI, and Benedict XIV, who, however, was not averse to the use of piquant sayings in his discourses, which he directed against the evil ways that abounded in his native Bologna. Cardinal Lambertini, as everyone knows, is one of the figures of the Roman Pontificate that shines most brightly for rectitude of character.

Certain Councils pronounced themselves unfavourably on the theatre and several Fathers of the Church and Scholastic Philosophers have spoken of it with reproof.

Tertullian suggests that baptism should be refused to those who persist in frequenting the theatres; in his Confessions, St. Augustine mentions the theatre as one of the causes of his youthful depravity. Among others who have denounced theatrical performances, we may mention St. John Chrysostom, St. Basil, St. Ambrose, Clement the Alexandrine, Lactantius, The Council of Arles, the Spanish bishops who ordered the leading theatres of the Peninsula to be destroyed, and St. Thomas à Kempis in the Imitation of Christ. And of more recent date the Eagle of Meaux, Bossuet, thundered from the pulpit of Notre Dame against theatrical performances, the dire influence of which he stigmatised also in several of his writings.

Fortunately, however, some authoritative voices have been raised in favour of the theatre. Some persons go so far as to hold that the Book of Job is a theatrical drama. St. Thomas Aquinas declares the comic art to be licit; St. Charles Borromeo, notwithstanding his objections to the theatre, corrected dramatic writings with his own hand; St. Francis of Sales allowed his *Filotea* to figure in ballets and theatres. Among others who speak well of the theatre we may recall Father Francis Mano Lettore, Bishop of Segovia, St. Bonaventure, St. Anthony, and Clement VII, who even allowed the clergy to attend theatres.

Theatrical performances have always been given in Church colleges, and dramatic companies have often been granted hospitality at the seats of the Pontifical Legates. It is superfluous to recall again here the liturgical dramas performed in the churches in the Middle Ages.
The Fathers of the Church have been less severe against the marionettes; indeed some persons claim that their most benevolent pronouncements on the theatre were in fact intended for them.

To glance at other religions, we find that theatrical performances were allowed by the Jews; recently, indeed, the Jewish theatre has met with great favour in Italy and elsewhere; the Buddhist religion, on the contrary, explicitly condemns a specific expression of the theatre, that is to say music, which, according to Buddha, weakens and enervates the soul, while it excites the senses to inebriation and frenzy.

c) Views taken of the Theatre by Philosophers, Educators and Thinkers.

There is no less variety and contradiction of views on this matter among philosophers and educators.

The enemies of the stage lean on Montesquieu, De Mably, D'Alambert, and J. J. Rousseau for the support of their views. They quote the definitions of Voltaire and Racine as a reason for condemning it.

Racine thus speaks of it:

\[
\begin{align*}
& \text{Là de nos passions l'\textit{image} la plus vive} \\
& \text{Frappe, \textit{enlève} les \textit{sens}, tient une âme captive;} \\
& \text{Les jeux des passions saisit le spectateur,} \\
& \text{Il aime, il hait, il craint, et lui même est acteur.} \\
& \text{D'un \textit{héros} soupirant là chacun prend la place,} \\
& \text{Il est dans tous les cœurs que la \textit{scène} se passe (1).}
\end{align*}
\]

The theatre exercises a deplorable influence, say the critics, because the drama is more concerned with the passions than with sentiment.

La Rochefoucauld goes even further: «We leave the theatre» he writes «with our hearts so brimful of all the sweetness of love and our minds so convinced of its innocence, that we are all open to receive its real impressions, or rather to seek occasion to quicken them in the hearts of others, in order that we may taste the same pleasures and sacrifices that we have seen so finely represented on the stage».

But let us take a retrospective glance into antiquity and mark what the ancients had to say of the theatre.

Ovid declared the theatre to be a snare to pious modesty and advised Marcus Aurelius to order the places where performances were given to be destroyed as a step towards the reform of public morals.

Aristotle said that the worst persons are imitated in comedy and the best in tra-

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(1) Behold of our passions the animate scroll (*)
That masts the senses and fetters the soul;
The onlooker's seized by the passions that rage;
He loves, hates, and fears; acts himself on the stage.
Each men of the love-stricken swain plays the part;
The scene is enacted in every heart.

(*) A somewhat free and up-to-date rendering... but the times have changed, while the tyranny of rhyme has not.
Tacitus attributed the Germanic virtues to the absence of theatres in northern parts.

More than one dramatic author and actor has repented in his old age of the bad lessons imparted by his work. We may here recall Racine, Quinault, Le-Mots, Corneille, Grasset, Metastasio and the actor Lodovico Riccoboni.

It will be seen that numbers of persons have shown but scant charity for the theatre. But let us hearken to some more indulgent voices.

Cato the Censor did not disdain to attend theatrical performances. Horace said that the object of the theatre was to chaste vice by ridicule. In later times, Molière claimed the merit of having denounced and cast ridicule on many court vices in his plays, not without effect at court itself. The Encyclopaedists also entered the lists in defence of the theatre: notable among them are Cav. Maffei, Ringhieri and Count Diego Rubin.

The recent wide diffusion of the drama in juvenile circles leads us to suppose that modern critics of education are more favourable towards it.

d) Closing Considerations.

During the war permission was given for variety shows to be performed at the frontiers where the belligerent armies were stationed. At that time, however, a number of instructive films were distributed, which, by the illustration of acts of heroism and methods of warfare, did an important work of patriotic education.

In any case there can be no doubt that the theatre, when guided by sound educative principles, offers immense advantages. There is no exaggeration in claiming that it can do yeoman service in the domains of history, geography, physical and natural sciences, technology, hygiene, literature and art. Charitable sentiments such as pity, generosity, and gratitude, can be magnified by it; moral sentiments, such as the hatred of evil and the admiration of virtue; ideals, such as the love of religion, country, and learning. Will power may be affected by the influence of the theatre in training character, by showing the greatness of renunciation and self-sacrifice, the necessity of action for magnanimous conquest.

Let us devote all our best efforts to the «Children's Theatre» in all its forms. We have here a most efficacious means in which all the factors of human wellbeing are blended: knowledge, enjoyment, and virtue. The whole of our life is nourished by these three elements.

Dr. Leone Cimatti.

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CHILDREN’S THEATRE AND CHILDREN’S FILMS

Notwithstanding considerable discussion and enquiry, opinion is still divided on the question with which Dr. Cimatti deals in the foregoing article: namely the desirability and practical value of a special «children’s theatre». It may be of interest to print here what the Rome Institute communicated officially on this matter to the Child Welfare Committee at a recent meeting in Geneva.

PRELIMINARY REPORT

BY THE INTERNATIONAL EDUCATIONAL CINEMATOGRAPHIC INSTITUTE (ROME) ON THE PRESENT POSITION OF THE CINEMA CONSIDERED FROM THE STANDPOINT OF ITS RECREATIONAL, INSTRUCTIVE AND EDUCATIONAL VALUE FOR CHILDREN.

The question of producing films for children is closely bound up with that of establishing special cinemas for certain kinds of films.

It must therefore be considered under a two-fold aspect:

1. Is it possible to produce films suited to the peculiar requirements of child psychology and suitable for presentation at public cinemas, so that at certain performances young people may see films appropriate to their age and mentality? This system has drawbacks, owing to the difficulty of giving separate shows and dividing up the audience into two categories: adults and children.

2. Is it possible to have cinemas where only special films would be shown, intended for a particular section of the public?

In either case the various methods and possibilities of production would have to be studied, always bearing in mind that, apart from the actual subject of the film, the method of presentation must depend on how the room is arranged, etc. Two points have to be considered, namely, the choice of subjects suitable to children and the character of the audience, or rather the proportion of attendance by children.

Statistics show that in America, on any day of the week and at any hour of the day, children and young people sometimes constitute as much as 90% of the audience.

The percentage is not as high in Europe, but here again the greater part of the audience consists of children and young people rather than adults, the proportion being about two to one. An enquiry into the matter would be most instructive, especially:

If it could be made in a large number of countries;

If separate statistics could be established for urban and rural cinemas.

The enquiry should also cover the various types of films. It would be bound to encounter practical difficulties, and close co-operation with cinema producers and child welfare organizations and services would be essential.

The usual cinema programme includes, apart from the news of the day, which is really supplementary, the following items:

1. A drama, representing scenes out of real life, based on fact or the outcome of the author’s imagination;
2. Historical, political, or religious subjects in dramatic form;
3. Historical, political or religious subjects in non-dramatic form;
4. Journeys, adventures or police cases in dramatic form;
5. Journeys or adventures in non-dramatic form.

These are the types generally shown. Films of the second, third and fifth kinds cannot be said to have a pernicious effect on children's minds, since the purely religious or political features are always, or practically always, scrutinized by the official or unofficial cinema censorship. The other kinds, however, are apt to contain dangerous passages, and with a few exceptions should be prohibited for children.

From an enquiry, the findings of which were published in the Revue Internationale de l'Enfance for October 1929, children do not seem to care so much for the special films produced for them, which are generally based on a purely hypothetical and erroneous idea of their intellectual capacity and mentality.

They prefer adventures (journeys, exploration, deeds of daring), films which depict life as full of effort, novelty, and danger, and form a valuable adjunct in character training.

The investigators found to their amazement that children generally prefer adult cinemas, but there is no reason why they should have been so surprised; a film suited to children can only be produced by a psychologist, an artist and a producer working together. The psychologist should find out the child's real (not theoretical) tastes, which vary according to country, age, social environment and habits. The artist will realize that no audience has a keener sense of beauty than an audience of children and will harmonize the ideas of the psychologist, while the third will add his technical knowledge to the ideas of the other two.

All this, however, leads to no definite solution of what is meant by «recreational films» suited to children and calculated to amuse then, while supplying the intellectual stimulus and moral incentive that they require. Some attempt must therefore be made to arrive at a specific definition for each particular case:

Worn-out conceptions of life cannot be held to fulfil the required conditions; with certain reservations, children's films should show life as it is, and the disparity in type between juvenile and adult films should not be so marked that the child immediately perceives the difference between what is intended for juvenile and adult consumption.

The Institute has gone thoroughly into the experiments actually carried out or instituted in a number of countries (Great Britain, France, Germany, Spain, United States, Italy, etc.); the results were quite simple and, it must be admitted, not encouraging: special children's films, whether shown at special cinemas or at the ordinary public cinemas, at the usual hours or at special hours, proved a complete failure; the attendance was small and the audience did not show the slightest interest. The principal reasons for this are as follows:

1. Once the educational factor looms too large, the children become bored. The cinema is still regarded as a place of recreation and amusement, sometimes offering highly dramatic entertainment. A child that is used to ordinary cinema shows will have nothing to do with special children's performances;
2. One half of the audience consists of children in charge of adults, but unfortunately parental responsibility has not yet woken up to the meaning of the cinema and its possible dangers, and parents and adults in general do not care about children's films and will not take children to the special cinemas.

One vital necessity emerges from these enquiries: there must be a gradual raising of the standard of cinema performances, so that there shall ultimately be no need to worry about their perversive effect, and films suitable for children and young people must be produced and shown more frequently than now.

The following, however, may already be regarded as satisfactory from this standpoint:

a) Films artistically representing historical, political, or religious events, whether dramatised or not, adapted to the tastes and intelligence of children and young people;

b) Adventures and journeys, and generally speaking individual or collective examples of courage or patriotism, as typifying social ideals;

c) Informative films depicting episodes and scenes of real life;

d) Films of plays fit for children to see and fit for children to act in, if the part is really a suitable one.

In such cases the child will himself become a « moral factor » in the film, and the scenario calls for very careful treatment if it is to include child actors. The film will probably attract adults as well as children, as has happened in the past, in the case of magnificently produced films, with children in the chief parts. Some of these have proved a huge success, showing that there is a real demand for wholesome films interpreted by children.

e) There is lastly the classical type based on stories and fables, which require to be adapted to suit modern tastes. Purely fantastic films, animated figures and drawings may be amusing for a time, but they soon become wearisome and unsatisfactory, as children detect the contrast between life as they know it and life as it appears on the screen.

Dreams can be made realistic, provided that the contrast with real life is not too glaring. Imagination and fancy, if not too remote from reality, offer magnificent possibilities.

These then are the types of films, of varying recreational value, but all suited to children and young people, that are wanted for youthful audiences; on the other hand films unsuited to children's tastes and mentality may have a perversive influence, or at all events show life in its less desirable aspects.

In addition to this problem — the type of film best suited to children — the following two questions call for consideration:

What can be done to encourage the production of such films?

What can be done to promote their exchange and exhibition?

The first question is one for the producer. These special films, as already stated, call for co-operation between the psychologist, the artist and the producer; the first two submit their analytical and intellectual contribution, but the real work, the production proper, is a business matter and the man who finances the scheme must be the one to estimate the chances of success.

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What the cinema industry is now producing for children is poor in quality and insignificant in quantity — for the simple reason that producers always prefer to work on less specialised and more remunerative lines.

There thus exists a very close connection between the two problems: improved standards and choice in production and increased production. The various educational organs, associations and institutions, and child welfare associations, acting in conjunction with artistic and intellectual circles, might lend their support to the cinema industry, encourage the production of scenarios and come to the help of authors and producers with suggestions and practical assistance, in the interests of their common objective.

It might be well for this purpose to set up bodies which would centralize the work and, acting on suggestions from the Rome Institute, supervise and coordinate the different experiments made in the cinema industry.

Production would be stimulated if there could be some system of fiscal exemption for films held to be suited to juvenile audiences. The Rome Institute has already submitted to the League of Nations a draft convention for consideration by all the Member States, according fiscal exemption in the case of educational films.

Recreational films for children, whether in dramatic or other form, are undoubtedly of the highest educational value. All those who have anything to do with children, professionally or otherwise, and are interested in their upbringing and education, are unanimous in their view that amusement and recreation must be regarded as a part of education.

One other factor might persuade producers to increase their output, namely an assured market, on the strength of Government support and the backing of the various bodies concerned — whether the solution be in the form of special theatres for children or of special regulations for showing juvenile films at ordinary cinemas (special hours, special performances, special conditions prohibiting or restricting admittance). It would of course be possible for the Government or any of the various government or independent child welfare bodies to form film libraries, on co-operative or other lines, which would have supervisory powers and be responsible for financial arrangements with producers; these libraries could guarantee orders or contracts for production and thus do an immense amount to increase output.

Producers could even find a further market for their goods, since recreational films, of an instructive and dramatic type, could very well be shown in schools at the usual scholars' performances.

Educational films, it is agreed, require to be supplemented by others of a more recreational character. Once producers realize that, apart from their regular output, there are vast economic possibilities in the proposed institution of film libraries and the inclusion of films in school performances, this will give them a fresh impetus. Closely bound up with this point is the problem of distribution, for which the solution would appear to be film libraries, and centres to collect and catalogue the best films; they would come under the Departments of Education or Child Welfare, and would supply films to anyone, even to individuals, desirous of availing themselves of these particular intellectual and educational facilities.
Distribution could be carried on on national lines through the specialist associations and bodies, and international associations or bodies might also assist and take a leading part in the movement. A particular film would not of course be understood equally well all over the world, and the degree of appreciation must vary with intellectual and national standards and according to the «atmosphere», which differs between one country and another and often between one district and another.

Certain spiritual and intellectual factors, however, are common to all countries alike, and never change: this applies particularly to everything that concerns children, and with minor variations, young people the world over have the same way of thinking and living and the same conception of existence.

An international organ or series of organs linked up with one another might arrange for a very useful system of exchanges between the different countries and child welfare organizations.

The work might be entrusted to the Child Welfare Committee, acting in conjunction and in agreement with the Rome Institute.

March 17th, 1930.
THE TASK OF THE CULTURAL FILM IN GERMANY

Side by side with the production for schools and universities of the scholastic film proper, for actual teaching, the Cultural Section of the «Ufa» has been steadily devoting its attention from year to year to films of general culture, and has created a new type of film of a kind to enlarge the mental outlook of the masses who look to the cinematograph as a pleasant means of relaxation after their day's toil.

The general public are apt to fight shy of the best and most important cultural films, which present their lessons in a pedantic and unappetising form, just as a sick man is loth to swallow nauseating drugs for the good of his health, and will only consent to do so after they have been rendered palatable by the apothecary's art.

Hence it is essential to clothe the didactic message of films in aesthetic and spectacular vesture, accompanied by titles and captions which not only rouse the dormant understanding of indifferent onlookers, but actively stir and arrest their attention.

This has given rise to the so-called «success-guaranteed cultural-films» of which the Ufa Company has released nearly 250 during the last three years. These have been so successful that, even in the most exigent of all cinema countries, the United States — where hitherto the public and cinema impresarios were either unacquainted with cultural films or refused to have anything to do with them — this type of picture, known locally as «Ufa Oddities», has proved extremely popular and achieved considerable fame.

It is obvious that the production of films of this description could not be an altogether clear-sailing business. Experiments date back as far as the Cultural Section itself does, and many unavailing efforts were made before the right way was discovered. At first it was thought that the films ought to be explained to the audience by scientist lecturers, a suggestion well accepted by both press and public. But the plan came to nothing owing to the difficulty of securing able speakers for the numerous halls throughout the Reich where it was necessary to exhibit the films if they were to be a paying concern.

To get over this impasse, an attempt was made to cut up the lecturers' addresses into descriptive titles, to be distributed throughout the film; but the words, bereft of the living presence, struck one as pedantic and sterile.

Now, at last, the talking film has come to the rescue and has made it possible to reproduce the accents of the most celebrated and gifted lecturers in all branches of science, further vivified by the living semblance of the speaker, who can be seen and heard at once in all corners of the globe where the film itself is shown.

The first of these Ufa films «Glass Wonder Animals» (Glaserne Wundertiere) caused quite a sensation. Although this was the first sound film of the Ufa Company
made by an experimental apparatus, and was merely tentative from the technical standpoint, it earnt golden opinions as a film-type in a public referendum by direct vote.

About 95 per cent of the spectators pronounced themselves distinctly in its favour. This encouraged us to pursue the effort in the hope that by this means scientists of international repute might in the future be able to address thousands and thousands of persons, illustrate their studies by vivid images, and personally influence men the world over for the common weal.

The second alternative that suggested itself was to popularize the scientific matter dealt with by adopting a special system of captions. In the days of the mute film this seemed the only course open.

At first it seemed impossible to hit on the right style. While some persons were in favour of humourous titles, others denounced them as incongruous and flippant; some regarded the descriptions as over pedantic, others as over frivolous; at one moment they were objected to as being too simple, at another as too cold and lifeless; then again as being «vapid subtleties».

The difficulty was solved by couching the explanatory titles in an appropriate form. Firstly, the all-importance of selecting the best points for the captions was realized, particularly in the case of biological films made by real scientific authorities, who neither in this regard nor in their choice of subject need have recourse to subtleties of style in order to influence the public.

These titles, gone over again and again by different persons, do not travesty scientific truth, while at the same time avoiding anything stilted; they thus provide an aesthetically pleasing comment on the show and, by revealing the essential points of the film, arouse lively interest and the sense of enjoyment which the unexpected revelation of the unknown and the mysterious always produces.

This pleasure-giving quality is the secret of the success of all such cultural films. The cultural film must satisfy the thirst for knowledge in the same way that the dramatic film satisfies the emotional need of tears or of laughter.

A third method that has been successfully applied is that of weaving the scientific material round a plot. This does not always succeed; but certain subjects lend themselves to such treatment, and one of the most successful Ufa films was «False Modesty» which, in four dramatic scenes, dealt with the dangers of venereal disease and how to combat them.

It is surprising how much real knowledge films of this type can impart, notwithstanding the dramatic feature, and how readily and willingly the public learn from them. The good they have done is truly encouraging. Many doctors, in fact, acknowledge that numbers of patients, who had long neglected the disease, were induced by watching the pictures to undergo medical treatment, or resume it when carelessly dropped, and thus get completely cured. A rigidly «instructional» film would never have achieved this.

The so-called «supplementary cinema programmes», that is to say one-act cultural films of not more than 300 metres in length, did not meet with success, despite repeated experiments with the mute film. Photographing the actors and dramatic
scenes consumed so much of the ribbon that little or nothing was left for the essential scientific content.

But here again the sound-film has come to the rescue, and rendered it possible to utilize the manifold possibilities offered by dramatic form in the short-reel cultural film. All waste of time is avoided by the fact that the actors can speak their parts as soon as they appear on the screen and thus convey the message of the drama to the audience. There will shortly be shown a sound version of the film Der Raritatenladen (« The Curiosity Shop »), taken by an Ufa expedition under the direction of Dr. Ulrich K. T. Schulz to the Institute of Marine Biology at Messina. The « Glass Wonder Animals » pictures were shot during this same expedition.

To combine the pleasing with the useful is no doubt the surest way to induce the public to swallow the bitter pills of science. And thus we may hope to solve one of the most important and most arduous problems of the Cinematograph — after that of teaching the young — that is to say the skilful and efficacious diffusion of scientific knowledge for the instruction and improvement of mankind.

Dr. Nicolas Kaufmann
Chief of the Cultural Film Department of the Ufa Co.
EDUCATIONAL FILM GLEANINGS

(From the Italian)

With the exception of Russia, where an almost prohibitive censorship, based on political motives, results in conferring a virtual monopoly on the national film — aesthetically a very fine one, to be sure — it seems that in all European countries the cinematograph is more or less at the mercy of American exports. I recall having read that not less than 80 per cent of the films that go the rounds of the cinemas of the European Continent are of transatlantic origin. I cannot say whether this figure is correct, nor am I aware whether there exists any international statistical office in a position to give reliable information on the point. But for the moment this is of little concern. Any person who is wont to sojourn in the big cities of the Continent has ample opportunity to note for himself how greatly the exhibition of American films exceeds numerically that of any national films anywhere.

Now, always abstracting from financial considerations, which I do not feel competent to go into, two things may be asserted in favour of American production. One is its intrinsic aesthetic and technical merits. On board the liner that carried me to New York, and again in the various « movies » of New York and Chicago, I have watched films published by the Paramount and other American companies, that overflow with natural beauties, not infrequently woven around plots that were interesting and in perfectly good taste. The other factor that renders the hegemony of the American film less irksome is the fact that the managements of a considerable part of the American companies take particular care to abstain from impressing too distinctively an « American » trade-mark on their films. They have no great difficulty in avoiding this for two reasons: firstly because several American firms and a great number of artistic managements are in quite other than exclusively American hands. The Jewish element — so different from the American, and in fact nearer akin to European mentality, perhaps because the commercial and artistic influence of the Jews is so strong here — often prevails. Secondly, we must remember that the American actors selected by the managements are ethnographically a very mixed grill — Anglo-Saxons, Jews, Spaniards, Italians, Scandinavians, Negroes, Mongolians; so much so that it almost looks as if the American managements sometimes took a pride in putting the whole human zoological gardens on the screen. This is no very exacting task, given the composite elements that form the American nation; and given also the power of the dollar, which readily lures all the leading European stars to the United States.

Thus it happens that the European public, when confronted by this ethnographic phantasmagoria from overseas, is not so greatly struck by the foreign quality of the show; is, indeed, almost willing to accept it as a home production. The American exporter in fact aims at this; for it is the safest way to make sure of his vast overseas clientèle.
But, for all this, there is no doubt that there has been something of a reaction in Europe against the American film, which has become more marked since the advent of the talking film, owing to the obvious drawback of the foreign language. On one hand, there was some touchiness in certain nationalistic milieux; on the other, a natural anxiety lest the triumph of the American film should prove a serious handicap to European production, which there was every reason to hope might vie with that from overseas, both in technique and artistic merit.

A few personal impressions may not be out of place here. Before America had asserted her absolute preponderance, I remember, during the war, watching a magnificent French patriotic film, the leading rôle in which was played by no lesser a star than Sarah Bernhardt. At the close of the war, the Germans produced an equally patriotic film, of the grand historical kind, entitled: *Fredericus Rex*. As for Italian production, we may recall the film *Duce*, produced by the Luce Co., which we happened to see in Bâle: this was a very fine production, and the work not of actors, but of the men themselves who guide the destinies of Italy. All three films were unquestionably educational.

It is certainly desirable to avoid scrupulously, in all national cinemas, any approach to depicting other countries as wilfully aggressive or morally inferior, or, still worse, in a ridiculous light, in a manner to hold them up to the hatred or contempt of the audience. The cinematograph is a most powerful weapon in the hands of those wielding it and is capable of doing great damage to international relations by aggravating preconceptions and prejudices that are already too prevalent in the judgment of one people by another. Two rules must be observed, so as to safeguard against this danger. One is a matter of logic. I take the liberty to quote here an example mentioned by Ernst Seeger in the first issue of this Review in an article on State control of the film in Germany. It appears that the German Government takes the most careful measures to prevent anything that may wound the feelings of other nations. In view of this fact, the queer exception made with respect to the judicial and police administration is all the more striking. If it is true, as Seeger asserts, that a ban is placed on all shows in which the behaviour of the German police is depicted as foolish or bungling in their prosecution of crime, or in which they appear careless or as outwitted by the criminal, one hardly sees why the same rule should not be applied to the police of other countries. There is certainly nothing to criticise in the statement of the German censorship that any misrepresentation of «the doings of foreign police forces does not compromise public safety in Germany»; but I doubt whether the habit of representing the police of New York, Paris, Rome, etc., as inferior to the German can be regarded as sound cinematographic policy of a kind to soothe national pride and promote international understanding.

On the other hand, the policy of avoiding everything liable to offend national sentiment or the feelings of neighbouring peoples, however commendable in itself, carries with it the risk — and a very serious one — of driving its followers to take refuge in the unreal, the false, and the absurd. Let me explain myself better. No one who follows cinematographic production with attention can have failed to note that the citizens of the film world are often compelled to act a preposterous
part — wholly alien to good sense and good taste, to say the least of it — in their
endeavour to keep clear of everybody's susceptibilities and not to tread on anybody's
corns. This is certainly a weakness and contrary to the tenets of all real education.

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Let me repeat that one of the highest aims of the cinegraphic art is and must
be faithfulness to life.

This primary duty is, unfortunately, very little heeded at the present time.
We need only observe one point: the rhythm of movement. How unreal the screen
crowds look! No one moves naturally. We are told that film actresses are chosen
largely on account of the gracefulness and elegance of their gait. But this is not
very apparent on the screen. All the film characters appear to be eternally on the
run, dashing forward, and plunging ahead in a state of extreme agitation. The
whole world seems to be in a perpetual panic. It may be that this travesty of real
life is in fact due to the man at the wheel who turns the film too rapidly. It is
also quite possible that in his turn the «man at the wheel» does this because
the cinema impresario, in his anxiety to fill the coffers, gives orders to work in as many
shows as possible during the day. In any case, it's an execrable system. It is so,
first and foremost, because, as we have said above, it falsifies reality. In the second
place, it is anti-hygienic. Nothing is more tiring to the eye-sight than to watch
this perpetual hurry and skurry and the over-rapid succession of scenes now in
vogue; so much so that persons with poor sight very wisely abstain from exposing
themselves to the fatigue of the cinema. To the above should be added a third rea-
son, that bears on aesthetics and culture: the onlooker is unable to concentrate his
mind on the details of this wild gallop, the feverish rhythm of which tends to su-
perficialise his impressions.

It is earnestly to be hoped that a remedy will be found for the defects —
here cursorily indicated — of the «movie» of to-day, because they handicap its
educational possibilities, and because the cinematograph, in other respects, offers
so many advantages to mankind.

Robert Michels.
PEDAGOGY, EDUCATION, AND POETRY IN THE CINEMA.

(From the Spanish)

TEACHING.

It has been said and repeated from time immemorial that in teaching example is better than precept.

There is nothing like seeing a thing done to learn how to do it oneself.

The cinema shows us things, and shows us how they are done. It makes us see and shows us how to make. By doing so it establishes its claim as a teacher.

We must, however, free ourselves from a grossly mistaken idea that is very widespread at the present time. By all means we must facilitate the progress of science and teach the young in an agreeable and entertaining way; get rid of the aphorism that learning is suffering (la letra con sagre entra). There is always a middle path between two extremes. It is no less absurd to endeavour to teach by punishment than by tomfoolery.

Study, like all other forms of work, is a painstaking business. But we can and must endeavour to stimulate the understanding and interest the will, even though the attempt to eliminate all effort on the part of the pupil is a fundamental error.

Study is a form of intellectual gymnastics. Now, no form of gymnastics that aims at exercising the muscles and nerves, can set them in action without fatiguing them to some extent.

The methodology of eliminating effort, so much in vogue in some countries, where mechanical principles and systems of standardization are the order of the day, ends by destroying instruction.

The pupil is absorbed by the method. Nothing remains but the method, the apparatus; all intellectual effort being reduced to the minimum.

The pupil sees things done, but does not learn to do them himself. We have thus created a spectacular form of science that makes much the same kind of appeal to children’s intelligence as a display of fireworks. This is due to the fact that the mind has not been at work at all; it has remained completely inactive.

The cinema teacher is apt to fall into a like error.

How many children come away from watching scientific films without having learnt anything of scientific principles! We must avoid mechanizing intelligence and turning the child into a mere screen.

On the other hand the method itself, however pleasant it may be, is not devoid of risk. All pupils have their own particular psychic and nervous faculties, and the tension to which their eyesight is subjected may end by exhausting it.

Learning is suffering — or in the words of the Spanish adage « letters draw blood » according to the rigid and cruel aphorism of past times. But we must now make quite sure that the endless watching of cinematographic films shall not constitute a new form of torture.
Cases of hallucination and somnambulism among children, caused by cinematographic shows, prove the possibility of this new form of injury.

It is, moreover, a well-known fact that the cinema can have a very dangerous effect on neuropathic subjects or the children of neuropathies.

**Education.**

Many persons make a confusion between teaching and education. To watch a picture of the dangers arising from the neglect of hygiene is a vivid and compelling spectacle. It is not, however, properly speaking, instruction in hygiene, but a practical lesson in moral principles.

It may be a very striking lesson to see a person die as the result of having neglected the elementary rules of hygiene, but it is not a strictly scientific one.

It is a lesson on effects; but it does not do away with the necessity of mental effort in studying and learning the scientific why and wherefore of the phenomenon.

This is an example of the enormous educative influence that the cinema may exercise, but not of its instructional powers.

In my opinion, one of the most urgent and most serious problems for the International Educational Cinematographic Institute to tackle is that of obviating the bad education which the cinema is capable of imparting.

Childhood claims the most earnest consideration.

The life of our time is distinguished by a certain form of refined material civilization, but childhood is almost a thing of the past. Where are we to look for the innocent young lives, the guileless young souls unaquainted with the language of corruption and indifferent to the vexing cares of the world?

It is a crime of lèse humanité to educate badly the soul of a child.

The visual image of the cinema reacts very keenly on sensibility and, through it, on the conscience and judgment of the spectator.

By the very fact that it «represents» life, the cinema presents either a moral or immoral conception of it. The author of such representations need not «reason» to impose his views without any reasonable arguments. A little tale that proves nothing may influence the outlook on life of the young or the untutored mind more than any solid reasoning could do.

By sexual education or mis-education, the cinema offers publicly an object lesson that over-excites the imagination and stirs unhealthy curiosity in children.

Not even the most strenuous Catholic organizations demand the creation of «moralizing films» that are out of place and out of keeping with the time. But we do wish that all cinematographic shows might offer really healthy amusement and healthy emotion and that they should respect Christian morals — the foundation of all real civilization and solid culture.

**Poetry.**

The mission of the kinematograph, as its very name denotes, is to depict life in movement. But it is not sufficient to represent nature in its objective aspect, as a mere photographic impression.
The cinema, like painting or music, must be treated as an art. A painter may depict a landscape faithfully to nature, but it should always be informed by his own artistic conception of the subject.

It is the same with the cinematograph; it must give us a subjective interpretation of the scene it renders. For this reason alone the film author should be a real artist. We need poetry in the cinema. Only a true poet can interpret the inner meaning of life; he alone can render it realistically and poetically at once.

The visual image has its artistic value no less than the word. There is such a thing as silent dialogue, intimate and fraught with emotion. The communion between man and nature is concealed in every landscape.

To poetize the film signifies to give it expression and to impart a new musical language to the image. Hence the need of fine and suggestive music in harmony with the cinematographic show.

On the other hand, it is our opinion that the sound film, with its mechanical music synchronized with the image, may certainly be a great technical triumph, but can never be true art or true poetry. The vocal film, indeed, risks giving a new lease of life to those unendurably boring speeches that used to be inserted into the film scenes of the past, and that acted as a damper on any sincere emotions aroused by the film itself. At the present time the "talkie" endeavours to interpret the film in our normal language, thereby destroying the visual and universal language of the cinema.

The film should be harmonized only with pure music—a language as universal as the visual image itself.

Dr. Juan Dominguez Berrueta.
Professor at the National Institute of Instruction of Salamanca.
INAUGURATION OF THE I.E.C.I. LIBRARY AND HALL.

The International Educational Cinemato- 

graphic Institute has inaugurated its grand hall 

equipped as the Institute's library and for the 

projection of educational and artistic films for 

public exhibition and purposes of study.

A valuable collection of books and periodicals 

dealing with the cinematograph all the world 

over, which reach the Institute in ever growing 

numbers, is being built up here. Hitherto it 

has not been possible to centralize these in a 

satisfactory manner for study and reference.

A few figures will afford some idea of the 

work of collection that has been accomplished 

in the course of about eighteen months. The 

Institute receives regularly 644 reviews and ma-

gazines and 98 newspapers — 742 publications 

in all — apart from special numbers, 'cahiers', 

and other journalistic matter of various kinds, 

which bring the number of publications regu-

larly received up to about one thousand month-

ly. There are 254 Reviews of a strictly film 

interest — artistic, technical, educative, etc. The 

others deal with special branches of activity in 

which the Institute is interested: hygiene, la-

bour, agriculture, social welfare and the pre-

vention of accidents, and other problems that 

lend themselves to illustration by film.

These figures, which are merely provisional 

—for the number of the papers and reviews re-

ceived increases steadily from day to day — 

do not include publications of an official cha-

acter, such as those of the League of Nations, 

the I. L. O., the International Committee on 

Intellectual Cooperation, the International 

Institute of Agriculture, and other organiza-

tions of the kind.

The principal countries that contribute the 

periodicals here gathered are: the Argentine 

Republic, Australia, Austria, Brazil, Belgium, 

Bulgaria, Canada, Chile, Columbia, Costa Rica, 

Cuba, Czechoslovakia, Denmark, Dutch 

Indies, Egypt, Equator, Esthonia, Finland, 

France, Germany, Great Britain, Greece, 

Holland, Hungary, India, Italy, Japan, Mexico, 

Norway, Peru, Poland, Portorico, Portugal, 

Roumania, Russia, Salvador, Spain, Sweden, 

Switzerland, United States, Uruguay, and 

Venezuela.

The Library is in course of formation. It 

has up to the present collected a goodly number 

of books, monographs and pamphlets, present-

ted to the Institute. In the near future all 

publishers and authors producing works of 

cinematographic interest will be invited to 

forward copies to the Institute; an index 

catalogue is being prepared for this purpose, 

and the International Review will devote space 

care to the survey of such works.

The Library of the Institute is already in 

possession of over 150 books and pamphlets 

dealing with special aspects of the cinematog-

raph — art, history, and applied technique; 

this does not include over 30 year-books, and 

all the special catalogues of films, etc.

Apart from the above material of strictly 

cinematographic interest, the Library already 
counts over 500 works of diverse kinds, dealing 

with other branches of study, all connected, 

however, with problems of interest to the se-

eral sections of the Institute.

The handsome gift by the Western Electric 

Co. of a complete sound equipment, together 

with a projector courteously presented by the 

Zeiss Ikon firm, are a novelty of the greatest 

importance to the I.E.C.I., and enable us 

now to give the most up-to-date exhibition of 
cultural films. This is a tremendous addition 
to the attractions of the hall.

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On the 12th March, Canon Joseph Reymond, 

Director of the Office Catholique Internatio-
nale du Cinématographe delivered a lecture in 

the Institute Hall on the subject «A new edu-
cator: the Cinemagraph». The purport of this 

lecture was not so much to stress the fact that 

the cinema can be used as a vehicle of education, 

nor yet to show the best way of utilizing it, 
as to demonstrate that, in point of fact, the 

films shown in the public cinemas of our time
are in all cases more or less educative or anti-
educative. One of the principal values of the 
film lies in the fact that it exercises a spon-
taneous influence on the spectator, who gives 
himself up completely to the suggestion of 
the spectacle. In these conditions he is no 
longer on his defence against the influence of 
the screen, which reacts on the sensibilities of 
the audience without their exercising their 
reasoning powers.

The principal consequence of this fact, ac-
cording to the lecturer, is that the cinematog-
raphy deserves much more careful and serious 
consideration than has heretofore been accorded 
it, and that it is absolutely incumbent upon 
all those who by their office or their inclina-
tions are either compelled or desire to influence 
the mind of the public, to have recourse to it.

Canon Reymond’s lecture was followed by 
the official inauguration of the hall on the 29th 
March ultimo, in the presence of H. M. the 
King of Italy, the President of the Institute, 
Signor Rocco, Monsieur Dufour Ferone, Un-
der Secretary General of the League of Na-
tions, who represented the body whence the 
I. E. C. I. derives its raison d’être, and many 
of the leading personalities in the diplomatic 
and educational world in Rome.

President Rocco described the formation of 
the library and dwell on how the hall, thanks 
to the princely gift for the Western Electric and 
Zeiss Ikon Companies, promises to become a 
unique centre for international exhibitions of 
the best films in the fields of intellectual and 
aristic education.

Monsieur Dufour Ferone spoke as follows:

Your Majesty:

It is a great honour and a great pleasure to 
to me to be present on this occasion. I regret that 
the Secretary General of the League of Na-
tions, Sir Eric Drummond, is unable to attend 
in person, in response to the invitation extend-
ed him by the Institute. He has asked me 
to represent him and to convey his warmest 
thanks and the expression of his regret at 
having to declining so welcome an invitation 
owing to the pressure of his duties at the Se-
cretariat. It would have been a great plea-
sure to him to pay another visit to your beau-
tiful Capital and he present on this most auspici-
cious occasion for the International Educational 
Cinematographic Institute.

When less than two years ago the Institute 
was called to life by the munificence of Your 
 Majesty’s Government, there already existed 
in different countries a number of organiza-
tions and institutes interested in the problems 
of the educational film and in its production. 
But it was reserved to this Institute of the 
Educational Cinema to arouse world interest in 
and appreciation of the question, and to create 
an understanding of all that the film can con-
tribute in the domain of education, teaching, 
and general culture, to both the young and their 
elders, to the general public and perhaps also 
to scientists.

It has accomplished this task in a very short 
time, and if the International Educational Ci-
nematographic Institute has already attained 
to a very high position, this is largely due to 
the wise and energetic guidance of the Presi-
dent of its Governing Body, H. E. the Keeper of 
the Seals, Hon. Rocco, and to the indefatigable 
zeal, devotion, and self-sacrifice of its Director, 
Dr. de Feo, who dedicates the whole of his 
exceptional gifts and experience, with almost 
excessive devotion, I may say, to his work.

Thanks to these efforts, the Institute, which 
works under the authority of the League of 
Nations, has by now become an international 
centre for all those who recognize the useful 
and instructive purposes to which the film 
lends itself.

All this is recognized by the members of the 
League of Nations, and more especially by the 
Committee on Intellectual Cooperation, which 
is well represented on the Governing Body of 
this Institute. The work of the Institute is 
followed with keen interest in these circles and 
everyone is anxious to do what he can to 
support it in its labours.

It is an honour to me to be able to say this 
in the presence of Your Majesty, and I wish 
to be allowed to express personally all my best 
wishes for the prosperity and continuous suc-
cess of the Institute, whose work and mission 
recall the adage «res verum gaudium est».

***

The inaugural addresses were followed by 
the projection of a number of sound and vocal 
films, which were greatly appreciated.

H. M. Victor Emmanuel III, who honoured 
the Institute for the second time with his pre-
sence, expressed to President Rocco and to Dr. de
Both flourished, talked HB Motherhood -Q conditions is its problem being and -

Feo his high approval of the work that was being done and his praise for the practical and creative mission that inspired the Institute.

On the 3rd April the eminent French film author and producer, Jean Benoit Lévy, gave a lecture in the Institute Hall on a problem of the greatest social and demographic interest: Motherhood, illustrated by projections from a film of great artistic merit which presents the problem of such great moment to the nations — that of the diminution of births — in a vivid and noble form, and one that cannot fail to carry home its lesson of social propaganda.

In the presence of the French Ambassador and several Ministers, and a number of persons of note in the political and cultural world, M. Benoit Lévy explained the difference between educational and instructional films. Both types of film teach; that is to say, they both contribute elements of knowledge, but while the pure educational film has its own clearly circumscribed field of action, instructional films may bring many valuable lessons home through a series of artistic visions and without giving the public the impression that they are being «talked at».

This type of film accomplishes its educational mission through its appeal to the emotions, its ability to move the feelings of the onlooker and to bring him, through the purely exterior phenomenon of the image projected on the screen, into harmony with the author’s ideas and the central thought behind the film.

«Motherhood» is a film waging one of the worthiest battles of modern life; its aim being to make the public realize the immediacy of a social problem of vital importance to the future of the Nations and the race. This film depicts the contrast between the lives of two families: the voluntarily sterile family that lives its life in a town environment with its petty conventions and its bigger or petty tragedies, and that of a peasant family, with all its native energy and the need to increase and multiply, so essential to its conditions of life. The heroines are two women, one a mother who gathers a flourishing family around her and re-lives her own youth and life in their youth and their cares and joys. The other the woman who has never known the love of children, and who in the end, lest she be destroyed utterly like the sear tree that the farmer fells, devotes herself to helping others, through good works on behalf of motherhood.

The fine Institute Hall offers the I. E. C. I. a new and grand opportunity to acquaint the public with its work and objects, thus forming, around the silent work of its offices, a living centre of culture and propaganda.

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At the close of 1928, Admiral Byrd, the bold flyer over the Polar regions, set out from the United States on board the «City of New York» bound for the South Pole. The expedition consisted of 2 ice-breakers; 3 aeroplanes equipped with sleigh runners; 100 sleighs drawn by 200 dogs; tents, portable huts, medicines and medical equipment, food, and a complete radio station, etc. The entire crew consisted of 500 men, of whom about fifty only formed the main exploring body, the others remaining behind at the base.

The expedition aimed at continuing the series of antarctic explorations which, starting with those of Scott, Shackleton, Wilson, Von Drigalski, Nordeuskojold, Charcot, Cook and Amundsen (1911), had succeeded in revealing a part of the secrets of the Frozen Land and in delimiting many of its bays, coasts, coes and plateaus. But the whole of the mystery had not been laid bare: much yet remained to be done in studying the nature of the soil, wherein precious minerals lay hidden, volcanic activity, physical phenomena, meteorological and atmospheric conditions, to enable us to determine the third and last factor in the atmospheric conditions of the globe; the observation of flora and fauna, and lastly the data requisite for charting a definitive map of the antarctic.

The Byrd expedition, thus powerfully equipped, after some two years sojourn at the South Pole, has fully attained these objects. The first long radiograms which the City of New York broadcast on its return voyage tell us all this. We may very shortly expect to learn in detail the full results of the exploration from Admiral Byrd's report. Meanwhile, in addition to the new lands discovered (Mary Byrd Land, Depôt Mountain, etc.), we are told that the expedition is bringing home a vast mass of va-
uable scientific material, together with samples of the precious minerals of which there are vast deposits in the antarctic: radium, copper, etc.

Now, while the people of the United States are preparing with proper pride to welcome home her sons who have thus opened up new horizons to the civilized world, it is not out of place to recall also the humbler mem-

bers of the expedition who, with no less a spirit of devotion and self-sacri-

fice, and equal courage, faced the same risks and the same sufferings.

That most powerful scientific broadcaster and most faithful of chronic-

cers, the Cinematograph, has been throughout at the service of the expedi-

tion and has recorded every phase of it for all time.

Let us here make honourable mention of the names of the two Para-

mount operators — the pride and the boast of the international motion pic-
ture — Joe Rucker and Willard Vanderveer.

These two strong, silent men, during their rests at «Little America»
(in «Whale Bay» Camp), by themselves and unaided set up a complete develop-

ing and printing studio, which served most admirably to prepare
the elaborate film material that they gradually accumulated, when accompanying all the flights and special sleigh explorations. The vigilant eye of the objective has not missed a single detail of the beauty of the scene, the pluck, the danger, and scientific discovery. No other members of the expedition faced severer fatigues and dangers than those of such «camera work». An eye witness, R. Owen, writing in the *New York Times*, bears witness to the valour and merits of the two operators.

«As I write, the Paramount camera-men are photographing scenes by the light of great search lights. This is no easy job, for in such temperature film easily tears and machines stop working; lubricators freeze, photographic lenses get coated with ice, the loose parts of the camera contract and warp. Again and again the machines have to be thawed, taken to pieces, and reassembled. Then the finely powdered snow starts damage afresh! It penetrates into every cranny; even where water and dust cannot make their way.

«It's enough to drive the poor fellows mad, without mentioning the «burns» on their finger from contact with the metallic pieces of the apparatus.

«Then there is the actual personal risk. The operators have to move about rapidly from one point to another, get over the shifting ice, scramble over obstacles, and jump crevasses.

«Despite all this, Willard Wanderveer and Joe Rucker are forging ahead and getting their job done; they will deliver the goods, and show the whole civilized world what a handful of plucky men can accomplish in the teeth of peril and indescribable discomfort endured month after month.»

The pen is impotent to record the merits of such work and to do it justice.

Only when the celluloid ribbon has revealed all the phases of the expedition shall we get any adequate idea of the value and importance of what it has accomplished and its geographical and scientific discoveries. Then and then only we can appreciate the work of Rucker and Vanderveer. They have fixed the permanent record of one of the finest and biggest works of our time. And the Paramount Company, thanks to the enthusiastic and practical work of its members, and its powerful organization, which will distribute the film throughout the whole world, will have deserved well of all mankind.
President:

Harley L. Clarke

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**HYGIENE AND SOCIAL WELFARE.**

We are not devoting a special section of this issue of the International Review to cinematographic activity in the domain of hygiene ad social welfare. As stated in our January issue the May number will be specially devoted to a survey of this important branch of work.

To avoid repetitions or gaps in the special survey we are preparing, we have therefore deemed it expedient to hold over till our next issue all articles dealing with these two interesting and important fields of cinematographic work as well as the notes and comments on current events and public opinion.

**SOCIAL ASPECTS OF THE CINEMA.**

**CONGRESSES, LECTURES AND COMPETITIONS.** — The influence of the Cinema on the education and minds of the young is, as ever, a topic of absorbing interest to all those who are concerned with the screen. From every quarter of the globe we hear of competitions, lectures, enquiries, and special courses of study, all aiming at the same object — to get at the facts and define the principles upon which educators, manufacturers and authorities can safely rely in framing their plans and policies, either for the purification of the screen — so as to prevent its acting any longer as a corruptor of youth — or to put a stop to an unfair campaign against this singularly expressive and stirring representative art.

The French Academy of Social Education and Welfare in Paris (31 Rue de Bellechasse) has started a competition, which will remain open till the 11th October of this year, for the best answer on the moral, social, and intellectual influences of the cinema. A prize of 5000 francs is offered to the winner (L'Ami du Peuple, Paris).

**CONGRESSES.** — While the cinema is steadily making greater progress throughout the whole world, women are working to bring about systematic collaboration between the industry and existing national and international organizations aiming at the common weal. The five-yearly meeting of the International Council of Women will be held this year in the Hofburg at Vienna, from May 26 to June 7. The best-known names in the ranks of female education and culture have been proposed for the cinema section: Mrs. L. Dreyfus Barney (vice-president of the Peace Commission) as Chairwoman, and Countess Alberto Appony, Princess Alexandrina Canacuzene, Mmes Robbins Gilman (representative of the National Council of Women in the United States), Tilma Hainari, Dr. Elsa Marz (member of the Censorship Council for the cinematograph at Berlin) and Miss C. Cerkez (vice president of the Educational Commission) as Vice-Presidents.

Some of the more notable resolutions to be discussed are of a purely social welfare character, and others follow on the lines of the work that the Rome Institute has been carrying on successfully for some time past.

Among the former is a proposal inviting the various governments to prohibit the projection of detective films, or, in any case films which tend to incite to crime; and another inviting the different Censors' Offices to promote a moral movement throughout the world, through the International Council of Women, to prevent producers...
from presenting to the public any subjects but those which show the best side of life and human nature.

The following two proposals are comprised among the latter:

a) The International Council of Women, in concert with the Central Committee of the great international organizations, expresses the hope that the various governments will consent to the suppression of custom's duties on educational films, in order to facilitate their free circulation in the interests of youth;

b) expresses the hope that, in order to facilitate the international circulation of educational films, an international agreement may be reached to provide for the definition and classification of such films.

These hopes are already on the way to being realized, thanks to the work of the Rome Institute and the League of Nations. In any case, it is extremely interesting and significant that woman, who is the natural guardian of children and youth, should now be making a stand that will serve as support and encouragement to the work we are carrying on.

Meanwhile, across the Atlantic, the Correspondence Division of the South Californian University, at Los Angeles, has been holding a highly original course for its pupils and the radio public on the «Social Aspects of Motion Pictures». This course consisted of 26 lectures on different subjects by Prof. Boris V. Morkovin. The most striking were: «Motion Pictures as a new Synthetic Art», «The Evolution of Motion Pictures as a Social Institution», «Motion Pictures as an Instrument of Communication», «The Rise and Decline of Stars», «The Influence of Motion Pictures on Personality of Children and Adults», «Publicity, Distribution, and Exhibition», «Educational and Commercial Values of Motion Pictures», «Social Pathology and Therapy in connection with Motion Pictures».

The course, which was held during the winter quarter and closed on the 26th March, was carried on under the so-called «triangular system», in vogue at Los Angeles University, that is to say, 12 broadcast lectures of half-an-hour each, dictated to the microphone by Prof. Morkovin, 12 written lessons distributed among the students and listeners, 2 conferences with the instructor, and a supervised final examination. It wound up with an inspection tour of Hollywood studios.

The course presented also a critical analysis and appreciation of the technical and artistic qualities of mute and sound films, including lectures on the new technique of talking pictures, the insertion of the musical element into photoplays, and practical phases such as translating original manuscripts into strips of film.

The social value of the cinema is stated with emphasis by another American educator, R. B. Kleinsmidt: —

«It is a matter of increasing necessity» he declares, «for a modern journalist, teacher, social lecturer, church member, politician, social reformer, enlightened parent and citizen, motion picture director, scenario writer, actor, artist, musician, cameraman, and financier to understand the nature and power of motion pictures upon the minds of billions.»

«Motion pictures have already become an organic part of the social life of the whole world, and their sociological significance is steadily increasing. The time is coming when the study of motion pictures, their appreciation, technique, art, and the social forces underlying their success, will be accepted as a curriculum of high schools and colleges, as well as professional organizations.»

The task of statistical enquiry, so necessary to the elucidation of the problem, goes on side by side with its theoretic study. Not all the enquiries carried on, however, are distinguished by rigorous scientific methods. A questionnaire has, for instance, been circulated in the schools of Norwalk, U. S. A., with the object of eliciting to what extent the film influences the outlook on life of children aged between 10 and 14 years. This questionnaire, which comprised some hundred questions, roused the indignation of the parents, who protested against their children being made to waste their time answering such enquiries as the following: «Do you think it right for a young man to throw over his sweetheart merely because she allows another man to kiss her?» (Exhibitors' Herald World, Chicago - D. 15/167).
The Premier Pictures Corporation has carried out a less futile enquiry of a different tenor (« Inside Facts », Los Angeles, 34/484), in order to find out what kind of films the public like best. 80% of the answers plumped for comic films. The firm has in consequence planned to produce nothing but this most popular type of picture during 1930.

Welfare work. — The task of theoretical enquiry and statistical research is carried on apart from the field of practical activity. The film industry, in so far as it is concerned with moral and educative ends, prefers to leave theory on one side and to take practical steps towards solving its problems by getting together and cataloguing films of genuine cultural and educational value, which are at the same time of a kind to make a ready appeal to young and old. The latest returns show that the Compagnie Universelle Cinématographique (C. U. C.) of Paris, possesses 600 films in its archives touching on the several branches of human activity, and 20,000 cards are kept up to date, recording the best documentary and teaching films so far produced throughout the world. The C.U.C. lets out year by year over one million metres of film to the several schools of France.

Institutions for child welfare through the medium of the cinema, or with its assistance, are multiplying on all hands. The Salvation Army has held a series of cinema shows for charity, the tickets being paid for in kind, by fruit. The films shown all tended to moral propaganda, and the very original cash received for the entrance fees was distributed among the poor of Charlotte, N. C., (« Weekly Film Review, » Atlanta - 15/160). Then again, while on the other side of the Atlantic Congressman Langford, of Georgia, (« The Film Daily », New York - 17/90) has laid a Bill before Congress on the creation of a Department of Public Welfare to deal solely with matters pertaining to the cinema and broadcasting, and especially with the production of films for distribution and showing in schools, churches, etc., in Italy the Sezione Colonie Climatiches (Children’s Holiday Fund) of the Central Welfare Office of the Fascist Federation has had a film exhibited at the Del Verme Theatre in Milan, in the presence of the authorities and a fine re-presentation of the Balilla (young Boy Scouts) and Piccole Italiane (Girl Guides). This film, Per la nuova Italia (« For the New Italy »), illustrates the work done on behalf of children by the Fascist Provincial Federations, through seaside and mountain holiday colonies (L’Ambrosiana Milan - 15/178). The statutes of the Jugoslavian Red Cross have organized two propaganda days, the 16th February, known as « Winter Day », and the 8th June, « Summer Day ». These days are to be devoted to the collection of funds for social welfare work; a series of « family film exhibitions » are to be given on these occasions specially suited for children and young people (Vers la Sante, Paris - 33/128).

This is a way for encouraging social welfare work together with the organization of a charming form of entertainment for the little ones, that aims at bringing before them what is beautiful and pleasant in life and at keeping out of their sight, as far as possible, the ugly and tragic side of the world, that is all too obvious on all hands.

Censorship. — There has been a good deal of talk in England of the desirability of establishing a special « C » class of film for children only, side by side with Class « A » intended for Adults, and Class « U » for universal exhibition. According to the « Manchester Guardian » (18/258), however, the British Board of Film Censors is quite against the idea. On the other hand, the Board has more clearly defined the limitation already established. Thus the West Riding County Council (The « Daily Film Renter », London - 15/175) has decided that no child aged less than five years may be admitted into a cinema hall of any kind unless accompanied by a person aged at least 15; the Municipal Council of Lowestoft has laid down as a condition to the granting of licenses for exhibitions reserved for children that no child aged less than 12 years may be admitted to the gallery seats, unless accompanied by a grown-up person (The « Daily Film Renter », London - 15/175), and, lastly, the Surrey cinemas may not admit children under 15 unaccompanied by adults, unless the films shown are declared by the Censors to be fit for universal exhibition (The « Times », 15/174).
Unfortunately, these measures are not always strictly observed. At a cinema in the vicinity of Rochdale, Lancashire, the police stopped a show that was being given to children, on finding that a film classed ‘A’ was being shown (To-day’s Cinema, London - 15/161) and in Canada ten cinema directors in Montreal were prosecuted in 1929 for infringing the law against the admittance of children under 16 to the cinema.

Preventive Measures. — Preventive measures of several kinds have been adopted against the possible dangers of the cinema, and others are being considered. To paraphrase a classical Latin saying, it is indeed a regrettable fact that accidents and disasters are necessary to force men to arm themselves against them.

Special safety measures to be enforced in cinema shows for children were discussed at the annual Congress of the Manchester and District Branch of the C. E. A. (The Daily Film Renter, London - 15/161). At a recent congress held in London, the National Union of School Teachers passed a resolution urging the Government to pass a law requiring a non-inflammable type of film to be used in all cinema shows intended for children (The Times, 15/176). As a consequence of the appalling Paisley disaster, England is making provision for further safety measures. Among other steps it is proposed that in the case of all shows organized for children, an attendant should be provided for every thirty children (To-day’s Cinema, London - 15/166) or else, according to the proposal of the Taunton authorities, one grown-up person to keep an eye on each group of fifty children (To-day’s Cinema, London - 15/186).

Morality and Immorality. — The most elementary notions of morality are closely associated with the study of sound moral hygiene for the young of a kind to strengthen them physically and spiritually against the dangers of the surrounding world. A sound and healthy training of the child’s mental faculties and moral outlook are the safest guarantee throughout life against weaknesses that are apt to lead to wrongdoing and crime.

Dr. Hausermann, Professor of Pedagogy at the Zürich University, declares that children before the age of 4 or 5 years are very rarely addicted to lying or thieving, and that it is their elders who are apt to misinterpret their words and actions; the little ones being in fact unable yet to distinguish between truth and fiction and between yours and mine. It is therefore essential to distinguish apparent lies and thefts from bona fide ones, if the term may be applied here. Untruths told by children of school age are for the most part dictated by the necessity of the moment; a fib being the only means that suggests itself to escape punishment. If this “necessity”, for one reason or another is prolonged and the untruth takes a hold on the child’s psychology, a permanent habit of lying may be developed; the child shuts himself up in himself to escape interference, pretends to obey, and becomes false and hypocritical (Revue Internationale de l’Enfant, Geneva - January 1930).

In addition to fibbing and rudeness, laziness is another form of the child’s reaction against unsuitable environment. Without being necessarily altogether lazy, he is apt to rebel against some special and uncongenial form of effort demanded of him.

The first five years of a child’s life (Douglas A. Thom: “The Value of Mental Hygiene for Child Welfare” in La Revue Internationale de l’Enfant, Geneva - January 1930) are all-important to his psychical and mental development. During these years, a number of mental and physical defects begin to show themselves and can be easily diagnosed. According to a legislative enactment of the State of Massachusetts, all backward school children from three years of age onward must undergo a psychometrical examination.

Most bad habits and aberrations of character are developed before the age of school attendance; it does not require a specialist to recognize their disastrous effects.

Backward and recalcitrant children when examined psychometrically are generally found to present typical symptoms of a criminal tendency: impulsiveness; defects of inhibition; the inability to resist the temptations of immediate pleasure or to deny themselves anything for a particular end.

The child’s natural plasticity of mind, however, makes it possible to modify these
tendencies, which place him in conflict with his environment.

Sante de Sanctis, in a remarkable article on education and social welfare published in the above mentioned number of the R. I. de l'E., points to work as one of the finest remedies or helps against these defects, and as being of paramount importance in the study of mental hygiene. He maintains that we ought to aim not only at a form of nationalization of children's work, but that work ought to be regarded as a quasi obligation from the sixth year onward, due regard being had for the individual capacities of the child, both physical and mental. This applies not only to children who are in perfect health of body and mind, but also to psychically abnormal children. The latter are for the most part characterised by a « monotonous aptitude », to use De Sanctis's expressive definition; their aptitude for a given kind of work shows itself spontaneously, and can, in any case, be easily ascertained by systematic tests.

Teaching by film, as has been so often pointed out in past numbers of the Review, is of the greatest efficacy in developing the physical and mental powers of children.

This applies to adults no less than to children. Mental hygiene is synonymous with healthy food for the mind, and this can be provided only by the highest forms of education and re-education.

According to « Il Lavoro » of Genoa, the American film is responsible for the fact that the Chinese, notwithstanding the prohibition of the authorities, are adopting the habit of kissing to express their sentimental or amorous feelings.

As for the sexual problem, which lies at the basis of morals and social education, the M. K. B. Filmrundschau of Berlin deplores the fact that the film « Spring Awakening » founded on Wedekind's drama of the same title, has not followed the real trend of the author's thought, and presents a travesty of his work. The film suggests an altogether exaggerated view of the problem of the awakening of sexual instinct in the young, especially in school children, and of sexual education, which teachers and parents are represented either as ignoring or as imparting in a distorted form. The whole question might certainly have been better presented and developed from the educational standpoint.

In a striking article published in the February issue of the Revue Internationale de l'Enfant, M. I. Maus, Director General of the Child Protection Department in Brussels, again raises the question of the influence of the cinema on morals and criminal propensities.

The author starts with a series of premises dealing one by one with the causes of child delinquency and their relative importance. He pronounces himself as follows:

Deficiencies of control or of home education are the primary cause of moral disorder in children. The Belgian Children's Tribunals have ascertained that from 70 to 80 per cent of cases of law-breaking, vagabondage, and bad conduct are attributable to home conditions. In like manner, the Moll and St Servais Observation Institutes have noted that the moral lapses of 79.8 per cent of the boys and 74.6 of the girls are attributable to bad homes. It is a striking fact that 48.1 per cent of the boys' parents and 45.3 per cent of the girls' parents had themselves at some time been sentenced for crimes or misdemeanours.

The social and economic conditions of the working classes under the individualist system, the thirst for amusement among young and old, the decline of respect for superior authority and of religious and moral ideas, are further causes of moral disorder.

The laws in force in most so-called civilized countries are a further contributory factor. Inspired by the individualist ideas of last century, these regard the individual rather than the family as the cell of the social system. The religious and ethical basis of family life is undermined by the easiness of divorce and by the various legal enactments and projects that tend to consider illegitimate births and unions as on the same social level as the legally constituted family.

The Cinema is another cause of moral disorder. The writer states in this regard that an enquiry carried out by 26 magistrates sitting on the Belgian Children's Tribunals have put forward some disquieting facts on the corrupting influence of
the screen. The Moll and St. Servais Observation Institutes have noted, for instance, that the screen accounted for the delinquency of 39.6 per cent of the boys and 77.5 per cent of the girls whom the Courts committed to reformatories.

Dancing clubs are a further cause of trouble. The above mentioned Observation Institutes consider that they contribute to the fall of 80 per cent of the boys and 46 per cent of the girls.

Much blame attaches also to lewd and obscene literature. This is held responsible for 20.4 per cent of delinquency among boys and 16.2 per cent among girls.

And, lastly, physical or mental anomalies and alcoholism among the children’s parents play their part. Psychic disturbances are stated to influence 29.9 per cent of the boys and 33.5 per cent of the girls, while alcoholism reacts on 31.5 per cent of the boys and 61.3 per cent of the girls.

While M. Maus’ careful and detailed statement shows, on the one hand, that the cinema is, or may be regarded as, one of the principal causes of delinquency, on the other hand it brings out two points which have so far received but scant attention from those who impute to the screen the biggest, if not the sole, blame for demoralisation and crime.

Firstly, it is not the cinema that gives the biggest percentages. Secondly, out of the 39.6 per cent of the boys and the 77.5 per cent of the girls who, according to the Moll and St. Servais Institutes come under its bad influence, other factors (home influences, drink, bad literature, dancing clubs) have undoubtedly, according to M. Maus, vied with the cinema in inciting to immorality and crime. Which of these factors played the leading rôle? we may ask. The value of figures may be absolute when these are adduced as the only cause of a given phenomenon; but it is but relative when they indicate merely a contributory cause.

Then again, the Belgian Children's Court statistics are not altogether in agreement with M. Maus’ observations of Belgian children. If the cinema is in fact a new factor in stirring up crime and immorality, it ought logically to contribute to aggravate the figures of statistical returns. On the contrary, however, the population of Belgian prisons on the 31st December 1913 (that is to say at a time when the cinema had not attained to its present phenomenal popularity) numbered 4826 men and 328 women. On the 31st December 1928, when the cinema was in the heyday of its career, Belgian prisons housed 3871 men and 324 women. In like manner, during this same period, the number of the inmates of refuges for beggars and tramps had fallen from 5523 to 1901 men and from 485 to 224 women.

Even assuming that the number of prisoners is only a partial indication of the prevalence of crime and immorality, it is obvious that the cinema cannot have aggravated the crime situation in the locality.

In any case, and apart from the brief comments we have made on M. Maus’ report, the case is at the present time *sub judice* and the latest information gathered by the Rome Institute shows that the question is as ever the subject of very lively debate.

The Portuguese periodical *Invicta Cine* (18/262) states that the importation of scandalous films continues to react very badly on the minds of the young. In an article on the «The Problem of Public Morals and the Cinema», the Paris Cinégraph deals with the unhealthy social influence of certain films, the plots of which are based on homosexuality and prostitution (33/169). A film entitled «Heredita» has been produced in Germany depicting the alcoholic propensities of the son of a degenerate («Variety», New York, 33/124). As a matter of fact, this film, which is founded on the crimes of the Düsseldorf vampire, under the disguise of social propaganda is of a purely sensational, anti-social and anti-moral character, according to the periodical cited. And lastly the French Federation of the Big Family Leagues (*Cinéma Spectacles*, Marseille, 18/257) and the Rev. Clifford Shay, in the Film Daily of New York (15/181), raise their voices in protest against immoral films and schools of pseudo morality.

The latest news shows that the opposite camp, that of the defenders of the cinema, is no less awake and active. Alice Miller Mitchell, writing in the «Billboard» of Cincinnati (15/161), studies the manner of life
of 10,052 Chicago Children, and says that 90.6 per cent of them turn to the cinema rather than to books for amusement, maybe because books are suggestive of school lessons and school routine, and also because it is less of a mental effort to watch a film than to read a book. In an article by Mr. P. Lavis on «Children and the Cinema» published in the «Canadian Digest» of Toronto (15/187), he protests against a law in force in the State of Quebec, excluding all children aged under 16 from attending cinemas unless they are accompanied by adults, even when educational films are being shown, and deplores the fact that in this way a large number of children are cut off from the educative influence of the film. With reference to this same law, the Exhibitors' Herald World of Chicago points out that since it was passed child delinquency has increased 60%. If this statement is correct, the cinema would appear to have acted as a powerful moral influence and a deterrent rather than an incitement to crime.

At the annual congress held at New York of the National Board of Review, Dr. J. Holmes, an eminent student of psychology of Columbia University, declared that as a result of an enquiry he himself had carried out, he has come to the conclusion that it is unfair to accuse the cinema of inciting the young to crime (To-day, New York - 15/172). According to the Daily Film Renter of London the decrease of arrests for drunkenness in Preston, Lancashire — 103 in 1929 as against 446 in 1902 — is attributed to the educative influence of the cinema.

The Providence censors (Daily Review, London - 10/261) declare that in the United States the film has attained to such a high moral level that they did not have to censor a single film during the year 1929. And lastly, commenting on the observation of a Canadian scientist, according to whom the largest number of suicides occur among persons working in offices who are unable to indulge in their favourite hobbies and in healthy exercise, Cecil de Mille declares that the cinema is the best anti-suicide influence, because it offers a number of emotions that are indispensable to the nervous systems of persons who are cut off by their

avocations from the relaxations of modern life. (Il Cinema Italiano, Rome - 34/494).

CHILDREN'S CINEMAS. — The February number of La Revue Internationale de l'Enfant again insists in two interesting notes on the necessity of creating special theatres for children, akin to children's specialized literature.

It recalls that in London the first theatre of this kind was opened in 1927, by Joan Luxton, a young Australian actress. It counts 130 seats and is the smallest of all the theatres licensed by the London County Council. One interesting point about this theatre is that it has philanthropic aims in view and that every evening it offers a certain number of seats at a nominal charge. The theatre affords every comfort and the most up-to-date safety arrangements for children.

Prof. Patty S. Hill expresses the opinion that parents ought not to take their children to the cinema when they are too small, because it is well that in its very earliest years every child should be the author and actor of its own amusements (The Film Daily, New York - 15/188). E. A. Ross, Professor of Sociology at Wisconsin University (Film Daily, New York - 15/184), and Dr. J. L. Elliot (idem, 15/183); the Sociétés Savantes of Paris (which has opened for children under 15 the so-called «Thursday Screen») (Hebdo, Paris - 15/186), and the English Schools that have organized at the Willesden Empire a series of special shows for children to be given on Saturday mornings at a very low entrance fee (The Daily Film Renter, London - 15/173) — all these different persons and institutes show themselves favourable to the cinema.

Economic reasons are partially responsible for the diversity of ideas and standards relating to specialized theatres and cinemas. We learn that in Spain a law has been proposed prohibiting all children from attending cinemas, except those specially intended for them. It is held that this law, if it were passed, would spell ruin for most cinema owners, because a large number of adults, being unable to leave their children alone at home, would end by not going to them at all. (Variety, New York - 15/164).
RE-EDUCATION. — From the « The Refuge » photographed by Kaufmann (Gazzetta di Venezie, Venice - 15/182) — a film showing how children are treated in the institutes devoted to their upbringing and how their education, or when necessary their re-education is provided for — we pass to the direct use of the cinema as a means of re-educating sick, deficient, and abnormal persons to work and normal life.

Thus in the Prague Lunatic Asylum (Nieuw Weekblad voor de Cinematographie, the Hague, 34/498) a cinema equipment has been installed to give the unfortunate inmates a chance of enjoying the film, and in Spain (Bulletin de Accion Catolica Femenina en Vizcaya, Bilbao - 33/126) the Old Age Pensions and Savings Fund of Barcelona is making use of the cinema not only for educative and recreational purposes, but for the re-training of the sick, abnormal, and deaf-mutes, and as a means of reforming prisoners by showing them the advantages of work.

SOCIAL DEFENCE. — Special films have been prepared for the police forces both of a directly educational kind for the spread of knowledge and teaching, and also to call attention to the fine and often heroic work that is being accomplished in this field.

With the collaboration of the Viennese Police, A. Deutsche Gennan will shortly undertake the production of a film for the training of police officers and the diffusion of up-to-date police systems.

At the Primus Palast of Berlin (Local Anzeiger, Berlin - 33/129) an M. G. M. film was recently shown: « When the Capital sleeps ». This film depicts the splendid work done by the police amid the nocturnal life of a great city. Then again, « The Brave Deed of Andrew Hanner » filmed by the Austrian Scha Company shows the worth and heroism of the Vienna police officials who, in the discharge of their duties, often sacrifice their lives. (Oesterr. Film Zeitung, Vienna - 33/130).

All these documentary films are of considerable social value and are of a kind to exalt the nobility of self-sacrifice and devotion to duty.


catholic. — The « Encyclical on the Christian Education of the Young », of Pope Pius XI, dated 31st December 1929, contains a special warning to Catholics against the dangers of the cinematograph. The question is stated in these terms: It is necessary to watch over and guide the education of the young « who are as soft as wax in bending to vice », whatever their environment, by removing temptation and offering them the best chances in the way of both relaxation and company.

« At the present time ever wider and greater vigilance is needed, more especially in regard to profane and licentious books, « cinematographic » shows, and now also broadcasting, which may be said to multiply and facilitate all sorts of reading, just as the cinematograph multiplies and facilitates all sorts of spectacles. These most powerful means of divulgation, which guided by sound principles, may do so much for education and training, are all too often made subservient to the incentives of evil passions and the greed of gain. How bitterly parents and educators of our time have to deplore the havoc among the young caused by the amusements of the day and by bad literature! »

« On this account, all praise and encouragement are due to educative works which, with truly Christian zeal for the souls of the young, endeavour, by means of suitable books and periodicals, to acquaint parents and educators with the moral and religious dangers, often surreptitiously insinuated into books and shows, and that devote themselves to diffusing good literature and promoting really
educative entertainments, by opening, sometimes at great personal sacrifice, theatres and cinematographs which are not only innocuous to virtue, but do much to encourage it».

L’Azione Cattolica Italiana thus comments on the Encyclical:

«We can no longer be satisfied with deploiring and denouncing the immorality of cinema and theatre. This serves no really useful purpose; it being all too obvious that the young are unable to resist the wizard and corrupting spell, and it is no easy matter to dissuade them from haunting such resorts; besides which, even this negative remedy is not applicable to everyone, for large numbers are beyond our sphere of influence. We must look for a positive remedy; and this is clearly indicated by the elogium expressed in the Encyclical of all efforts that aim at promoting truly educative amusements».

We know that efforts of this kind are not lacking on the part of educational institutions, schools, clubs, and public speakers, who have appreciated the full importance of this work as a means of safeguarding and training the young. The matter has been dealt with in the January issue of the International Review, and referred to in the Notes on the Religious Film.

Further on we will survey some of the most recent initiatives, as, for instance, in Italy, the Milanese institute for the techno-legal assistance of Catholic theatres and cinemas. Cardinal Arc, of Milan, has appointed a commission to give legal and technical advice and support to the theatres and cinemas of Catholic institutions; priests and persons of technical competence are appointed to this commission. — Among other members, we note the names of the Rev. Father Carlo Canziani, Director of the Rivista del Cinematografo; the Rev. Father Giovanni Bandera, Secretary of the Diocesan Committee, Avv. Comm. G. B. Migliori, Engineer Cav. G. Gambelli, and Avv. Edoardo Clerici. The commission has been at work for some time past and has held several meetings. The speakers described the police regulations on public entertainments and the measures taken by the Prefectures for the safety of the halls and the protection of the audiences. These descriptions, supplemented by a complete statement of principles and by clear instructions as to procedure, together with a survey of the copyright law, will be embodied in a booklet to be distributed in all the entertainment halls of the Catholic Associations of the Milan Diocese. The commission will afford its help, advice, and guidance to the Catholic associations in their educational and welfare work. The Rivista del Cinematografo has been chosen as the official organ of the Commission (1).

The late Società San Marco was in the past responsible for the production in Italy of artistic and moral films. With the approval of the Vatican, it is now proposed to constitute a company for the production of religious films and films dealing with serious questions of a kind to spread the social and moral principles of the Catholic faith.

The various Catholic associations throughout the world that devote attention to the cinematograph by writings and publications and that have organized film production and distribution services, have in view not only education in the strictly religious sense, but general moral improvement. They aim more especially at counterbalancing the effects of the popular cinematographic production, and act as an antidote to the anti-Catholic ideas which are so often, though sometimes unwittingly, propagated by theatrical films, made with the sole purpose of bringing in money and attracting the crowd. Hence Catholics favour the production of «family» films of an educational tenour, in which the values of Christian life, family virtues, honesty and goodness are unostentatiously stressed in the course of the development of the plot. Catholics are particularly fond of the documentary films and travel films depicting far-off lands — so long as these do not reproduce, for propagandist aims, conditions of life that are not compatible with Christian ideas; whenever scenes of such life are depicted it is required that the film should illustrate its errors.

(1) The Rivista del Cinematografo is the organ of the Consorzio Uëenti Cinematografi Educativi (Cuce), of which the Rev. Father Canziani is Secretary. The Cuce combines all the halls of the organizations under the Azione Cattolica Italiana, and has opened offices in Milan (head office), Turin, and Venice. Branches are being organized in Florence and Rome, and the organization will in time spread its network all over Italy.
Another form of film favoured by such institutions are those for genuine vocational training, hygiene, and agriculture. Such films can do no harm and may do much good.

Catholic action is mainly directed against what it regards as the snares and perils of the cinema. In an article published in the Osservatore Romano, Avv. Migliori, writing on « Law, Art, and Morals », expresses the view that the task of determining the limits between the licet and the illicet in respect of morals and decency — whether in cinematographic films or elsewhere — is one that ought properly to be entrusted to the priesthood, owing to their special competence in such matters.

The Catholic cinema reviews which we quoted in the notes on religion and the film in our January issue, are publishing reviews of the films that are going the rounds of the different countries, criticising them in detail, and describing their qualities and defects. These criticisms give all apposite information to those who have the moral well-being, especially of children, at heart. The readers are told which films are suitable for children and can without qualms take their own families to see those recommended.

It is not the public alone that benefits by such information. Les Dossiers du Cinéma, of Paris, for instance, specifies which type of hall (boarding schools, charitable and welfare institutes, etc.), and what class of public (children, youths, or adults) the different films are suited to. Criticism of the kind affords safe guidance to producers. Father Muckermann calls attention to this point in the M.K.B. Film-Rundschau, in an article in which he urges film producers to listen to the voice of criticism. He declares that the critics have a serious responsibility and regrets that the cinema reviews usually devote too much space to blatant advertisement, being wont to dilate on the excellence of all the films they announce, often devoting leading articles to such publicity. Film producers, he declares, are entitled to advertise their new productions, but not to pronounce on the merits of the films. This task pertains to the critics, who would do manufacturers a good turn by informing them of the vox populi; the best producers — those who have serious moral production at heart — would more particularly appreciate this. Production ought to follow the trend of public opinion.

It has, indeed, been proved that film criticism is really conducive to the desired effects. As a result of the criticism in the French Catholic press of the film on Joan of Arc, of the Aubert-Franco Co. (to which we referred in our January issue), this firm was induced to revise and emend the film. « The Universe » of the 28th February refers as follows to this matter:

« Some weeks ago we had something to say about a French film entitled « The Marvellous Life of Joan of Arc », which, while abounding in well conceived scenes, contained certain very objectionable features, open to strong censure on both moral and historical grounds. The film was severely criticised by the French Catholic press, and especially by La Croix. The sequel is in the highest degree gratifying. As a result of the adverse Catholic criticisms, the Aubert-Franco Film Company, acting on the suggestions of the cinematic services of La Bonne Presse, effectively amended the production and has excised all passages incongruous with the life and character of the Maid. Moreover, the Company have given an undertaking not to make any further use of the original and offensive version. As revised, the film is really a fine work, and it is to be hoped that in the near future it will be seen on this side of the Channel. The story of this film illustrates both the need of concerted Catholic action where matters of faith and morals are involved, and, at the same time, the effectiveness of such action when taken ». The K. M. B. Film-Rundschau of Essen refers to the matter with similar satisfaction.

The Bonne Presse is the Catholic cinema firm in France which, besides manufacturing slides for lantern projection to be used for religious education, publishes the great bulk of French films of a religious character, and supplies these to the French Parochial Cinematograph Institutes founded in 1928. The Bonne Presse started its film-renting service in 1913. It was the first firm in France to produce religious films. In the course of the last two seasons it has distributed not less than 10,720 programmes, equivalent to over 22,000 projections. The Abbey
Danion has turned a number of films, among others: «The Better Part»; «In Glory»; «The Bayonne Eucharistic Congress» «Apostles’ Hearts», and «The Island of Noirmoutier as seen by Peter the Hermit».

Through the medium of its cinematographic review, the Bonne Presse gives technical advice on the purchase and use of equipment, on its price and upkeep, preventive measures for the safety of the plant in halls, etc.

An interesting feature of the production of the Bonne Presse is its sub-standard size films for the Pathé Baby, which give even the poorest parishes a chance to avail themselves of this means of instruction. Among the films published for the Pathé-Baby we may mention: «Bernadette and the Ghosts» (the first film produced in this format and published in 1928); «The Disciples of Emmaus»; «The Legend of Saint Nicholas»; «The Parable of the Good Samaritan»; «Saint Cecilia»; and «Saint Elizabeth of Hungary».

Apart from these films of a strictly religious character, the Bonne Presse has published other sub-standard size films, of a recreational type, such as «Granny’s Spectacles» and «Heroic Hearts», and they will shortly bring out «How I killed my Son» and «The Woman with closed Eyes». The Bonne Presse is about to turn its attention to sound-films, and is already studying their use and the cheapest equipment for parish use (16/115).

On the occasion of the episcopal consecration of Monsignor Verdier, a sound-film was taken, in which the Archbishop of Paris addressed through the sound-film 74 seminaries representing the students of 11 countries, in the following terms: «The cinema, like the press, is a powerful weapon for evil, as it is for good. It leaves the deepest and most lasting impression on men. Let us be careful that it act as an apostle of the true, the good and the beautiful in our midst» (Comadia, Paris – 34/390). This film was enthusiastically welcomed by French Catholics, who by its means were made personally acquainted with their Archbishop. Another film of religious character was recently taken in Paris, in the Gaveau Hall: «The Marvellous Life of Bernadette», the scenario being written by Georges Pallu in collaboration with the Abbey Honoré (Le Fascinateur, Paris - 11/113).

A new enterprise, the Lux Honesta, has been founded in Spain by the «League of Friends of the Good Cinema» at Barcelona. The object of this institution is morally to improve the cinematograph under all aspects. It has already started work, by supplying the Catholic parochial cinemas and other social and cultural institutions, with a number of carefully revised films. A board of censors examines all the films submitted; these are first published in a catalogue compiled by the League, and divided into three classes: films for Catholic organizations; films for moral welfare organizations and schools, and lastly films for children who frequent the church schools. The Lux Honesta is not out to make money; it facilitates the distribution of instructional and recreational films to poor Catholic schools, charging very low prices, and, where necessary, letting out the films gratis. A secondary aim of the League is to start a crusade for the exhibition of a better type of picture in the public cinemas, making use of original material. With this object it is contemplating the acquisition of halls in the principal cities to exhibit its films, as it has already done at Barcelona (El Debate, Madrid, 17/90).

In Belgium, the Jeunesse Ouvrière Chrétienne (J. O. C.), provides in its programmes a section that may be described as pleasant and recreational. The General Secretariat has organized a central educational service and is in a position to furnish its members with a very large collection of films, dramas, songs, lectures, etc., of a kind to meet all needs. The Committee, acting in concert with the Council, is able to select the most suitable material, and proposes to give certain shows prepared by its own young people; at other times interesting films are shown for the delectation of the young associates; and lastly a series of lectures is being organized, as in Pecq-les-Tournai, where winter evening lectures will be given, illustrated by films, on such themes as woman, children, etc.

While religious films proper illustrate the lives of the Saints and the Parables, and serve the purposes of actual religious instruction in the Parishes, Schools, Children’s Homes, etc.,
the propaganda cinema fulfils another important function and acts as an auxiliary to mission work.

Its powers of suggestion are such that it represents one of the most powerful means of reaching the minds and hearts, especially of the simpler and more primitive peoples. The films serve to illustrate the work actually done by the missionaries, and help to make this more widely known and appreciated. In our March issue we referred to the expedition made to Tamanrasset, in Central Sahara, in order to identify the tomb of the Holy Apostle of the Tuaregs, Father Charles-Eugène de Foucauld.

This was the first film to play a part in a beatification ceremony. The Agenzia Fides (11/121) announces the forthcoming release of a great missionary film, founded on the book «The Conquest of the Okawango». The Okawango Film will be prepared by Father Juzcek O. M. I., who is going to Windhoek, in South-East Africa, to shoot the scenes. This film will represent: the first ill-fated expedition to the Okawango in 1903; the death of the chief of the medical section, Father Biegner O. M. I., and of Friar Reinhardt, O. M. I.; the second expedition in 1908, directed by the present Apostolic Vicar, Mons. Gottardt; the deaths of Fathers Lanner and Krist, O. M. I., and of Friar Kurz; and lastly, it will show how the missionaries in time managed to get a footing in the land, and with the greatest difficulty founded the Kyangana and Andana Stations. The Native Chiefman, Libele, seeks by all means to hamper the work of the missionaries. Witchery, drunkenness, and polygamy stand as an insuperable obstacle to the spread of the Christian faith. Once again the great enterprise seems destined to disaster and definitive failure. But at last the Cross triumphs over Pagan darkness. We are shown the first Christian community, schools, and new foundations in Okawango, Kuringuru, in the Punja and the Pondero. Then the arrival of the first Missionary Sisters; the life and work of the missionaries — their disappointments and their successes.

The content of this film, now in the making, gives an idea of the form in which such subjects are presented.

Protestant production is no less remarkable in the domain of the missionary film, especially in Germany. We will refer to this in the sequel, and survey evangelical activities.

In countries in which the Protestant or Anglican religion prevails, but that have important Catholic nuclei — such as Great Britain — or entire Catholic regions — such as Germany — Catholics are always more or less on the war path. The greater the opposition with which a religion has to contend, the more deeply it is felt by the minority that professes it. Production and hiring in Germany are in the hands of the Leo Film-A. G., of Munich, under the direction of Dr. Ernst (who is also the President of the Catholic Cinematograph Committee, with head-quarters in Paris), and all the efforts of Catholics are centred around this firm. In Germany there are some five Catholic cinema halls. Cinematographic communities (Filmgemeinden) are now in course of formation, in connection with the Union of the Popular Theatre (Bühnenvolkshaus). In addition to this, the Catholics are collaborating with State organizations, such as the censorship boards and higher censorship commissions, as well as with state and communal cinematographic offices. Another by no means negligible activity is that of the parochial cinemas and Catholic clubs (Pfar- und Vereinskinos). These are of considerable public utility, and, with rare exceptions, give cinema exhibitions only on certain days and at certain hours, and project only special films selected from among the great cinematographic production.

The advisory service in regard to these films, the renting service, and, as the need arises, also the sale of the requisite equipment, will be carried out by the Bild- und Film Zentrale, of Cologne (cf. also the article by Father Muckermann in the January issue of the International Review). This new central organization is supported by the Jugenderband (Stella Maris) of Düsseldorf, and by the Leo Film-A. G., of Munich. A Cultural Advisor of the Central Committee of the Catholic Instruction Associations (Zentralbildungsausschuss der Katholischen Verbände, Z. B. A.) for which the «Filmarbeitsgemeinschaft der Deutschen Katholiken» represents the leading organ for Catholic cinematographic production.

As stated in the January number of the
International Review, the production of religious films in England is actively opposed in certain quarters. But this does not prevent Catholics from demanding an ever increasing production of films in keeping with the requirements of the Faith. This need was clearly expressed in an open letter to a London Catholic paper, the « Universe » as follows: « ...to form a cinema company which will produce films — not necessarily Catholic films with an obviously Catholic plot — but films having a Catholic outlook on life, and upholding Catholic morality. In this way, and in this way only, can we counteract and overcome the tendency among the majority of cinema-goers of to-day to take divorce for granted, to applaud revenge, and to encourage suicide in cases of great pain or loss of money. 

Protestants—Germany:

Evangelischer Presseverband für Deutschland Evangelischer Bildkammer, Berlin: The Cinematographic Chamber of the Evangelical Association of the German Press, of Berlin, started its cinema activities in 1924. Its efforts are mainly directed to promoting the social welfare and charitable work of the ecclesiastical organizations. Its films show the work done in hospitals and social welfare institutions. The following subjects receive special attention: assistance to cripples; Infant welfare; juvenile welfare work; the care of the sick; help to emigrants; care of the blind; mission work. The Evangelical Bildkammer is the first concern to produce films on missions, paying particular heed to the work of mission doctors and to the problems of tropical hygiene. Film exhibition organization is carried out as follows. When the Evangelical Cinema Chamber started its work, all likely organizations in the German Reich and abroad were sent explanatory circulars describing the objects of the new institution, which put them in a position to select and order films. The Evangelical Chamber is now in continual touch with these bodies. In cases in which the applicants already possess equipment for the projection of the films, these are hired out, and often accompanied by persons to give the requisite explanations. Especially in the Provinces, however, where proper equipment is often lacking, an operator is sent along with the films, together with portable projection apparatus.

The work of the organization at the present time embraces all Central and Eastern Europe, as well as Asia Minor. The Evangelical Chamber has branches in several European countries, that work under the direction of the central organization. This is true of Poland, Latvia, Esthonia, Austria and Jugoslavia.

The following films produced by the Chamber are deserving of mention: « Hands that speak » — describing the methods of teaching the blind deaf-and-dumb in the Nowawes (Oberlinhaus) Institute — a film showing how, little by little, and with the greatest pains, the pastor and Evangelical sisters manage to teach children who are deprived of both sight and hearing, to read with their fingers, thus bringing the unfortunate little ones into touch with the life around them. The « Invisible Kingdom » describes welfare work among children, the poor, the sick, emigrants, etc. Another film, the title of which is taken from St. Paul’s First Epistle to the Corinthians: « ...If ye have not Love » (« and if I give all that I have to the poor, and give my body to be burnt, but have not love, it shall avail me nothing ») takes the spectator to a Children’s Summer Colony in Riesegenbirge, shows the work done in the Cripples’ Home of Altdorf, in Franconia (Nuremberg), and other efforts made on behalf of children by the Evangelical Church.

By combining all the several missionary associations concerned, a Missionary Film Company (the Missionsfilmgenossenschaft) was founded, to collaborate with the Evangelical Cinema Chamber. This Company represents the interests of the missionary films of the leading German companies. One of the operators in its service filmed some two years ago in Africa the reel « Andrew, the Magician’s Son », to which we shall refer hereunder, and for the past year he has been in China, preparing other foreign mission films showing the work accomplished in that country by the missionary societies. This year he will go to India for the same purpose.

Vertriebsdienst der Missionsfilm e. G. m.
b. H., Berlin: With a view to concentrating the hiring service of missionary films, a Missionary Film-Renting Office has been opened, which attends to this service in the same way as the Missionsfilm-Genossenschaft. The service embraces: 1. the hiring of missionary films in their original form, wherever possible, also to the public cinemas; 2. emending the films to render them more entertaining, so that public cinemas may be the more inclined to take them up. The principal task undertaken, however, is that of making missionary films directly accessible to the several ecclesiastical communities, so as to show their members who are interested in the matter the work actually accomplished by the missions, and also to penetrate as far as possible into centres far removed from such interests and arouse their curiosity. Thus the missionary film has developed from a mere record of facts into a carefully thought-out means of propaganda.

The practical methods pursued by missionary films are as follows: A circular on recent production is sent to all German clergymen, so as to enable them to apply for any films that interest them. As orders come in, these are classified, and a systematic chain established for their distribution. At the opening of the cinematographic season — i.e. towards the end of September — the office sends operators, bearing with them the films, projection apparatus, and all the requisite accessories, on rounds fixed in accordance with schedule. Thus it is possible to give daily shows in the several localities. All the smallest centres, down to those numbering 200 inhabitants, are duly visited. The season closes in April, because by that month the rural population is so much taken up with farm work that it is not able to attend shows. During the 1929-1930 season, some 3000 projections were given under this system, each of which was attended by an average of from 150 to 200 persons.

Communities that possess cinematographic apparatus of their own are supplied with films of general culture, in addition to the strictly missionary films.

Among the missionary films we may mention: «Andrew, the Magician’s Son», depicting the life of a negro belonging to a tribe in the vicinity of Kilimanjaro, who, being converted to Christianity, manages to convince his tribe also, and last of all, his own father, who followed the calling of a magician. We are shown the moral struggle of the old witch doctor, who ends by acknowledging that not he, but his son, has found the «true path». «Who will come with us into Africa?» depicts the work of the Kondeland missionaries, the primitive life of the negroes and their strange rites, the moralizing work and the succour of the sick and infirm — all the gradual introduction of civilization by the missionaries. The film «The Victory of Life in the Land of Death» was filmed under the tropical sun of Surinam, where the Herrnhuter Mission is established — and shows the sailing from Amsterdam for Madeira, the arrival at Paramaribo; the port, the native police, the work of the missionaries, the plantations — (coffee, cocoa, sugar, timber, farming, palms, and cocoa oil) — a visit to Boskimanni, the virgin forest, the native Indians. «The Calling and Work of Missionaries» first takes the onlooker into China, then conveys him back to Spreewald, in Germany, where budding missionaries are trained, and lastly takes him to Daressalam in Africa.

Evangelischer Presseverband fuer Westphalen und Lippe. Bildkammer. Witten an der Ruhr. — The field of activity of the Cinematographic Chamber of the Evangelical Association of the Westphalian and Lippe Press, comprises religious films and cultural films of serious value, specially adapted to popular education. In addition to the exhibition of these films, which up to the present were purchased from other firms, it has also organized a model censorship, which acts on behalf of cultural cinema owners and parochial cinemas, selecting and procuring suitable films for their use.

It started to produce its own films in 1929 by the Speyerfilm. Besides up-to-date cinematographic cameras (Debric-Parvo-L, Eyemo, Askania) it has disposed of a certain number of Lampemarks. The actual production of the films is and must be carried out entirely by specialized scene directors.

Organizations similar to the Westphalia Chamber, operating in Germany, have been amalgamated in an evangelical cinematographic
graphic association (Evangelischer Bildspielverband) the commercial management of which is attached to the Chamber itself.

The production of the current year will comprise: a film on the 4th centenary of the Augsburg Confession, one showing the different places where Luther lived; and also a film on pilgrim life, "The Friar's Highway." Other films on Spain and Brazil are in the making. Among films rented by this Chamber (which also has travelling cinemas in its service), we may mention among the more recent: "For Faith and Conscience's Sake - Four Centuries of Protestantism"; "A Journey to Jerusalem" (both produced by the Speyerfilm); "The Iron Hindenburg", compiled on the basis of German, English, French and Russian archives; "Come again, Africa" — consisting of two parts, one of the above title, and the other the aforementioned "Andrew, the Magician's Son". Many of the films rented by the Westphalian Chamber are the same as those rented by the Berlin Chamber.

UNITED STATES: Y. M. C. A. Motion Picture Bureau — New York, Chicago: The American Y. M. C. A. Cinema Office aims at providing suitable film material at the lowest possible cost, and discovering and promoting the most effective methods of presentation and adaptation of motion pictures to the programs of churches, clubs and industries; grammar, high, and technical schools; colleges, community and welfare organizations, and similar institutions, in addition to the Y. M. C. A.

The American Y. M. C. A. has organized an extensive hiring service. A few figures will give an idea of the diffusion of the films furnished by it. It 1927 more than 1000 different organizations other than Y. M. C. A. used this service. In 1917, slightly more than 300,000 people attended programmes furnished by this Bureau. In 1927 they numbered more than 6,500,000.

The Y. M. C. A. has a picture service at Geneva that publishes catalogues in several languages to inform its different national organizations about suitable educational and recreational film material. Upon special application, it also rents films. The catalogues list the films under their titles in the original languages; they are however described in the language of the catalogue. Most of the films are, of course, in English; others in German. To judge from the titles and descriptions, the latter are for the most part the same as those published by the German Evangelical Associations above mentioned.

The films sold and rented by the Y. M. C. A. deal with the most heterogeneous subjects. Propaganda on behalf of institutions; the activities of the Y. M. C. A. in the different countries (religious work, schools, sports, etc.); vocational instruction films; precautions against accidents in workshops and farms; hygiene, medicine, etc. There are documentary films of geography and travel, and biographical films. There are also theatrical films (these comprise the famous Niebelungen cycle, Uncle Tom's Cabin, "The Love that teaches"; "The Struggle for Bread" (German films), and "Beethoven's Moonlight Sonata" in English, etc.

In addition to the not inconsiderable series of films illustrating Y. M. C. A. activities, the association has published a whole series of films for religious instruction. The American catalogue states that there is a constant and increasing demand for these. Among others, we may note the following: "Christ Confounds his Critics" (St. John, VIII, 3-11); "The Unwelcome Guest" (St. Luke, VII, XX, 36-50); "Forgive us our Debts" (St. Matthew, XVIII, 233-5); "The Rich Young Ruler" (Matthew, XIX, 16-23).

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We have endeavoured in the above to give some notion of one aspect of American religious activities — the Y. M. C. A. But it is a well known fact that the religious cinematographic movement in America — Lutheran, Anglican, Baptist, Wesleyan, Catholic, etc. — is very widespread (the film has by now actually entered into the very precincts of the Church, projections being given before and after the religious services). But space does not allow us for the present to deal with other aspects. We will later on give particular attention to the work
done by other religious sects in America. Besides this, Russian activities in the domain of conscience, the Jewish movement, and other forms of the Christian religion, will in due course claim their share of attention.

**TEACHING BY THE FILM.**

An "Institute of Research on Methods of Education" has been inaugurated in Brunswick, Germany, in the presence of a goodly gathering of personalities in the world of science, industry and politics. — The principal object of the new institution — the first of its kind in Europe — is to promote the interests of instruction and culture in Germany; but by keeping in close touch with the leading educational organizations in other countries it may be said to establish some claim to an international position.

It will consist of three sections, each of which will be charged with distinct and separate duties. The second section, having the special mission of studying problems connected with child psychology and methods of teaching children, will deal with the question of the cinematograph as a means of instruction, and for this purpose will keep in regular contact with the International Educational Cinematographic Institute. Professor A. Rieckel is the founder and director of the new Institute (Schulblatt für Braunschweig und Anhalt, Brunswick, 17/99).

As a result of the experience of the Cinematographic Office of the Central Institute of Education and Teaching of Berlin, the authorities concerned have decided to introduce certain changes into the system of the revision of artistic, instructional, and educational films. The censors, whose number will be reduced from eight to four, will henceforward take an active part in the censorship commissions revising artistic films. The President will have a vote. Commissions comprising a certain number of experts will be responsible for the revision of films of an instructional or educative character. The main object of the new organization of the commissions is to simplify their working (Communiqué of the Russian Official Press Service, 18/260).

"The term cultural film" writes the Bordeaux Ciné, "is interpreted in a much wider sense in the U. S. S. R., than in other countries. The best Russian films are certainly to be counted as cultural, and the leading Soviet producers have adopted the methods of the cultural film in their work. Among these should be counted Eisenstein, Vertoff, Tourine, and others. These films pursue educational ends; they do not merely stir the emotions of the audience; they aim at instructing it on whatever subject they touch on.

In the U. S. S. R., art is not regarded solely as a means of amusement, but as an educational factor. The same may be said of the cinema, which is indeed a practical means of informing the most uninformed.

Thirteen Soviet cinematographic organizations are at the present moment engaged in getting ready cultural films. This work is ramified through all the national republics. Ethnographical films are in the front rank.

The Mejrahpm-Film Co. takes a leading part in this field of production. The Moscow Sovkino, however, maintains its position as the centre of the Russian cultural film. It is at the head of forty groups of scene-directors; which means that it can work on forty films at a time. Fifty per cent of Russian cultural film production is represented by the output of this Company.

At the Cultural Research Institute of Berlin, directed by Dr. Hans Cürlis, several newly produced films of a cultural tenour were recently shown to a select public. Among the pictures exhibited special mention should be made of the first part of the geographical film The Elbe, showing the physical, industrial and economic characteristics of the region in which the river has its source. Next was shown a film of the Schaffende Hande series, illustrating the making of works of art after the an-
tique; we are here introduced to Bruno Krauskopf, Heinrich Zille, and Alceo Dossena, and can watch them at work. As regards the latter, Dr. Cűrlis recalled that this artist who has a studio in Rome on the banks of the Tiber, created a world sensation in 1928 by his astonishing imitations in wood, marble, terracotta, and other media of the artistic products of different epochs. It is not as an imitator, said Dr. Cűrlis, that Alceo Dossena has his place in the «Schaffende Hande» series, but as one of the finest representatives of the old art of copying, which he pursues with such remarkable technique.

The Berliner Lokal Anzeiger writes in this connection that the Schaffende Hande deserves a place of honour among the productions of cultural cinematography. It is a real joy to art amateurs to be able to watch on the screen the most renowned masters at their work and to be made acquainted with their technique by practical demonstration. In this connection, the Schaffende Hande deserves to be included among the teaching apparatus of all vocational schools of applied arts. This collection of films shows us oil painting, water-colour painting, fresco work, painting on glass, wood engraving, etching and copper engraving, lithography, wax modelling, bronze casting, artistic glass blowing, jewelry, etc., in a manner that lends itself perfectly to teaching the technique of these various branches of fine art, besides being admirably suited to the general artistic culture of children.

School curriculums that place art on a footing of equality with other branches of learning are rare indeed. And yet acquaintance with and understanding of the beautiful is not only a matter of aesthetic training for a child; it is altogether one of the finest means of developing its mind and spirit. For this reason it has become the custom in so many countries to conduct whole classes of school children to visit the public art galleries and museums, while in drawing lessons a great point is made of training them to see and to observe.

Writing in the Stadtschulrat, Dr. Hawel, of Cologne, makes an eloquent plea for visual teaching, which he considers a fine means for rousing children's interest in art, forming their character, and developing their finer nature. Dr. Hawel refers to the advantages of both stationary and moving pictures of a kind to raise the mind above the materialism that weighs so heavily on modern life, and to open up a vision of the beautiful, to which all rational beings aspire. The showing of beautiful images in schools ought to rank beside singing in the spiritual education of the pupils (Lichtbild und Arbeitschule, Breslau).

Mr. Alfred S. Lewerenz, of the Statistical Bureau of the School of Psychological and Educational Research of Los Angeles, has drawn up a report on the results obtained by the introduction of motion pictures as a means of teaching in schools.

As a practical test of the efficacy of visual instruction, some scenes from the film «Columbus», produced under the direction of Yale University, were projected in this school.

The experiment convinced Mr. Lewerenz that the film was a very efficacious means of teaching children of less than average intelligence. He further noted that boys are more observant than girls, and he therefore considers that the different inclinations of the two sexes ought to be carefully considered in making a choice of motion pictures.

The tastes of the boys are of a wider range. Intelligent children should be shown nature films of a kind to make them think. In conclusion, Mr. Lewerenz expresses the view that the use of the film adds 15 per cent to the teaching efficiency of the masters. (Los Angeles Educational Research Bulletin, 37/166).

On his side, Mr. F. Dean McClusky, director of the Scarborough Schools of New York, continues to put forward his conclusions on the film as a vehicle of instruction. According to him, it should be regarded merely as an auxiliary means; in whatsoever branch of learning, the film must be subsidiary to the method of instruction; vice versa never. Motion pictures should be made to respond to the understanding, the age, and the experience of the children viewing them. As for methodology, Mr. Mc. Clusky makes the following recommendations: only teachers are qualified to prepare the general scheme of teaching films, just as only teachers can explain them; money could be
saved and instructional efficiency increased by cutting out titles and superfluous captions; there is no call to have recourse to motion pictures in teaching such subjects as physics and chemistry which allow of direct means of demonstration.

In any case, the pupils no less than the teachers ought to be made acquainted beforehand with the subject-matter of films; for this reason it would be desirable for the producers to supply explanatory booklets to the schools using them. (The Educational Screen, New York - 37/171).

In his pamphlet «Luminous Projections in Schools», the Italian educator, Luigi Cremaschi, makes a statement of the principles and the technique of this branch of the cinema. «First and foremost» he writes «one must lay down as a fundamental principle that the domain of the motion picture begins where that of reality, of the real thing, in a form that children can approach and understand, ends». Signor Cremaschi considers that the screen has a big pull over the school museum; the screen is quick with life and movement, while museum specimens are dead, dry-as-dust, and fragmentary. L'Imprimerie à l'Ecole of St. Paul, summarizes Signor Cremaschi's remarks; in our turn, let us cull the most salient points from this resumé.

The darkness necessary during cinematographic lessons «canalizes» the attention of the pupils, arrests their interest, and tends to develop a state of suggestibility, which is of the essence of this method of instruction. The lesson should command the projection; not the projection the lesson. Motion pictures and stationary slides should complete one another. The master, the artist, and the operator must work in concert in the production of films and slides. Every school ought to possess a collection of slides for stationary projection, while a distributing centre is necessary for films. The word of the master, in the presence of the screen as elsewhere, must remain the basis of the lesson, the basis of mind training. A few minutes' relaxation and freedom are necessary after each screening; this enables the pupils to exchange their impressions; to ask explanation of their teachers, and to take notes of what they have watched.

In the New Jersey Journal of Education, Mr. Lawrence R. Winchell, Chairman of the New Jersey Commission on Visual Education, insists on the necessity of perfecting the practical training of teachers in the use of educational motion pictures, since, according to him, the whole success of this new method of teaching depends on the personality and the experience of those handling it.

Mr. Joseph J. Weber, of the University of Valparaiso, has compiled a bibliography of visual education in the United States, more particularly in so far as the teaching film is concerned The Educational Screen of Chicago has undertaken to publish this in serial form in its pages; the series of articles will be continued till next June. In this work we find the names of those who are to be regarded as pioneers of the teaching film in America: A. G. Balcom, Don Carlos Ellia, Laura Thornborough, Alfred S. Lawrenz, F. Dean Mc Clusky, Joseph W. Weber, B. A., Aughinbaugh, Thomas E. Finegan, Frank W. Freeman, Ben Wood, Daniel C. Knowlton, Charles E. Skinner, et al. (The Educational Screen, Chicago - 37/200).

It this same review, Mr. William Lewin, a school-master of Newark, takes up the question of the sound-film: «We are» he writes, «on the threshold of a new age, that will endow the teaching film with words and colour». Dr Frank N. Freemann and Mr. Ben Wood are joint authors of a book in which attention is drawn to the future career of the sound-film as a teacher; the vocal-screen, indeed, does not lack champions in the domain of higher education and vocational training. Some persons foresee, as one of the consequences of the more general adoption of sound-films for teaching, the necessity of a general and radical revision of text books; some go so far as to prognosticate their being done away with altogether! The conjugation of words and colour in teaching-films — according to the latter — ought to make it possible to learn more in ten minutes than one can learn in an hour from books. Nevertheless, since teaching is both an art and a science, and not a mechanical process, no new method of teaching can avail without the counsel and the
personal influence of the teacher. This much, at any rate, is acknowledged on all hands.

Being convinced of the merits of the teaching-film—a conviction that is gaining ground in all quarters of the globe—the Chilian Government has set up at Santiago an «Institute of Educational Cinematography», which it has placed under the authority of the Rector of the University. The mission of this Institute is to carry out scientific researches on the effective value of the motion picture as a means of instruction, and to keep in touch with similar organizations in other countries, with the object of organizing the exchange of films of an educational and instructional character (La Película, Buenos Ayres - 17/88).

We cannot close these notes without devoting a few words to the memory of a man who has rendered signal service to the instructional and educational film, whose recent death we have learnt with deep regret: Dr. Heinrich Fuchsig, of Vienna.

With Dr. Fuchsig’s death, the educational screen loses one of its worthiest promoters and organizers. A man most highly versed in the science of teaching, and a distinguished philosopher and psychologist, he was a convinced and convincing partisan of the educational screen. While deploring his loss, we are comforted by the reflection that his mission does not die with him, for he leaves behind much valuable work: to us and to all those who have the educational screen at heart, he bequeathes his Rund um den Film. This excellent treatise, in which the principles of the new teaching method are enunciated, is a valuable text-book both for the experienced and for those who have only an elementary notion of the question. We have no hesitation in recommending this book very warmly to our readers; it is rich in ideas and in the practical sense derived from experience; the hints given on the systematic choice of educational cinematographic material are an important feature.

This work of Dr. Fuchsig is a new title to our gratitude and assures him a permanent place in the bibliography of the cinematograph.

LABOUR AND SCIENTIFIC MANAGEMENT.

A Section of the IVth International Congress of Scientific Management held at Paris last year was charged to deal exclusively with the labour aspect of the cinematographic problem. We have several times dwelt on the fact that the cinematograph is an immense force, since by its means we are able, at a given moment and in any place, to project the rarest and most complete phenomena on the screen, including many that it would be impossible, by any other means, to bring before the general public. These various possibilities were illustrated by suitable films during the labours of the Congress, and the delegates of all countries displayed the liveliest interest in the pictures.

The Congress made a point of demonstrating that the cinematograph is as yet but little used to spread knowledge and propaganda concerning the various systems of scientific organization of labour. Some of the delegates pointed out very clearly that, with a relatively small expenditure, the machines for timing the workers’ movements which are at present used in many workshops could be satisfactorily replaced by a cinematograph apparatus, which is excellently adapted for taking small chronometric films giving the analysis and measurement of the workers’ most elementary movements, while the usual timing machines are generally not at all exact, and are always too delicate of construction to be satisfactory.

In spite of the heavy labours entailed upon them by the Congress, the delegates were always ready to view the films shown in illustration of the various subjects under discussion, for they all realized that film reproductions can be much more suggestive and nearer, to the truth than the most lucid verbal explanation.

The cinematograph is certainly destined to
increasing utilization in the field of labour. This assertion of ours will be amply confirmed at the next International Congress of Scientific Management, the organizers of which attach great importance to the films that will be projected during the Congress in illustration of the subjects under discussion.

We give below a description, from the Report of the Cinematograph Section of the Paris Congress, of some of the films projected which strike us as being worthy of notice. It may also interest our readers to learn that these films were supplied either by the congressmen themselves or by companies and offices which desired to demonstrate the results obtained by them in organization and technical instruction by means of the scientific regulation of labour. The Cinematograph Section of the Congress proposed, in its interesting Report, some innovations in technical instruction films, among others: interruption of the film from time to time, and its replacement by stationary views showing diagrams and plans on which the lecturer could give the necessary explanations, since the instructions accompanying technical teaching films are as a rule insufficient.

APPLICATION OF SCIENTIFIC ORGANIZATION METHODS IN THE MINES OF THE COAL MINING COMPANY OF GRODZIEC.

This film was worked out with the aid of Stanislaus Razniowski, C. I., Manager of the Grodziec Mines, and of the National Polish Committee of Scientific Management.

The film is of great interest because it shows that the methods of scientific organization may be successfully applied not only in factories, but also in places like mines, where the conditions are difficult and variable. Many special operations (haulage of timber from the pit-head to the road entrances, extraction of the coal by squads, and the timbering of the pit) are represented and analysed from three different points of view:

a) an ordinary photograph shows the actual operations;

b) a plan of organization, showing the internal structure of these works, their approximate topographical conditions and their connection with the rest of the operations for the extraction of coal;

c) "harmonograms" which, by means of Prof. Adamiecki's method, allow a still higher degree of extraction to be obtained, and the exact table of productive and non-productive times to be projected on the screen, as well as the various relations with the distances covered. By means of particularly well selected pictures, it is possible to show a functional organization replacing the old geographical organization: each agent, engineer or foreman, instead of concerning himself with an entire series of functions in a limited territory, must assume the responsibility of a special one throughout the whole territory. Of three engineers, for instance, one concerns himself with the extraction of the coal, another with the timbering, and the third with the sales; and each foreman is under the orders of the engineers dealing with his particular section of the work. The superintendents are also divided up in the same way. A general table gives the distribution of the orders of the day.

Another section of the film illustrates the different phases of a complex and curious operation, namely, re-earthing by hydraulic pressure. A squad builds a brick wall across a gallery; the necessary sand, taken from the sandpit by means of cages, is carried by a train that runs according to the "harmonogram". The train runs on a single track and is regulated by a very exact time-table, so that the two trains must always meet at the switch line.

The sand is drawn by a current of water to a sylos, or directly behind the brick wall to the part that is to be filled up.

This film will be revised and eventually developed by its producers, the projection before the Congress having shown that there are certain points that should be made more convincing and intelligible.

UNIFICATION OF THE ALTERNATE CURRENTS FREQUENCY IN PARIS.

This film was produced by the C. P. D. E., with the collaboration of M. Klimowicz and M. Rieumier, Manager of the Alternation of Frequency.

It is composed solely of plans and animated designs, and is an interesting application of cinematography to the history of an important industrial event. The intention is
The film shows a young man by his dying father, victim of an accident during work; under the impression of this tragic sight, the young man decides to dedicate his life to the study of means for preventing such accidents. A remarkable impression of reality is given to the subject by the facility with which the cinematograph shows, with all the natural surrounding paraphernalia of things and persons, the widely differing kinds of accidents that may happen in the various trades; and the impression is increased by the scenes where the chief actor recounts the painful details of an accident to groups of workmen to his audience at the lectures that he gives in the different workshops.

The suggestive powers of the cinematograph are cleverly employed in this film, and the various scenes bring into high relief the utility of applying means of prevention against accidents during work.

The film may be rented or bought from the Central Austrian Office.

NOTES ON THE INDUSTRIAL FILM

The talking film has been enlisted in the service of industry and very aptly adds its verbal comment to the photographic view of things, that is not always sufficiently explanatory by itself. Thus the Fox Movietone News has released a "talkie" entitled "East of Suez" illustrating the port and trade of Singapore (Exhibitors' Herald World, Chicago - 5/108).

These industrial films are always of an educational tenour, even when their immediate aims are of a different kind. Any correct rendering of the processes of labour and production, even the reproduction of the working of a machine or mechanism, make pictures of an essentially instructive kind. Russia has been one of the first countries to realize this fully, to judge from the information published in the The Cinema of London of the 13th December last. It appears that Shelia Bilshki has just completed a series of films illustrating the petroleum industry, the scenes being shot at Baku, Grosni Naikope, and the Ural mountains.

These films are for showing at the workers' clubs and higher industrial and technical schools of the U. S. R.

It not infrequently happens that men make use of a new discovery or invention without fully realizing what they are handling, or at any rate without having any thorough understanding of its genesis and structure. In such cases also the cinema may teach, and indeed reveal phenomena that escape normal observation.

The Journal de Genève tells us of an extremely useful telephone propaganda film, projected in the League of Nations Capital, showing the difficulties in constructing the lines in mountain districts, such as those of Switzerland, which possesses the highest telephone post station, at an altitude of 3298 metres; the organization and functioning of the Zurich central station; how the work of supervision and repair along the several lines is carried out, and lastly the benefits of the telephone to the public.

The whole world knows by now what
an immense force publicity has attained to in the United States as a fundamental coefficient of industrial development, and everyone is aware of the new and strange guises it assumes in order to attract attention and appeal to the public. It may be said that science and art vie with one another as inspirers and patrons of the modern advertisement. The film is put to good use in this domain; thus in New York the shop windows are everywhere displaying miniature screens to give ocular demonstration of all manner of things that may serve the purposes of trade publicity. The Kinematograph of Berlin tells us that a sound film is being shown in the windows of one of the big stores, illustrating the production of woollens through their various processes, from the raising of the sheep to the weaving of the material and the manufacture of a suit (5/116).

The machines used in draining marshy land are one of the finest achievements of mechanical science of our time. A recent film, turned by the Dutch operator, Joris Sven, shows the whole cycle of work in draining a marshy zone, and gives a splendid view of the pumps in action. (Daily Film Renter - 5/116).

To learn all about one's own national industries is a valuable step in popular education: the interesting documentary film taken by Jean Tedesco to illustrate the French metallurgical industry is inspired by this conviction. It gives a fine picture of the grandeur of human labour and industry. Films of this type are highly artistic productions in themselves, besides being of great social and moral value (Le Phare de la Loire, Nantes - 5/118).

We have had many occasions to refer to the fine work done in Germany by the industrial film, where it finds a very favourable territory in the powerful industrial organization so typical of the Reich. Thus we learn from El Debate of Madrid that a film has recently been shot by the Ufa Co., giving a chronological history of aviation in all its phases of development, from the flying machine of Wright Brothers to the air giants of to-day. Thus also the Ufa Dienst of Berlin tells us that the Deulating Weekly Survey — a film journal concerned solely with industrial films — shows how enormous quantities of salt are being obtained in Alvorado, Cal., by the evaporation of sea water (5/120).

Professional orientation films.

The unique value of the film as an auxiliary to all those concerned with launching the young into trades or professions is well established.

The Informations Sociales published by the I. L. O. on the 6th January of this year informs us of the institution of special professional orientation schools in Roumania, Belgium, and Switzerland. The Zurich office dealing with this question deserves honourable mention; we learn that during 1928 this institution organized 48 lectures illustrated by the cinematograph (8/94).

A note published in a recent issue of To-day of New York refers to the intention of Mr. Lemmel B. Schofield, Chief of Police of New York, to make use of «talkies» for training firemen and police officers. This is not the first initiative of the kind, but it is another striking instance of the value of the film for vocational training (8/95).

Finishing courses for cinematographic operators are getting too numerous to count, owing to the ever growing need of a perfectly trained technical staff and the high standard demanded by the producing firms. Following on the understanding between the R. C. A. Photophone and Mr. Sam Kapaln, President of the American Motion Picture Operators' Society, a new and important course for this purpose has been opened in New York (The Film Daily, New York - 8/96).

Liverpool offers us a further example of the importance attached by film manufacturers and manufacturers of cinematographic instruments to these courses for technical operators. A new course has recently been started there, which already counts 125 pupils; the Western Electric Company is contributing to its success by sending one of its own engineers to give lectures each month without charging any fees. (The Daily Film Renter, London - 8/99).

Another striking example of the above is afforded by the Fire Department of Paris, which has gathered together a vast number of films reproducing scenes of fires as a
means of training their employees. (The Film Daily, New York - 8/98).

Journalism is another profession that requires of its adepts a comprehensive knowledge of the whole complex organism of which it forms so important a coefficient. A correct understanding of the technical organization of newspapers and the industrial and technical framework of the press is a valuable asset to the conscientious modern pressman. Washburn College, Topeka, Kansas, has been showing films in their classrooms reserved for budding journalists for the projection of films illustrating modern newspaper organization and the work of the editorial staff (Movie Makers, New York - 8/11).

The Sound Film. — Within the short period since it came into existence, the sound and talking film has already won over a large number of the world’s markets and is rapidly overcoming all opposition. Official information from the Department of Commerce of Washington (The Film Daily, New York - F. 19/423 and 432) shows that there are already more than ten thousand plants of the kind that are working or will shortly be ready to start. The greater number of these are in the United States (about 8,400); 200 in Canada, 1200 in Europe, about sixty in South America, ten in Egypt and 200 in the Far East.

The figures concerning the spread of the sound film are of especial importance when it is considered that, according to approximate but fairly exact calculations, the cinematograph industry is the chief, if not the sole source of amusement of about 115 million persons weekly in America, and about 130 millions in the rest of the world.

At Washington recently, Harry H. Warner, president of Warner Brothers Pictures Inc., spoke to an audience of 400 representatives of the religious, educational, and social life of America on the singular origin of the « Vitaphone sound » system.

A wireless station had been set up in the Warner studios on the Atlantic coast, and one of the directors came to hear, in a conversation with an engineer, of the attempts that the latter had been making to obtain a talking film. The first experiments were more or less of a failure. Then a new experiment was made with an all-sound film to reproduce the sounds of a jazz orchestra. As the leading filming theatres are wont to monopolize the best orchestras, in order to give the utmost support to their actors in the performance of their rôles, the enormous advantage that would accrue by the use of the sound film instead of orchestras was at once evident. The first contract with the Western Electric was therefore executed, and the trade name of « Vitaphone » was given to the new system. It was some time, however, before musicians would accept the idea that this did not mean doing away with their work, but a specialised and improved form of performance, since perfect orchestration is absolutely necessary if the best effects are to be obtained.

Harry H. Warner admits, however, that slight crises are likely to occur here and there, while the various members of orchestras are being settled; but he thinks they
will prove to be not very serious and easily solved.

In Poland, for instance, according to the December number of Informations Sociales, published by the I. L. O., there is considerable unemployment among musicians in consequence of the use of the sound film, and as usual, no one has thought of having recourse to any other remedy than a special tax on sound films to form an aid fund.

This form of unemployment is largely due to an error of judgement on the part of those running cinemas. They thought that with the sound film synchronized to the mute show there would be no necessity for an orchestra; but that is a mistake. The sound film can complete, but not replace an orchestra; by the use of these films the orchestra can be reduced to the number of instruments that cannot be perfectly reproduced in the sound film. There are many musical forms and expressions which cannot, up to the present, be reproduced by the sound film, and the human accompaniment must still be used, therefore, in these cases.

The orchestra could and should be considered as the completion of the cinematograph spectacle, especially in the foyer and during intervals.

The gravity of this problem was recognized at the December sitting of the National French Syndicate for the Cinematograph Industry (Le Courrier Cinématographique, Paris, of December 31st., 1929); and Charles Le Fraper, vice-president of the Syndicate, in raising the question, admitted the difficulty of checking the invasion of the sound film; the most that can be done is to endeavour to solve the problem by a financial effort, in order not to be beaten by foreign competition.

It may be of interest to quote the opinions of some actors and actresses on the sound film (Josy Journal, Cairo, February 17, 1930).

a) Richard Barthelmess: The talking film gives mimic art a better chance and allows of much finer nuances in the performance. In addition, our pictures are not forced to depend for their explanation on more or less incomplete and misleading titles and captions.

b) Billie Dove: Pantomime is much less needed when working for the sound film. Actors are therefore able to express themselves with greater force and sincerity.

c) Corinne Griffith: The rôle of the film artiste is immeasurably simplified by the addition of language.

d) Dorothy Mackail: I have always had to speak, even when performing for the mute film, because I could not give my feelings free play without the use of words.

e) Douglas Fairbanks: Sound is the third dimension of the film. Take a golf player who has lost an arm, and then manage to restore it to him. He will of course have to start training all over again, but that once done, he will not only become a good player, but may become a first-class one.

f) Loretta Young: I have a special fancy for pantomine, perhaps because the mute art is more difficult. But, on the other hand, some of the scenes that I created for the sound film seemed so vivid and real to me that I often could not sleep at night after playing in them. I was never affected like that by acting for the mute films.

g) Lois Wilson: I used to have two passions. One for the screen and the other for the stage. Suddenly I found that these two passions could be fused, and that the one could admirably complete the other, thanks to the creation of the talking film.

The figures of the cinema. — In 1929, there were 3503 French cinemas, without counting those belonging to religious and lay organizations, or scholastic cinemas (Ciné Journal, Paris - F. 19/438).

The general situation of the industry was not, however, very flourishing. Proof of this is to be found in the fact that the number of films imported into France from Germany was 130, while only 16 French films were exported to Germany (La Cinématographie Francaise, Paris, 19/426).

The production of films in the Republic, which amounted to 68 in 1924, and increased to 94 in 1928, dropped to 52 in 1929, the lowest number in the whole five year period. Against these 52 national films (counting only those that passed through the Censor's Office) the Censor's Office examined last year 386 films altogether, of which 211 were American, 130 German,
The following is an analysis of the total number of films submitted to the censorship during the last two years:

<table>
<thead>
<tr>
<th>Country</th>
<th>1928 %</th>
<th>1929 %</th>
<th>Increase or Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>America</td>
<td>53.70</td>
<td>48.30</td>
<td>-5.4</td>
</tr>
<tr>
<td>Germany</td>
<td>20.90</td>
<td>29.70</td>
<td>+8.8</td>
</tr>
<tr>
<td>France</td>
<td>16.10</td>
<td>11.90</td>
<td>-4.2</td>
</tr>
<tr>
<td>England</td>
<td>4.00</td>
<td>5.30</td>
<td>+1.3</td>
</tr>
<tr>
<td>Other countries</td>
<td>5.30</td>
<td>4.80</td>
<td>-0.5</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Germany also finds it necessary to defend her film industry and intensify the measures protecting it, in spite of her progressive invasion of neighbouring markets. This fact is to some extent due to a state of things that is, in all probability, universal rather than strictly German. It has, in fact, been estimated that only one-third of the audiences frequenting the 380 cinemas of Berlin pays the entrance fee (The Daily Film Renter, London - F. 19/427), and the entire cost and maintenance of films has to come out of this third: theatre, orchestra, and all other more or less necessary outlays. If the day comes when the non-paying two-thirds are, if not entirely suppressed, at least considerably reduced, the industry will benefit in every way by its increased revenues, and it will be possible to sell the tickets at a reduced price, to the advantage of the public.

German film renters have, in fact, pointed out (To-Day's Cinema, London - 34/479) among the causes threatening the national industry: the disproportionate increase of cinemas in comparison with the increase in the population; the amusements tax, which has reached 12 1/2 %, and the advent of the sound film. One of the principal causes of the menace is, in fact, the decrease in the number of persons frequenting the cinema.

Side by side with the German film-renters' crisis, we have the crisis in the ranks of other collaborators in the film industry (authors, scene directors, architects, actors, musical composers). To meet this crisis, the various classes mentioned have organized themselves into a Dachorganisation der filmschaffenden Künstler Deutschlands (Cinematographic Artistes Protection League). The Verband der Filmregisseure Deutschlands e V. (Association of Scene Directors), the Verband deutscher Filmautoren e V. (Association of Cinematograph Authors), the Verband der Filmarchitekten Deutschlands e V. (Association of Cinematograph Architects), the Verband der Filmarchitekten Deutschlands e V. (Association of Cinematograph Architects), the Gesellschaft der Filmregisseure e V. (Actors' Association) and the Gesellschaft der Filmregisseure e V. (Musical Composers' Society) all form part of this new organization.

Together with the regular film industry, that of the cultural and educational film is also encountering difficulties, which, however, have not prevented the production, in 1929, of the respectable number of 728 films, of the total length of 412,803 metres (La Cinématographie Française, Paris - F.3/264).

In Austria, at the end of last January, 30 theatres had already installed sound equipment, and 10 others were being set up. Almost all of these were supplied by the Western Electric Co., although a new type which has recently been put on the market, the Wiener Selenophon, on the Thiring system, achieves perfect purity in the reproduction of speech.

In the Czechoslovak Republic there is a considerable increase of film production, 36 films having been produced last year against 15 in 1928. It is interesting to note that the production and spread of educational films is continually increasing. In 1929, in fact, 283 films of a total length of 153,379 metres, that is to say, more than 10 % of the national and foreign films submitted to the censor, were recognised as having a cultural and educational character (Internationale Filmanschau, Prague - F.19/437).

In England, during the year 1928-1929 alone (The Film Daily, New York - 19/434) 256 patents were granted for cinematograph inventions. Of this number, 52 were connected with colour films, 57 with sound films, and 21 with stereoscopic processes.

We have also, of recent date, the following further figures connected with films:
It appears that 80% of the films projected in Sweden are produced in America (Weekly Film Review, Atlanta - 19/435).

Meanwhile, the number of theatres is steadily increasing. In Switzerland there are 285 cinemas, 20 of which are travelling cinemas; 106 out of the total number are open every evening; 149 are open only two or three times a week, and 30 are open only occasionally. The total number of seats is about 60 thousand.

Denmark has 380 cinema theatres, 42 of which are in Copenhagen, 61 in the provincial towns of Seeland, 78 in the provincial towns of Jutland, 87 in the rural communes of Seeland and Fionia, 108 in the rural communes of Jutland and the other Islands, and 4 in the Færø Islands.

The so-called five-years plan in Russia, which should lead to the continual extension of the cinema network, is going full steam ahead; new premises are being opened, production is being intensified, and the various classes of film workers are being formed into groups.

The basis of cinematograph activities in the U. S. S. R. is to popularize the screen among the peasant and working classes, with the object of enabling millions of persons who are present beyond the reach of the cinema to benefit by the education and culture it can impart.

According to official information which has courteously been supplied to the Institute, Russian cinemas, which numbered 6074 in 1927, should reach the number of 24,063 in 1932-33. Including scholastic cinemas and those belonging to the Red Army, already working or planned, the cinemas of the U. S. S. R. will reach a minimum of 43,896 at the end of the period indicated, with a possibility of increasing to a maximum of 60,000.

Russian cinemas are divided into three classes: commercial cinemas in the towns, cinemas belonging to workmen's clubs, and rural cinemas. The first class, according to the plan, should have a minimum increase of 54.40% (from 897 to 1385); in the second class the increase should be 133% (from 2425 to 5650) and in the third class it should be 518.70% (from 2752 to 17,029).

These figures do not include the cinemas in the Ukraine, where the screen has attained a higher development, in proportion to the territory and population, than in other regions of the Republic.

The industrial plan aims:

a) at intensifying national production in such a way as to ensure that all the cinemas of the U. S. S. R. shall be projecting films of purely Soviet production by the end of the five years in question;

b) at increasing the production of documentary films to the greatest possible extent;

c) at creating an intimate bond between the cinema and the economic reconstruction of the country.

The official plan, therefore, provides for the creation of 667 artistic films and 701 documentary films. These figures, however, do not include the films to be produced by the various Commissariats, the Executive Committees of each region, and the trade organizations and cooperative societies.

The Ukraine proposes to create 241 artistic films and 326 documentary films.

Scholastic and children's films form a special feature of the five-year scheme; and the work to be accomplished in this branch during the entire period involves an expenditure of 170 million roubles.

With regard to the groups of cinema mechanics, directors, camera-men and actors, the scheme arranges for a number of regular collaborators in the screen, varying from a minimum of 22,000 to a maximum of 40,000.

In the countries outside Europe — with the exception of Mediterranean countries, which are more or less affected by the influence of neighbouring States — the cinema is assuming a development that is more notable in view of the fact that there is a tendency, as in Russia, to consider the film industry from a strictly national point of view.

In fact, while the great majority of the films shown in Egypt are imported (50% from France, 25% from America, 12% from England and 6% from Germany, during the past year) the industry is in a very flourishing condition in India, according to the «Billboard» of Cincinnati (19/439) and Mon Ciné of Paris (34/507). Madan &
Co., create artistic films with exclusively native talent, while the Tagore Company, recently formed by a cousin of the poet, intends working on the same lines. It is calculated that native companies alone employ, at the present moment, about 5000 actors and 178 actresses.

According to The Yorkshire Post, in Japan, which was recently described from the standpoint of the cinematograph in a book published by the Russian scene director Eisenstein, the producing companies employ a very brief period for the creation of authentic works of art — from one to four weeks — and Western producers might do well to take example by them. The two biggest companies are the Nikkatsu, which specialises in the production of historical films and films dealing with the Shinto and Buddhist religions; and the Soetsiku Company, which has three producing centres, one of which is at Kamata, the Japanese Hollywood, where there are 50 artistic directors, 80 technicians and more than 600 actors.

Eisenstein, while acknowledging the progress made by the Japanese cinematograph, claims that it has the defect of adhering too closely to the rules of the theatre and of neglecting the wider scope, both in technique and ideas, afforded by the cinema. This criticism cuts at the core of the question, for it reveals the national stand that Japan is making against the invasion of films from across the ocean; that is to say, she intends to keep intact in her productions the traditions, rites, customs, and other elements that have contributed to form the character and spirit of the race during the last millennium.

One of the nations that is almost outside the cinematographic life of the world is Persia; but this country is on the way to taking a front rank among Eastern countries in the van of progress, and to reviving its glorious traditions of the past.

Up to the present, only imported films have been shown in Persia, preferably German, French, Russian and American. The detective and adventure types of film are preferred, as well as comic ones and films of passion and drama. Topical and documentary films have recently begun to take hold, however, and as it is the things that happen in the country itself that especially attract the public, Persia has begun to import photographic apparatus and film material.

In this country the cinema programmes, which average from 1800 to 2500 metres of film, usually include some topical subject, a comic film and a drama.

The Persian cinemas are working full time, although they are naturally obliged to conform to the prohibition of public amusements during the religious festivals of Islam.

Films to be projected must have all captions, etc., in Persian, and the form, set-up, and staging must be easy of comprehension by the audience.

There are seven cinemas in Teheran alone, and two more are being got ready, each of which will contain 900 seats. One of the new ones is intended for open-air projections during spring and summer, and the other for winter projections.

The largest existing cinemas, the « Grande Cinema », « Cinema Iran », « Fordowsky » « Teheran », « Peri » and « Golestan » can each seat from 400 to 700 persons.

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M. Emile Roux-Parassac says that only a small minority of the French people frequent the cinema, a minority composed mainly of the working classes. The bourgeois and educated classes boycott the films through ignorance and prejudice rather than from contempt or of set purpose (Film, Paris - F. 34/480). The same may be said, more or less, of all countries. This fact is due to a misapprehension caused by reasoning merely from presumptions, without practically examining the value of this new means of social propaganda, education, and culture.

The sound-film, which might be a splendid means of documentation — much, indeed, has already been achieved in this line — meets with great opposition in the artistic world for purely doctrinaire reasons, on the part of the champions of the silent film and of those who see only the inevitable defects in the technique of the new development.

Eugenio Giovannetti says that the attempts made up to the present do not succeed in giving a true reproduction of words, as they do of images, so as to harmonize the visual and auditory illusion. He therefore considers that the sound-film, but not the talking-film, may in the future be found worthy of the screen (Giornale d'Italia, Rome - F. 10/308).

Camille Guimard, on the other hand, expresses, as the opinion of a musician, his entire admiration of the sound-film, which he regards as belonging neither to the theatre nor the cinema, but as a synthesis of both arts. (La Griffe Cinématographique, Paris - F. 12/568).

The sound and spoken-film has, in spite of misgivings, triumphantly entered on the documentary field. One of the latest and most talked-of films of the Radio Corporation is The Atlantic. Two Catholic reviews, the M. K. B. Film Rundschau of Berlin (F. 12/566) and The Universe, London - (F. 12/567) have expressed diametrically opposite opinions regarding this film. The chief criticism of it is not directed against its technique, but against the unreality of its subject.

It is objected that imagination is neither history nor a document. Above all, precision is required in the reproduction or reconstruction of facts; the more so, as the film may soon become a means of classifying historical events for future times, in spite of the present opposition to it of certain official institutions, such as the French Academy (Le Temps, Paris - F. 6/431).

Against it Aldo Parini, writing in Il Lavoro of Genoa (F. 34/495), in an article on the Aesthetics of the Cinema, says that the real art of the film is a work of imagination, not of documentation. Its proper part is to express the feelings and mind of the artist, who knows how to relegate the episode to the background, so as to lay more stress, on the emotions by suppressing realism.

Jean Dreville maintains that the documentary film should be the soul of the cinema, as it is in this field, that is not yet worked, that the artist can find the greatest inspiration and the greatest freedom for the realization of his ideas (Gazette de Monaco et de Monte Carlo, F. 6/441). Jean Painlevé considers the film to be of great service to science, and protests against false documentary films which give rise to vulgar errors; be deplors the neglect by the industry and the State of this side of the educative power of the screen (Le Monde, Paris - D. 6/410).

Should the documentary film have a dramatic or romantic plot, or not? Jean Dreville calls attention to this much discussed question without answering it. It seems to us impossible, a priori, to decide one way or the other. It all depends on the particular circumstances under which the incident occurs and is photographed. In this, as in other cultural and educational matters, it is impossible to lay down any hard and fast rules, or to depend on purely theoretical ideas.

The cultural documentary film, whether it be a sound one, as foreseen by Fovean de Cournelles, or a silent one, may deal with all social problems, as we pointed out in our
March number (Le Cinépse, Paris - 281). It reflects the most subtle aspects of human action. Thus recently a cinema at Breslau screened The Sexual Problem illustrating married life from the point of view of social hygiene. (Kinematograph, Berlin - F. 3/118).

No aspect of the cinema is so living as the documentary one. The possibility of representing the different aspects of human enterprise and its strict adherence to life has made the cinema the dominating factor of modern mentality.

Art. — Art has, from the beginning, made use of the screen, at first with bad results, but now with great success. A recent film produced by the M. G. M., The Rogue’s Song, taken from Franz Lehár’s operetta «A Gipsy’s Love», has met with enthusiastic success at the Chinese Theatre at Los Angeles and at the Astor Theatre at New York; Laurence Tibbett and Catherine Dale Owen feature in it.

Art films also meet with great encouragement in France and Italy. Lazard eff announces in the Paris Midi (F. 2/121) that in France a group of authors, including Maurois, Bourdet, Girardoux, Le Grix and the Contesse de Noailles, is being formed for the production of artistic films, with the object of restoring the French cinema industry to its position in the front rank of world producers for the screen. G. Macri calls on the Italian film industry to reproduce on the screen the Greek plays periodically given at Syracuse, since there is no reason why the film should pass over the highest manifestations of art (Arte e Artisti, Roma - F. 2/122).

Carl E. Milliken declared, in a lecture delivered at the Women’s Club at New York, that credit was due to the cinema for making known everywhere new fashions in dress and house decorating (To-day, New York - F. 22/300).

Art, or at any rate the so-called artistic film, has its immoral side, there being a tendency to present under the guise of art scenes and subjects that overstep the limits of education and culture, not to mention decorum. At the Empire Cinema at Buenos Ayres a so-called cultural and artistic film was screened, which consisted merely in a somewhat indecent exhibition of men, women and children practising in the open-air exercises and dances under the instruction of a German teacher (Critério, Buenos Ayres - F. 3/285).

Among the latest artistic films announced or produced are: Cosmos, illustrating the history of mankind and man’s physical and mental development in different ages, (The Kinematograph Weekly, London - D. 3/277); Les Nouveaux Messieurs produced by J. Feyder, which has received artistic approbation in Germany from the Commission of the Institute of Education and Instruction of Berlin (La Cinématographie Francaise, Paris - F. 2/115). It should be noted that «artistic approbation» carries with it tax reductions, a system which might well be emulated, so as to encourage the production of high-class films.

Other artistic films are: Frederica of Sensethim, dealing with a youthful love affair of Goethe: this film was turned in Frankfort, Strasburg, and other cities connected with the life of the poet (Kinematograph, Berlin - F. 2/119) The Dark Lady produced by Maurice Elvey on an episode in the life of Shakespeare (La Cinématographie Francaise, Paris - D. 2/120); The Tin Soldier, illustrating the fairy story of the same name, which was praised as of high artistic value by the Lampe Committee (Licht-Bild Bühne, Berlin - F. 2/123).

Social Life. — Four recent documentary films represent different phases of work in present day life. The province of Antwerp has decided to produce a film illustrating the work carried out by it in various fields of activity; this film is to be shown during the exhibition at Antwerp and Liege, (Neptune, Antwerp - F. 6/421). At the same time a film called Sprengbags N. 1010 has been photographed in Germany; it illustrates the new German financial and industrial imperialism as shown in the working of its great industries.

In contrast to these two films, which exhibit the life of the workers, are two others stressing the beauty and nobility of life. The heroic, but hard and toilsome life of sailors manning the life boats and inspecting light-ships is displayed in a sound film; the other one shows the daily struggle of fishermen fighting for their livelihood against
the perils of the deep (Mon Ciné, Paris - F. 6/409) and Licht-Bild-Bühne, Berlin - F. 6/432)

Political. — W. J. Gell, director of the Gaumont C., is of opinion that politics should be entirely eliminated from the film in the interests of the industry. (The Cinema, London - F. 9/120). Raymond Millet is of the opposite opinion; he has pursued an enquiry amongst well-known people in French politics, of all shades of opinion, such as: Paul Boncour, Maurice Violette, Eugène Lautier, Jean-Michel Renaitout, André J. L. Baton, Pierre Taittinger, Xavier Vallat, Maurice Pujot, Paul Reynaud, Henri de Kervi®is and Paul Gini®st. He met with considerable difficulty, caused by the fear that the censors might take action on political grounds against films in favour of any one political party. But the tangible success of the political film in America, and more especially in Germany (not to mention Italy), is, however, beyond question. (La Griffe Cinémato©raphique, Paris - F. 9/128).

The recent speech of the Austrian Chancellor, Schöber, at the Hague has been recorded as a talking film (Kinematograph, Berlin - F. 9/129). We have also three recent event films. One showing the Hague Conference, screened at the Kleukamp Hall in Holland (Nieuw Weekblad-voor Cinematografie, The Hague - F. 9/118), a talking film of King George's speech at the opening of the Naval Conference in London (Daily Review, New York - F. 9/130), and the film of the Conference itself, or rather preliminary to it, taken whilst the delegates of the several nations were walking in the garden of Downing Street. Each of them said a few words in his own language in front of the microphone (The Daily Telegraph, London - F. 9/112).

Other films of a historical-political order are a film showing the adventurous life of the Empress Catherine, screened at the Atrium in Berlin (To-day's Cinema, London - F. 9/122); one in preparation by Richard Oswald called L'Affaire Dreyfus, in which Clemenceau and Jaurès are shown on the screen (Film Reveue, Antwerp - F. 9/113); a Russian one The March of the Enthusiasts, showing the struggle of the Russian people during the social conflicts (Cinéma Spectacles, Marseilles - F. 9/119).

Of a purely political order are those of strictly nationalist tendencies or in defence of the country's own film production; whether they aim at refuting real or imaginary attacks on a race or a country, or merely at preventing the swamping of markets and the consequent perversion of national spirit and thought by the invasion of foreign talking films.

In the first category we have the film Welcome Danger by Harold Lloyd, in which the Chinese are represented as thieves and opium-smokers. At Shanghai the public tumultuously left the theatre before the end of the performance, demanding to have their money back and that the film should be publicly burnt. « The Times » in reporting the incident, pointed out that the cinemas which screened the objectionable film were owned and managed by Chinese and that the local censorship had not forbidden it.

As regards the second category, in spite of the language difficulty, recent statistics show that 48% of talking films screened in France are of American origin (The Film Mercury, Hollywood - F. 10/309). Films in the several national tongues are announced: in Holland « Things Rare and Various » (Nieuw Weekblad voor de Cinematografie, The Hague - F. 10/300); in Brazil the Municipality of San Paulo has decided to impose a fine of 1500 francs on Cinema directors who exhibit English-speaking films (Le Courrier Cinémato©raphique, Paris - F. 10/307). In Cze®ovia, the Prague press has started an energetic campaign for the prohibition of German speaking films, in order to limit the penetration of German influence. Only English, American, or French speaking films will be admitted. This is the more significant since 90% of the population speaks and understands German perfectly (La Cinémato®raphie Francaise, Paris - F. 10/303). At Los Angeles representatives of Latin America have protested against the decision taken at Hollywood to employ only actors speaking pure Castilian in the production of Spanish talking-films (Inside Facts, Los Angeles - F. 10/303).

In England and in Italy the need to fight the importation of American films is realized,
since these may have notable effects on the language, the spirit and the unity of the race (The Daily Telegraph, London - F. 34/502 and L'Eco del Cinema, Florence - F. 34/499).

The Italians propose an agreement between the 25 Latin nations for the production of films.

In opposition to the above idea, the Rivista Cinematografica of Turin (F. 12/561) maintains that, at least as far as the sound film is concerned, it is not incompatible with national ideals, since music, either instrumental or sung, is the international language par excellence. It seems that Horace Sheppard has discovered that all languages are pronounced by means of six co-ordinated positions of the lips and that it is, therefore, possible to adapt any language to the original spoken film by following, in the selection of phrases, the movement of the lips which have been thus standardized (La Cinematographie Francaise, Paris - F 10/296).

One important point of view has, however, been overlooked. The talking-film — as apart from the merely sound one, which can only have a negligible influence on the habits and mind of the different nations — cannot make the universal appeal made by the silent film. The latter, by merely translating the captions, can spread all over the world, and represent systems of life and thought directly opposed to those of the different states. But when speech is added to the pictures, their spread and popularity over the world becomes extremely difficult, and this will be the case until means have been found to synchronize on the same film the different languages of the importing countries. The possibility of propaganda is, therefore, reduced, and can only represent a danger for peoples speaking the same language, a danger common to other forms of expression, such as books, newspapers etc.

Instead of an international danger, the advent of the talking-film in its present state, may, therefore, be regarded rather as a bad day's business for those producers who formerly flooded the world markets with their silent films.

Military. Renzo Reggiani proposes that a visible history of the war should be made by means of the cinema, as he considers that the impression made on the imagination by a direct view of the events would make war, which is perhaps the most important of all social phenomena, more comprehensible (Gazzetta di Venezia - F. 7/51).

The most recent military films, either produced or announced, may be divided into three classes:

1) imaginative productions, founded on written descriptions, and on photographs of real war scenes;
2) distinctly documentary records of real events;
3) films for military instruction.

In the first class we find The Western Front in 1918 founded on the book Quatre de l'Infanterie (L'Ecran, Paris - F. 7/58); Journey's End and All Quiet on the Western Front, the latter founded on the famous novel by Remarque (Daily Review, New York - F. 7/59 and 22/299). Mr. Carl E. Milliken, in a speech delivered at the Mother's Club at Brooklyn, said that the horrors of war exhibited in these films were a splendid argument in favour of ideals of peace and universal harmony.

In the second class we get The Blue Train by the Sovkino, illustrating an episode of the Chinese Revolution (La Cinematographie Francaise, Paris - F. 9/131); Scapa Flow showing some revolutionary scenes which preceded, in Germany, the armistice and the surrender of the German fleet. Permission to screen this was obtained after a lot of difficulties with the German censorship (The Times, London - F. 7/61); Life in the Foreign Legion which will be photographed in Africa with officers of the Legion taking part (F. 7/60).

In the third class are Pilots of Death, produced by W. Wellman, in collaboration with the American army and Air Force (Le Courrier Cinematographique, Paris - F. 7/55), a Serbian film showing the battles fought near Belgrade in 1914-15 (To days Cinema, London - F. 7/56); The Tragic Plunge a German production, but photographed at Santander with the co-operation of officers and units of the Spanish Navy (Cinemaonde, Paris - F.27/52).
In Belgium and America military instruction in the army by the film has been greatly developed (F. 753 and 54).

Tourist Films. Errile Roux Parassac, in an article on tourist films, deplors the fact that there are, so far, no good films for touristic propaganda in France (Ciné Magazine, Paris - F. 6/440). A series of twenty such films are in course of preparation, which will show France as it was and as it is (Bordeaux Ciné, Bordeaux - F. 6/442).

In other countries this type of film is being exploited. In Spain the National Society for the encouragement of tourism has completed its plan for this year for cinematographic propaganda. Three types of documentary films, measuring from 700 to 900 metres, will be produced: the first, which are completely silent, will show all the interesting features of a province or district; the second are sound films, synchronizing characteristic songs and dances; the last will illustrate historical and literary scenes. A dozen films will be produced this year. Amongst the most interesting subjects are: Toledo, Vasconia, Galicia, The Guadalquivir in history and at the present day; Spanish Sanctuaries which will be illustrated by religious music; Arab Spain accompanied by modern Spanish music by Chapi, Albeniz, Granados etc. (El Debate, Madrid - F. 6/438).

In the hall of the cultural cinema of the Ufa at Berlin was recently shown a film entitled Under the Italian Sun which shows the most important Italian cities from an historico-cultural point of view, the beauties of the country-side and the business of the great cities (Ufa Nachrichten, Berlin - F. 6/419); Winter in Switzerland explains itself (La Cinématographie Française, Paris - F. 6/417); The Conquest of the Heights, showing the ascent of the Dent du Requin, one of the bleakest peaks of Mont Blanc (La Semaine à Paris, Paris - F. 6/439); The Heart of the North and Under Northern Lights - the former in natural colours - both showing the wild beauty of the fjords (Cinadia, Paris - F. 6/436 and Daily Review To-day, New York - F. 4/104).

Aviation. Many recent documentary-tourist films deal with aviation. C. Duvanel has produced a film, Swiss Wings, dealing with aviation in Switzerland and giving also interesting views of the chief European cities (Le Cinéma Suisse, Montreux - F. 6/434). From information received from our Vienna correspondent, it appears that the first presentation of a film dealing with flying by gliders, has taken place in Vienna. The Austrian pilot Kronfeld, winner of the Adler-Plakette, accompanies this film, with a descriptive lecture. It reproduces the flights he made during the great cold of last year, with a temperature of 30° below zero, in the vicinity of Raxgebiet and the journey of Kanlenberg on the completely frozen Danube. These are most successful photographs of flying and are as admirable from the artistic as from the educational point of view.

Two other films dealing with aviation are of a documentary-scientific order. One deals with flying as a means of transport, as an auxilliary to geographical, geological and agricultural work, for moving invalids or doctors, and for bringing first aid in urgent cases; the second film, The Flight Machine, taken in collaboration with the Royal Aeronautical Society, illustrates the flight of birds as compared with that of aeroplanes (El Debate, Madrid - R. 3/284 and The Yorkshire Post, Leeds - F. 3/280Y.)

Travel. The film is seen at its best as a record of the present for future generations when it reproduces landscapes and travels.

Travel films are full of adventures and dangers, due to nature or to man, from the very regions, unexplored or nearly so, where the photographs are taken. Such photographs of distant countries and incidents are unique.

Some of these films are of a highly dramatic nature, as Scattered at the Pole, which shows Snow's expedition to the North Pole (La Semaine à Paris - F. 6/450), and Commander Byrd's record of his journey to the South Pole. A fact which should please the cinema world is that Byrd has bestowed the name « Paramount » on one of the mountains which he discovered in his flight (Las Noticias, Barcelona - F. 6/437).

Another film dealing with the polar regions is one shown recently at the Mozart Hall in Berlin; it is called Roah, Roah and shows the Antarctic mountains covered with
eternal ice and the savage fights between elephant seals, whales and seals. (Film Kurier, Berlin - F. 6/451); the Sovkino has produced a film Life in the Polar Regions, showing the habits of the inhabitants of those parts (Cinematoweld, Antwerp - F. 6/425).


From Asia we get The Marvels of Asia, taken by Martin Hürllmann, illustrating landscapes, temples and buildings of a long past civilization, ancient Siemese dances and other beautiful and curious things (Film Rondschau, Berlin - F. 6/426).

Further there is The Men of the Forest, a Russian film showing the life of hunters in Mongolia (La Semaine à Paris - F. 6/450).

Africa is, as ever, the part of the world that most appeals to explorers and documentary film enthusiasts. Gaston Thierry suggests that, following England's example, France should produce colonial documentary films illustrating the civilizing influence of France in her over-seas possessions (Paris Midi, Paris - F. 6/445); M. Monceron, the Resident General of France in Tunis also wishes, by a greater use of educational films, to arouse a livelier interest in her colonies and protectorates than at present exists in the Mother Country (Excelsior, Paris - F. 6/404).

Amongst other travel films are one on the Prince of Wales' expedition, exhibited in London and accompanied by a lecture by Captain Erard (The Kinematograph Weekly London - F. 6/443); one on Italian Somaliland taken by Governor Corni and showing the remarkable development of the Colony (L'Osservatore Romano, Città del Vaticano - F. 6/444); one by Raymond Millet called A Walk through Equatorial Africa (Le Courrier Cinématographique, Paris - F. 6/428); Wings over Africa and The Soul of the Bled (La Semaine à Paris, - F. 6/450); The Song of the Hoggar, partly on the banks of the Niger (Revue Belge du Cinéma, Brussels - F. 6/448).

Still dealing with Africa we get: The Land without Shade illustrating North Africa, the first long meterage Ufaton film (El Debate, Madrid - F. 6/418); West of Zanzibar, by the M. G. M. (the Prince of Wales was present the first time it was screened) (Canadian Digest, Toronto - F. 6/403); The King of the Congo, a sound film produced by the Mascot Pictures Corporation (The Cinematograph Times, London - F. 6/406).

In Polynesia, Robert Lugeon has taken a very curious documentary film amongst the cannibals in the New Hebrides (Le Cinéma Suisse, Montreux - F. 6/435).

FOLKLORE. Cinematographic pictures of local habits have always been specially interesting, not only to people who are far removed from the scenes reproduced on the screen, but also for those who are the subject of the films. In the Courrier Colonial of Paris, 7th March 1930, Victor de Stahe deals with films of this kind, and states that the natives concerned are highly amused at scenes photographed from life, representing local ceremonies, fantasies, indigenous trades, and views of the cities and bazaars of Algeria, Tunis, and Morocco; that is to say, scenes with which they are directly in touch and which interest them.

Cinegraphic-folklore record is particularly difficult because either the photographs of the customs must be taken perfectly, or else they may provoke resentment on the part of the people who see their habits reproduced in a manner not consistent with the truth, or stressing and exaggerating the worst side of their life, whether intentionally or not. Thus the Publicitat of Barcelona (F. 6/422) has criticised some recent films of supposed Spanish propaganda, which reproduced unfavourably the customs and aspects of national life. Such films often tend to belittle the country, and the paper has appealed to the firms responsible for them to submit all such films to strict inspection so as not to offend the dignity of the country.

Amongst recent European folklore films a Roumanian one was shown at the Sorbonne at Paris, under the patronage of the Univer-
sity Musical Society, accompanied by a lecture by prof. Brailoin, of the Bucharest Conservatoire, on Roumanian religious music (Cinedia, Paris - F. 6/499); two films on London, one dealing with the Thames from a landscape and folklore point of view, the other showing the characteristic life of the foreign quarter in Soho (The Times, London - F. 6/416, and The Kinematograph Weekly, London - F. 6/408); Julius Hagen is preparing a talking-film, in six languages, illustrating the characteristic customs of different European countries (Daily Film Renter, London - F. 6/415).

Dealing with other parts of the world, we have Shanghai showing the life of the people of that city, and also pictures of the international troops who were there in 1927 (The Kinematograph Weekly, London - F. 6/407); Vasantsena, produced, by order of the Maharajah of Mysore, by the stage manager Bhanani Moham, has a slight, artistic plot and illustrates Indian customs and religious habits; it is produced entirely with native actors and crowds (Cine Journal, Paris - F. 6/402); a Fox Movietone film shows the Moroccan fêtes of Ber Rachid, and reproduces the sounds of native flutes, tomtoms and other instruments (La Cinématographie Française, Paris - F. 6/413). Lastly, Max Gluksman is preparing a film on the national art and customs of the Argentine (L'Ecran, Paris - F. 6/430).

Scientific. Documentary scientific films are making steady and striking progress not only thanks to the work of the more or less specialized industries connected with them, but also through the collaboration of amateurs, scientific studios and laboratories, engaged in experiments of the greatest value and interest, which are made known all over the world by means of lectures and exchanges.

Dr. J. Comandon gave a lecture at Toulouse, illustrated by films, on the division of cells and the movements of red blood corpuscles (Dépêche de Toulouse, Toulouse - F. 13/111). Another film of great scientific interest is Whither Flowing, a psychological study of hysteria, by Dr. H. A. Haise (Movie Makers, New York - F. 13/187).

Dr. Haise has produced also a surgical film The Soul Thief, which illustrates a very delicate operation (Movie Makers, New York - F. 13/107) Mm. Roederer, Haret and Picarde, at a meeting of the Radiological-Medical Society of France, screened a film showing the pelvis and spine of a patient (La Presse Médicale, Paris - F. 13/114) Dr. de Machel gave a lecture, at the surgical Society of Paris, on the new methods of operating for exploring the cerebellum; the lecture was illustrated by a film showing a child suffering from a tumor, both before and after operation (La Presse Médicale, Paris - F. 13/112).

Dr. Pino Cheni lectured at the Popular University of Trieste on the most recent treatment of tuberculosis (Il Piccolo, Trieste - F. 13/110).

Dr. Palanca gave a lecture, illustrated cinematically, on typhoid fever in Spain; Dr. Pedro Mayorat Carpintero lectured on biopsy in the diagnosis of chronic inflammations (El Debate, Madrid - F. 13/108, 109).

Another valuable group of scientific films illustrate micro-cinematographic zoology and biology in the animal kingdom.

Mrs. Kate, Hecht screened pictures at the Urania in Berlin of owls, badgers, crows, cranes, dogs, cats, goats and otters, under almost free conditions, in their life and at play (Licht-Bild-Bühne, Berlin - F. 3/267). Seton Gordon lectured in London on Sea birds and Seals, illustrated by a film taken by himself and his wife in the New Hibernies (The Times, London - F. 3/285). The Ufa has produced a film Armoured Animals (Film Review, Antwerp, - F. 3/26) and Jean Painlevé another on crustaceans (La Semaine à Paris - F. 3/275).

Micro-cinematographic biology of the animal kingdom is, as ever, the most interesting study, both for the public and for scientific research workers. The high documentary value of film records of phenomena visible to the naked eye is obvious, as it preserves the phenomena and extends the range of such knowledge. But micro-cinematography opens up much wider and more original horizons, hitherto unknown and unknowable to our own immediate powers of observation — that unknown world which exists around and outside us, which we feel or of which we have heard, but which we
could not see, or analyze, or study for the benefit of mankind, were it not for the prodigious help given to us by the cinema in microscopic research, with its powers of slowing down and accelerating movement. The Ufa has recently produced a film showing the various weapons of defence and attack amongst animals (Ufa Nachrichten, Berlin - F. 3/276). Still more interesting are the films screened at the Palace of Fine Arts at Brussels by Jean Painlevé on nature as revealed by the cinema (L'Indépendence Belge, Brussels - F. 23/113); and that shown by A. Bayard at Paris in the theatre of the Oceanographical Institute, which reproduces to perfection the achievements of the oceanographical museum and the biological study of the ocean depths.

**F I L M C E N S O R S H I P I N I T A L Y.**

**Laws.** — The Italian censorship of films, which was formerly regulated by the Act of the 25th June 1913 and the order in Council of the 9th October 1919 (No. 1953), is at the present time subject to the following enactments:

*a) Royal Decree of the 24th September 1923* (No. 3287), as amended by the Royal Decree of the 18th September 1924 (No. 1682);

*b) Act of the 10th December 1923* (No. 2277) for the protection and assistance of mothers and children;

*c) Regulation of the 15th April 1926* (No. 718) under the preceding Act;

*d) Act of the 16th June 1927* (No. 1121) on the requirement to exhibit films of national production.

There is also the Royal Decree of the 2nd October 1924 (No. 1589) on the collection of taxes on cinemas through the medium of the Societies of Authors.

According to Art. 3 of the Royal Decree of the 24th September 1923, all persons exhibiting or causing to be exhibited films that have not been entirely or partially submitted to the censorship, are liable to a fine of from 100 to 1000 lire and to detention for a period not exceeding one month.

« In the case of a repetition of the offence, a fine of from 200 to 2000 lire may be inflicted and the period of detention extended from three days to one month. »

All persons infringing this Act, in the circumstances contemplated in the first part of Article 3, are further required to day to the Treasury a sum equal to five times the amount of the fee chargeable for the examination of the film under Art. 2 of the Order in Council of the 9th October 1919 (No. 1953).

In the case of a repetition of the offence, ten times the said amount is chargeable.

Any person exhibiting or causing to be exhibited cinematograph films that have been entirely or partially prohibited is liable to a fine of from one thousand to ten thousand lire, and to detention for a period of not less than ten days and not exceeding one month.

« Any person exporting or endeavouring to export abroad any film that has not previously been passed by the censorship is liable to a fine of from 200 to 2000 lire and to detention for a period not exceeding one month. »

« Where the film in question has been entirely or partially prohibited by the censorship, the fine shall be increased from a maximum of 2000 to a maximum of 10,000 lire and the period of detention from ten days to one month. »

**The Censorship Boards.** — In compliance with the provisions of the single clause of the Royal Decree of the 18th September 1924 (No. 1682) the examination of scenarios and censoring of the films are entrusted to a Board consisting of the following persons:

*a) an official of the Department of the Interior, and member of the Police Administration, acting as Chairman;*

*b) a magistrate;*

*c) the mother of a family."
Where a Prefect is appointed to the Board, the censoring of the films must be entrusted to an official of the Prefecture not inferior to a councilor in rank.

The interested parties may not be present at the censoring.

An official of the Police Administration acts as secretary of the Board.

According to the terms of Art. 156 of the Regulations of the 15th April 1926, the choice of the mother of a family is made from a panel of six names proposed by the Opera Nazionale per la maternità e l'infanzia (National Mothers' and Infants' Welfare Institute), which may submit to the Ministry of the Interior other lists of names of mothers of families to be included in further censorship boards that may be appointed.

The underlying principle of the Italian law, however, is the appointment of a single Commission, with offices at the Ministry of the Interior, in Rome, that may be subdivided into autonomous sub-commissions forming part of the original organization.

**Procedure.** — The procedure of the Commission or Commissions of the first instance is as follows:

the general secretary accepts applications for the examination of films and scenarios, and enters them in chronological order in separate registers;

applications must be lodged in duplicate (one copy on stamped paper) and must specify:

- the name, address etc., of the firm presenting the film;
- the title of the film, the trade mark, and the meterage of the reels;
- a specification of the titles, subtitles and captions contained in the film, in the same order in which they appear on the reel, and in the Italian language;
- a statement to the effect that the film is being presented for the first time to the censorship.

The films are examined in the order in which the applications are received, an exception being made in favour of topical reels and films that are of recognized educational interest. For these last two categories, indeed, the Ministry may, in cases of special urgency, delegate the Prefects to grant permits for exhibition as occasion arises.

It stands to reason that such permits cannot be granted before the films have been fully examined; the examination in such cases shall be carried out at the expense of the applicant by the Prefect or his delegate, after receipt of the application and of proof that the fees have been paid.

The Prefects are required to inform the Ministry of the Interior of the arrangements made and at the same time to transmit the applications.

No cinematographic film intended for exhibition within the territory of the Italian Kingdom is accepted for censoring unless a copy of the scenario has previously been submitted for preliminary examination and unless its subject has in principle been recognized as fit for exhibition.

The scenario must contain an exact description of the subject and must be presented in duplicate. The applicant may, at his own risk, present the scenario together with his application for a permit for the examination of the film.

In the case of films recording topical events and those of a cultural character reproducing sporting events, public monuments, works of art, cities, landscape, the life and customs of peoples, episodes of natural history, scientific phenomena and experiments, agricultural works, and industrial plants and undertakings, applicants are not required to lodge a copy of the scenario for preliminary examination.

On one copy of the scenario lodged by the applicant, the Censors must state whether it is passed as it stands, or whether certain scenes, titles, sub-titles, or captions must be altered or cut out. In this case, the film may be presented anew for revision after the required emendations have been made.

Applicants are promptly advised of the censor’s decision, whether of entire or partial approval, or rejection.

**Censors’ Fees.** — Art. 2 of the Order in Council of the 9th October 1919, No. 1953, fixes the fees due for revision at 30 centimes per metre of film, in addition to a fixed fee of 100 lire for the examination of the scenario.

The same decree lays down that 9% of
the proceeds of these fees shall be distributed, in equal shares, between the Institute for the Protection and Assistance of Disabled Soldiers, the Home Office Fund on behalf of War Orphans, and the National Institute for the Orphans of Civil Servants.

If, upon measuring the film, this is found to be longer than the applicant stated it to be, its revision is suspended until the latter furnishes proof of having paid to the proper office the extra amount due from him. The above fee provides for a single examination by the Board of first instance and the Board of Appeal.

**Appeals.** — Appeal may be made against the refusal of the prefectual authorities to pass films of a topical or cultural kind which are of an urgent character as referred to above. Such appeal must be lodged within thirty days from the date of the notification of the refusal, and entails a fresh revision of the film by the Board of Appeal, without the payment of any additional fee.

The same term is allowed for appeal against the decisions of the Board of first instance.

The Appeal Board consists of two police officials, one of whom acts as chairman, a magistrate, the mother of a family nominated by the National Mothers’ and Infants’ Welfare Institute, a person versed in artistic and literary questions, an author, and a professor (Art. 12 of the Regulations of the 24th September 1923, No. 3287, and Single Clause of the Decree of the 18th September 1924, No. 1682).

The non-official members of the Boards both of first instance and of Appeal are appointed for one year and may be re-appointed for one further year only.

The law lays down other special rules for the functioning and procedure of the Boards.

A minimum of five members forms a quorum for the decisions of the Board of Appeal. In the event of parity of votes, the Chairman’s vote is decisive.

The Ministry is entitled to cancel the names of any members who fail to attend three consecutive meetings of the Board without furnishing adequate reasons, and may replace any who prove themselves to be unsuited to the task.

No person who has acted on the Board of first instance that has rejected a film can act as a member of the Board of Appeal reconsidering it.

Members of the Boards, who need to be well acquainted with films, are entitled to have access at any hour to places where cinematographic shows are being given, upon exhibiting a special ticket issued to them by the Ministry of the Interior.

**Prohibitions and Restrictions.** — Apart from the normal restrictions laid down by the Boards of first and second instance, the Ministry of the Interior may, at any moment, either on its own initiative or at the request of the authorities, public or private institutions, and diplomatic representatives, recall films, even when these have been passed by the censors, and may demand a special revision of the same by the Board of Appeal.

After the work of the censorship has been accomplished, firms to which license to exhibit has been granted are required to make certain that the copies of the films distributed for public exhibition in any part of the Italian Kingdom are identical with the film passed by the censors. Film hirers and cinema managers are under a like obligation; they are moreover, required to exhibit the permit, or a copy obtained from the Censor’s Office, whenever asked to do so by the police authorities.

In the event of a film being altogether rejected, the interested party is at liberty to make such alterations therein as he deems expedient and to present it a second time for revision. This is regarded as an application ex novo for examination, and is subject to the same rules and fees as the original one.

**Bills and Posters.** — Censorship does not apply to the films alone. According to Art. 17 of the Royal Decree of the 24th September 1929 (No. 3287) and Art. 159 of the Royal Decree of 15th April 1926 (No. 718), the appropriate authorities, before granting, in accordance with the police regulations, permission to post or distribute posters, hand-bills, or other papers regarding cine-
The matographic shows, are required to inform themselves very carefully that they contain nothing contrary to the principles upon which the revision of the censorship boards is based, and that in all notices referring to shows from which children and young people are excluded by order of the censors, this fact be clearly announced in the following terms:

« No person who has not attained the age of fifteen years may be admitted to this exhibition. »

Standards of Censorship. — There is, as ever, a generic and a specific aspect to the criteria upon which the action of the censors is based.

The general principle is to prohibit whatsoever is liable to offend morals, decency, and public order.

In addition to this three specific considerations — each of which covers a number of particular situations — have to be borne in mind:

a) Domestic and foreign policy: All scenes, episodes, and subjects contrary to national reputation and prestige or public order, or prejudicial to international relations are vetoed. The same applies to anything offensive to the decorum or prestige of public institutions and authorities, police authorities and officials, the army and navy, or that are injurious to private citizens.

This very broad rule covers the Catholic religion, which is recognized as the State religion, and all other faiths that are recognized or tolerated within the territory of the Italian Kingdom.

b) Public Morals: All scenes, episodes, or subjects that offend modesty, morals, or public decency are vetoed.

The censors are not concerned here solely with standards explicitly laid down by penal legislation or the identification of acts deleterious to public morals and decency, and therefore punishable by law, but with a much wider and more comprehensive standard, left to their own judgment and discretion, and embracing a mass of actions and situations that do not necessarily come within the strict province of the penal code or police regulations.

c) Crime: The veto covers all scandalous and repulsive subjects and scenes, showing cruelty to human beings or animals, sensational crimes and suicides, surgical operations, hypnotic and spiritualistic phenomena, etc., that tend to justify or excuse unlawful or felonious conduct, or to stir up class hatred; or that can in any way be regarded as a school for or incentive to crime.

A special form of prohibition is contemplated in art. 4 of the Regulations of the 24th September 1923 (No. 3287) in connection with films intended for exportation. In this case, permits may not be granted to films showing scenes, or dealing with facts and subjects, that might prejudice economic or political interests, national decorum or prestige, public institutions or authorities, officials or agents of the army or navy; or that might give rise in other countries to false or damaging appreciations of the Italian nation, or ruffle friendly international relations.

Children. — Art. 157 of the above cited Regulations under the Mothers' and Infants' Protection Act, sets forth certain special censorship rules respecting children. Control is not so much exercised by the action of the censorship board as by a restrictive system regulating the admission of children to cinemas when certain kinds of shows are being given.

Art. 22 of the Mothers' and Infants' Protection Act of the 10th December 1925 (No. 2277) provides that the censorship boards shall differentiate between shows to which the general public may be admitted and those from which children and young persons of either sex are excluded. The Ministry of the Interior and the National Mothers' and Infants' Welfare Institute act in concert in this matter; the former communicating month by month to the Institute a list of films approved during the previous month for public exhibition and indicating which of them are considered suitable for children and young persons. On its side, the National Institute notifies to the Ministry those films which, in its opinion, ought to be submitted for special revision, even where a permit has already been granted them.

The owners or managers of the cinemas are required, under pain of the sanctions
laid down in the aforesaid art. 22, to inform
the public, by means of posters exhibited
outside the halls to which class the films about
to be exhibited belong, and the police must
see that this requirement is duly complied
with.

In the absence of proof to the contrary,
the age of the young ones is in practice deter-
dined by their height; all children measur-
ing less than 1 metre 50 being presumed to
be under 15.

The Regulations of the 15th April 1926
(N° 718, art. 157) schedule the films to which
the age restriction applies. These are for
the most part films of a sensational or detec-
tive interest, or those which, in the opinion
of the censors, are in any way apt to over-
excite the passions or corrupt the young mind
by the force of suggestion.

The following types of films, on the other
hand, are considered as being specially suited
for the young: films reproducing works
of art, cities, landscape, historical happenings,
national customs, natural history, scientific
phenomena and experiments, land work,
industries; films illustrating subjects and
scenes that tend to exalt civic and religious
virtues, the sanctity of the home, family
affections, maternal love, the spirit of self
sacrifice, acts of heroism of a kind to incul-
cate kindness and courage.

Arts. 160 and 162 of the above cited Regu-
lations lay down the lines for the proper en-
forcement of these regulations.

FILMS FOR EXPORTATION. — These films
are subject to special measures.

All film producers who wish to cinemato-
graph in public places, or in places that
are open to the public, any scenes or doings
with a view to making films intended for
export abroad, are required to notify in ad-
vance the police authorities.

In speaking of the general standards of
censorship, we have already mentioned that
the censors are required to devote particular
attention to films intended for abroad. We
may add here that such films must be ac-
companyed by special permits issued by the
Ministry of the Interior attached to one of
the two copies presented by the applicant for
an export permit; but films that have already
been submitted to the censors and ap-
proved for exhibition in the Kingdom are ex-
empted from further examination by the
censors, when they are to be sent abroad.

This rule is in accordance with the prin-
ciple that the Censorship Boards ought to
adhere to one and the same policy in con-
idering the two categories of films, and that
rules that appear to be laid down more par-
ticularly as applying to exportation are also
valid, from the standpoint of censorship, for
the home country.

For the purposes of exportation, all persons
producing, renting, or trading in cinemato-
graphic films must keep a chronological
register of these, and annotate on the margin
all permits and prohibitions connected ther-
with, as well as permits granted subject to
certain conditions.

***

It will be seen from the above that the
Italian censorship system is mainly based
on the necessity of the protection of the
young; that is to say, safeguarding them
against any dangerous influences that the
cinema might have on them.

Under this aspect it comes nearer to the
Belgian than to any other national system,
and stresses one of the most essential postu-
lates of film censorship: that only the hap-
pier, purer, and nobler aspects of life should
be put before children.

STATISTICS. — During 1929, 806 cinemato-
graphic films were submitted to the Cen-
sors. Of these:

2 were withdrawn before examination;
678 were approved;
66 were approved, subject to certain
emendations;
60 were vetoed for the reasons indicated
in the foregoing.

It is interesting to note that in several of
the films of the third group, it was the
captions that gave rise to criticism on the
part of the censors, in view of the peculiar
power of words in bringing out what is least
desirable in questionable situations.

The whole system of control reduces it-
self in fact to eliminating matter that may
assume an anti-moral aspect or be contrary to the laws of the state, thus producing in the onlookers a state of mind at variance with the prevailing social system.

Ten films were passed for exhibition to adults only.

As regards films of propaganda and those directed to cultural ends, these are produced in Italy almost exclusively by the National L. U. C. E. Institute, and are not subject to the censorship.

We are informed by the Ministry of the Interior that the said Institute had produced 722 films by the 30th November 1929.
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MONTHLY PUBLICATION
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— LEAGUE OF NATIONS —

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PUBLICATIONS OF THE I. E. C. I.

Institut International du Cinématographe Educatif (Inauguration) (out of print)

Enquête sur le cinéma faite dans les écoles de Neuchâtel, Lausanne et Genève (A. de Maday).

Social Aspects of the Cinema.
Aspectos sociales del cinematógrafo.
Gli aspetti sociali del cinema.
Le cinéma sous ses différents aspects d’ordre social.
Die sozialen Aussichten des Kino.

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The Cinema and Eyesight.
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El cinematógrafo al servicio de la higiene.
Igiene e cinematografo.
Le cinéma au service de l’hygiène.
Hygiene und Kino.

The Cinema and Scientific Management.
El cinematógrafo al servicio de la organización científica del trabajo.
Organizzazione scientifica del lavoro e cinematografo.
Le cinéma au service de l’organisation scientifique du travail.
Das Kino im Dienste der wissenschaftlichen Arbeitsorganisation.
The Rome Institute, pursuing the task of enquiry and of the collection of evidence which its relations with the main centres of production and study enable it to gather, offers the readers of the International Review of Educational Cinematography and all those who take the screen seriously as a means of recording and studying the phenomena of social life, the present issue devoted entirely to questions of hygiene.

This is a « special number » on the same lines as the March issue, which dealt solely with « social » questions. In obedience to the decisions of our Governing Body, we put this forward as a modest contribution to the study of these problems, and without any idea of solving any of the problems connected with public health.

There is no end to these problems. Generations of men have devoted themselves to studying them, and there will surely be no check on evolution in this direction until the limits of the existence of this globe ordain it. Every day and every new phase of life opens up fresh vistas to hygiene study — vistas hitherto unimagined.

This number claims merely to set forth and enunciate some of the problems that beset mankind. We have endeavoured to survey what has been done along this line in the various countries and to point to the possibilities offered by the cinema, as an auxiliary means of propaganda, broadcasting, and culture, and to set some questions touching on certain facets of the public health problem.

To attempt any conclusions would have been vain and pretentious. We are content to place the question on the table and to invite the scientists of the world to collaborate and... to answer.

There can no longer be any question that the cinema is one of the finest weapons for hygiene propaganda. The daily experience of life confirms this. Perhaps in no other domain of work and action can the film come into such intimate touch with the masses, or expound its lesson so clearly and so comprehensibly on the luminous screen From elementary precepts it has advanced to the affirmation and the fullest documentation of facts.

The cinema has come to be an essential partner — and no sleeping partner — of the propagandist, the nurse, and the scientist.

We are here dealing with general hygiene — not any special branch of it. That will form the object of a later issue which the Institute is now working on and will publish as soon as it is ready. The sector of hygiene and the prevention of accidents will embrace the contribution of the cinema — in its cooperation with agriculture and industry — the prevention of labour accidents.
Our work has been mainly one of "assemblage" — to assemble the works and writings of specialists and cull from them the crucial evidence; and secondly, to call upon the expert views and advice of specialists and authorities on the part that the film could best play in the campaign which all are waging for the common weal.

We offer examples of films conceived and elaborated with a view to the diffusion of the most important questions; publish a study in which the influence of the cinema on eyesight is rapidly and succinctly dealt with, with a view to the better safeguarding of the public retina; and just glance at the practical applications of the cinema in the field of medical and surgical study and teaching.

As we stated in our March number, our idea is, by this means, to enunciate a series of questions which we invite the competent and the specialized to come to our assistance and answer. When this work of collaboration is in full swing and the answers have reached us, they will be published and will no doubt constitute a serious step forward in the work of investigation we have undertaken with the object of offering to the studious the world over an organic scheme of international cooperation in seeking the most efficient kine-hygienic production to meet the public demand and suggesting new paths to the industry, so that the film may indeed become one of the most efficient means in the individual and social struggle for life.
THE CINEMA, A CREATOR OF DIVERTIVE IMPRESSIONS,
IS, ABOVE ALL, A PRODIGIOUS MEDIUM OF EDUCATION.

(From the French)

The cinema is coming to be better understood from day to day and the leading
lights of science, teaching, and hygiene are beginning to pay it their respects.
The days when it was looked upon with a cold and supercilious eye are past.
It is now regarded seriously as a very powerful and very efficacious means of in-
tellectual, moral, technical, and health education, a means that has been tried and
not found wanting.

It was promoted to an official status on the day that that eminently useful
organism — the International Educational Cinematographic Institute — was founded.
This Institute, under the impulse of a highly competent technician and an apostle
who is intimidated by no obstacles — Dr. Luciano de Feo — is preparing the
future, with great method and authority, for the triumph of the cinema in the do-
main of education, and therefore of a better understanding between the peoples and
— we may even hope — an era of international peace and amity.

All competent persons, all those who know and understand, are agreed in prin-
ciple, and we have no wish to repeat the truisms of an obvious situation by going
into theoretic appreciations. What is all important at this moment is the divulgation
of the precious instrument, its adaptation to detail and its steady improvement.

All this can be achieved only if those who have long experience of the cinema
as an agent of education are willing to contribute the sum of their knowledge
and experience to this fine centralizing organ, the International Institute. We offer
herewith our modest contribution — the outcome of some ten years of popular
hygiene teaching by the film.

But, first of all, let us point out that the cinema is not only a lucid and mar-
vellous demonstrator of facts; it also possesses magnetic powers to attract men
and the ability to make them assimilate the most arduous ideas. How much more eas-
ily we all learn when the mind is not fatigued in the process of uptake!

I. THE CINEMA ATTRACTS AND EXPLAINS

We must once and for all accept the fact that, all the world over, the number
of "seers" is considerably greater than the number of "hearsers": 80 per cent
of mankind take in knowledge through their eyes. This fact explains without
any difficulty the sensational and lightning popularity of the cinema. Now we
want to impress on the public mind the perils of infant mortality and tuberculosis.
In this campaign against suffering and avertable death, the French National Anti-
Tuberculosis Committee, founded by Léon Bourgeois — "the apostle of social so-
lidarity" — had rallied all its forces and was most validly seconded by the American
Mission formed by the Rockefeller Foundation, which, prior to the military intervention of the United States, had been anxious, in concert with the American and French Governments, to contribute its precious share to the cause of civilization.

It was no easy task to bring home to the masses at such a difficult moment ideas and principles which till then were unknown or overlooked, and it was clear that success depended almost entirely on the means employed. These means were indeed many and diverse: posters, post-cards, pamphlets, tracts, lectures, and, above all, the cinema. It is much to the credit of the Rockefeller Foundation and the French Committee that, at a time when so few realized the value of educational cinematography, they understood that the film was capable of playing a leading part and of presenting that very dour subject, hygiene, in a quite acceptable and even agreeable form.

Automobile squads were formed and staffed as follows: a lecturer, a woman lecturer, and a chauffeur camera-man; the material consisted of a motor camion equipped with an electric battery, a cinematographic apparatus and a collection of instructive and attractive films. These squads thus equipped — there were as many as six — ranged during five years all the towns and villages of France, everywhere arousing the keenest interest and made welcome everywhere by authorities and people.

The automobile squads arrived, heralded by copious publicity, which took care to stress the cinematographic character of the campaign. Keen interest was at once stirred. The news boomed through town or countryside like a track of gunpowder, and in the evening, in the biggest local hall or in the public square, according to the season, everyone flocked to hear the lecture and to glue their eyes on the screen.

This cinema activity was without a doubt the secret of the success of the meetings: first and foremost, it was attractive and fetched the crowd; then by addressing itself to the sight — that is to say to our sense which is the most eager for impressions — it succeeded in demonstrating things that no other means could have brought home to the understanding of the simple audiences, unused to mental effort.

The outcome of this fine cinema effort was prodigious: a formidable movement of public opinion grew up in favour of public health measures, and hygiene practices became general. At the same time, thanks to this «understanding of life and health» a formidable hygiene armament grew up — dispensaries, preventoriums, sanatoriums, anti-venereal centres, infant welfare centres, anti-cancer centres were organized — and these are steadily developing.

II. THE CINEMA, MIND-ROUSER AND DEMONSTRATOR, AS AN ADVANCED HYGIENE TEACHER

The first and most important interest for all educators is to safeguard health: *primum vivere, deinde philosophare*. For this reason it is necessary to teach children, from their earliest years, the rules of health and to persuade them, by salutary and
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practical demonstration, to protect themselves against the contagions that menace it. It is not — as Montaigne so tersely put it — when life is waning that we should learn how to live... As soon as the mind develops we must inculcate into habit — which is quasi instinctive — the means that should be pursued to preserve the greatest of all boons: health. We must therefore make of the child a passionate lover of cleanliness. Training in cleanliness must precede all other teaching.

What an incomparable part the cinema can play in this essential branch of education!

« It is an obvious fact » writes Professor Léon Bernard « that cleanliness cannot become a habit with the public unless it is well grounded in their spirit; unless it becomes part and parcel of their psychological automatism, so to speak; coercive measures and theoretic teaching can do nothing, we must show the drawbacks of the absence of hygiene measures, the personal and collective advantages that derive from their application ». For this purpose there is no more fruitful means than the cinema which, by documentary films, makes ideas, that have so far been obscure and remote, both lucid and accessible, and we must render hygiene attractive by means of anecdotic and imaginative films.

Being convinced of the outstanding advantages the cinema can confer in the domain of social education, the French National Anti-tuberculosis Committee organized popular cinema propaganda from 1918 to 1926, by its own means, and later with the precious cooperation of the French Social Health Office. An important cinema archive has been established in Paris; it includes five hundred very diverse films dealing with health and social education. It has a variety of means of diffusion, many of which are highly original. Educators, doctors, and nurses, or institutes receive the films and present them in the course of their talks and lectures. Public cinema halls cleverly introduce them into their normal programmes. The regional educational cinema offices or the scholastic cinema institutes organize recreational meetings. Lastly, the automobile groups established by the Ministry of Health and by the National Social Hygiene Office are constantly scouring the whole of France, organizing everywhere, but more especially in the villages, the most useful and beneficial demonstrations which, thanks to the moving and living qualities of the cinema, remain impressed on the mind.

Day by day, under the influence of the cinema, this form of education is widening, and a powerful movement in favour of public health protection is on foot. It will be one of the miracles of the cinema — and by no means the least — if, by its brilliant and penetrating teaching, it succeeds in dispelling the dense shadows of ignorance and death, and in restoring a cheerful and smiling kingdom of light and of life.

Lucien Viborel
Propaganda Director of the French Anti-Tuberculosis Committee, General Propaganda Secretary of the National Social Hygiene Office, Expert of the League of Nations.
The institution of the Polish « Health Centres » can be traced back to the manifold and diverse efforts previously made in the United States and in England: these efforts aimed in the main at promoting the activities of social institutions (Red Cross Plan); those of the municipal administrations (New York City Plan); at the better care of the sick (Bigg's New York City Plan), or else at preventive social measures (Cincinnati Plan). There were also other well organized and handsomely supported schemes for the care of the sick, combined with prophylaxis (British Plan); while on the Continent of Europe special mention should be made of Jumet's « Demonstration » in Belgium, organized by the Belgian Red Cross. In Germany, Doctor Pütter devoted himself with zeal to co-ordinating the work and efforts of dispensaries organized to combat those diseases that are properly regarded as a danger to society. The central polyclinics and bacteriological stations of Jugoslavia are organized for the purposes of medical treatment and tend to the socialization of medical practice. In France the efforts of a few devoted medical men and hygienists have recently been responsible for opening a number of hygiene dispensaries of a new type: those established in the outskirts of Paris — Vanves, Vitry, and Boulogne — merit our particular notice, owing to the very successful way in which they unite social hygiene activities with public medical aid under the direction of the communal medical officers. Dr. Bezançon drew special attention to this point in a recent publication, Annales d'Hygiène, (December 1928).

All these institutions are making good progress; but in none of the countries mentioned has a general system yet been organized throughout the whole territory.

The creation of these health centres in Poland dates back to 1925, when, thanks to the Rockefeller Foundation grant, so well merited by the public health authorities, the Direction of Public Health in Poland was enabled to organize the first model Health Demonstration Districts after the American plan. By degrees, the sanitary units, supported by the Rockefeller grant, devoted themselves to co-ordinating the special dispensaries and organizing « health centres »; thus by combining the two activities — dispensaries and demonstration — a single organization was created, of a peculiarly Polish character (1).

« Health Centres » in our country are institutions combining the general activities of the public health service with particular regard to preventive medicine; this latter feature being more or less marked. In the first place the following districts were selected: an urban district, the Mokotov quarter of Warsaw; a district in the outskirts of Warsaw, the population of which is partly suburban and partly rural; the Skierniewice rural district, and a purely industrial district: Bendzin, in

the coal mining zone. The direction of these four health districts was entrusted to medical hygiene officers, who had pursued special studies in the Hygiene Schools of the United States and in European countries in which social hygiene institutions have been most highly developed.

The health centres in question have considerably enlarged their sphere of activity, and fresh centres are being opened every year; in Warsaw alone six new centres have been recently organized and — according to the scheme drawn up by the Warsaw Health Administration — 14 centres should be in working order in the course of the next two years; the number has already reached nine in the area covered by Warsaw and its suburbs — four in the Skierniewice district and four in the Bendzin district.

The idea has caught on all over Poland; thus on the 1st January 1929 we already counted 140 districts throughout the country; 74 of these have at least two sections (child welfare and anti-tuberculosis campaign); 43 comprise three sections, and 23 more than three sections.

At the present time these centres are distributed as follows throughout the territory of the Polish Republic:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Number of Health Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warsaw (Town)</td>
<td>7</td>
</tr>
<tr>
<td>Warsaw (Department)</td>
<td>21</td>
</tr>
<tr>
<td>Lodz</td>
<td>13</td>
</tr>
<tr>
<td>Kielce</td>
<td>15</td>
</tr>
<tr>
<td>Lublin</td>
<td>7</td>
</tr>
<tr>
<td>Bialystok</td>
<td>8</td>
</tr>
<tr>
<td>Vilno</td>
<td>2</td>
</tr>
<tr>
<td>Novogródek</td>
<td>3</td>
</tr>
<tr>
<td>Polisia</td>
<td>3</td>
</tr>
<tr>
<td>Volhynia</td>
<td>2</td>
</tr>
<tr>
<td>Posen</td>
<td>9</td>
</tr>
<tr>
<td>Pomerania</td>
<td>0</td>
</tr>
<tr>
<td>Silesia</td>
<td>10</td>
</tr>
<tr>
<td>Cracovia</td>
<td>8</td>
</tr>
<tr>
<td>Lvov</td>
<td>4</td>
</tr>
<tr>
<td>Stanislawov</td>
<td>9</td>
</tr>
<tr>
<td>Tarnopol</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>140</strong></td>
</tr>
</tbody>
</table>

A glance at the chart showing the network of centres now working shows how the system tends to spread all over the Country. The most important and best organized of these centres, such as that of Mokotov, some of the Warsaw centres, and those of Skierniewice and Bendzin, are visited and studied by numbers of hygienists and social workers who wish to set up similar institutions; these centres are
Poland. Hygiene Centres with:

- More than 3 Sections
- 3 Sections
- 2 Sections
also valuable for the practical training of students from the State Hygiene School and nursing institutes.

"According to the Polish point of view" writes Dr. Kacprzczak, "each Health Centre should consist of a number of dispensaries, connected not only by their common headquarters and administration, but closely bound together by their aims and working methods. Patients must always apply to the Centre, not to the dispensaries. They pass through a central ticket distributing office, and are handed over to visiting nurses, each of whom belongs to a circumscribed district, attached to the Centre.

As we have stated above, the range of the Centres' activities differs from one locality to another; but each Centre is required to attend at least to the health of mothers and infants and to anti-tuberculosis efforts; several centres have also organized anti-venereal, anti-trachoma and dentistry sections; some are engaged in the anti-alcohol campaign, and in combating malaria; school hygiene is almost always comprised among their activities.

Under the auspices of certain Centres, public baths, wash-houses, and crèches for delicate children, as well as gymnasiuums, have been opened.

The Centres of the big towns and their suburbs have a number of specialist doctors at their service; the village and rural centres are run by a single medical officer, who has the whole health service in his charge. The dispensaries are run in a way to obviate the risk of contagion; whenever the premises available are not of a kind to allow of the patients being kept separate in the waiting rooms and consulting rooms, a point is made of fixing different hours for the attendance of patients suffering from different kinds of diseases.

Doctors directing the work of even the most modest centres are always supported by a visiting nurse, who has charge of all the social welfare work of the district, looks up the patients, and visits them in their homes. The Centre is regarded merely as a point of contact with the population; the bulk of the care is given in their homes. "The number of visits made is the best index of the activity of a centre, for it is a conditio sine qua non of success in prophylaxis to penetrate into the home life of the patients." So Kacprzczak tells us. Centres that have several nurses at their disposal divide up the districts under their supervision into several sections, each of which is in the charge of one of the nurses: in this manner the «specialization» of nurses is avoided — a more expensive system and one that lends itself less well to family needs.

There is a growing tendency everywhere to hand over to these Health Centres certain duties attaching to the campaign against virulent contagious diseases, and to call upon them to carry out duties pertaining to the sanitary police, and sanitary hygiene authorities. For this purpose the Health Department and the big urban communes place a certain number of «health controllers» at the service of the Centres: these are akin to English «sanitary inspectors», and the State Schools of Hygiene are responsible for their special training.

Each Health Centre carries on active hygiene propaganda in a number of different ways: organizing regular hygiene courses, by lectures, by medical treatment at fixed hours, and the visits of the district nurses. Then again, from time to time, the
Health Centres organize cinematographic shows and broadcasting, meetings of parents and children, entertainments, Christmas Trees, etc., with the object of gaining the confidence and interest of the population and getting it to regard the Health Centres as an institution of their own. Work of this kind is as important to the Health Centres as the medical consultations themselves.

The Health Centres avoid on principle, as far as possible, all treatment by drugs, except in such diseases as venereal ailments and trachoma, etc., where specific treatment is the only means of curing the patient and protecting those around him from contagion.

Our Health Centres will be able to give the best results only when their work is coordinated organically with that of social welfare institutions. Our Ministry of Labour and Social Welfare, having recently expressed its anxiety to coordinate efforts of this kind with those of the Health Centres, especially in the country districts and villages, it is to be hoped that shortcomings in this respect, which have been responsible in the past for considerable overlapping and waste of means and forces, may soon be got rid of.

The creation of the Health Centres was handicapped in the early days not only by difficulties of a financial kind, but also by technical ones: lack of suitable quarters and properly qualified staff. To overcome these drawbacks, the Health Department organized an architectural competition for plans of Health Centres of different types: big town centres, small urban, and country centres. The results of this competition have been highly encouraging, and it has done much to facilitate and widen the scope of the movement for the creation of health centres. A special plan for a health centre combined with public baths, intended for the rural communes of mountain districts, was elaborated by the State School of Hygiene, on the initiative of the Central Committee for the succour of the inundated regions in the South-East Departments of Poland, under the direction of Mme M. Moscicka, wife of the President of the Republic. Three centres of this type will be opened this year, at the expense of the Committee, in the mountainous regions of the Departments of Stanislawov and Lvov. In view of the great difficulties of communications in these districts, these special centres will be supplemented by small subsidiary stations, situated in distant localities, lost among the mountains.

Accommodation will be provided for the nurses in the buildings of the Centres. The City of Warsaw, on its side, had special plans made for a centre adapted to the needs of the Capital.

One of the most urgent problems of the near future is that of training the staffs of the Centres. The State School of Hygiene has organized this year a special course for doctors directing Health Centres, it having been found that the ordinary University Courses do not afford sufficient training in the specialized fields of social hygiene and prophylaxis.

At the same time the State School has instituted a lengthy course for training district nurses for the rural health centres. It is most necessary to complete the instruction given in the nursing colleges, of which there are six in Poland, by spe-
cial theoretic and practical study of social hygiene, the present programme of these schools being mainly concerned with hospital requirements.

Each year the School of Hygiene organizes a 4-5 months’ course for the training of sanitary inspectors.

In this manner it is hoped soon to have trained a sufficiently qualified staff to carry on the Health Centres with perfect efficiency.

The cost of building, management, and upkeep of the Health Centres is met, by the big urban communes, the communal administrations of the several districts, and partly by the sickness-insurance funds; the State also makes certain grants to encourage them.

* * *

The Centres tend to coordinate all efforts that aim at bettering public health and sanitary conditions — those of the Government, the communes, the social insurance organizations, and benevolent societies. From this point of view, the centres of each region may be regarded as the smallest unit for the protection of public health and social welfare throughout the region. In the principal town of each district completely equipped centres are being organized, directed by the local health officer, whose duty it is to supervise and coordinate the activities of the local centres.

Chodzko, writing on «Making the Country healthy» in the Bulletin de l’Office Internationale d’Hygiène, 1928, thus expresses himself: «If these Health Centres go on developing as rapidly as they are doing at present, we can expect our country soon to be covered by a network of institutions, embracing all the problems of public health and preventive medicine, and the health organizations of Poland, once this plan has been put into effect, will be definitely established on a solid, practical, and rational basis».

Prof. W. Chodzko

Director of the Polish State School of Hygiene.
HOW THE CINEMA CONTRIBUTES TO PUBLIC HEALTH IN RURAL DISTRICTS.

(From the German)

There are some persons who still hold the view that only harm can be done by diffusing culture among the masses and in particular by teaching them the principles of health. They are convinced that ignorance as to the nature of our bodies, and especially our internal organs, is bliss; that it is safer not to pry into the physiological functions of our different organs, and to trust blindly in the superior knowledge of doctors when anything goes wrong with them. And in addition to these, there are some persons who, on principle, deny all educative efficacy to the film.

Without discussing the details of these points of view — which are not altogether without justification — I wish to put forward a few elementary considerations.

First of all I would call attention to the big successes achieved by popular hygiene education during the last decade. Small-pox and cholera have been definitely stamped out in Germany; the death rate of young infants reduced by one half, and man's average span of life considerably lengthened; while the figures of the death-rate from epidemics in steadily decreasing. At the same time, however, statistics point to the fact that the peasantry, who were once the healthiest section of the population, are worse off at the present day in point of health than those who live herded together amid the asphalt and the stones of cities.

The second argument against the enemies of popular hygiene instruction is that we are no longer so much concerned with frightening the public with the bacillus bogey, or indicating the means of combating disease, but that the object of modern hygiene teaching is to stress the need and the knowledge of prevention, of preserving health, strengthening the constitution, and drilling the body for better self-defence.

Thus we need no longer be so preoccupied by the fear of raising a generation of hypochondriacs, and hysterical and nervous wrecks.

I would here also point to the fact that the recent floods of literature and public speaking have disseminated so much misconception or exaggeration and nonsense among the people, that all authorities, organizations and bodies concerned ought to work in concert to immunify the people against the danger.

And the best antidote against the poisons spread by the putative messengers of wellbeing and greedy exploiters is a sound knowledge of the facts of bodily health and of the elementary principles of hygienic living, feeding, dressing and dwelling.

Those persons who, on principle, refuse to recognize the film as a means of instruction are too few to worry about, and we may dismiss them from our minds like the prophets of yesterday who made their futile stand against the advent of the railway and the automobile. Their way of thinking is not only contradicted by the irresistible increase and development of public cinematographs, but more especially
by the unostentatious and rapid increase of school cinemas and projection halls for the use of small associations and families.

As regards the applicability of the film to the rural population, the sceptics are not without reason. It may be said that we do not possess any hygiene films adapted exclusively to the country and the peasant.

This brings us to the first and most important, but also the most difficult problem in this domain. All films dealing with questions of hygiene and social medicine that are instructive and capable of enlarging the mental outlook have been made in the interest of the towns and their inhabitants. They touch on problems which are entirely extraneous, incomprehensible, and therefore boring to the country populations. Some of them take for granted too high a degree of general culture; they are oppressive from the weight of their contents and confusing owing to the rapidity with which they set forth facts and ideas, and especially in view of the fact that the powers of adaptation and the understanding of the peasantry are more limited than those of town-dwellers.

Then there are other films that give positive offense by representing the peasant as a boor and a pitiable fellow altogether behind the times. Hence there is a dirth of films adapted to the needs of the country, and unless production in this line looks up sharply as the result of subsidies and special grants, or better still through the direct ordering of films made specially for the peasantry, there is no hope for an improvement in the situation.

Under present circumstances, a producing firm cannot afford to bring out films specially suited to country needs, because, unless its film output is of a kind to be shown also in the towns, it cannot even cover the cost of production.

Thus the cinema industry has no interest in producing hygiene instruction films. In addition to this, under the deplorable financial conditions of the Reich and of its several States, we cannot hope for subsidies and grants for the present. We must, therefore, make an effort to help ourselves.

Examples are not lacking to prove that this is possible: the League of Agricultural Vocational Associations (Verband der landwirtschaftlichen Berufsgenossenschaften has, in execution of a direct order, got the Land und Industriefilm A. G. Erich Stocker to produce a film on the prevention of agricultural accidents, a great number of copies of which have been distributed throughout the whole State.

Expert reports inform us that this instructive film, which was most favourably received by the rural population, has been highly successful, so that the campaign, which is of the greatest value in view of the enormous number of agricultural accidents, can certainly not miss its aim.

The Reich Committee on Popular Education, of Berlin, which has for years past received a continuous request for films on rural hygiene instruction from numbers of offices, made its first effort in this direction last year. The Verlag wissenschaftlicher Filme, of Berlin, declared its readiness to produce a film of the kind, if the purchase of a certain minimum number of copies were guaranteed it, which was done after a number of offices and organizations had been approached.

Ever since the commencement of this work, the Deutscher Verein für ländliche
wohlfarts-und Heimatpflege and the Deutscher Verein für Landkrankenkassen offered the services of their experts for the elaboration of the scenario and the filming.

A number of very important points are developed through a simple plot: the supply of drinking water, milk production, cleanliness in kitchen and larder, sanitary conveniences, etc. It stands to reason that not all these subjects can be dealt with exhaustively; it is sufficient to touch on them.

Due care is taken of the susceptibilities of the peasantry by caricaturing in the film a town lady who severely criticizes the unhygienic conditions of the village, while a countryman takes up the cudgels with her, confutes her exaggerations, and proves by examples that it is possible to create first-class hygienic conditions in the domestic economy of villages without great expense, by the exercise of a little intelligence and good-will. In this manner the first two parts of the films, entitled: «Long live the Country!» show, without going into detail, all that is likely to interest the peasant in the domain of hygiene. The third part deals very amply and minutely with a highly important theme: the care of sucklings and school hygiene in the country. In this manner it is possible to stress, either by accompanying lectures or by subsequent discussion, whatever is most to the purpose under local conditions. And a very useful lesson is thus imparted to young women and mothers on the care of children.

To pass from the problem of production to that of the utilization of the film as a means of instruction and rural progress, much fundamental information is to be culled from the findings of an inquiry carried out by the Government Committee on Hygienic Popular Education through the medium of the State and provincial offices and other organizations noted for their work in the field of public health and social welfare, and especially for having organized lectures and projections in country places.

A clear idea of the position can be gathered from the 65 replies received. Certain film manufacturers have also been interrogated on their experience.

Not to put too fine a point on it, the results — so far as hygiene films are concerned — are negative. The firms state that there is practically no demand for films of this kind. A number of central social welfare offices — who are much interested in films — state that they have never made any experiments with «hygiene films». Several of the answers show that films dealing with hygiene problems are only projected when supplied by local organizations — schools, local authorities, etc. — either gratis or a very small entrance fee being charged. This shows that the several offices responsible for the organization of cinematographic shows hold the view that hygiene propaganda does not come within their province.

It is time that, without further shilly-shally, an appeal should be made to the purses not of private individuals, but of the community.

Since statistics do not show the number of cases of illness or accidents that have been prevented, it is hardly possible to estimate the successes of hygiene instruction from the point of view of national economy. But the man in the street can have no difficulty in appreciating the fact that every case of illness that is avoided, every epidemic that is quelled, and every accident that is prevented is not a benefit merely
to the individual, but a benefit to all, and therefore a potent factor of national economy.

In this era of rationalization it is necessary continually to repeat and impress in rural districts, and especially upon the responsible chiefs, that the means of labour that form part of rural economy do not consist solely of horses, cows, and hogs, nor yet in machinery; but that man himself is the principal factor.

People are wont to make fun of the peasant, who is ever ready to call in the vet to attend to his beasts, while he himself, his wife, or his children must be literally at the last gasp before he is willing to call in the aid of the doctor, especially when the harvest is being gathered.

This point of view finds expression in a circular issued by the Government Committee for Popular Hygiene Instruction. The rearing of stock and methods of fertilizing the soil form the subject of hundreds of lectures, nor is there any lack of films, rented at high prices, of a generally amusing or instructive character; while there is no interest and no money to spare for films dealing with health. There is a lack of understanding of the fact that the worker, no less than his horse or cattle, must be kept in full working efficiency, especially at present when economic duress makes it necessary to call upon him to work as hard as he can.

But since the upkeep and the lubrification of the human machine cannot be obtained through decrees and enactments, but demand the intelligent cooperation of each and all, popular hygiene instruction is not only necessary, but absolutely indispensable for the country.

On this account we make an appeal to all who have a sense of their responsibilities to pay greater heed to hygiene propaganda in the country. It is not a matter of unproductive expenditure nor a luxury, since the money spent on promoting public health is the most fruitful of all expenditure. We make a like appeal to the big central organizations with large capital at their command, which are interested in the preservation of the public health, and especially in that of the peasantry. Not only the authorities and public departments, but public and private insurance companies ought to take a much livelier interest in sanitary measures and general prophylaxis. These different forces working in concert might make available the requisite means to carry out in the course of a few years a vast and comprehensive programme for the production of what is so sorely lacking at the present time: instructive hygiene films for the country workers.

Whether this type of film, like hygiene films for use in the towns, ought to have an international character, remains to be seen. Meanwhile it is necessary to choose from among the catalogues of existing films, those that are of use and value for the rural population. Many such films might be made use of with a little good will, thanks to cuts, and, better still, accompanying verbal explanations. We must not, however, get into our heads that we shall immediately succeed in making popular in the country long instructive films of a compendious and systematic kind. The above mentioned circular of the Government Committee on Popular Hygiene Instruction shows that an exaggerated importance is attached to long footage films. In the first place the cost of the purchase or hiring of such films is very high. The
necessary conditions for the absorption of compendious scientific material is moreover lacking in the country: namely the peasant's powers of comprehension and assimilation.

The said circular also points to the fact that almost all collections and hiring programmes show a birth of short footage instructive and cultural films. And yet it is these short films that, owing to their lesser cost, are the most utilizable, since they can be projected on any occasion as an additional item on the regular programmes. Entertaining or even humorous films may be used, in which the instructive part is kept within strict limits.

I wish to call particular attention here to the list of films entitled: Lustige Hygiene (Merry Hygiene) published by the Excentric-Film Zorn und Tiller Co., of Berlin, on sale at the Government Committee on Popular Hygiene Instruction (Reichsausschuss für hygienische Volksbelehrung, Berlin).

These films may be regarded as models for demonstrating how popular health lessons may be spread without recourse to sterile scientific doctrine. These films, that lend themselves to use on a variety of occasions, deal with many and diverse hygiene problems; they may be projected either accompanied by explanatory lectures, or otherwise. Or else — as is most commonly the practice — they may be served as a palatable desert to a serious and informative lecture. They only take five minutes to show, and accomplish their object very well when projected before or after a feature film. A spice of humour adds greatly to the efficacy of popular teaching. When, however, strictly instructional films are shown, these without having a claim to perfection, ought, in some brief part, to deal not only with theory, but with the practice of every-day life.

A typical example of films of this kind is the « Behelfsmässiger Transport Verungluckter » of the Verlag Wissenschaftlicher Films, Berlin.

A quarter-of-an-hour projection is sufficient to show all that is essential to learn on this subject, and in most cases, a good deal besides. There are other films of this sort, made by the same firm as — for example — those on the use of medicinal first-aid cases, on the care of the body, etc. Such films, notwithstanding their brevity, offer much precious instructive material that sticks in the memory.

Complementary cultural films, which often contain only mediate hygienic instruction, may be obtained in great numbers from the Ufa Company, as well as from other big and small film manufacturers. The projection of films of this type in Germany entitles cinema owners to claim a reduction of the amusement tax.

On this account there is a considerable demand on the cinema market for short-footage instructive-entertaining films, and their production is proportionately considerable. The most should be made of the opportunity thus offered, and all utilizable films should be selected from this source. An example of the kind is the Ufa film, Gestachelt Plageiste (Biting Pests). The film, which illustrates the origins of malaria and the anti-malaria campaign, and is consequently of direct interest only in certain areas, affords the audience a very valuable idea of the origin and course of the disease, as well as on the part which these minute wretches play in the struggle for life.
Even after the onlooker has long forgotten the details of such films, he retains a clearer grasp of such topical problems as the destruction of noxious insects, the anti-fly campaign, the regulation of water-ways, the supply of drinking water, etc. Nor, lastly, should we neglect to make use of those excellently worked-out propaganda films which have been repeatedly recognized by the Film Office of the Central Institute for Education and Instruction as instructive and cultural, so long as they are capable, at the same time, of imparting and diffusing sound notions on health and sanitation.

Such films are often procurable at a very low price, and sometimes free of charge. When they impart notions of hygiene in the course of the most varied scenes, interest in the matter is gradually aroused, reflection invited, other problems are called to mind, and a mass of useful knowledge is stored up.

Another important point is that of projection equipment.

The circular of the Government Committee on Popular Hygiene Instruction shows that scant recourse is had to the cinema in country districts. Sunday exhibitions are the rule, these being held after Church service. It is known, however, that the public houses in the bigger villages at the present time mostly have suitable halls available, and often dispose also of cinema equipment, which they willingly rent cheaply to the public.

For the projection of hygiene films, use is usually made of such equipment as the schools, even in the country; generally possess; in many provinces such equipments are to be found in great numbers. There is no lack of them, especially in vocational and finishing schools and in winter schools of farming. Another opportunity for country exhibition is afforded by portable equipment of the "valise" type. We should not, however, overlook the fact that, according to the circular quoted, the new reduced size film equipments have so far not met with much success, notwithstanding the fact that excellent and reasonably priced models are available.

The advantage of reduced-size films, in point of cost, weight, and carriage are considerable; but the intervention of a big central organization is necessary for the success of this type of apparatus and film. The most instructive part of the circular, however, does not deal with projection apparatus so much as with the operators. That is to say, it has been noted that cinema shows in the country, and consequently the utilization of hygiene films, is better developed in those districts in which the work did not start with the purchase of films and apparatus, but with the training of suitable persons — and first of all teachers — in the use and handling of projection equipment.

The organizations interested in popular hygiene teaching first of all take care that such persons should attend finishing courses for cinematographic operators. Workers are willingly granted leave to attend these. After a preparatory course lasting a few days, a start is made with practical work, followed by a brief finishing course and an examination, after which diplomas are distributed to cinematographic operators. The purchase of apparatus is provided for by offices which, being in a position to do business on a large scale with the producing firms, obtain considerable rebates in price. The central office then grants local offices with scant
means at their disposal subsidies for the purchase of equipment which, in some cases, amount to as much as one half of the cost price.

As soon as a village can boast projection equipment and a person able to handle it with pleasure and interest, the desire to attend shows and consequently the demand for films, soon make themselves felt; and then it is not difficult to insert popular hygiene instruction also into the general cinema shows. The said offices usually keep afloat out of their modest takings and, in time, they even accumulate the funds necessary to purchase equipment for other offices.

An association is now being organized between several localities for projections in common. In this manner the Provincial Committee of Hanover has available at the present time more than 130 cinema offices. The central office provides for the purchase of films or for their hire for lengthy periods; it then hires them out at half price to the different offices, as is usual in the cinema industry. Other provincial offices even take over the whole cost of the films, with the exception of their carriage. Sometimes the projection of the films is made conditional to the previous showing of a series of lantern slides, accompanied by a lecture on the subject, for its elucidation.

I wish lastly to mention that certain offices refuse, for the reasons already stated, and also on principle, to make use of the film as a means of teaching in the country, and make use only of stationary slides — a medium in considerable and growing vogue for hygiene instruction. Almost all schools of any standing possess equipment for the projection of diapositives and even epidiascopes. All cinematographic apparatus, moreover, have a special attachment for showing such slides. Such big and well organized firms as the Deutsches Hygiene Museum, of Dresden, the Deutscher Lichtbilddienst, of Berlin, and the Government Committee for Popular Hygiene Instruction dispose of large collections containing excellent series of films on hygiene. And lastly, there are ribbon equipments which have 50 to 60 separate images on a reduced size film, which can always be projected as slides.

The ease with which they can be carried around is a great advantage of these ribbon equipments; also, they cost little and are easily handled. It is to be hoped that this means of projection will develop steadily in the country districts and especially in the village schools.

Dr. Curt Thomalla

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THE CINEMA AND HYGIENE PROPAGANDA

(From the Italian)

If Nicolò Tommaseo (1802-1874) had known of the resources of the cinema, he would certainly have assigned to it a leading place in his « Survey of the Works that may be attempted in the education of Man, the Peoples, and Humanity » published in 1834 (1).

In an arid — as he himself says — but synthetic form, Tommaseo sets forth in this survey the subjects of education its objects, means and methods. As for means, he finds these in nature, art, and society — through conversation and instructive comparisons — in travelling teachers, and in statistics; he also points out the supreme necessity of keeping the minds of learners ever open to receive the truth.

As for methods of education, Tommaseo mentions the power of the signs of all kinds, by which we are wont to assist memory and enlarge the association of ideas, but he insists that we must not have too much recourse to arbitrary means; that such aids should be all or mostly founded on nature.

From this list of means, methods and instruments of education, we perceive how Tommaseo strained his imagination to find the greatest number of possible ways of penetrating the human mind; he even refers to « travelling teachers » with whom we at the present time and for some time past have been acquainted, in the form of diverse so-called travelling chairs, with the automobile and the cinema at their command.

The sense of the need of diffusing education was so awake in Tommaseo that, even in our hygiene and moral propaganda work, we can look back to him as a precursor; I do not speak of « hygiene » lightly, for I recall that in the first chapter of his work on education he speaks of the education which begins with life, and develops along summary lines not a few if those ideas that have now, more than ever in the past, aroused such ardent interest in motherhood, infancy, and physical education, and which so often form the object of appropriate cinematographic films.

Having paid this tribute to the memory of Tommaseo as an educator, it may not be out of place to attempt to crystalize certain ideas for the preparation of cinematographic production aiming at hygiene propaganda.

For this purpose there are in current use:

1) Films and also lantern slides for fixed projection of a purely technico-demonstrative character, illustrating some special point of anatomy, physiology, pathology, or hygiene in its several aspects: individual, rural, industrial, etc. These films, as also the stationary slides, require detailed captions, or better still oral description of their functioning, similar to the illustrations of a text book.

They serve rather to teach than to educate in the complete sense of the word.

2) Films in which the technico-demonstrative factor — more or less developed, or barely hinted at as the case may be — is coordinated with the action of real life, with evidence gathered from nature or from art, from the life of the fields and workshops, or other forms of human activity, which serve to stress some point connected with personal or public hygiene. In such films the cinematographic lesson, aiming at health and sanitary propaganda, may also be developed in the form of a story or dramatic action.

Each one of such films may have a special purpose, specially appropriated to the milieu in which it is to be shown and to the type and condition of the public which is to view it.

The first type serves particularly for scholastic or vocational milieux, or to illustrate lectures.

The second type is the kind best suited to keep general interest alive or to bring it into touch with the question in hand, in as much as the ideas that are to be taught are brought into relief and remain more permanently impressed on the memory, either by association of ideas or by an appeal to the feelings.

On the other hand, it is proper to observe that the hygienic guidance of life sometimes calls for the exhibition of points of detail and particular situations, which are not usually brought out in a big cinematographic representation, though it is essential to stress them.

For example: many films that represent the life of the community or of juvenile colonies are wont to demonstrate the washing of hands before meals among a number of other episodes. This is a detail of primary importance in health education, but the demonstration thereof, which in most films is hurried over in a few seconds and swamped by other pictures of greater interest that follow, fails to arrest properly the attention of the young, and is soon forgotten.

To pursue the example — it would therefore be necessary to find some means whereby a detail of so much importance to health might form by itself the centre of a separate sketch — as is usual in literary work — a suggestive sketch capable of penetrating the minds of the audience and producing thereon a permanent impression.

These hygiene propaganda films, in the form of separate « sketches » — short but telling — might form a most useful form of educational intermezzi, often more effective than longer films which, especially when they are over long, weary the audience and fail to carry their point.

To sum up: even in cinematography aiming at hygiene propaganda, it is essential to distinguish between what is purely instructional — which consists in the demonstration of a positive truth — and the educative element.

The educative film, utilizing the instructive factor, must rely mainly on this, and by its special tactics — wherein the whole skill of the author consists — find a road to the feelings of the audience by the projection of complete films together with sketches of details, according to the subject dealt with, and while avoiding unpleasing or depressing impressions, must arouse adequate emotive effects, which are always necessary to ensure a lasting impression.
The cinematograph lends itself also to illustrating important legislative measures, by projecting the full text of the law when possible, or its central purpose, and then, by pertinent pictures or actions, presenting a vivid picture of the hygienic disadvantages or the dangers to public health which the law aims at remedying, and next the benefits which the new law will ensure.

The efficacy of comparisons and contrasts of the false and the true, the useful and the harmful, might, by commentating the law, be of the greatest educative significance.

And besides broadcasting typical legislative measures of this sort, the educative cinematograph might also undertake to make living and speaking to the people the most salient statistical demonstrations, the exposition of which, as we said above, was referred to as very useful by Tommaseo.

The whole point — no very easy one to be sure — is to find good and efficacious demonstrative stratagems — explanatory, clear, and eloquent, of a kind to make a lasting impression of the principal demographic and health phenomena, or bringing into relief other important indices, which are useful owing to the valuable inferences that they suggest.

The present moment is specially propitious in Italy for all forms of educational propaganda of a moral and hygienic kind, for the spirit of the Fascist Regime is eminently educational.

Alessandro Messea.
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THE RED CROSS AND THE HYGIENIC EDUCATION
OF THE PEOPLE BY MEANS OF THE FILM

(From the French)

The Red Cross is the representative of a universal desire to improve the health of the masses, prevent disease, and diminish suffering. This is the fundamental ideal of all the national Red Cross Societies, irrespective of religious, ethical or political distinctions.

There are fifty-seven of these Societies in existence at the present moment, with a total membership of 22 millions; the Red Cross is a volunteer and independent organization, and each society is recognized by its respective government.

The Red Cross has taken over much wider responsibilities since the war ended: acting as medical auxiliary in wartime, its task in times of peace is to work in unison with public and private organizations and complete their labours. Among other activities, its programme includes the organization of relief in times of public calamity, the formation of nursing bodies, the development of the Red Cross spirit among young people, and the education of the masses on the subject of hygiene.

In order that the Red Cross Societies may be in a position to carry out their various tasks, they must have the moral and material support of the people of their respective countries; and to his end they have to organize, according to circumstances, propaganda campaigns to make known the programme of the Red Cross, energetic campaigns to recruit members and collect funds for the relief of peoples afflicted by some great calamity, and to educate the masses on questions of hygiene. In the task of making known their aims and requirements, they need all the assistance that can be given by modern scientific methods of propaganda, and especially by the cinema.

In 1917, at the time the United States entered the war, a vast hygienic campaign was undertaken by the army medical corps, the official sanitary departments, and the American Red Cross. The films used in this connection for the formation of medical and hygiene corps and the education of the troops were specially produced by the United States.

The Red Cross was obliged, after the war, to collaborate with official organizations in the work of curing the social scourges which had assumed such alarming proportions during the four years of the war: the recrudescence of tuberculosis, venereal diseases and infant mortality, and epidemics of typhus, influenza, and cholera.

It was shortly after the Armistice, in 1919, that the League of Red Cross Societies was founded, and it was only natural that one of the first concerns of the new international organization should be that of reinforcing the attempts to conquer the evils that had grown up out of the war. It was necessary to assist the heavy task of the medical corps by teaching the various peoples afflicted by these maladies to fortify themselves against them, to eliminate sources of infection and isolate per-
sons suffering from infectious disease; and the Red Cross devoted itself to these tasks, especially in regard to the organization of vigorous campaigns of hygiene propaganda. The League, on its side, made every effort to stimulate the work of the national societies in this domain, assisting them by sending men and material to their aid and lending them educational films on hygiene subjects. This was the origin of the cinema archive (1) which has gone on developing ever since.

The Red Cross, therefore, made its appeal to the cinematograph from the moment that its enlarged programme opened up a work of propaganda.

Not content with making use of films in the big towns provided with cinema theatres or halls equipped with cinematograph apparatus, certain National Red Cross Societies decided to carry their propaganda to the smaller towns and the country, where their hygiene crusade had not yet reached the population.

Each of these squadrons includes a motor van equipped for lantern slide and cinematograph projections, and a staff composed of an organizing agent, two or three lecturers, and a chauffeur-cameraman (2).

One of these squadrons went all through Poland, from January 16 to June 13, 1922, covering a distance of 3,120 kilometres and giving 616 lectures, which were attended by audiences numbering altogether 300,000 persons.

In Czechoslovakia, the travelling squadron went through the whole of Bohemia in 1922, organizing more than 600 lectures, which were attended by 212,250 persons, representing about 55% of the rural population. In 1923, the squadron visited 28 localities in Slovakia, and gave 106 lectures to audiences numbering altogether 43,550.

The great attraction of these popular hygiene lectures, in the course of which pamphlets and tracts were distributed, was the projection of films on the anti-tuberculosis and anti-venereal campaigns, and on the care of children, personal hygiene, etc.

In 1924, the Red Cross of South Africa equipped a motor van which was several times put at the disposal of the Board of Health for its work of hygiene propaganda, notably on the occasion of the outbreak of the plague in the Orange Free State and Cape Colony.

At the present time the fifty-six societies of the Red Cross, all members of the League of Red Cross Societies, are using films both for the instruction of a specialized section of the public (nurses, Samaritans, first-aid corps, etc.) and for a propaganda on the social education of the masses. They generally borrow films from the film archive of the Secretariat of the League of Red Cross Societies, which lends them free of charge.

Although the 200 films of the Secretariat of the League have always been much in demand, numerous Red Cross Societies have set up their own film collections during recent years, and some of them even have produced films for propaganda in

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(2) For the organization of these squadrons, see: "International Review of the Educational Cinema", February 1935, pp. 199-201.
their own countries. Among the latter are the American, German, Australian, Belgian, Brazilian, Danish, French, Greek, Italian, Japanese, Dutch, Polish, Siamese and Swedish Societies.

It is not possible to give a detailed account in this article of the work undertaken by the various Red Cross Societies for hygiene propaganda by the film; but the following examples will give an idea of how universal is the use of the cinema in connection with the Red Cross.

In Italy, the Red Cross has about fifty films, which have been produced by the General Direction of Public Health of the Kingdom of Italy, or by the Secretariat of the League of Red Cross Societies, or by the «LUCE» National Cinematographic Institute. We are pleased to be able to state that an agreement has been entered into between the latter institute and the Red Cross to the effect that the «LUCE» shall produce the films of the Red Cross at a special price and utilize the same films on its own account, incorporating them in the programmes of the various cinemas in the country.

The French Red Cross, especially its juvenile section, makes considerable use of social education films.

During the last seven years the Belgian Red Cross has organized more than 3,000 cinematograph shows on hygiene subjects. The Society owns 23 films, and frequently borrows others from the Secretariat of the League. In the course of the «Red Cross Week», which was held in April last year, this Society undertook the task of conducting the propaganda for the anti-diphtheric campaign throughout the kingdom. Films formed an important feature in this work of propaganda.

A report of the Estonian Red Cross states that the Society has been making use of hygiene propaganda films since the juvenile section of the society was formed, in 1924. Lectures on hygiene, with cinematograph projections, are given in the schoolhouses, under the auspices of the Juvenile Section of the Red Cross, not only in such towns as Revel, Narva, Parnu, Tapa, and Võru, but also in villages like Jõhvi, Port-Kunda, Asari, etc. A convention has also been approved between the Red Cross Societies of Esthonia, Lithuania and Latvia, instituting a film archive common to the Baltic countries and facilitating the circulation of films among them.

The regional committees of the Red Cross at Zagreb, Sarajevo, Gouchtany, and Latchrak, as well as the central committee at Belgrade, own a projection plant for films; and the Juvenile Section of the Red Cross of Yugoslavia has 33 apparatus which are circulated among the towns and villages to illustrate lectures on hygiene.

Seventy-two popular lectures on hygiene that were given by the Red Cross in Hungary in 1925 were attended by a total number of 25,000 persons; the figures for 1926 were 382 lectures, given before audiences numbering altogether 52,000, while the respective figures for 1928 were 620 and 164,000.

In the Westman Islands of Iceland, the Red Cross projected some films belonging to the League; 850 persons attended the lectures, of whom 250 were school children.

The Greek Red Cross made special use of films in its antimalarial campaign, and also took the initiative of forming a federation of groups dealing with the pro-
duction and spread of educational films in Greece, special importance being given to films on hygiene.

In the United States, the Red Cross has either produced or contributed to the production of propaganda films.

Turning our attention to Latin America, we find that in the different countries of this continent there is very generally a close collaboration between the national Red Cross Societies and government institutions for the propaganda of hygiene by means of the cinema. The Secretariat of the League of Red Cross Societies has had films brought out with Spanish texts for the South American Red Cross Societies, for circulation in those countries. Some time ago, the Red Cross of Costa Rica stated that the projection of these films had been enthusiastically commented upon by the press, a fact which indirectly contributed to strengthen the hygiene campaign organized by this Society.

Nor has the Far East failed to make use of the cinematograph in its hygiene propaganda.

Some years ago, in 1922, when the first regional conference of the Red Cross Societies of the Far East was organized at Bangkok, hygiene propaganda films were projected in the course of this important meeting, and the Red Cross Societies of the countries represented afterwards appealed to the cinema collection of the Secretariat of the League to put educational films at their disposal.

The Indian Red Cross is one of the societies that has most frequently addressed itself to the Secretariat of the League for the purchase of films to be used in its hygiene work.

The various Societies are not satisfied with making use of these films in the mother country only; they have been very widely used in the Colonies also, by means of the Colonial Red Cross Societies. In Africa, to cite one example only, hygiene propaganda films have been projected by the Red Cross of the Congo, which is a section of the Belgian Red Cross.

Indeed, it may be said that the use of the social educational film throughout the world is almost entirely due to the action of the Red Cross.

All the National Red Cross Societies consider the cinematograph as one of the most influential weapons of their educational campaign; and they hope to see producers giving special attention to the production of good social educational films. By doing so they will collaborate with the Red Cross in accomplishing one of its finest missions: that of improving the health, or in other words contributing to the well-being of humanity.

F. ROYON.
Propaganda Service, League of Red Cross Societies.
The information given herewith is all taken from direct sources. It has reached us:

1) in answer to our questionnaire addressed to the several Governments (1);
2) in reply to enquiries directed to official, semi-official, and private organizations (to whom we were in most cases directed by the Governments themselves;
3) in reply to enquiries addressed to the different National Red Cross Societies.

We here give a general survey of what has so far come directly to our knowledge. The exposé is still far from being complete — nor have the brief surveys of the countries listed yet been entirely exhausted — nevertheless the particulars we are in a position to set forth give some idea of the valuable work that is being done on all hands. As fresh information reaches us it will be published in the columns of the Review (2).

ARGENTINE REPUBLIC.

Film propaganda in this country is centralized in the National Hygiene Department, which owns a good number of films, purchased partly at home and partly from abroad. The Department makes direct arrangements for screening these films which deal with preventive medicine, prophylaxis against such diseases at the pest, tuberculosis, and malaria, and personal and social hygiene.

The medical officers of the National Board of Education and of the Institute of Hygiene also carry on film propaganda on their own account.

Film propaganda for the prevention of venereal disease is carried on by the Argentine Social Propylaxis Society.

There is no technical or scientific censorship of films of this kind.

The National Health Department (Departamento Nacional de Higiene) makes use of the film for the purposes of its educational work among the masses. For this purpose it has pur-

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(1) The following is the text of the questionnaire:
1. Are there any official sections charged with cinematograph propaganda in the domain of hygiene and social welfare attached to the different Ministries in your Country; or is such work centralized in a single Government Office?
2. Is such propaganda regulated by special laws or ordinances?
3. Do your Government Departments carry on direct propaganda, or do they have recourse to organizations, associations and official, semi-official, or private institutions? (e. g. institutions for maternity and infancy; social welfare institutions; workmen's and "after-work" associations; organizations for the prevention of accidents; sickness and provident institutions; vocational re-training institutes, etc.).
4. In what manner is such propaganda carried on; how are exhibitions, descriptive lectures, etc., organized?
5. Do your primary and secondary schools provide for adequate hygiene propaganda and social welfare work in general?
6. Have you any industrial and commercial enterprises that make use of stationary slides for the purposes of hygiene and social welfare propaganda among workmen?
7. Does a special censorship exist for this type of film and does it conform to technical and scientific standards? In the affirmative case, kindly state how the Censorship Office is organized?
8. Who attends to the distribution and renting of propaganda films of this kind? — (kindly mention any particular firms, institutions, etc.).
9. Do you possess any complete catalogue of films of the kind referred to in this Questionnaire?

(2) Let us recall once again that the Review is an open tribune for all those who have anything useful or interesting to say on the questions with which the Institute is concerned. We are always grateful for fresh news and original views.
chased from film manufacturers at home and abroad a number of films dealing with the prophylaxis of plague and malaria, and on child welfare.

The Medical Corps of the National Hygiene Education and Training Council of the Faculty of Medicine makes use of the film as a means of propaganda.

In addition to this, the Argentine Social Prophylaxis League (whose President is Dr. Alfredo Fernandez Verano) uses the film as a means of propaganda in the campaign against venereal disease.

AUSTRALIA.

There is no official section ad hoc in the Commonwealth attached to any of the Ministries; but the State Department of Health occasionally purchases and makes use of films for purposes of general public health propaganda.

Films are bought and exhibited by and exchanged between the Commonwealth and State Health Departments and several unofficial organizations, such as the Public Health Association of Australia, the Association for the prevention of Venereal Disease and the National Safety Council.

Such films are either included in the ordinary programmes of the cinema houses or at special lectures, etc.

AUSTRIA.

The Public Health Office of the Federal Ministry of Social Administration has a collection of slides and films. The Public Health Office informs by circulars the authorities and medical officers under its jurisdiction all about the collections of hygiene and social-propaganda films. The daily political press also publishes notices on the subject from time to time. Town doctors, provincial doctors, and sanitary officers, etc., are required to make use of such material, by exhibiting the films in halls attached to industrial enterprises, social welfare institutes and associations, schools and cultural institutes, first-aid societies, etc. The projections must be accompanied by explanatory lectures (1).

Projection apparatus is supplied by the institutions, since the central film archive attached to the Ministerial Office does not itself possess any.

The curriculums of normal and intermediary schools provide for hygiene instruction and give lessons on its general principles: the structure and functioning of the human body, etc. In the vocational schools, on the contrary, hygiene is one of the official items of instruction; in the Oesterreichische Montangesellschaft doctors deliver regular courses of lectures on first-aid and rescue work in mining and other accidents, on industrial hygiene, etc. The Ministerial Public Health Office has not so far undertaken to produce such films directly. They acquire them from national and foreign firms and institutes, as, for example, the Dresden Hygiene Museum.

Hygiene propaganda is carried on either by the State or provincial authorities, or by sickness insurance societies, or private institutions.

An extensive propaganda is made in Vienna through the medium of the municipal aid offices among married couples and those about to marry. Special attention is called to the

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(1) The cinematographic material and the text of the lectures are loaned upon application by the renting service of the Public Health Service of the Federal Ministry of Social Administration on the following conditions:

a) The material is loaned only to doctors requiring it for the purposes of hygiene lectures;

b) It is generally rented for a period of not more than four weeks; if required longer, proper notice must be given;

c) The Central Office charges 1 schilling per series of slides up to 50 images, and 10 groschen for each lecture; these charges are made week by week from the date of forwarding to the date of re-delivery.

Doctors are recommended to make wide use of the film in view of the great importance of hygiene instruction.
dangers of contagion, venereal diseases and tuberculosis, and the menace to future generations entailed thereby. The Vienna Municipality further offers a prize of 40 schelling to all women who, during the first four months of pregnancy, consent to have their blood examined (Wassermann test) and whenever a positive reaction ensues, to undergo anti-syphilitic treatment. This initiative is known as the «Help the Mothers!» campaign. The cinema is widely used to diffuse and elucidate legal measures dealing with public health and to stress their utility. It also serves to acquaint pregnant women with institutions where they can obtain medical advice gratis, and to instruct them on points of general health, diet, etc. Expecting mothers receive also gifts or loans of cradles, linen, etc. A constant and effective propaganda work is carried on. Attention is called to the existence, throughout the whole of Austria, of a system of nursing centres (500 exist at the present time) and to the free gifts of baby clothes and other equipment necessary for new born infants.

In like manner, sickness insurance institutes do considerable propaganda, and even mothers who do not belong to these are entitled to receive a dole during the first 12 weeks of nursing. This assistance may be extended for 26 weeks at the outside, if the mother nurses her child longer than the usual period.

The cinema pays no less attention to anti-tuberculosis propaganda, in order to bring home to those suffering from the disease the dangers of contagion to their fellows. Venereal disease is accorded like attention.

All institutions dealing with these diseases make wide use of the cinema for suggestion, propaganda, and education.

BELGIUM.

We are informed by the Ministry of the Interior and of Hygiene that there is no central government office in Belgium which deals with hygiene and social welfare propaganda. It is true that some of the government departments encourage propaganda in this field to some extent, but all initiative is left in the hands of the higher officials, so that it cannot be said that any actual government propaganda exists.

Hygiene and social welfare propaganda is mainly carried on by the Central Department of Hygiene, the National Society for the Protection of Children, and the Ministry of National Defence. These organizations give, fairly regularly, cinematograph shows illustrated by lectures. Their cinematograph material (films and apparatus) is lent free of charge to any workmen's clubs, sporting clubs, welfare clubs and associations that desire it.

Propaganda by means of the cinema is not yet regularly organized in schools, but some of the communal authorities have set up cinematographs which supply the schools under their jurisdiction with a regular service.

Private institutions, like the Université Cinégraphique Belge and Les Amis de la Cinématographie instructive et educatrice, are organizing a regular series of cinematograph shows, many of which deal with hygiene and social welfare.

Similar propaganda is being carried on in industrial centres by insurance companies.

The associations for the alleviation of the great scourges of mankind (cancer, tuberculosis, alcoholism, venereal disease, etc.), and also the Red Cross are doing active cinematograph work in this line.

In Belgium, the censorship of films does not exist. The sole restriction is that laid down by the decree of September 1, 1920, prohibiting the admission of young people under 16 to the cinema. But this measure was modified by a later Royal Decree of November 19, 1920, which allows children of less than 16 years to go to the cinema provided that the shows are what is called family spectacles, that is to say, shows presenting only those films which have been authorized by a special commission instituted by the above mentioned Royal Decree.
BRITISH INDIA.

The India Office informs us that the local Indian Governments have not organized special sections to deal with hygiene and social welfare propaganda by the film, but that the officials of the several governments deal with this matter. Propaganda of this kind, however, has so far been but little developed, though its full importance is coming to be realized and plans are under way for a widespread and comprehensive campaign.

The Indian Red Cross Society (New Delhi) make large use of films in connection with its health and propaganda work, which is definitely apportioned as between the Central and Provincial Committees. The Central Committee maintains at the Central Red Cross Depôt a large variety of suitable material, such as pamphlets, posters, magic lanterns, slides and films, which it either prepares itself or obtains from other sources (League of Red Cross Societies, Paris: Rockefeller Foundation, U. S. A., etc.) and issues free, or at cost price, according to circumstances, to the Provincial Committees. The latter, being in close touch with the people, use the material according to the demands of local conditions. The work is carried on by means of lecture tours, exhibition of films at gatherings of people specially invited for the purpose, or at fairs and similar assemblages, and the distribution of literature during epidemics etc.

Some of the Provincial Committees have instituted dispensaries which carry the healing message of the Red Cross to the interior and have proved a very potent means of furthering the aims and objects of the Society.

The films used by the Indian Red Cross in its propaganda work include: «Through Life's Window» — describing the construction of the eye and the common defects and strains to which it is subject; «The Priceless Gift of Health» — stressing the advantages of medical examination in the public schools and conveying a few simple rules of hygiene for children; «Malaria» — an educational film for popular education; «Florence Nightingale» — demonstrating in an instructive way the training of nurses and their value to the community; «Unhooking the Hookworm» — which explains itself; «The Rat» — showing in an extremely interesting manner the dangers of these pests and the means of exterminating them; «The Fly» — illustrating the biology and the danger of these ubiquitous insects; «How to be Healthy» — an interesting film of local production.

CANADA.

There is a Cinematographic Bureau in Canada attached to the Ministry of Commerce. The task of this office is to produce films on health questions under the direction of the Federal Department of Pensions and National Health. But as a considerable number of films of this kind are already on the market, the Health Department is, generally speaking, in favour of making use of these rather than of getting out new ones. Hence the Cinematographic Bureau has not so far produced any hygiene propaganda films, but it is ready to do so if the necessity should arise.

The Provincial Health Services — which number nine throughout Canada — make use of the cinematograph in their educational propaganda work.

The Canadian Red Cross Society uses the films to illustrate its work, and from time to time publishes films touching on different aspects of public health. It cannot, however, be said to have any considerable recourse to the cinema.

COSTARICA.

Cinema hygiene propaganda is carried on exclusively by the officers of the Public Health and Social Welfare Department of San José, which disposes of a certain number of
films. This campaign is carried on in cinema halls and in schools, exhibitions being preceded by explanatory lectures. There is no permanent organization of this kind of propaganda, nor is it subject to the censorship. The films shown are furnished by the Rockefeller Foundation and the National Anti-Tuberculosis Association of New York.

CZECHOSLOVAKIA.

Hygiene and social welfare propaganda by means of the cinema is carried on by the Ministry of Hygiene and Physical Education; hence it is centralized at the Department of Social Hygiene which, in its turn, is divided into an education section and a hygiene propaganda section.

In accordance with the terms of the circular of the Ministry of the Interior of the 17th January, 1922, projection permits lapse if the pictures are not exhibited within a given period of time. This measure embraces also films of culture and education. The authority concerned may grant an extension of the permit. The Ministry of Hygiene has entrusted the technical part of the programme to the Culture Section of the Massaryk Institute for Popular Education, and has handed over to it the greater number of the films, whether purchased or produced directly.

The films are hired out against payment of a small fee which covers general expenses, carriage, and amortization of their cost. The films, when adapted to the young, are also shown in the schools. Social hygiene organizations also dispose of a certain number of films reserved for domestic propaganda. The Czechoslovakian Red Cross owns four travelling cinemas furnished with films and slides. Each travelling cinema, when touring the provinces, is accompanied by a doctor who explains the pictures.

All films are subject to the official censorship. The provisions regulating licenses and censorship are laid down by decree of the Ministry of the Interior, No. 91 (Imperial Code).

DANZIG.

The Red Cross Society organizes now and then cinematographic shows for its members, hiring films for the purpose from the German Red Cross or the League at Paris.

DENMARK.

There is no direct state propaganda in this Country. The Hygiene Institute of Copenhagen University has so far been unable to avail itself of the film owing to birth of means and lack of suitable premises.

The Committee for the institution of a permanent Hygiene Exhibition owns a number of films dealing with health questions, among others one showing the work carried on in a Danish Infant Welfare Centre at Odense.

The Maternity Section of the Rigshospital of Copenhagen owns a projection equipment for the training of students and nurses.

The Danish Society of Dentists has for the last two years been in the habit of sending round lecturers from its central office, with the object of teaching children how to look after their teeth, prevent toothache and treat dental trouble generally. These lecturers carry projection apparatus to the schools, adapted to all forms, and they explain the films as they exhibit them. The films used are imported from America and Germany.

DOMINICAN REPUBLIC.

The Secretary of State for Public Health and Welfare of San Domingo has recourse for propaganda of this kind to official and private local public health institutions. The propaganda is not subject to any legal regulation, nor is there any scientific censorship of the films.
ECUADOR

The General Direction of Public Health at Quito states that propaganda by film will be introduced in the course of the current year. Up to the present, films have been used for hygiene instruction only in the Vicente Rocafuerte National School at Guayaquil. This Institute has made use of the cinema during the past two years.

EGYPT.

The Propaganda Section attached to the Public Health Department deals with hygiene propaganda and has frequent recourse to the film.

Sometimes the doctors attached to the Child Welfare Section, which forms a part of the Administration, deliver lectures, illustrated by films obtained from the propaganda section, on the proper rearing of babies.

Health propaganda films are moreover used by the Egyptian Hygiene Society in the course of lecture campaigns.

The same is true of the Cairo American University, the Young Men's Christian Association, and the Juvenile Islamic Association.

The Health Propaganda Section pursues the following methods: the date of lectures are fixed and made known to the public by means of notices in the press, indicating the locality (schools, cinemas, clubs, lecture halls, etc.) date, hour, and subject.

At the appointed time and before showing the films, the lecturer delivers a brief address on the question. The film is then shown and the doctor explains it and answers any questions that members of the audience may wish to ask.

The biggest halls available are used for such exhibitions, so as to be able to accommodate the largest possible number of persons. When it is possible to darken the halls thoroughly, the lectures are given by preference in the daytime; otherwise they are given at night.

The lectures are addressed to all classes of society: civil servants and clerks, students, workmen, business men, farmers, peasants, etc.

Use is also made of lantern slides to project images demonstrating special aspects and phases of disease, etc.

Autocars equipped with electric batteries visit the villages to project hygiene films.

The Health Propaganda Section publishes pamphlets dealing with the prevention of diseases.

There is also a Health Propaganda Museum containing a number of wax and other models, charts illustrating how diseases are propagated, and how they can be scientifically diagnosed.

A number of companies and workshops would do well to organize propaganda of a similar kind, but so far their owners and managers have not seen fit to apply for the requisite films. In any case, as above stated, the Health Propaganda Section invites workers, especially in the provinces, to attend their health lectures.

Most of the films are imported from abroad (Society of Social Hygiene). Others are produced locally under the direction of a propaganda delegate of the Public Health Department. All the films, before being exhibited, are examined by a commission appointed by the Health Department, while those exhibited by societies, universities, clubs, etc., are under the control of a technical commission of the Ministry of the Interior.

The production of the films required by the Public Health Administration is entrusted to two firms: the Misr Co. for theatres and cinemas and the Kodak Film Co.

The Propaganda Section also hires out films to societies that make application for them, and publishes an English catalogue of the films in its possession.

FINLAND.

There is no Government Office in Finland which undertakes hygiene and social welfare propaganda by means of the film; but there is an office for the protection of workmen that
makes use of the screen for propaganda purposes. Private organizations and associations also, such as General Mannerheim’s League, use the cinema as a means of propaganda.

In factories and manufacturing firms the film is also used, but this movement is in the hands of private individuals, and is not at present regulated in any way.

FRANCE.

The National Office of Social Hygiene attached to the Ministry of Labour has sent us the following answers to our questionnaire on hygiene and social welfare propaganda by means of the film in France.

There is a general Propaganda Commission attached to the French Ministry of Labour, Hygiene and Social Welfare, which has at its disposal a Cinematographic Section and a Film Archive, where all the films of the Ministry are gathered together with those of the National Office of Social Hygiene and other big national hygiene associations.

While no special laws have been enacted to regulate film hygiene propaganda, it is nevertheless under the methodical control of the said Ministry, which works in concert with the National Health Office, the principal hygiene associations and departmental organizations.

Film propaganda of this kind is organized directly both by the General Propaganda Commission, through its travelling cinemas, and by the departmental organizations and, in a general way, by other associations concerned with social education.

Both primary and secondary schools include films in their curricula of health instruction.

The three societies which form the French Red Cross make use of the film for hygiene and social welfare propaganda. They use either films supplied by other societies, or those furnished by commercial firms; especially the Gaumont and Pathé Companies. In addition to this, one of these three Red Cross Societies — the Société de Secours aux Blessés militaires — itself owns the film of Dr. Devraigne (brought out by Jean Benoit-Lévy): The Mother of To-morrow. The projections are always accompanied by lectures.

As for the activities of the League of Red Cross Societies, which has its headquarters in Paris, we refer the reader to the article from the pen of Prof. Royon published in this issue.

Various private organizations — such as the Anti-alcohol League, the Anti-veneretal League, etc., — also have recourse to the film for their hygiene and social propaganda work.

GERMANY.

We have received the following reply from the President of the « Reichsgesundheits-Amtes » (the German Public Health Department).

There are no special offices attached to the several Ministries which have for their object hygiene and social welfare propaganda by means of the film, nor is there any one office in which propaganda of this kind is centralized.

The Hygiene Instruction Committee, attached to the Ministry of the Interior — in connection with which a film office has been organized — does not carry on propaganda, but it is at the service of producers and collaborates with them in drawing up the schemes of films suitable for the purposes of such propaganda.

Legal enactments, dealing with propaganda of this kind, provide for reducing taxation or exempting from certain taxes those cinemas which include in their programmes films which have been duly approved in advance as appropriate to the purpose by the Berlin Central Institute of Education and Teaching (Prof. Lampe) or by the Bavarian Film Office at Munich (Dr. Amman).

The School curriculums, and more especially those of the elementary schools, provide for the use of films, more particularly for teaching natural history.

Many industrial enterprises have had films dealing with hygiene and social welfare made for the instruction of their employees.

These films are subject to the censorship like all other films. But the approval of the
offices above mentioned is requisite in order to obtain a certificate «recognizing the educational value» of a film.

The producers themselves are usually responsible for both production and hire, but many quasi public bodies dealing with preventive medicine and social welfare, workers' organizations, sickness and life insurance companies, undertake direct the production and intelligent exhibition of such films, accompanied by lectures.

The Bildwart Verlags Genossenschaft (Film Publishers' Society) of Berlin has issued a general catalogue of all educational and cultural films.

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The initiative for propaganda by means of the film in matters of hygiene, preventive medicine, and social welfare, is for the most part left to semi-official and private organizations.

Thus the Central Committees for the Campaign against Tuberculosis and against Cancer, the German Society for combating Venereal Diseases, the big temperance organizations, eugenic associations, the Central Institute for the Campaign against Infant Mortality, the German Red Cross, and many other organizations, have had films brought out on their own behalf. These films are often produced in a theatrical form and exhibited in cinema halls; the organizations concerned make wide use of them, showing them in private and public halls, associations, clubs, schools, etc., accompanying the films by instructive lectures.

But all these films produced for specific social purposes are also shown in the ordinary cinemas, in accordance with the «Beiprogramm» (supplementary program), whereby cinema theatres benefit by a reduction of taxes for these particular films, which must not measure more than 200 metres in length and must be authenticated by the requisite certificates issued by the Berlin and Munich offices.

In addition to this systematic popular propaganda there are, of course, the academic university courses. There does not exist a single higher education institute in Germany that is not furnished with projectors and cinema material. Films play a leading rôle, especially in the teaching of medicine; the university clinics are themselves responsible for the production of this scientific material and they own special cameras for recording operations (Dr. V. Rothe's system). The University Cinematographic Institute of Berlin and other institutes and firms also undertake the production of such films.

But hygiene and social welfare propagands is also carried on on a big scale under the auspices and on the direct initiative of the competent authorities, acting in concert with the several official, semi-official and private organisms. Every year a whole week is devoted to the propaganda of some particular question throughout all the centres of the Republic, even to the remotest country districts, by every possible means, including the film. Thus in 1929, we had the «Reich Week» for the prevention of labour accidents in workshops, etc.; during recent years we had a Public Health Week, an Anti-Fly Pest Week, a Sports Week, and so forth.

GREAT BRITAIN

There is no single Government Department in Great Britain dealing specially with hygiene propaganda by the cinematograph, but a number of semi-official or private initiatives carry on propaganda work of this kind; one of the most important of these being the Central Council for Health Propaganda of London.

The British Social Hygiene Council of London, produces films dealing with hygiene and social prophylaxis, a list of which it also publishes.

The National Baby Week Council itself publishes a number of health films and supplies a tabulated list of these. It hires these out to Local Authorities, Local Committees, Infant Welfare Centres, and any organizations or private individuals, for the purpose of promoting maternity and child welfare propaganda.
The British Red Cross Society issues a list of the films at its disposal, most of which it obtains from the Secretariat of the League of Red Cross Societies of Paris. It also supplies films to the medical officers who exhibit them throughout the Country during «Health Weeks». The Red Cross Society refers all enquirers or applicants for films of an instructional nature (dealing with Physiology, Hygiene, etc), to the Federation of British Industries, which publishes a number of such films that do not come within the special scope of the Red Cross.

The Mutual Property Insurance Co. of London owns a certain number of films dealing with preventive medicine and such matters, which it loans to Public Health authorities and other organizations interested in such matters. These films also were extensively shown during Health Weeks and Exhibitions in England and Scotland, and are much appreciated by the public.

The Dental Board has a series of films dealing with dental care and dental prophylaxis. Some of these are of its own production, others are obtained from British, American, and German sources. Special mention may be made of the popular films «Don’t wait till it hurts» and «A Brush with the Enemy».

All these films are lent, in Great Britain, free of charge to educational and other authorities and societies in connection with the Dental Board’s Campaign to educate the people on the necessity of proper care of the teeth.

The London College of Pestology is the author of a film entitled «The Enemy within our Gates» — this deals with the rat as a carrier of diseases. It has been approved of and recommended by the Ministry of Agriculture.

The National Institute for the Blind has brought out a film illustrating the training of the blind and the work they are enabled to accomplish.

GREECE.

There are no special sections attached to any of the Greek Ministries dealing with health propaganda by the film.

There are however various semi-official and private institutions that carry on this type of propaganda. Among these are the National Child Welfare Institution, the Hellenic Red Cross Society, the Young Men’s Christian Association, and the Office of the Educational Film.

The Greek Child Welfare Institute owns two special films: «The Mother to be» and a Greek film illustrating the work done by health visitors for the care of babies.

The Hellenic Red Cross makes use of films obtained through the League of Red Crosses. In concert with the Ministry of Health it organizes yearly tours through the more important Greek towns. All film exhibitions are either preceded or followed by lectures by specialists. At the present time the Society owns films on tuberculosis, malaria, and social hygiene for women.

The Y. M. C. A. also organizes shows accompanied by lectures, and owns two films dealing with venereal disease and 60 educational films.

In January 1928 the Hellenic Red Cross, the Child Welfare Institute, the Greek Women’s Lyceum, and the «Parnassus» Association, set up a special office: the League for the propaganda of cinema films among children. This institution organizes a number of shows for children, which include hygiene films.

All these institutions provide for the distribution and the hiring of the films.

HAITI.

The National Public Hygiene Service attached to the Ministry of the Interior at Prince’s Port, where all cinema propaganda is centralized, draws up programmes for social hygiene propaganda in which films play a very considerable part. Together with the screening of hygiene and preventive medicine films, others dealing with agriculture are shown: both are accompanied by explanatory lectures, delivered by experts on the subjects.
Hygiene classes for masters and pupils illustrated by motion pictures are also held in the schools. This service carries its very active propaganda right into the remotest corners of the country through the medium of its dependent offices.

HONDURAS.

Although a special Department is lacking, the Departments for Child Welfare and Tropical Diseases of the General Health Administration have undertaken active propaganda work which they carry on directly through their officers, without having recourse to other official or private institutions.

At the present time child welfare propaganda is carried on in the Capital only.

The campaign against tropical diseases is waged throughout the whole country, travelling cinemas equipped with gasoline motor projectors being used for the purpose. In places where there are cinema halls, these are used for the purposes of the exhibitions.

The cinema is one of the means included in the programme for the training of specialists on tropical disease, and all the students are taught to use the apparatus.

The censorship does not apply to this type of scientific film, as it does to ordinary cinematographic production, since only the health authorities handle them.

The General Direction of Public Health has applied directly to the Rockefeller Institute for films, and also to the National Motion Pictures Co. of Indianapolis, U. S. A. The films deal with the following subject matter: tropical diseases, malaria, flies, etc.

HUNGARY.

The Board of Social Welfare and Labour states that the propaganda of hygiene by means of the cinema in Hungary is centralized at the «Centre of Hygiene Propaganda» connected with the Board. It is regulated by ministerial decree.

The «Centre of Hygiene Propaganda» is not satisfied with merely directing and controlling the organizations and associations authorized to conduct the propaganda, but also takes an active part in the rational organization of the work.

Various social organizations, such as the Red Cross, the different societies for the protection of mothers and infants, the National Stephanie Union, the Institution for Social Assurance, with its hospitals and sanatoriums, different cultural associations and the medical corps connected with the schools and communes, are charged with the practical demonstration of the films. The spectacles and lectures are generally given at cinema theatres, but where these are lacking, travelling theatres are set up.

The curriculum in elementary and secondary schools does not provide for a special cinematograph propaganda, but the school doctors frequently have recourse to such shows, illustrating them by practical lectures.

Industrial and commercial firms do not provide for hygiene and social welfare propaganda among their employés, the task being undertaken, as we have already said, by the above mentioned associations.

The Censor's Office provides for censoring films bearing on hygiene.

The «Centre of Hygiene Propaganda» arranges for the supply of the requisite films, preparing the subjects and giving them local colour. The films are produced by Hungarian firms as a rule, but foreign films are frequently acquired, when they are of a nature to be of use in the propaganda.

The films contained in the archives of the «Centre of Hygiene Propaganda» are lent free of charge to those desiring them. The office has drawn up a complete catalogue of the film material in its possession.

ITALY.

Systematic hygiene propaganda by the film is steadily developing in Italy. Ever since 1919 the General Direction of Public Health attached to the Ministry of the Interior, has had
recourse to the cinema for hygiene propaganda and for a comprehensive campaign of an evidential and persuasive kind. Some films have been published directly by the Ministry, under the guidance of a competent medical staff assigned to the purpose. Malaria is one of the subjects most successfully, comprehensively and persuasively dealt with. A number of other films have been published in concert with the Italian Red Cross Society, particularly so as to illustrate the widespread work and fine institutions organized in the different regions of Italy for the prevention of tuberculosis and to fight contagious diseases.

A great impulse was given to hygiene propaganda by the foundation of the Luce Institute and the formation, by the wish of the Head of the Italian Government, of its collection of films for educational and hygiene propaganda. Since 1924, this propaganda has developed steadily. A number of films released in the Kingdom were purchased from abroad, especially in France, Germany and the United States; a still greater number were produced in Italy: these comprise films on Tuberculosis, Open-air Life, Health Education for Children, Sanatoriums, Modern Towns, Healthy Dwelling Houses, Food Hygiene, Town and Country Life, etc. All the above films were produced by the Luce Company under the direction of a special technical committee, of which the Director General of Public Health was President. We wish, however, to call particular attention to three forms of activity:

a) Sunday propaganda lectures;
b) Documentary films on behalf of the League of Nations;
c) The organization of Hygiene Film Archives for the use of Elementary Schools.

In 1925, on the initiative of the Film Archive of the Rome Governatorato, which was organized in consultation with the Luce, Sunday Hygiene Film shows were started in the Capital. The owners of district Cinemas placed their halls at the disposal of the Governatorato every Sunday morning, free of all charge. The Rome Health Office sent doctors to all the cinemas to address the people, to explain hygiene films, and to carry on a systematic work of propaganda. No entrance fees were charged. The enormous success of the enterprise was evident right from the earliest weeks. It was estimated that over 15,000 persons — men, women, and children — were present at the twenty to twenty-five contemporaneous Sunday shows. It was found necessary to intensify the work, and special shows, illustrated by lectures, were organized for women, showing films dealing with the feeding of infants, puerperal care, etc. Lastly, shows were organized for soldiers resident in Rome, dealing more particularly with contagious diseases.

This is, undoubtedly, an initiative deserving of the widest notice.

In 1928, the Health Section of the League of Nations having planned an exchange of hygiene specialists between different countries, in order to observe the progress made in hygiene propaganda and in works designed to prevent the worst social evils, the Luce was able, with the help of data furnished by the Health Section, to get ready some thirty films illustrating the great work accomplished by Italy during the last ten years for the direct and indirect improvement of public health: the big aqueducts, industrial hygiene works, the demolition of slums in the old quarters of our cities, building new quarters, the construction of new roadways to obviate the bad effects of dust, great mountain basins, the physical education and training of the young, open-air schools, new school buildings, etc. Having completed this film collection, the Luce Institute was requested by the Hygiene Direction of the League of Nations to send its own experts along with the medical missions going to Belgium, Holland, Jugoslavia, Germany and other Countries. In these countries films of great interest were likewise taken, under the direction of local experts. Lastly, the Luce turned a long and complete film in Copenhagen under the guidance of Prof. Madsen, on the occasion of the Serological Conference on the methods of floccology practised by the specialists of different countries.

The organization of School Hygiene-Film Archives is a further work organized by Italy that deserves our notice. 75 Provinces have so far set up in the elementary schools appropriate film collections of from 20 to 30 films, dealing with social hygiene. These films are distri-
buted to all the provincial schools, together with the requisite apparatus, free of all charge. All that is required is that application be made in due time.

JAPAN.

The Japanese Red Cross Society makes use of the film to diffuse a knowledge of hygiene rules and to make the Red Cross and its work generally known. It publishes a catalogue of its films.

The films are exhibited to the general public at the headquarters of the Red Cross Society, which also hires them out to its branches and to other local institutions.

JUGOSLAVIA.

The Ministry of Public Health in Belgrade informs us that the several Yugoslavian Hygiene Institutes, of which there are nine in all, are entrusted with the task of hygiene propaganda by means of the film; apart from this, however, private associations interested in questions of public health carry on similar propaganda in the same field, the requisite films being placed at their disposal by the said Institutes.

This propaganda is not subject to any special legislation, but is carried on by the free initiative of the Health Institutes and Associations mentioned above.

The Zagabria Hygiene Institute has its own Cinematographic Section which provides in considerable measure for the production of the requisite films. Recourse is also had to foreign motion pictures for the purpose.

LATVIA.

Film propaganda on hygiene and social welfare is not subject to any special legislation in Latvia; nor is it centralized in or organized by any Government department.

Films dealing with the matter are, however, shown from time to time in the public cinema halls and are accompanied by lectures of a popular kind.

The programmes of instruction in secondary schools are now in course of being re-organized, and it is intended to include propaganda on matters of public health and social welfare in the new curriculums.

A special law requires all primary and secondary schools to include anti-drink propaganda in their curriculums.

All the requisite films are imported from abroad.

LITHUANIA.

The Director of the Health Department of Kaunas sends a communication to the effect that the Sanitary Section of the Department of Hygiene at the Ministry of the Interior has been charged to carry out hygienic and social welfare propaganda by means of the cinematograph, although there is at present no special organization for this purpose.

The Committee for the Protection of Women makes use of the film for propaganda purposes, and also possesses a travelling cinema which is mounted on a railway van.

Hygienic and social welfare films are subject, like all others, to the usual censor’s regulations.

LUXEMBURG.

The Hygiene Service of the Grand Duchy informs us that Social Welfare Propaganda by means of the film is entirely in the hands of the Ministry of Health, which places its cinema material at the disposal of private and official organizations interested in public health questions.
These organizations carry on an active propaganda by the regular public exhibition of appropriate films accompanied by popular lectures.

Special meetings with projections and lectures are organized for the students of primary and secondary schools.

Luxemburg does not produce its own cinematographic material and all its requirements are supplied from abroad.

MEXICO.

The Minister of Health, Dr. Bernardo Gastelum, has sent the Institute two highly interesting volumes dealing with the admirable organization of his Department. Dr. Gastelum is personally responsible for this organization. A special section for hygiene propaganda and instruction has been set up in connection with the Health Department; this has its agencies in the remotest districts and does film propaganda work on preventive medicine and prophylaxis, accompanied by elucidatory lectures. Apart from this, official and private social welfare organizations carry on a film campaign that is well deserving of note.

The above mentioned Section of the Health Department started its cinema work at the end of 1927 and during the present year has held about 1000 film shows and lectures. At the end of 1928 it already owned 60 projection apparatus.

NETHERLANDS.

The President of the Council of Hygiene in Holland states, in reply to our questionnaire, that up to the present none of the government offices of his country concern themselves with hygiene and social welfare propaganda by means of the cinematograph, nor are there any laws dealing with the question.

There is, however, a law on cinematograph films, which provides, among other things, for the examination of films from the scientific point of view. If a film which is announced as scientific does not respond to the requirements of science and technique, it is not allowed to be presented to the public.

There are several houses in Holland which produce scientific films and which have put some excellent material on the market.

The Dutch Red Cross informs us that an active cinematographic campaign is being carried on in Holland in the field of hygiene and social welfare.

Numerous films dealing with these subjects are being placed before the public, and they are often preceded or accompanied by lectures and explanations.

PARAGUAY.

Social hygiene propaganda by the film is centred in the General Direction of public Relief Work at Asuncion; it is subject to municipal regulations and is carried on by the officers of the above mentioned department.

The Maternity and Infancy Associations and the Red Cross Society are carrying on hygiene propaganda on their own account with particular reference to infant welfare.

Films intended for public screening must be granted a certificate by the Comisión de Moralidad y Beneficencia Publica.

PERSIA.

Up to the present there are no special sections for cinematographic hygiene propaganda attached to the Persian Ministries interested in such questions. The municipal authorities organize projections in the provinces, dealing with malaria, venereal disease and alcoholism.

The Red Lion and Red Sun Societies of Persia inform us that they have recently decided to take up the film as a means of social propaganda; but unfortunately for the present means are lacking to carry out this programme.
PERU.

The General Direction of Public Health of the Ministry of the Interior informs us that so far no official use has been made of the cinema for the purposes of social welfare and hygiene propaganda.

POLAND.

There are a number of different systems in Poland for the projection of hygienic and social welfare films. The sanitary office of the municipality of Warsaw has a regular and well organized film service. In other towns also, such as Lodz, Cracow, Lemberg, etc., the communal authorities are organizing, in accord with the sanitary authorities, regular cinematograph spectacles accompanied by instructive lectures.

Private associations are likewise making considerable use of the cinema for their propaganda work, as in the case of the Polish Association against Tuberculosis, which has organized a service that is working also in the provinces. During the past year, 459 spectacles were organized in 62 different localities, all of them being films dealing with preventive medicine and prophylaxis; 304,373 spectators attended the shows.

The Polish Eugenic Society possesses its own cinema theatre in Warsaw, where propaganda films are shown regularly. During the past year, 1,349 spectacles were organized, and 90 different films were shown before an aggregate of spectators numbering 207,641.

The Ministry of Labour and Social Providence prepared for the National Exhibition of Posen of 1929 a film dealing with the protection of workers' health in factories, and had it projected daily during the whole time the exhibition was open.

SALVADOR.

The General Direction of Public Health at San Salvador is the only authority that makes use of the film for the purposes of hygiene propaganda.

So far, propaganda of this kind is not subject to any legislative regulations and is carried on casually by the organs of the said General Direction, which has hygiene films screened in the public squares and in schools. The shows are accompanied by lectures.

SWEDEN

No special services have been organized in connection with the several Ministries to deal with hygiene propaganda by the cinematograph.

There are, however, at least four institutions in Sweden that have taken up the production and hiring of films of this kind. The Educational Cinematographic Section of the Svensk Filmin industri is commissioned to supply more than one thousand schools, lecturing societies, study institutes, etc., with films adapted to their purposes. Mention should also be made of the Cinematographic Section of the Svenska Skolmuseet, which prepares and keeps on hand a stock of scholastic material; of the Förbundet Svensk Upplysningsfilm, which counts the Swedish Red Cross among its members, and of the Föreningen Armé- och Marinfilm, which projects hygiene films from time to time. These films, however, are addressed entirely to military circles. All these institutions are located at Stockholm, and publish catalogues of their production.

The Swedish Red Cross makes very scant use of the film for hygiene and social welfare propaganda; it is mainly concerned with Red Cross activities. The Central Committee of the Swedish Red Cross has further prepared a film on the care of the teeth.

SWITZERLAND.

In reply to our questionnaire, the Hygiene Office of the Federal Public Health Department states that propaganda in matters of Hygiene and Social Welfare is not centralized in any single government office, nor is it the subject of any special legislation.
Such propaganda is, however, effectively carried on by private organizations which are responsible both for the production and appropriate distribution of films on the subject. A number of associations concerned with preventive medicine and social welfare organize public cinema shows accompanied by popular lectures, while films bearing on hygiene and of a kind to diffuse its essential rules in everyday life are regularly shown in the cinema theatres.

Special mention should be made of the following organizations as responsible for the production and distribution of Films on Social Health questions: —

The Swiss School and People’s Cinematograph of Berne;
The Swiss Red Cross Society, at Berne;
The Central Swiss Health Office.

TURKEY.

The Board of Hygiene and Social Welfare of Angora informs us that none of the government offices have a section charged with cinematograph propaganda, which is dealt with exclusively by the "Direction of Statistics and Publications" connected with the Board of Hygiene.

The new law on hygiene contains a special paragraph dealing with propaganda by means of the cinematograph.

The Health Offices in the different provinces receive cinematograph films from the central authorities and put them at the disposal of the communal authorities, who, turn by turn, arrange for them to be presented to the public for periods varying from 6 to 15 days, according to the density of the population. These spectacles are explained and illustrated by the medical officers of health. Systematic hygiene and social welfare propaganda by means of the cinematograph is also carried on in elementary and secondary schools; this is conducted under the direction of the medical officers of the schools, the head masters, and teachers, who, in addition to illustrating the films by practical explanations, distribute pamphlets to the scholars dealing with the principal rules of hygiene, which are published by the Ministry of Public Education.

Industrial and commercial firms in Turkey are also beginning to make use of the film for purposes of hygiene propaganda among their employés.

There is not at present a scientific censorship for this type of film.

The greater number of the films are acquired in the United States, but a certain number are also bought from some of the European producers.

UNITED STATES.

Various Departments of the U. S. Government (such as the Public Health Service of the Treasury Department) possess films supplied by the general industry; but film propaganda in the domain of hygiene is not centralized or officially organized.

The Labour Office of the Federal Government owns a number of hygiene films and films illustrating the prevention of accidents. The War and Naval Departments have prepared certain films dealing with the prevention of disease.

The National Health Council has a whole series of films, of which it publishes a list. We are further informed that there are a number of organizations that rent films of a hygienic interest. Propaganda is carried on by the State Boards of Health, health societies, educational institutes, clubs, churches, and industrial organizations and like agencies. In some cases organizations arrange with the local cinemas for showings during "off-hours" when the regular commercial films are not being shown.

The Pan American Sanitary Bureau has got out some films showing the way in which water is purified for drinking and other domestic purposes, on the pasteurization of milk, and teaching the importance of pasteurization.
URUGUAY.

The National Health Council of Montevideo informs us that so far there is no regular film propaganda service for hygiene purposes, but that the education and propaganda Section of the said Council owns some 46 films dealing with hygiene and prophylaxis. The films are shown at the Universities, cultural societies, and official and private institutions, being in all cases accompanied by explanatory lectures.

Good work is done among the rural population by means of travelling cinemas despatched by rail or automobile.

U. S. S. R.

Cinematographic work and direction in all the Republics of the U. S. S. R. are centred in the Public Education Commissariats, which are at the head of the big cinematographic enterprises: the Sovkino (R. S. F. S. R.), the Vufku (the Ukraine S. S. R.); the Belgoskino (White Russian S. S. R.) the Gruzkinpron, etc.

Whenever any of these companies have to bring out a film on some health subject, they put themselves in touch with the Commissioners of Public Health and submit their plans of production and their scenarios for their opinion. The Commissariats have special offices for the production of health films.

Cinematographic production is regulated by Government laws and decrees.

There are no experimental institutes for educational films, but a special section attached to the « Society of Friends of the Soviet Cinema » attends to all questions connected with cultural films.

The « Artes » cinema at Moscow makes a special point of exhibiting cultural films, including those for hygiene instruction.

For the most part cultural films are hired by the workmen’s clubs, the Red Army, and the travelling cinemas. Long meterage films are shown in the public cinema halls, and the short ones are included as supplementary items in the programmes of public shows.

The films are censured by the leading Repertory Committees attached to the Commissariat of Public Instruction. All scenarios are submitted to them and they issue permits for exhibition. Representatives of the People’s Public Health Commissariat take part in the censoring of hygiene films.

The U. S. S. R. has issued a complete list of its films dealing with health matters.

The League of Red Cross Societies and the Red Crescent of the U. S. S. R., at Moscow, has recourse to films for health propaganda and has issued a pamphlet dealing with this problem.

The Central Committee of the Red Crescent of Uzbekistan, at Samarkand, makes use of educative films for health instruction. At the present time it exhibits the following films, published by the R. S. F. S. R.: Malaria; Work, the Family and the Dispensary; Tuberculosis; Marriage and the Sex Question; First Aid; Abortion; Life’s Unpleasant Truths (Syphilis); Gonorrhrea; Golubin’s Palace (Tuberculosis), and Should we keep Silent? (Syphilis). The Red Crescent of Samarkand, furthermore, informs us that the Uzbekgoskino has published, during 1928-29 the following separate films prepared out of local material: The fight against Malaria; (Tropical Medicine Station of Tashkent); Nature and Health (carried out under the direction of the Tashkent Institute of Physical Methods of Treatment) Richta (Bokhara Tropical Institute); Hydrophobia (now in the making); The Campaign against Tropical Diseases in the Irbekistan (likewise in preparation).

The above films are either shown in the course of the regular shows or are exhibited gratis in the towns, or by means of the travelling cinemas, also free of charge.

The Armenian Red Cross at Erivan makes use of films for hygiene and social welfare propaganda. This propaganda is mainly directed to the rural districts far removed from urban centres and aims at collaborating in the campaign against malaria, syphilis, trachoma, and tuberculosis.
VENEZUELA.

The Health Office attached to the Ministry of the Interior itself provides for cinematographic hygiene propaganda; so far however this is not carried on systematically.

Shows accompanied by lectures are held in theatres, schools, hospitals, etc.

A regular cinematographic service is shortly about to be extended to workshops, factories, and other industrial establishments.

The lectures that accompany these shows are delivered exclusively by the medical officers of the Health Office.

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We may infer from this summary of information supplied us that the cinema is not only widely recognized as a highly efficacious means of hygiene teaching and propaganda — and as such is turned to good account in many quarters — but that there is a steady and growing demand for hygiene films and that, though financial means may sometimes be lacking, a general and resolute effort is on foot to make use of this valuable medium. In calling attention to the centres that are interested in moving pictures dealing with health questions, we believe that we are rendering a service both to them and to the producers of such films, by thus facilitating their getting into touch with one another.
HYGIENE AND THE CINEMA

(From the Italian)

Ever since the last talk I had with the Director of the International Educational Cinematographic Institute I have reflected, indeed I have meditated deeply, on the question committed to my consideration; namely, the possibilities of the educational cinema in the field of hygiene, in contemplation of an organic programme coordinating these into a system which the Institute might adopt and put forward.

I have delved among my memories and impressions; I have read something of the vast literature — still too scanty perhaps — on the matter; I have perused certain articles that I had from time to time collected on a subject that has always attracted me, and more especially the Institute's interesting Review, which I regard as the main reservoir of the views of the diverse authorities in the domain of education by the new art, still so young and so full of promise. This has enabled me to feel the ground to some extent and to get my bearings in the pursuit of the practical solutions that might be put forward in this connection.

I realize, however, that there is, after all, nothing new in what little my meditative labours of these days have been able to yield. These things are known and, alas! I find myself, as the poet Giuseppe Giusti said in similar circumstances, «carrying planks to Fium'Albo and cabbages to Legnaia» (coals to Newcastle) . . . . which I would rather have avoided doing.

In any case I will express my views, so as to fix some landmarks and define the terms, to avoid floundering in the vague and indeterminate, when a programme is needed, even if roughly traced only in its general lines.

It may be that further study and new material — such as the Institute can offer me out of its ample documentary resources — may suggest to my mind new directions and new possibilities of solution.

Hygiene teaches us how to live; it is the science of living. It occupies a very high position in the hierarchy of the individual and collective factors of health. Hygiene teaches how to live healthily through the exercise of forethought of two kinds: care in avoiding the causes of disease and care in fortifying the organism. By the first we avoid illness; by the second we increase our powers of resistance against the snares of the foe that we cannot always avoid.

This simple and elementary statement tells the social importance of hygiene and the weight of its influence on public economy, given the obvious concept that life is not only a moral but also a material capital, capable of being appraised in monetary values, the amount of which is directly proportionate, not only to the number, but also to the health of the individuals forming the community.

To hygiene then is committed the important task of safeguarding this capital and defending it against the two-fold risk to which it is exposed: that of remaining for a time unproductive on account of illness or of being lost in death before it has yielded its full harvest (Di Vestea: Principii di Igiene).
But Hygeia, to be able to fulfil this function, must not remain segregated in the palace of science, she must come down among the people, penetrate their understanding, and become a part of their daily life, thus producing a state of mind which my distinguished and beloved master, Alfonso Di Vesta, defined as the "hygienic consciousness".

Hygiene must be examined in its two aspects — public and private. The first touches the powers of the State; the latter concerns the individual and translates itself into hygiene education. They are two aspects of the same problem of the care of health, indissolubly connected with one another; so much so that attention to the former, in the absence of the latter may miss the mark. From some points of view, indeed, I would go as far as to say that private hygiene may be more fruitful of good results than public hygiene, because it leads to individual collaboration, and hence to that of the masses, thus forming a hygiene volunteer force, without which the best devised measures are apt to be vain.

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Big social reforms, such as those that fall within the domain of hygiene, that aim at transforming habits and eradicating prejudices deep-rooted in daily life, are not possible without a previous change in the trend of opinion. Reforms come from within, from the depths of consciousness and not from the outside and the surface, as Vincenzo Morello well observed in an admirable article on the state of public conscience in France. This concept is particularly applicable in the domain of hygiene. You must first convert the individual if you wish to convert society. And you cannot change the individual till a new sense of life succeeds in replacing that which has determined his conduct in the past (1).

Now this, precisely, is the task of individual hygiene, which brings about a new education of the masses. The habit of washing hands before meals; baths; sweeping the house without raising dust; the habit of not spitting on the ground; care of the teeth, and numberless other points (the list whereof would be endless) cannot enter into a people's daily habits until the new sense of the danger to health caused by neglect thereof has penetrated their consciousness, until — to put it in other words — the new consciousness has formed itself within, the hygiene consciousness, and replaced the former one with all the bad manners attached to it and that kind of blind fatalism which is the source of so many private and public ills.

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In this passage from the old to the new consciousness, in the elevation of the individual conscience, which later spreads to the multitude, the cinema can render great

(1) VINCENZO MORELLO: "Le Cronache delle vigilia" in the Lettura of 1st January 1917, XVII, No. 1)
services, by accelerating the rhythm of the «passage» through the suggestive spell of its animated images and scenic effects from life — the expressive symbols of living and breathing reality.

This highly interesting side of the social functions of the cinema, with respect to popular education, culture, and propaganda in its several domains — has been effectively stressed in the International Review of Educational Cinematography. Several striking articles have dealt with this subject, both from the point of view of cinematic production having this specific aim and from that of substance and form, doctrine, art, statistics, technique, and so on. A fine and useful initiative of the Director of the Institute, Dr. de Feo, deserves notice: this concerns an international enquiry dealing with the cinema in the service of hygiene and social welfare.

All the material gathered, all the opinions expressed, concur in attributing to the cinema an extraordinary power of educational and cultural expansion and penetration. At the recent Berlin Congress Dr. Cürils, President of the German Lehrfilm-bund, declared that no means of propaganda or publicity has greater powers of attraction than the cinema, powers that he defined as «magical», adding that all who come within the rays of its light are subjugated. And Jules Destriée, Belgian former Minister and Deputy, attributes to the cinema the power of «profoundly modifying human mentality».

Apart from the fascination exercised by the subject itself, by the moving images, the scenic arrangements, the luminosity of the picture, the musical accompaniment — in a word by the cinematograph as such — this efficacy depends also on the number of the spectators. It is calculated that an average of 40 million persons pass daily through the 130 thousand cinema halls which — at a rough estimate — are scattered throughout the world. The figure is enormous, but probably inferior to the truth, when it is considered that in the United States alone — according to the statistics submitted to the First Congress of Italian Cinematography, which met in Padua in June 1929 — there is an annual movement of five thousand million spectators yearly, which is as much as to say that each citizen of the Federal Republic goes to the cinema, on the average, 46 times in a year; in Germany and in England, 730 millions; in France, 352 millions; in Italy, 260 millions. In Spain there is one seat per every 14 inhabitants.

This movement, which is already so conspicuous, is everywhere bound to increase, especially with the prospect of television, which will make it possible to project the moving images to a distance by wireless.

What progress in the 34 years of the cinema’s life!

But let us see to what extent this prodigious instrument of education and teaching has been utilized, or I would say «exploited» in the service of hygiene?

I have the impression that the use made of it is less extensive than the subject matter would have warranted. Production has concentrated in certain domains and has not always been adequate, while other domains, and not the least important, have remained unexplored.

I do not wish to be misunderstood. Speaking of the scanty output I do not mean that medicine as a whole has not received the consideration due to it in cine-
matographic production. This is another matter. But the use of the cinema has been directed rather to particular sectors, as for example surgery. It appears that the surgical operations of the famous Doctor Doyen, of Paris, were the occasion of the first applications of the cinema to medicine. At the Colonial Institute of Amsterdam I have watched some highly interesting films showing operations on the eye — with extremely clear enlarged images in colours, which enabled hundreds of persons attending the Congress to follow the phases of the operation, whereas very few persons — some four of five at the most — can actually watch the process in real life. Here is an instance in which cinematographic reproduction has very great advantages over the real thing. There has been a certain amount of production in the fields of anatomy and physiology: the circulation of the blood, even in the capillaries of living man; the registration of heart-beats; the back of the globe of the eye. Considerable attention has been paid to nervous diseases. At Rio de Janeiro there is a complete film collection — perhaps the completest existing — dealing with nervous diseases, which the resources of the cinema have made it possible to study and reproduce in an admirable manner. In Moscow the celebrated experiments of Dr. Paulo on the brains of dogs have been shown on the cinema by animated drawings. Certain very successful films have recorded the phases of childbirth and details of the care of mother and infant. Some biological curiosities have also been filmed, such as the titanic struggle between infusoria, the microbes existing in a drop of water, and so on.

Thus medicine has been accorded a position of some importance in the hierarchy of cinematic production. But I have the impression that hygiene, within the strict meaning of the word, has been treated more shabbily. It has received some consideration, but not, in my opinion, the consideration due to it and that might have been accorded it. A little microbiology, with the study of certain bacteria; a little entomology; the life and habits of certain insects and their metamorphoses. More attention has been paid to the sector of social diseases: tuberculosis, syphilis, malaria, alcoholism. There has been a little physical education and some films of stomatic prophylaxis. Some general subjects have been touched on, such as «the advantages to health of the observance of the laws of hygiene». Some attention has been paid to sanitary reforms: the depuration of sewage, etc.

The hygiene films released by the Luce Company on the occasion of the exchange visits of foreign doctors to Italy during 1928 form a commendable exception.

But, in so far as the matter has come within my reach of observation, I have the general impression that we have here a casual documentary production, that «happened» under special circumstances: a fragmentary, disconnected and often inadequate production from the standpoint of the social, educational, and scientific ends which we should have wished to be pursued. For instance, I have seen films of towns that represented merely episodic scenes, touching the mere husk of the subject, but that failed to document the substantial matter, consisting of important sanitary works which had transformed the locality by eliminating unhealthy factors, thus lowering by many points the quotient of the death rate, which is the surest index of sanitary conditions. Some years ago I watched in a Rome cinema a film that
purported to aim at anti-tuberculosis propaganda — a work of some merit from the dramatic standpoint, but grotesque from the medical point of view. I have before my mind’s eye the figure of the family doctor, who used his stethoscope upside down, to the clamorous amusement of a part of the audience. Examples of the kind might be multiplied.

Thus production is not very abundant and not always good. The results, therefore, cannot be other than mediocre.

Whole sectors of the hygiene problem have not yet been explored, or insufficiently explored. Exotic epidemiology, for instance, which, owing to the increased development of traffic and the rapidity of the means of communication, breaks out so frequently in the great ports of the world, has not been dealt with. In like manner, international prophylaxis — with its fine and widely developed international defences, the notable quarantine stations on the far eastern routes, where Moslem pilgrimages are so frequent and the movement of passengers and goods so extensive, has been neglected. And yet these are subjects which offer matter for artistic productions of great value from the historical, geographical and epidemiological points of view, and also maybe from the aesthetic.

Then there are other fields — such as climatology, geology, hydrology, the history and future of human habitation — the characteristics and tendencies of building, its structure and care of light, air, etc.; the systems for removal of town and domestic refuse, methods of biological depuration, etc.; hygiene in clothes, food, exercise, and rest; personal hygiene — all these offer fertile possibilities for film rendering.

And then we come to special branches of hygiene in its numerous applications: town, rural, industrial, agrarian, maritime, etc.

There yet remains microbiology viewed a little more closely; sanitary engineering in reclamation works; public welfare institutions, demography, and so on.

These are all subjects of considerable importance, which offer scope for a highly valuable film production, a production of an adequate, organic, and systematically coordinated kind, so as to make documentary material available for a Hygiene Museum which would represent the question without serious gaps or omissions — not a mere film collection of subjects and experiments, often disconnected and lacking in correlation, and what is worse, largely inadequate.

There are diverse causes for this relative lack of «hygiene» films. Firstly there is the difficulty of filming certain scientific subjects, a point to which we will return later. And then films of this kind are not always entertaining and the public are little inclined to watch them. The producing firms thus give their preference to «feature» films, dramas, novels, travel, historical reconstructions (which take so many liberties with history, alas!) thrilling adventures, etc. — apart from comic, heroic-comic and altogether nonsensical subjects.

The public flocks to shows of this kind, which are often preposterous, depicting banal and frequently grotesque and anti-aesthetic situations — while they leave the documentary and cultural film unvisited.

This is to some extent the fault of the producing firms which, for trade reasons,
have seen fit to lower the artistic level of production, having recourse to the fantastic, the preposterous, the abuse of « stunts ». Thus public taste, which in the earlier days favoured « reality » films, has been gradually distorted. I always recall the Rome Cinema Reale, that now no longer exists, which some twenty years ago was wont to devote Fridays to subjects from life. The films shown were exclusively documentary, for popular education, and highly interesting : e. g. « the wheat harvest », « the cotton industry », « silk worms », « the life of the butterfly », « the Terni steel works » and a number of other subjects. These always drew big audiences who had to look sharp to secure a seat. The cinematograph’s early days were devoted to recording reality — a train steaming in, the waves of the sea, the collapse of a wall. It is necessary to lead the public back to its original taste, which will be of great benefit to hygiene.

* * *

Here is a field open to the I. E. C. I. and its energetic Director. It comes within the precise scope of its statutory attributes. To educate, to educate! — in the words defining the purpose of the Institute; to utilize the motion picture to promote and diffuse education among the people, as a step towards moral and material improvement. Now hygiene, as we have seen and as everybody knows, is one of the most promising branches of popular education, inasmuch as it favours and strengthens the sense of health defence, a feeling instinctive to man, the origins of which are lost in fable.

The Institute holds a powerful weapon in its hands; to what more worthy object could it devote its activity than to use this weapon for the ends of science?

I am far from suggesting that it is for the Institute to provide directly for the requisite production: but it might encourage it, guide it, supervise it, measure and balance its effects, see that its output is adequate to the aims in view. Herein lies its task. To support private initiative, which, as we have seen is fragmentary, disconnected, and not always enlightened, by the powerful assistance of its advice, its persuasions, and an assiduous work of propaganda, thus gradually replacing sporadic effort by more organic, more harmonious, and more useful initiatives. Such initiatives the Institute alone can promote, thanks to the prestige and authority it derives from the League of Nations, of which it is part and substance.

I have no intention of suggesting that production of this kind should be standardized. To standardize in this case would be to render flat and stale, if not unprofitable. No: the Institute can, perhaps it ought — within the limits of its rules and mission — to set itself up as a kind of technical supervisor — as Louis Dop well observes — a guide and counsellor on the lines that this modern and powerful vehicle of thought and propaganda should pursue in the educational — in our case the « hygienic » — domain.

To consider a wide field, embracing the whole hygiene problem, what ways and means are open to a productive collaboration of the cinema?

It behoves us here to distinguish between subject matter and aims.
As for material, the answer is easy enough. There are no preserves in this desmesne. The cinema can render the most valuable services in all branches of hygiene, whether general or specific, public or personal, doctrinal or applied, collective or individual. To my mind the whole question consists in how best to utilize the instrument.

As to the other point, that touching on aims, the collaboration of the film may be developed in three different directions:

Scientific research;
Teaching and culture;
Education and propaganda.

These three aims overlap somewhat, because a film of scientific investigation is always cultural; just as a cultural film may be educational. It is not possible to trace any distinct line of demarcation between the several aims; each one of them may be regarded as embracing the others. Nevertheless some distinction is necessary in practice, for the purposes of the construction and development of the theme. Account must therefore be taken of the « prevalent aim » and we must bear this in mind so as not to risk defeating our aims.

1. The collaboration of the film in scientific research work.

Recent discoveries in cinematic technique justify the most confident hopes. The cinematic art, under proper guidance, would in all probability be able to wrest fresh secrets from nature.

The improvements effected in the cinematograph camera and in general technique make it possible at the present time to analyze a number of clinical phenomena from the standpoint of their scientific interpretation and from that of pedagogic demonstration. Prof. Aloysio De Castro, Director of the Medical Clinic of the University of Rio de Janeiro has shown this in a striking manner (1). We are used to regarding time as constant and unalterable. For the film, however, it has on the contrary, become a regulatable factor, and we can accelerate or retard it at our pleasure. Rapid movements may be reproduced very slowly on the screen in a manner to allow of accurate analytical study. On the other hand, the film can show in a few seconds things that in real life it takes hours, days, or weeks to enact. The Director of the Multifilm Co., of Haarlem, pointed this out in a memorandum on the scientific film he addressed to me. In this manner the intermediary stages of movements, or even extremely slow movements, which escape the grasp of the most experienced senses, may be made perceptible. It is generally supposed that the vegetable world is motionless or moved only by the wind. But the quick motion film reveals to our eyes all kinds of movements in plants; movements made for determinate ends, in a way that gives at times the impression of tumultuous kinetic energy. Who can

(1) Vide International Review of Educational Cinematography, No. 4, Page 407)
tell whether these new special and complicated mechanisms may not one day render it possible to analyze even the movement of the atoms in intermolecular space or those of the anions and cations in saline solutions? How many phenomena now surrounded by mystery may not thus be explained!

Another notable discovery is the application of X rays to the cinematograph: i.e. radio-cinematography; which has already made possible some striking investigations into opaque bodies, as for example certain phenomena that occur inside the living organism.

In like manner, the application of powerful microscopes to the cinema (micro-cinematography) has made it possible to observe the behaviour, movements, and life of an infinitesimally minute world. The slides of Charles Pathé, on which Dr. Commandon worked, and the more recent and highly complicated slides of Jean Painlevé, who succeeded in micro-cinematographing living microbes in the liquid held between two glass plates and in reproducing the circulation of the blood in a small echinoderm, are worthy of special note.

Another interesting discovery is that made by Prof. R. A. Watzel, of New York, in collaboration with his fellows of the Rockefeller Institute. Professor Watzel observed that in certain preparations of colloidal silver the silver particles increase in volume under the influence of light. This curious phenomenon has been fixed on the film and represents an initial stage towards the solution of the relations between force and matter—a solution which might have the most unforeseen applications in the practical domain.

The horizon investigated by the cinema is being further enlarged by the new prospects of colour cinematography, three-dimension films, and the sound and talking film.

On the occasion of a cinematographic entertainment, given last September by the Multifilm Co. of Haarlem, accompanied by a lecture by Prof. Seters of the Colonial Institute of Amsterdam, I had an opportunity of watching some truly interesting films of scientific investigation: the mechanism of malarial infection in its two-fold evolutive cycle—sexed and asexed—of the protozoa of malignant tertian; as well as the several stages through which the malarial mosquito passes, from the depositing of the egg in stagnant water to the formation firstly of the larvae with their characteristic movements and then of the nymph, right on to the unclosing of the crysalid, from which we can watch the perfect insect laboriously freeing itself for flight, under the gaze of hundreds of spectators.

Thus the actual and potential achievements of the cinema whereby it may become a most powerful ally in scientific investigation, more especially in the field of epidemiology and prophylaxis, are manifold.

But it must not be assumed that these new goals can be easily reached. Experts point out many and serious difficulties. Apart from the question of mechanisms, which are extremely complicated and difficult to handle, that of time and exhausting labour must be considered. In the above mentioned memorandum the Director of the Multifilm Co. stated that the Dutch Institute had been at work nearly a whole year on a single systematic film recording the movements of plants. «Day
and night two cameras were automatically and uninterrupted at work: every minute, every quarter of the hour, or every hour, the apparatus projected their powerful light and made a single photogram of the object placed in front of the objectives. A work such as this necessarily proceeds very slowly and it is hardly necessary to add that it takes years to produce a film comprising several subjects of this kind.

Then there are other difficulties related to the subject itself. It is sometimes necessary to concentrate an enormous quantity of light on a microbe of no more than a thousandth part of a millimetre in size, when it is desired to enlarge it satisfactorily by increases of a thousand and more diameters. At times these unwilling film stars - continues the Director of the Multifilm - feel very uncomfortable in such a glaring flood of light. They seek constantly to escape beyond the luminous zone, to get out of the range of fire. Some cease to move the moment the light is projected on them; others die or make all sorts of unnatural movements. It is necessary to have recourse to all kinds of stratagems and devices to carry through such films. And it is no exaggeration to say that fresh ways and means of overcoming such difficulties have to be sought in the case of each particular microscopic film, and that these are always the result of long and very patient experiments.

Spectators who, thanks to these reproductions, have been enabled to penetrate some of Nature's mysteries, are unaware of the laborious fatigue that has been expended on seizing scenes which pass before their eyes so rapidly, in a few minutes.

II. COLLABORATION OF THE FILM IN THE DOMAIN OF TEACHING AND HIGHER CULTURE.

This is another kind of collaboration akin to the scientific cinema. And we may say that much is being done for medicine by this means. The same cannot be said for hygiene. Many schools of hygiene still possess nothing but obsolete projection apparatus for stationary images and are lacking in the powerful help of the cinematograph.

When I frequented the Upper School of Hygiene, where the pioneers of the Italian Health Administration were trained — a school whose teachers were Luigi Paggianli, Alfonso Di Vestea, Achille Sclavo, Enrico Raseri, Luigi Palazzo — names dear to all students of hygiene in Italy — we used to get on with the aid of mural cartoons and schematic drawings, which gave but a pale and inadequate idea of the truth, when indeed they did not actually falsify it.

To-day, on the contrary, with the help of the moving picture, we are able much more efficaciously and readily to study and penetrate the several branches of hygiene: epidemiology, microbiology, technical physics, sanitary engineering, public health assistance, etc. To-day, thanks to the cinematograph, it is for instance easy to get an idea of the several hygiene works scattered over the globe, without actually repairing to the spot, and we can examine these in their building structure, functioning, aims and results.

Here is a typical example. The Permanent Committee of the International
Hygiene Office in Paris, to which I have the honour to belong, is by its own efforts pursuing the problem of international health protection. Now neither I nor any of my colleagues on the Committee representing the fifty adhering States had ever visited the great Quarantine Station of El Tor, which is one of the bulwarks at the mouth of the Suez Canal for safeguarding Europe against the irruptions of exotic diseases. And yet we were called upon to deal with it. Only this year, thanks to an interesting and detailed film, produced under the supervision of the Egyptian Quarantine Board, and on the initiative of its worthy president, Dr. Gilmour, have we been able to make the acquaintance of the great maritime institution, with its roadstead and port, its buildings for general and special services, its hospital and disinfection stations, its water supply, etc. We were, moreover, thus enabled to view its actual functioning on the arrival of the pilgrimages from Mecca; their stay there, the different clinical and bacteriological examinations, vaccination, the services of a public kind, etc., right up to the departure of the pilgrims.

The above is a typical example of the utility of the cinema for the purposes of higher hygiene culture.

But examples might be multiplied, for we are here concerned with the uncircumscribed field of the documentary film, in the highest form of its expression and achievement. Nobody who reflects on the matter can fail to appreciate the immense services that this type of film, photographed from life, could render to teaching in Schools of Hygiene: by showing aqueducts, systems for removing and destroying domestic and city refuse, dwelling house improvement schemes, hospitals, shelters, health resorts, climatic resorts, industrial works, etc. Such films would show us all these hygiene works, not in their static, but in their dynamic aspect, in all their working efficiency. The moving images, taken as required, would enable us to follow the progress of hygiene in the different countries, and give no mere hearsay, but a direct account of the manner in which the manifold problems are being tackled and solved.

This would also be a powerful means of propaganda, as casting light on the efforts made by the several countries and enabling us to appreciate these at their proper value, and would serve as an incitement to the inert by the irresistible force of example.

In my humble opinion, much could be done for these ends by the International Cinematographic Institute, acting in collaboration with the Health Section of the League of Nations, by gathering on the spot the necessary documentary material for the formation of a rich film archive.

This should loan all requisite teaching material to the various schools of hygiene, according to their particular needs.

The carrying into effect of a programme such as this, which here we can only just glance at, would, in my opinion, mark a great advance in the teaching of hygiene, by imparting much useful and profitable knowledge to the students, the future masters of this science.
III. Collaboration of the film in the field of hygiene education and propaganda.

Perhaps this is the domain in which we shall gather the richest fruits, owing to the suggestive ascendancy of the cinema on the minds of spectators. At the present time, with the spread of civilization, hygiene propaganda by means of the living picture ought to play a big part. Cinematography, as we have already said, ought to be brought up to the level of the renewed public spirit of the time. Hygiene now pervades all walks of social life. It is no longer the hygiene of the past, restricted to the protection of the individual. The protection of the collectivity through that of the individual, which originated in the advent and new developments of biological sciences, is the problem of our times. To-day this «science of health», illuminated by recent discoveries in bacteriology, has spread, like a salutary lymph, throughout the intimate system of social life, and civil progress is rendering it a necessity. For the very progress of civilization has by a sublime paradox created new snares for mankind, while suggesting to him the ways and means of self-defence! It is our duty to avail ourselves of these means, to follow these ways, and to reach the goal.

A spontaneous move is being made in the right direction, partly by virtue of the new civilization itself, but mainly owing to the profound change that has taken place in hygiene, which has transformed man's environment, freeing it from the principal causes of disease. The flection of the curve of mortality, both general and specific, throughout the world is due to hygiene; we have to thank hygiene for the disappearance of the exterminating scourges of the Middle Ages.

Characteristics of the Hygiene Film.

Hygiene films must have certain qualities, without which, in my opinion, much of their efficacy would be lost.

1. They should be taken from real life, especially those intended for popular education. Even the use of technical means should be so coordinated as to bring the truth into greater relief. Exaggerated situations ought to be avoided, situations which, even if true, are only of occasional occurrence. Exaggeration generates incredulity, which is the worst foe of persuasive results.

2. The choice of subject is another important point. Choice should fall on subjects of topical interest, of a kind to appeal to the audience. Choice naturally varies according to the audience for which the film is intended, according to its receptivity and grade of culture. A film intended for an audience of intellectuals must naturally have a different consistency and construction from a film intended for the masses. The cinema should be of a certain spiritual and moral guidance to the people; it should avoid grossly disagreeable themes of a kind to offend morals and the aesthetic sense, even with the laudable intention of safeguarding
health. The manifestations of science must always conform to exigencies of other kinds.

3. "Educational" films should be fundamentally recreational. They ought not to weary attention. Indeed they should, as far as possible, convey their message to the spectator's mind without excessive mental effort on his part. This condition is closely bound up with the duration and comprehensibility of the film. Preference should be given to a few brief and clear ideas impressed in an obvious and incisive manner on the mind picture.

4. The range and importance of the results at which the film aims should also be taken into account. Physiology and experience both show that men retain visual perceptions better than they do aural ones. But the two forms of perception, when associated together, are fixed more tenaciously in the memory. The mnemonic sensation of the moving image is thus added to the mental perception roused by what is heard. All students of the question are agreed on this point. Thus the combination of cinematographic vision and verbal explanations on the subject give the best results, a result yet further enhanced when these two methods of propaganda are accompanied by a short written account of the matter—a summary which the spectator takes home, and which, animated by the memory of what he has seen and heard, ensures the lasting nature of the impression produced by the educational show.

5. The popular film, as P. Boncourt well observes, ought not to be a debased art, but a pure and aesthetic artistic expression for the benefit of the people. The cinema is not merely a popular art, he goes on to say, but a new form of art, which, owing to its vast diffusion, is closely bound up with the life of modern society.

Art first of all consists in originality, good taste, and a sense of balance and proportion.

Films in which art, in the most expressive sense of the word, is not lacking, have the greatest educational force.

6. The aims in view must always be borne in mind when working out the theme. Where the aims are cultural or scientific, it will generally suffice to reproduce the subject in its naked and unadorned reality. But a pleasing and agreeable presentation is necessary where educational ends are aimed at. It stands to reason that here also there are differences and gradations. In the case of propaganda intended to appeal to intellectual circles, there will be little call for extraneous elements of interest; whereas a framework containing romantic and emotive elements may have a decisive influence in producing an effect on the people.

All educational films require the partnership of the various specialists concerned, who must work in concert for the efficacy of the result.

The failure of many educational films, especially those dealing with hygiene (a field in which the ignorant often pose as wiseacres), is in fact largely due to the absence or dissociation of the masters in the several branches. The collaboration of these is responsible for the correct proportions of the parts, for the balance between the content and its artistic and effective manifestation. This is a fundamental condition to be borne in mind.
We need the help of the operator, who views the film from the standpoint of technical possibilities, undertakes all the details of carrying it out, prepares the material, arranges the play of light, moves the camera nearer or further off as required, makes sure of its working efficiency, and thus obtains perfect photographs from the technical viewpoint — luminous, accurate and clear — through a proper estimation and rendering of the general view at the successive moments of filming the scenes.

We need the help of the scene director, so that the facts of nature may be photographed in their most aesthetic and expressive aspects, combining the several elements of the picture into an organic whole, so that each and all of them may play their due part in the harmony of the picture.

The constant collaboration of the hygiene specialist, who draws the several elements of the picture from scientific sources, is, of course, a sine qua non of success.

This collaboration — which is in all cases useful and desirable — becomes absolutely essential when the «hygienic» realities are interwoven in the plot of a drama or any form of romantic picture. In such circumstances, as Dr. Schweisheimer judiciously points out in an article on «The Film as a Teacher» published in No. 5 of the International Review of Educational Cinematography, it belongs to the doctor, in a certain sense, to elaborate the internal or substantial part of the film, with the purpose of delineating the aims of hygiene, by giving it a scientific basis and preventing it from distorting or falsifying the truth, while it is the Art Director’s part to produce the exterior impressions. «Squeamishness and exaggerated reserve should be avoided» — continues Dr. Schweisheimer, — «Clear terms, emphatic accents, stirring action are necessary if in the space of an hour or two an idea is to be impressed on the inmost heart and mind of the spectator». This is precisely the task of the artistic partner.

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I will conclude for the present by recalling an idea already expressed. The Educational Cinematographic Institute has a great mission ahead of it: a humanitarian mission, fertile of good results: the use of the cinema in the service of hygiene. To collect together the threads of scattered initiative, to stir up fresh ones, to coordinate them all in the interests of the moral uplift of the peoples, will constitute a distinguished title to public gratitude.

I am confident that the Institute, under the watchful guidance of its Director, will carry out this mandate.

Dr. Alberto Lutrario.
CONSENSUS OF EXPERT OPINION.

In concert with the Director of the International Educational Cinematographic Institute, I have questioned a number of authorities on hygiene and kindred sciences on the subject of this article.

In so doing, I was prompted by the fact that the Institute had done me the honour of consulting my views on the lines of a general programme in connection with the enquiries it is carrying out on the cinematograph as an auxiliary to hygiene from the point of view of doctrine and of practice.

It is only natural that at this conjuncture, when the Institute is embarking on such a novel and important phase of activity, I should seek the support of scholars kindly willing to benefit the cause by their « ideas, suggestions, observations, and criticisms », to quote the words used in the circular letter.

Answers are beginning to come in.

While expressing — also on behalf of the Institute — our gratitude towards those who have responded to this call, I wish to cite here the salient points in the answers so far to hand (1), while looking forward to publishing in due course such others as may follow.

The General Director of the Italian Red Cross, General Dr. Cesare Baduel, writes:

If it were possible to carry into effect all that you suggest with means adequate to the development of such an undertaking, all associations — and first among them the Red Cross Society — would benefit by the acquisition of most valuable propaganda material. And all that I could offer in the way of collaboration — based on the experience I have gained during these years that I have directed the Red Cross — would be placed most willingly at the service of whatever organization or person might undertake to create hygiene propaganda films, suited to the mentality of our people and to their needs in the domain of personal and collective hygiene.

General Dr. Boyé, Inspector General of the French Colonial Health Service, writes:

I agree with you fully on all points. But while, considered from the standpoint of an instrument of scientific research and teaching, the cinema will of itself gradually evolve towards perfection, step by step with the advances made in cinematographic technique, the question is much more complex when we view it from the standpoint of a health educator of the masses.

Films that are strictly documentary and nothing more, are not popular with the masses of the people, whom we must reach, whose taste has unfortunately been perverted by the ridiculous and grossly farcical productions that fill the picture palaces.

(1) The letters are quoted according to the alphabetical order of their writers’ names.
Thus it behoves us to find a formula combining the teaching of some rule of hygiene with the attractions attaching to a story suited to the purpose and serving as a framework to the whole.

This calls for the skill of the scenario writer in co-operation with a doctor or hygienist, and much spade work will have to be done before we can hope to achieve success.

Dr. Carrière, Head of the Swiss Federal Hygiene Service, writes:

I have read with the greatest attention your article on Hygiene and the Cinematograph and cannot but approve of its general tenour and its conclusions. Just as I am averse to literary and dramatic cinematography — which I regard as a perverter of public taste — I believe that the moving photograph, with its well nigh inexhaustible possibilities, can and should serve the purposes of teaching, more especially of science, and those of hygiene propaganda. It is certain that, especially in this latter domain, much remains to be done; that hygiene, as you say, has been treated shabbily, and that documentary production is too fragmentary and lacking in continuity. I might add that the hygiene film, on its side, has committed some gross mistakes. You mention some of these and others would not be far to seek.

Thus, without going into details, I cannot but side with the conclusions set forth in your paper, especially with regard to the task that the International Educational Cinematographic Institute could play: namely, to bring scattered initiatives into unison, promote new ones, and coordinate them. This task is as fine as it is difficult and delicate, and you may claim to have contributed a practical share towards its achievement.

Dr. Colombani, Head of the Public Health Service of the French Protectorate of Morocco, writes:

May I offer the following suggestion: I should envisage a close liaison between all those countries that are willing to pursue your programme and the I. E. C. I. This liaison should take the form of a monetary contribution which would make it possible for educative films worked out by this technical organism to be circulated among the countries adhering to the Institute; and in its turn each country might furnish the material for a fine film. (I have in mind, for instance, typhus prophylaxis in Morocco by our Travelling Sanitary Groups. This would, indeed, offer a vision of «stirring action», to quote Schweisheimer's striking expression).

An understanding is therefore possible, and as Director of Public Health and Hygiene in Morocco, I should be ready, for my part, immediately to subscribe to the plan within the limits of my pecuniary resources. I think it would be most desirable for us to discuss this question on the occasion of our forthcoming meeting in Paris, next May.

Prof. Eugenio di Mattei, Director of the Institute of Hygiene and Bacteriology of the Royal University of Catania, writes:

At the back of my mind I was aware of a vague impression that the cinematograph might be of great help to applied Science in its several branches, and especially in the domain of hygiene, which, more than any other branch of science, must needs make
headway among the public in order that the «hygiene conscience» to which all hygienists aspire may be formed.

Only the cinematograph can make the various problems of hygiene generally known for the education of the community. Sight carries a much more lasting impression than hearing, especially when it does not merely record isolated facts, but a whole chain of facts and reasoning.

The film is the only practical means of bringing the soul of the crowd into touch with such problems.

As regards hygiene, I agree with you that not enough has been done and that much can be done. You are right in feeling that hygiene, within the strict meaning of the term, has been shabbily treated as compared with medicine. You point to what the film can do in the fields of microbiology, epidemiology, social scourges, prophylaxis, and sanitary engineering; all that it can teach us regarding the vast work of land reclamation, and especially how useful it can be, how much it can teach and enlarge the outlook as a means of propaganda.

You have also done well to point out the sectors hitherto unexplored by the cinematograph in exotic diseases, international prophylaxis, the world movement of the big quarantine stations, and other problems of vital international concern.

Hygiene has had enough of fragmentary output, as you well say; it is in need of comprehensive pictures of actual life, stripped of fiction, euphemism, and hypocrisy. Hygiene as a social function and a goal of social education needs the cinematograph.

I would go further. The cinema should illustrate the laws of the State in their hygienic aims, that is to say their social aims. And just as the laws of all States have rules for their enforcement, so also they should have an explicative Cinematographic Regulation on matters of health and sanitation.

It is not the masses alone that we need to get at; these ideas need to be impressed no less on doctors, servants of the state in general, and on the cultured classes, who should know and instruct in their turn.

I am therefore of one mind with you and I cannot do better than cite your own words: «The Institute holds a powerful weapon in its hands; it cannot use it more worthily than in the interests of hygiene». I would add that it is its duty so to use it. The Institute must promote and guide activities in regard to hygiene, both its means and its ends.

You are right in saying that «Hygiene pervades all the domains of social life; it is a collective defence against the snares which the progress of civilization has placed in man’s path; it is the science of living healthily». Lastly, let me express my admiration of the clear and concise terms in which you delineate the «characters» of the hygiene film: truth, topical interest, education, recreation, purpose.

I share your view that, whenever possible, the film should be accompanied by verbal explanations; nor let us forget the importance of turning out of Hygeia’s temple all the pharisees who «mask their ignorance by posing as wiseacres».

Prof. Alfonso di Vestea, of the University of Pisa, and a member of the Higher Medical Council, writes:

in,
« You have done well to recall St. Eusebius, that unparalleled master of the priests of Hygiea. Where you very properly remark that « from some points of view private hygiene may be more fruitful of good results than public hygiene » I would be more downright and uncompromising, so as to forestall any misunderstanding. I would cut out « may be » and « from some points of view » and declare that individual hygiene, as an end in itself, is pointless at the present time and is valueless against the great causes of mortality and disease ; it is all powerful, on the other hand, when interpreted not only as a duty towards oneself, but as a duty to one’s neighbours; a condition sine qua non of public and social wellbeing.

Col. Dr. James, Head of the Epidemiological Department of the British Ministry of Health, writes:

I have read with great interest and profit your admirable pamphlet on hygiene and the cinema. It occurs to me that your ideas on the use of the cinema for public health purposes are considerably in advance of those which are put into practice in this country. For this reason we have not been able to find anything which would be useful to you in your work in connection with the International Cinematographic Institute. If your pamphlet is to be published, I shall be greatly obliged if you will kindly inform me how many copies may be obtained in order that I may send them to individuals and organizations engaged in teaching and practice in this country.

Dr. Lasnet, Medical Inspector General, Head of the Public Health Service of the French Colonies, writes:

I agree with you that the Cinema may be an extremely powerful factor in educating the peoples and teaching them to lead healthy lives. As far as I am concerned, I am a convinced partisan of the cinema and I am doing my best to develop its use in the struggle against endemic epidemics which threaten our colonies. We already have films dealing with the plague, yellow fever, malaria and sleeping sickness which, shown in different places, have done us excellent service.

The Hon. Senator Prof. Alessandro Lustig, Director of the Institute of General Pathology of the Royal University of Florence, writes:

I hasten to associate myself, without any restriction, to your conclusions printed on p. 13 of « Hygiene and the Cinema ».

I consider as a branch of educational cinematography that which has been magnificently developed abroad and has received significant encouragement from the League against Cancer. That is to say cinematography which aims at the diagnosis and early treatment of cancer, or rather of malignant tumors.

Prof. Luigi Manfredi, Director of the Institute of Hygiene of the Royal University of Palermo, writes:

I, personally, have not much experience of the cinema as an instrument of culture and teaching. But during my now lengthy experience as a university teacher of hygiene either to the Faculty of Medicine, or at the School of Engineering, I have always made
great and systematic use of the projection of fixed images; I have found this of great assistance, as it multiplies a hundred-fold the efficacy of oral teaching.

There can therefore be no doubt that the didactic efficacy would be increased to a maximum — with the highest returns in all respects — if it were possible to add to static representation and documentation of many subjects, kinematographic presentation, which alone is capable of showing the relation between the different parts of a machine or between the diverse phases of a process; or still better to show the moving image of a living creature or of a machine at work.

We cordially hope for the success of your suggestions for reaching this goal, which is really ideal: that the excellent Institute of Educational Cinematography, in collaboration with the Hygiene Section of the League of Nations, should collect the necessary documentary material for the formation of a well supplied film-archive to be placed at the disposal of the different schools of hygiene. I believe that these would willingly repay the benefits received, by scientific and practical collaboration which they, better than any one else, could afford, and from which good results could be obtained in cinematography applied to education and hygiene propaganda.

I have something further to say on this point, that is to say in regard to educational and propagandist cinematography. You touch the sore spot when you say that the public flock to watch sensational and recreational films even when the subjects are farretched and grotesque and anti-aesthetic, while they habitually avoid documentary and cultural ones.

This is unfortunately only too true. But among the very apt remarks you make in explanation of this circumstance, the following is perhaps the most noteworthy: namely, that the sensational (passionale) or recreational factor, however presented, is easily grasped by all members of the general public, because whatever their social or intellectual level may be, there is always a common and equal denominator of sensibility in the human soul, while cultural subjects miss their aim unless they are in keeping with the mentality of the persons to whom they are addressed.

Hence it is seems likely that the lack of public interest in the latter form of show depends largely on the fact that the so-called cultural and propaganda films are too generic, owing to their effort to attract the whole public, which results in their being too abstruse and incomprehensible to some, and insipid and uninteresting to others, so that they end by not satisfying anyone. The proper rule to follow would be to create films for different and particular categories of the public, appealing to persons of the same social condition and cultural level.

In this connection the I. E. C. I. might do well to get into touch with the various organizations existing in Italy at the present time: the Opera Balilla (Boy Scouts), Opera Maternità ed Infanzia (Mothers' and Infants' Welfare Organization), Opera del Dopolavoro (« After-work » organization), Associazioni Sindacali (Workers' and Employers' Unions), etc., each of which offers a sufficiently wide field, however diversified, for hygiene propaganda by the cinema. What is important is that discrimination should be exercised in selecting the subjects, and care taken to «dose» the lessons properly: matters of interest to mothers and children do not appeal to the mixed « After-work » public; the industrial worker is interested in one type of
film: and the farm worker in another. The so-called intellectual classes — who are as much in need of certain forms of propaganda as anyone else — must lastly be considered apart; here again it is all a question of selection and of level.

One more question suggests itself. Ought these educational films to be got up in an artistic form in order to make the best impression? You truly say that art has rendered some bad services in this field by falsifying the measures, exaggerating the hues, and deforming public taste; and you would prefer the public to be educated in the school of reality and to a taste for the truth. This is excellent in itself; but it will pay only with a certain class of the public — those who are eager to learn and who realize the joy of widening their knowledge.

It does not apply to the general public who, as you well know, will only quaff the cup of knowledge when « sweetened at the brim »: for them it is necessary that the truths of science and the realities of life should be presented in a dramatic form that impresses their senses, appeals to their imagination, and moves their hearts. This is especially true of a people so imbued with artistic feeling and sentiment as the Italians. Art then must play its part; but it must be a form of art on a level with the high civil task it is called upon to fulfil.

In closing these hasty and brief impressions, allow me to synthesize my ideas in these words: it is only through this form of propaganda — the « moving picture » or the animated image — that the word will attain its fullest powers of expansion and penetration, that it will itself be quickened into life, and transformed into the mystic flesh of the Gospels « et verbum caro fit ».

Prof. Marchoux, of the Pasteur Institute, Paris, writes:

You are starting on an excellent campaign which may prove fruitful. What useful lessons could be learnt from the films which we might have collected during our visits to Italy, especially if their projection had been accompanied by a lecture given as the film was being screened and afterwards distributed to the audience.

As regards popular films: it seems to me that the real truth should be worked into a story. According to our experience in France, adults are not interested in hygiene films if they are more than a few metres in length. Teaching films, which at one time were produced on a large scale, were left on the hands of their producers. So much so that had it not been for the assistance of a far-seeing philanthropist, a distinguished operator, such as Albert Kalm, who devoted himself to the production of educational films, those would be unable to find work anywhere. Yet it is to him that we owe such interesting films as you mention in your article.

Professor Alfredo Niceforo, Anthropologist, Statistician and Criminologist, of Rome, writes:

I fully agree with Dr. Alberto Lutrario in wishing that a wider and more intense use might be made of the cinematograph in the study and teaching of hygiene in the three branches that he so clearly delineates: scientific investigation, technical and cultural instruction, and hygiene propaganda.

The sound film, by carrying the voice of the Masters themselves into the halls
of study and of the cinematograph, is able to broadcast direct teaching throughout the world and offers the vision and the voice of the specialist engaged on his work and experiments. The efficacy of such teaching, both seen and heard, will be very great. The salient point of hygiene ought to be translated into moving and speaking pictures by the efforts of the responsible Masters themselves — of the scholars who have created and transformed and advanced these studies. A real cinematographic encyclopaedia is ahead of us — an encyclopaedia to be seen and heard at once!

Pending the realisation of such an ideal — which will doubtless be attained in time — we must for the moment content ourselves with the mute cinematographic show, interspersed by those «animated slides» which transform arid diagrams and tedious figures into suggestive images that are penned as the film turns round. But the Masters, the scientists must be prepared themselves to write the «scenarios». Each will have his own part, his own chapter, his special branch. The Masters of science must indeed accept the new mentality and new needs: lessons «illustrated» and «spoken» must be speeded through the world by the specialists themselves.

Dr. Lutrario most opportunely suggests a number of points that lend themselves to treatment by the film. I should wish to add a few more: medical statistics, which have become at the present time, as everyone knows — especially in England and America — an autonomous science in the domain of hygiene, however little hygienists and doctors themselves may be aware of the fact; this branch would soon assume a less arid aspect when illustrated by the moving picture; class and trade hygiene, which, taking its cue from the methods of the biological examination of man, already possesses a considerable and up-to-date literature — in which anthropology, statistics, sociology, and medical sciences have their part — would also lend itself to this method of study and teaching; not to mention sport — I refer to rational sports, of course — the scientific study of which has already been delineated in many a forgotten monograph dealing with its «yield» and results, etc., in athletes and champions. Then again the pathology of labour, so closely connected with the above mentioned studies, would lend itself, in all its phases, to treatment by the moving picture — which might truly present all the stirring interest of drama ... There is a vast field to be reaped.

Prof. Bernard Nocht, of the Institut für Schiff- und Tropenkrankheiten of Hamburg, and a member of the Health Committee of the League of Nations, writes:

The tasks of the cinema that suggest themselves in this domain may be divided into three parts, and it is desirable not to confuse the three different kinds of films in applying them to practical instruction:

1. Purely scientific films for the instruction of medical students and hygiene specialists;
2. Films for the auxiliary staff (inspectors, disinfectors, district nurses, etc.) and for general social education;
3. Films for the general public.

Films for categories 1 and 2 are a comparatively simple matter. The choice of subject, the plan and details of each film must be invented and directed by hygiene
specialists, in collaboration, of course, with cinema experts. There already exists a considerable number of very good films of this kind in different countries and hygiene centres; the completion and the exchange of these is a relatively simple matter which can be organized by a central secretariat: e. g. one attached to the Health Section of the League of Nations.

The production of a good collection of films of the third category is much more difficult, because we cannot limit ourselves to teaching pure and simple; we must at the same time attract and entertain the public, as otherwise the films would fail in their appeal and the crowd would by no means flock to the cinemas to see them. As a general rule the lesson of such films must be more or less concealed and absorbed in an amusing or exciting story. They therefore require the collaboration of no mean a dramatic author, a scene director, and a hygienist. The rôle of the latter is a somewhat more modest one than where the first two categories are concerned; he becomes merely an advisory partner, who is there to make sure that no gross errors are committed and that nothing silly is introduced, and to see that the important features from the hygiene standpoint are shown in proper relief.

I am aware that throughout the whole world very few films of this kind exist, but I am sure that each new film of the kind, if it is amusing or exciting and at the same time does not contain technical blunders on hygiene, will be eagerly welcomed by the public and will fulfil its mission of instruction on a very big scale, because the public does not forget amusing and exciting things and will not therefore forget the lesson interwoven in a drama it has enjoyed.

Such, my dear Colleague, are my views on the value of hygiene films for the general public. It is not an original view of the matter; but I would stress the fact that the popular hygiene films I have seen have for the most part been lacking in lively interest for the general public and sometimes contain absurd improbabilities or hygienic demands that it is impossible to live up to in everyday life.

Prof. Donato Ottolenghi, of Bologna University, a member of the Health Committee of the League of Nations, writes:

I have read your article on Hygiene and the Cinema and cannot but fully approve its contents. In a short paper published by the same Review, I had briefly indicated what higher hygiene teaching can and should ask of the cinematograph. I am inclined to insist — in perfect agreement with you — on the desirability of calling upon the collaboration of the big national and international health institutions and all persons — first among whom yourself — versed in the different branches of hygiene theory and practice, in the elaboration of this programme.

In my modest opinion, we might for the present confine our attention to certain big hygiene problems of primary importance, with a view to developing from among the several branches of hygiene questions that lend themselves to cinematographic demonstration — which you so lucidly classify — the particular problem or problems that would do the best pioneer work in a cinematographic campaign worthy of the I. E. C. I.
Dr. Gustavo Pittaluga, of the Health Committee of the League of Nations, Professor of the Faculty of Medicine and Director of the Laboratory of Parasiology and Tropical Pathology of the Royal University of Madrid, writes:

I have long been convinced of the exceptional advantages that might be derived from an adequate use of the cinematograph as a means of educating and of broadcasting the rules of public hygiene among the masses, in schools, industries, etc. I have had your programme translated verbatim. I shall do my utmost to spread your precepts and to carry them out. For the present I will only tell you that I am having an ample edition printed of the Spanish translation of your paper and that it will be published in extenso in the Spanish medical press.

H. E. Dr. Mohamed Shahim Pacha, Under Secretary of State for Health at the Egyptian Ministry of the Interior, writes:

In Egypt the Public Health Administration makes use of hygiene films for health propaganda; the films used being either made locally, under the direction of the Administration, or else imported from abroad. The titles of the latter are translated into Arabic before the films are exhibited.

We have a special automobile service for the projection of such films in villages.

Dr. J. van Campenhout, General Inspector of the Hygiene Department of the Belgian Ministry of the Colonies, writes:

I have had occasion to appreciate the value of the cinema for teaching; with its possibilities of slowing down and arresting the projection, it has been a great help to me.

But there is a dearth of good films. Either they are totally lacking, or they are badly conceived and ill adapted to their purpose. You yourself have pointed to this fact.

It would be desirable for the International Educational Cinematographic Institute to distribute a list of suitable films among schools, universities, etc. Those that specially interest me are films dealing with African Colonial hygiene and the prophylaxis of tropical diseases.

Prof. Raffaele Vivante, Director of the Health Office of the City of Venice, writes:

I cannot but approve the criteria you express: I should merely wish to remark with respect to projections for popular education that one factor of success — and an essential one to my mind — consists in the oral explanations accompanying them. I consider that the vision of episodes in such rapid succession cannot leave a lasting impression unless, at any moment he wishes, a medical man is able to stop the projection and explain verbally the points that have been demonstrated on the screen. It is for this reason that, up to the present, I have preferred fixed projections to moving pictures. Hence, in making use of this means, which offers indisputable advantages, I think it would be desirable to add to the requisites of educational cinematography, the use of equipment that can be put in motion and stopped by the lecturer himself; this is already done in several schools where small equipments are installed.
On all other — and more important — questions, I can only repeat that I am of one mind with you.

Prof. C. E. A. Winslow, Professor of Hygiene at the School of Medicine of Yale University and a member of the Health Council of the State of Connecticut, writes:

I have read with the keenest pleasure your article on Hygiene and the Cinema. It seems to me by far the most complete and exhaustive discussion of this subject that I have seen. I cannot believe that you will receive any criticisms or suggestions, and you have covered the ground so completely that there can be little to add. I personally can express nothing but admiration for the broad and scholarly vision and the eloquent and persuasive style of your address. I hope that it will be reprinted and very widely distributed. It ought to be for some years the classic statement of the problem with which it deals.

I entirely agree with you as to the great importance of this problem, and I feel as you do that we have hardly begun to realize how effectively the cinema might be used to promote the objects in which we are interested. I feel sure, however, that your article will do much to promote right thinking along this line.

The following eminent scientists and hygiene specialists have expressed their entire approval of the ideas put forward in Dr. Lutrario's article:

Prof. Theodore Madsen, Director of the Danish State Seraphic Institute and Chairman of the Health Committee of the League of Nations;

Dr. Arnaldo Maggiora, President of the Faculty of Medicine and Surgery and Professor of Hygiene at the Royal University of Turin;

Dr. Ludwig W. Rajchman, Medical Director of the Health Section of the League of Nations;

Prof. Achille Sclavo, Director of the Hygiene Institute of the Royal University of Siena and President of the National Fascist Hygiene Association of Italy;

General Graham, Head of the Health Office of the Indian Empire, has expressed his adherence to the initiative for the study of hygiene problems.

The following health authorities have announced that their answers are on the way:

Dr. Araoz Alfaro, Professor of the Faculty of Medicine of Buenos Ayres;

The Mexican Minister of State Pani, Delegate to the International Hygiene Office of Paris.

* * *

The above letters not only assure us of the support of so many eminent authorities with respect to the vital aspects of our programme, but they give many valuable new hints for the more effectual utilization of the cinema in the field of hygiene.

The cinema as an auxiliary of public health must not only be a new source of interesting pictures: it must be a source of evidence, of teaching and propaganda, and a means of investigation. If we can succeed in combining these three aims the renaissance of the cinematograph will be assured.

Dr. Alberto Lutrario.
THE CINEMA AND EYE-SIGHT

Effect on Children's Sight

(From the Italian)

The influence of motion picture watching on eye-sight is one of the most important technical health problems for the physical protection of cinema-goers and especially of children.

So far as child actors — apart from child onlookers — are concerned, there is no hesitation is regarding their occupation as deleterious to the sight. The reports of Messrs. M. E. J. Lickley, assistant School Inspector and Director of the Department of School Attendance and Child Welfare in California, and Miss Minor, Secretary of the New York Committee on Child Welfare, cited in the Martin Report to the Genevan Advisory Committee on Child Welfare (19 March, 1928) are unequivocal on this point.

The sight, it is stated, suffers considerable strain from the intense light necessary for filming. In order to ensure the perfection of the films, it is customary to use in the studios an artificial light produced by arc or mercury vapour lamps which are very harmful owing to the frequent necessity of placing them close to the actor; sometimes at a distance of less than one and a half metres. The lamp diffuses great heat and emits ultra-violet rays; even adult actors suffer from this, and are liable to get burns, akin to those produced by the intense rays of the sun. The effects produced by such intense light and heat on the tender epidermis of children, on their nervous system, and more especially on their yet undeveloped organs of sight, may therefore be readily imagined.

It is true that the effects of the ultra violet rays may be attenuated by interposing a glass screen, where arc lamps are used, or by substituting glass tubes for the usual quarc tubes used in mercury vapour lamps; these latter cost a little more, but that is no excuse for their not being employed.

The periods of lighting might also be interrupted for rest; but here again economic difficulties are in the way. To manufacturers who do not appreciate its efficacy from the standpoint of renewed energy, an interval for rest merely represents waste of time and money. Their one object is to hurry along without stoppage or hindrance.

It is true that an effort might be made by legal intervention and inspection to fix certain rules and conditions for children's work on the screen; but the danger would always be lurking, and it would be difficult to avert it when money interests urge manufacturers and other persons interested to hold their tongues.

Kloeyg's disease, characterized by inflammation of the membrane of the eyes produced by the vivid light of the arc lamps, is aggravated at the present time by a similar and correlated trouble affecting the tonsils, caused by the incandescent lamps now used in rehearsal studios.
In answer to an enquiry made by the Rome Institute, Prof. Emile von Grosz, of the Ophthalmic Clinic of the Royal Budapest University called attention to this, possibility of injury.

In this enquiry, however, we are not so much concerned with the influence of the cinema on the eyesight of child actors — which notwithstanding the difficulties in the way might be subjected to legal enactments — as with the influence of watching films on the sight of children in the audience.

***

Uninfluenced by what has been said and written on the subject in the past, the Rome Institute has thought it expedient to carry out a three-fold enquiry: one among oculists; one among children, whose personal experience and contribution is of great interest, and one among technicians.

As regards the direct enquiry among children and youths, over 16 thousand copies of a questionnaire have been distributed among the various Italian schools, in three separate and distinct areas: North Italy, Central Italy, and South Italy; while some tens of thousands of questionnaires, drawn up in other languages, have been distributed, or are being distributed, in different European countries.

The enquiry among children, which was strictly statistical owing to the impossibility of ascertaining from them the causes of the phenomenon they experienced, reveals the full importance of the question.

The first returns that have so far come in to the Institute in answer to the questionnaire on the effects of the cinema on eyesight give the following general figures:

Questionnaires returned 15,874.

Negative answers; i.e. from children and young people who had never been to the cinema 4,560.

Answers to the questionnaire 11,314.

Of these latter, as will be seen from the tables that follow:

2788, that is to say 24.64%, state that the children generally feel their eyes tired after watching films;

514, that is to say, 4.54%, state that they sometimes feel this, but not as a general rule;

4882, that is to say, 43.16%, declare that their eyes do not feel tired or strained in the least;

3130, that is to say, 27.66%, did not answer the question clearly.

In any case, even if we choose to consider those who did not return clear answers as belonging to the category who were not aware of any sense of visual fatigue from watching the cinema, there still remain 29.18% who state definitely that they always or occasionally feel their eyes tired after watching cinematographic projections.
## Big Centres (Towns).

### From 10 to 12 years.

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
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<tbody>
<tr>
<td>Feel their eyes tired after watching films</td>
<td>573</td>
<td>641</td>
</tr>
<tr>
<td>Never feel it</td>
<td>1103</td>
<td>658</td>
</tr>
<tr>
<td>Sometimes feel it</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>No definite answer</td>
<td>574</td>
<td>582</td>
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<td><strong>Total</strong></td>
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### From 13 to 15 years.

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<thead>
<tr>
<th></th>
<th>Boys</th>
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</thead>
<tbody>
<tr>
<td>Feel their eyes tired after watching films</td>
<td>575</td>
<td>321</td>
</tr>
<tr>
<td>Never feel it</td>
<td>1150</td>
<td>528</td>
</tr>
<tr>
<td>Sometimes feel it</td>
<td>93</td>
<td>66</td>
</tr>
<tr>
<td>No definite answer</td>
<td>761</td>
<td>415</td>
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<td><strong>Total</strong></td>
<td>2579</td>
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### From 15 years onward.

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<tr>
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<tr>
<td>Feel their eyes tired after watching films</td>
<td>238</td>
<td>47</td>
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<tr>
<td>Never feel it</td>
<td>704</td>
<td>117</td>
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<tr>
<td>Sometimes feel it</td>
<td>121</td>
<td>22</td>
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<tr>
<td>No definite answer</td>
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<td>54</td>
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<td><strong>Total</strong></td>
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### Grand total

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<tr>
<th></th>
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<tbody>
<tr>
<td></td>
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## Small Centres (Country).

### From 10 to 12 years.

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<tr>
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<tbody>
<tr>
<td>Feel their eyes tired after watching films</td>
<td>201</td>
<td>186</td>
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<tr>
<td>Never feel it</td>
<td>383</td>
<td>175</td>
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<tr>
<td>Sometimes feel it</td>
<td>15</td>
<td>5</td>
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<tr>
<td>No definite answer</td>
<td>269</td>
<td>215</td>
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<td><strong>Total</strong></td>
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<td>581</td>
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### From 13 to 15 years.

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<thead>
<tr>
<th></th>
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<td>Feel their eyes tired after watching films</td>
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<td>1</td>
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<tr>
<td>Never feel it</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>Sometimes feel it</td>
<td>17</td>
<td>4</td>
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<tr>
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<td>68</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>68</td>
<td>17</td>
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### Grand total

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<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
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<tbody>
<tr>
<td></td>
<td>68</td>
<td>17</td>
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</table>
From 15 years onward.

Feel their eyes tired after watching films
Never feel it
Sometimes feel it
No definite answer

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<th></th>
<th>Boys</th>
<th>Girls</th>
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<tr>
<td>Total</td>
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<tr>
<td>Grand total</td>
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**From doctors we have received up to the present six answers, which we print verbatim, in view of their exceptional importance for the purposes of the enquiry. Prof. Arnaldo Angelucci, of Naples, honorary member of the International League for the Prevention of Blindness, states that the frequent «flickering» of the film is one of the main causes of eye-strain.**

«The phenomenon is met with when the rollers of the projection apparatus are worn, a defect often found in school apparatus and old model projectors. It is also the case when the perforations on the lateral margins of the film are worn, which causes very considerable flickering.

«In properly conducted cinemas and shows, even when large numbers of children aged between five and six years have been present, and with shows lasting about two hours, no complaints have been registered; nor has visual fatigue been noted in the case of school projections.

«Special enquiries that I have carried out have led me to the conclusion that hyperphoric and esophoric subjects find it difficult to follow a very rapidly turned projection and are easily tired thereby. Astigmatics likewise can stand it less well. I consider that cinema exhibitions in the usual poorly ventilated halls, showing old films, and using deteriorated apparatus, may tend to increase by about 20% the chances of papillary proliferation of the conjunctiva in children suffering from adenoids and hyperplasia of the turbinals, which, if the tonsils are neglected, may lead to or aggravate what is known as school trachoma.

«This applies more particularly to abnormal children. In the case of all children, however, it would be well that the school and ordinary cinemas which they attend should use nothing but films and projection material in a good state of preservation. All risk of injury would thus be avoided and children would considerably benefit by the shows».

Thus, apart from children in an abnormal condition owing to defects of the sensory organs, Dr. Angelucci regards the condition of the cinema apparatus and
the films as the most important point to be considered. In other words, films the perforations of which are worn or which pass through worn rollers, thereby producing the phenomenon of «flicker», are responsible for eye-strain, apart from any more serious effects.

Prof. Emile von Grosz, of the Ophthalmological Clinic of the Royal Hungarian University of Budapest, agrees, in principle with prof. Angelucci, in the view that cinema projections are not, in themselves, pernicious to children’s and young people’s sight. The usual school projections, he says, do not, as a rule, last more than from one to two hours, and there is no reason why healthy eyes should be tired or injured by watching films.

On the other hand, cinema shows may produce a bad effect on inflamed or weak eyes.

Albinoids, also, would in all likelihood experience some discomfort; but this could be overcome by supplying them with spectacles with greyish lenses.

Prof. F. De Lapersonne, of the University of Paris and President of the International Association for the Prevention of Blindness, as a result of his long experience and systematic recommendations to parents, sums the matter up as follows:

«The educative rôle of the cinema may be very great if the films are wisely selected; it may beneficially be extended to primary, secondary, and higher education.

« The cinema is not injurious to children’s sight, so long as the following rules are observed:

« a) the films should not be worn; that is to say, they should not have blemishes or «flicker»;

« b) the letters of the captions should be perfectly legible and symmetrical; the distance of the screen should not be beyond that of distinct vision, according to the scale of the type;

« c) No single projection should last longer than from ten to fifteen minutes, intervals of from two to three minutes being allowed, with subdued light, between the several projections;

« d) Last, but not least, care should be taken that the sight of the children is normal, and those suffering from any degree of ametropia ought to be supplied with proper spectacles.

« Oculists and school inspectors ought to prohibit the cinema to children suffering in any marked degree from ametropia, myopia, and above all astigmatism; functional defects, muscular insufficiency, disturbances of binocular vision, and in general from all lesions, either in formation or cicatrizing (corneal spots, partial cataract, etc.) which reduce sight below one half of the normal sight ».

A note-worthy opinion on this question has been transmitted to the Institute by Dr. Park Lewis, M. D., of Buffalo University, Vice President of the National Society for the Prevention of Blindness.
The Effect of Moving Pictures on the Eyes.

There are two aspects under which this question may be considered.

First the effects of the lights in the studios themselves on the eyes of those taking part in the production of the picture (the so-called "Klieg" eyes).

This has been carefully considered by the producers, and although in many of the studios there is still considerable leaking of the ultra-violet rays and in many of them the eyes are not adequately protected, it is no longer considered a serious problem.

Second, the effect on the eyes of those viewing moving pictures.

It is with this latter that the present memorandum is chiefly concerned. The National Society (United States) for the Prevention of Blindness has given attention to this subject since its origin. It is largely on notes given by the Director, Mr. Lewis H. Carris, that the following observations are based. In 1916 the then Field Secretary, Mr. Gordon L. Berry, attempted to answer the question «Whether frequent attendance on the Movies would be prejudicial to the Eyes?» and his conclusions based not upon scientific investigation but on general observations seemed warranted; viz: that if the mechanism were such as to produce evenly illuminated pictures, clearly defined, and produced with such a rapid sequence as to eliminate the flickering sometimes observed and if the angle of vision were suitable in reference to the position of the observer toward the screen, that moderate attendance would not be injurious. If for any reason discomfort resulted it would be evident that some of these requisites were not being met or that the eyes of the observer himself were not in normal condition and should be examined by a competent ophthalmologist.

Prior to that time, August 30th 1915, the results of very careful research on the subject were published in the Transactions of the Illuminating Engineering Society (American) by Professors C. E. Ferree and Gertrude Rand, then of Bryn Mawr, now of John Hopkins University, under the title of «Further Experiments on the Efficiency of the Eye, Under Different Conditions of Lighting: the Effect of Motion Pictures on the Efficiency of the Eye». (Vol. X, No. 6, pp. 491-496).

The following features were found to sustain an important relation to the eyes: the evenness of the illumination; the diffusion of the light, the angle at which the light falls on the object viewed and the evenness of surface brightness and quality.

The conventional tests for visual acuity were found useless for these experiments. Transitory tests of visual efficiency were considered inadequate as muscular effort may increase the acuity for a brief interval. A period of three minutes was chosen after experimentation to determine the time of the test. Even when the eyes are fresh the test objects are not seen clearly for the whole length of the time but are alternately clear and blurred. An apparatus is employed in which the periods in which the objects are seen clearly and when blurred is recorded on
the rotating drum. From this record the ratio of time in which the objects are
distinctly seen to that when the outlines are blurred is determined.

Various test objects were experimented with, but that chosen for this test was
the letters « li » printed in small type. The observers were all under 26 years and
the refractive, muscular and other conditions of the eyes were noted by a distin-
guished ophthalmologist, Dr. Wm. Campbell Posey, of Philadelphia, Penna.

Tests were made immediately before and after two hours of observation at
three successive times and at three distances from the pictures, the front, the
middle and the back of the picture house. This was 78 feet (23.7 meters) long
and 48 feet (14.6 meters) wide, walls and ceilings rough plaster, painted flat white.
That there might be no intermission in changing the films, two projection machines
were used.

The apparatus in part consisted of:
1-10,000 c. p. adjustable arc lamp;
1-22 volt a. c. through transformer;
Line current 28-30 a. m. ;
arc voltage 40-50 volts;
length of throw 72 feet (21.9 meters)
spread of machine 66 ft. 8 in. (20.3 meters) per minute;
screen muslin coated with white alabastine;
approximate brightness of screen with film removed 3.47 c. p. per sq. in.

Exceptional steadiness is given by this type of machine. As a result of these
tests considerable loss of visual efficiency was shown after two hours' observation.
The nearer the observer was to the screen the greater was this loss. « The loss,
however, so far as the observer could determine was no greater than that caused by
steady work under the direct and semi-direct light used in our distribution series ».

Such studies as have been made have been based on well-known principles of
illumination and eye-strain, such as the effect of glare from improper irradiation
from the screen, the general surrounding illumination of the auditorium, the posi-
tion from which the spectator views the pictures, the unsteadiness due to bad « di-
rection in acting », poor photography, film blemishes and poor projection. All of
these have been largely improved by the better mechanisms used during more re-
cent years. At about this time, 1916, a number of popular articles on this subject
appeared in magazines, health bulletins and the public press. In 1920 the United
States Public Health Service issued a new release on the subject « Do Movies
Hurt the Eyes? ». The conclusion reached was that « The fact that millions of peo-
ple go to motion picture shows throughout the United States daily without expe-
riencing any discomfort to their eyes, or that such eye trouble as is found is not
traceable to « over indulgence » in the movies, would seem to indicate that motion
pictures are not injurious to the vision », and that « some people do experience a
certain amount of eye strain at a motion picture, but in these cases the trouble
appears to be due to an ocular defect rather than to the motion picture, » and « it
is safe to say a person may witness a picture play lasting about an hour and a half
each day without straining the eyes or experiencing any discomfort, provided the
eyes are good and there are no hidden defects of vision.

According to an excerpt from «Science» of April 23rd, 1921, the London
County Council adopted certain recommendations of a committee appointed by the
Illuminating Engineering Society (British) to enquire into eye-strain in cinematog-
raph halls. The complete report is not immediately obtainable, but the synopsis
given in Science tells that the chief recommendation sets the limit of the vertical
angle of view and that the committee believes that ocular discomfort arises mainly
from the abnormal angle at which very often the eyes of the spectator are directed
upwards and that conditions suitable for the eyes would be secured if a moderate
value for the angle were adopted. It is proposed that the angle of elevation sub-
tended at the eye of any person seated in the front row, by the length of the verti-
cal line dropped from the center of the top edge of the picture to the horizontal
plane passing through the observer’s eyes should not exceed 25 degrees.

An article from the New Zealand Journal of Health and Hospitals, evidently
referring to the same report, states that the Joint Committee included representa-
tives of the Council of British Ophthalmologists, of the cinema industry, of the
Illuminating Engineering Society, of the Physiological Society, and certain offi-
cers of the London County Council, including Dr. James Kerr (Medical Research
Officer) and Dr. C. W. Kimmins (Chief Inspector of the Education Department).

Evidently in addition to the 35 degree angle discussed in «Science» the Joint
Committee decided that the lateral angle of view should be limited to 25 degrees,
and that the maximum distance from the screen of the furthest seats should not
be more than twelve times the height of the picture, that is to say, the angle of view
should not be less than five degrees; but no definite recommendations were
made in this case. The Committee also considered «flicker», imperfection of the
film and mechanical defects due to the nature of the screen, permissible amount
of general light in the hall, etc.

The next material of importance is contained in Bulletin N. 7, «Eyesight Con-
servation Survey», published by the Eye and Sight Conservation Council in Ame-
rica in 1925. This was compiled by J. E. Hannum, Research Engineer of the Coun-
cil, and edited by Mr. Guy A. Henry, General Director.

Among the conclusions reached are the following:

1. Although no extensive study of this subject has ever been made in this
country, a review of existing literature shows no definite reports of any specific
harm or injurious effect, and but few complaints of inconvenience. This has led
to the conclusion that under favorable conditions moving pictures do not cause
serious eye fatigue.

2. Since viewing motion pictures is distance vision, it does not demand the
degree of effort or strain in the use of the eyes that would be involved for near
vision.

3. The conclusion of Ferree and Rand which are referred to earlier in this
article, is that «while the eyes are strained a great deal by the observation of mov-
ing pictures, even in the better moving picture houses, they are damaged little
more by that in all probability then they are by reading steadily the same length of time under the greater part of the lighting that is now in actual use».

4. It is pointed out that any eye strain caused by motion pictures is due to any one or all of the following conditions, each of which is avoidable:
   a) Prolonged concentration of the eye.
   b) Defective eyesight.
   c) Position of the observer.
   d) Poor films, band projection, faulty operation.
   e) Faulty general illumination.

The motion picture industry has, of course, always been interested in assuring the public that no harm results to the eyes from attending film productions. In the April 1926 number of the American Cinematographer there is an article entitled «Do Motion Pictures Injure the Eyes?» by Herbert S. Marshutz, A.B. D.O. Mr. Marshutz states that great improvement has been made in both the production of motion pictures and the methods of their display. He points out that the eye must function under unusual conditions in a picture house, for instance:

1. The eye works in reduced light and consequently the pupil is larger than would be the case in an ordinary room or office.
2. In spite of the impression of flowing motion, the picture on the screen is a series of rapidly changing scenes.
3. There is no depth; the screen is a flat surface and the eye is seeing a world without its accustomed perspective;
4. The picture is not in natural colors, as a rule, but in monotonous tones of black and white.

Mr. Marshutz further states that the old viewpoint that motion pictures are bad for the eyes is based on conditions of many years ago, and that at the present time the abnormal conditions present in the showing of a photoplay are for the most part present in the legitimate theater, at the lantern lecture, at the opera, and even in some of our badly illuminated homes and offices. He also states that rest periods are very valuable and should by all means be taken advantage of during a moving picture performance.

The only presentation of what is apparently a scientific investigation on the subject appears in the report of Doctors A. Ray Irvine and M. F. Weymann, of Los Angeles, on «The Effect on Visual Acuity of Viewing Motion Pictures», which is published in the Journal of the American Medical Association for October 2, 1926. In this study the eyes of more than 150 persons were examined under suitable conditions, the visual acuity being measured by the Ives apparatus. This article gives quite fully the scientific methods pursued in the investigation, and states the following conclusions:

1. The Ives apparatus for testing visual acuity gives constant readings, and is dependable as a measure for small variations of visual acuity.
2. More fatigue is evident after forty-five minutes of reading current magazines than by viewing either a black and white, or a colored motion picture for one and one-half hours if one uses the visual acuity as a criterion for fatigue.

in.
3. The viewing of colored pictures of the Technicolor process is not more fatiguing to the eyes than black and white pictures, but on the contrary seems to cause less fatigue as judged by the impairment of visual acuity.

4. Those who suffer eye-strain from motion pictures are those who are unable to accomplish other ocular work without fatigue.

It is to be observed that the conclusions reached in this instance are not at variance with the opinions which have been held for the most part by those referred to in this discussion.

This would seem to be all of the available material relative to the effect of moving pictures on the eyes which we have been able to find.

Clinically there has been no evidence of eye injury due to viewing moving pictures in the experience of the writer that could not be more adequately explained by other contributing causes such as visual defects or constitutional conditions existing in the observer.

Two further opinions of Italian scientists are here recorded: Prof. Alberto Lutrario, former Director of Public Health, is fully in agreement with Dr. Angelucci's view: i.e. that the cinema is not, in itself:

"Delerious to children's sight, as certain doctrinaires assert it to be. But it may be harmful when deteriorated projection apparatus is used, producing tremulous and indistinct images."

Prof. Giuseppe Ovio, Director of the Oculistic Clinic of the Rome University, affirms:

"Cinematographic shows ought not, per se, to have any bad effects on children's sight. In practice, however, even when all is properly arranged, a cinematographic exposition ought to last less time than the ordinary school lessons, because, while the children's eyes are constantly on the move during ordinary school occupations, thus constantly re-adjusting themselves, sometimes working and sometimes resting — as is necessary if work is not to be physiologically excessive — at the cinema, on the contrary, the eye remains motionless, and this state of immobility is conducive to more rapid fatigue; keen and continuous attention is even apt to suppress the natural beating of the eye-lids, and this may end by causing some irritation to the superficial membrane of the eye.

"Hence shows should not be over long and intervals should be frequent.

"Cinematographic mechanism in relation to eyesight gives rise to three further criticisms:

1. It is time we got rid, once and for all, of the now general defect of over-rapid movement. Apart from the fact that it is unseemly and artistically and psychically grotesque to see grand ladies and Church and State dignitaries galloping across the screen, it is extremely tiring to the eyes, which have to make continual efforts to follow the scene and take in the phases of the movement;

2. Too frequent captions should be avoided, because these are shown on over-
light backgrounds, and the jerks from darker to lighter effects are not only bad for the eyes but they always produce a certain tremulousness;

3. Panoramic movement of the background ought to be avoided, because it easily produces giddiness and compels the eyes to unwonted and always tiring efforts.

« All the above points are quite simple matters and could easily be corrected; their avoidance would in no degree hamper the cinematograph or its great educative value. »

Prof. Van der Hoeve, Director of the Oculistic Clinic of the University of Leyden, Holland, declares that he has very little experience of cases of persons complaining of visual disturbances caused by the cinema, and that in the few instances within his knowledge, they have always been very nervous subjects.

« Nevertheless, » he pursues, « I am of the opinion that, especially in the case of children, it behoves us to exercise the greatest prudence with regard to the cinema, and that no film projection should last too long.

« It is, moreover, not at all necessary to have absolute darkness in the halls during projection; this would avoid the marked contrast between the luminous screen and the surrounding darkness.

« In conclusion, I am by no means averse to the use of the film in school, but I consider that the projections ought not to be of very long duration, that they should not be over frequent, and — in all schools where this is possible — I would be in favour of projection in full daylight. »

* * *

The results of the enquiries among oculists and doctors are — with slight variations in the details — concordant on three main points:

a) the films used should be in good condition, and the borders untorn;
b) the projecting apparatus should be in first-class condition, so that jerky projection should not be produced by worn rollers;
c) speed of projection should be properly regulated;
d) captions should be few, printed large, and clearly legible;
e) projections should not last too long.

The first point is a matter for the attention of the censorship and the authorities entrusted with the surveillance and control of public shows.

The officials charged with examining films from the point of view of their moral, political, and artistic content, ought also to ascertain the condition of the copies, and demand, before granting definitive permits for exhibition, that the films, under expert examination, should be found free from blemishes and undue wear and tear.

At a later stage, while the films are going the rounds — and on the assumption that the censors examine only one copy, while the concessionary of the film has
had a number of copies taken from the negative — some special class of officials or experts ought to be charged with supervising the condition of the films during public exhibition.

Under the censorship regulations, very few countries demand a preliminary examination of all the copies of films for which permits are demanded, and when they do so this is only so as to make sure that there is perfect identity between the scenes contained therein. The competent authorities only in a very few instances examine the films from the point of view of the hygienic exigencies of sight. The most recent instance of this sort to our knowledge occurred in Hungary, where, in 1929, according to official information communicated to the Rome Institute by the President of the National Censorship Commission, the authorities prohibited the exhibition of a film that was regarded as pernicious to the sight.

In the March number of this Review, and again in the article on « A Time-limit to Film Censorship Certificates », we pointed out the serious social injury caused by the absence of any such time-limit under nearly all censorship systems. We might add that the social damage goes hand in hand with damage to the eyes. The concessionaries of films are usually entitled to reproduce a given number of positive copies from each negative. The unlimited opportunities afforded them by the censorship permits induce them to send the films round again and again ad infinitum from the large to the small centres. When the copies are in such a bad state that they can no longer be presented to the public of big cities, they are packed off to out-of-the-way places to do their damndest both socially and ocularly. It is therefore essential that the control exercised by the police authorities and experts in this field should be supported by legislative enactments limiting the duration of permits or, at any rate, limiting (by a stamp to be applied to each copy projected on the screen before the title of the film itself is projected) — except in very exceptional cases — the age of the copy that is about to be shown.

All this applies to films that are to be shown in public cinema halls. In the case of those belonging to school collections, on the contrary, or to official, semi-official, or private bodies and organizations, the control of this point would rest more properly with the technician-operator in charge of the projection, and ought not to be hampered by any financial considerations which may excuse, if not justify, the resistance of public cinema managers.

The second point that emerges from the enquiry is closely associated with the first, so far as the possibilities of control are concerned. Apart from the efficacy of expert inspection in the projection cabins, to check the condition of the apparatus, it should be noted that, although in point of technique we have attained to a normal projection velocity of 20 to 24 images per second, there is still in fact an imperceptible intermittance between the images, which may, in the long run, cause fatigue to the eyes of a person of normal sight. In addition to this, the intermittent projection causes a state of nervous tension which is altogether detrimental to the exact observation of the pictures.

These defects might be corrected and the perforation of the films avoided (thus lengthening their life) by a system of continuous-movement projection with
optical compensation, which, by getting rid of the shutter, would practically ensure unintermittent projection.

From the technical standpoint, there are a number of continuous-movement projectors, but few of them are practical in the using. This is especially true of the big apparatus required in large public cinema halls, where few have so far worked satisfactorily.

The problem is less arduous in the case of school cinemas. First of all, the apparatus themselves are in less constant use and suffer less wear and tear. Secondly, they are subject to closer supervision, not being, as we have said above, hampered by business considerations. Thirdly, and lastly, because there are small machines, with continuous movement, which work much better than the big ones, suited to the purposes of smaller halls, and hence adapted to the needs of schools and similar institutions.

Two classes of persons are, therefore, concerned with the two first points: officials or experts to whom the service of supervision is committed; technicians to study the possibilities of obtaining projection apparatus that minimise the wear and tear of film, especially at the perforated margins, which, by abolishing or reducing intermission, would ensure normal projection from the standpoint of eyesight.

The points stressed in the Lewis report — the angle of vision of the spectator, the proper distance of the screen, etc., — are also matters coming within the competence of the cinema police and depend on the observance of proper standards of building. This report, however, does not invalidate the basic concept that the cinematograph, as such, does not endanger the eyesight of the audience, or at any rate does no more than other forms of ocular activity, such as constant and tiring reading (the most frequent cause of short sight), attendance in strongly lighted lecture halls, theatres, etc.

Prof. Ovio's observation on the rapidity with which films are turned is obviously important. It should be borne in mind that films are usually « shot » at the speed of from 16 to 18 images per second, while normal projection is made at the average rate of 20 per second. If the speed of the projection could be brought up to 40 images per second, the phenomenon of intermittence — which is certainly injurious to the sight — would be eliminated, but we should have a yet more hasty stampele on the screen, which, besides being anti-aesthetic and grotesque, would compel the eye to follow the scene yet more closely so as to keep pace with the movement; and this, in its turn, would injure the sight.

Under present systems, 40 photograms of film are not turned per second because the movements of the persons would become positively ridiculous; the normal rate of 20 to 24 images being in vogue. A half-way system is sometimes followed, which diminishes the intermittence, without getting rid of it, and which tires the eyes by the speed of the movement. Thus the damage is two-fold, though each of the two concomitant factors may be diminished.

Apart from the possibilities of continuous movement apparatus already referred to, which deserves further study, it would be desirable to investigate whether,
by a different system of photographing (by the slow or accelerated processes, for instance) it might not be possible to harmonize the spectator's view of the image with the reproduction on the screen.

In any case, this is all matter for purely technical study, which can hardly present insuperable difficulties and might well succeed in correcting one of the worst drawbacks of the cinema.

Some of the oculists who have been called upon to cooperate in our studies have called particular attention to the captions, owing to the form of the type used and the brusque passage from the grey tones of the picture to the staring black-and-white of the text. This criticism calls to mind another correlated phenomenon — the change from brilliant light to the absolute or quasi darkness of the cinema halls, and to the possibility of making use of day-light screens referred to by Prof. Van der Hoeve.

The expression « in full day-light » is hardly applicable here, because all screens of the kind work properly in a half-light or semi-darkness, and in any case do not require absolute darkness.

In this field also diverse more or less efficacious and practical systems suggest themselves ; most of them make use of transparent screens, which often absorb a good deal of light. Others are based on a system which makes it possible to produce on the white surface of the screen a state of shadow deeper than the surrounding shade, a state close akin to darkness, in such a way as to present realistically the blacks of the projected image and to bring the light shades of the same into greater relief.

This system, though not free from practical drawbacks, seems to us likely to give the best results, as it allows of an intenser illumination of the auditorium, being based on the contrast of light.

As for the captions, it is necessary to obtain the highest degree of visibility from all points of the hall. This might be obtained by making sure that the text was in harmony with the normal vision of the spectator furthest removed from the screen.

This would apparently suggest the practical need of illuminating the captions more brilliantly, so as to show them up better on the screen ; on the other hand, however, this would aggravate the contrast between the effects of the soft tones of the scenes and the startling tones of the titles. Another alternative would be to modify the form of the letters, which would complicate the presentation of the captions. All these difficulties, however, are on the way to being solved by the vocal film.

The other violent contrast consists in the jump from the darkness or semi-darkness of the halls during projection to the lighting-up during the intervals. Apart from the possibilities of daylight screens in full or subdued light, the illumination of the halls during intervals and at the end of the show ought to be effected gradually or else by coloured lamps, which would not tax the eye-sight.

A French Review Protection, sécurité, hygiène dans l'atelier, the monthly bulletin of the Association of French manufacturers for protection against labour accidents
(Paris, No. 4, 1930), points to the results of experiments that have been made on the various degrees of light desirable in localities of different kinds.

The intensity is indicated as lux, corresponding to the average illumination of a superficies of one square metre upon which a source of light, lumen, is reflected.

The lumen in its turn may be defined as the quantity of light intercepted during a unit of time by a spheric superficies of one square metre, the whole of which at all points is placed at a distance of one metre from a source of light casting, in all directions, the light of one candle.

The degree of lux is generally measured by an apparatus known as a luxometre.

This Review recommends a light intensity of 30 lux for cinemas during intervals and of 1 lux during projection.

The intensity of light recommended could not be at all deleterious, being considerably more subdued than that usually allowed in schools, hospitals, libraries, theatres, and other places where a number of persons are wont to gather for one reason or another. The study cited compares the intensity of light desirable in cinemas during the suspension of projection with that usual in the corridors of schools and hospitals, underground passages, and sick-rooms, which is the minimum to see by.

But it is not the intensity of light in itself that does harm, it is the brusque change from semi-darkness to bright illumination, a gradation which is wont to jump 29 lux according to the table we have quoted. And this, as we have above said, could easily be obviated by lighting up gradually or by the use of coloured lamps.

* * *

All that we have said in the foregoing applies more particularly to projections in public cinema halls and therefore to long-footage films.

Many persons have already pointed out that watching films of this type strains the eyes, owing to the tax on the sight of following a rapid succession of movements and continuous contrasts between black and white and light and shade, which are not a correct rendering of the real effects of life.

In a general way, for adults, it would be sufficient to have recourse to technical means (to get rid of « intermittence »), to regulate the speed of projection, improve the presentation of the captions, daylight screens, or grey-toned screens, or screens in penumbra).

But in the case of children and adolescents, who are, moreover, from all statistical returns, the most assiduous of cinema-goers, the problem is different and must be considered from two different points of view — that of public shows and that of school projections or special shows for children.

There is no great difficulty in the second case, where cinematographic representations are placed in the hands of teachers and psychologists, or, in general, of those persons or bodies whose business and interest it is to safeguard the young.
But it is a much more complicated question in the case of public exhibitions, in which children form part of a mixed audience, and at which long-footage reels are shown. The average length of «feature» films is from 1500-2500 metres, generally divided into three or four parts.

Calculating that each photogram measures 18 millimetres in height and that the normal rate of projection is about 20-24 photograms per second, it would take (without interruption) from 60 to 62 minutes to show a reel measuring 1500 metres, and from one and a half to two hours to show a reel measuring 2500 metres.

Each part, measuring about 500 metres would take from about 20 to 23 minutes to show. Thus the eyes of the onlookers must follow the more or less harmonious movements of the actors on the screen for more than a third of an hour at a time.

This may be very well for adults who do not suffer from eye trouble and who are not of a neurotic temperament; but it cannot certainly be desirable for children and adolescents, even if they are ocularly and psychically sound. The least harmful results are likely to be a form of eyestrain which, in the long run, may produce the typical «cinema headache», or may objectivate and produce disturbances of a visual and nervous order.

It has been said and repeated that shows for children ought not, at the outside, to last longer than from 10 to 15 minutes; at the end of which a proper interval of rest is needed, lasting from two to three minutes, before returning to the darkened hall and the projection.

Thus it would appear that, for physiological reasons and owing to a lesser degree of adaptability, the endurance-limits of a child are about one half those of a grown-up person. It is obvious that these limits, notwithstanding the interruptions of the projection, must gradually give out as the show is prolonged, and sensations of tiredness, which at first may be hardly perceptible, and are probably not felt at all if the show does not last more than one hour or an hour and a half, will begin to manifest themselves if it lasts longer.

No definite remedy can be suggested for this, unless the usual one of a separate system of shows for children and adolescents, apart from those intended also for adults, and so arranged as to meet the particular requirements of their age, or else to reduce the length of the parts of normal films to an extent that would not tire the eyes of the children present among the audience.

It is possible, indeed probable, that technical improvements such as we have referred to above — elimination of intermittence, supervision of the condition of the films, and the introduction of a new type of screen that would avoid startling contrasts of light and shade — will in time make it possible for children to assist at film shows for a longer period without any damage to their sight. The introduction of colour may very probably contribute to this end (if films are made showing life in its natural hues, without exaggerating the red tones) and that of sound and talking films, by getting rid of the captions, thereby shortening the length of the reels.

In connection with this last point, one need only reflect that the captions prolong by one tenth, on the average, the length of positive films as compared with
negatives. Thus the standard part of 500 metres would be considerably reduced. Even allowing for the scenic necessity of drawing out certain scenes in order to synchronize them with the spoken words and the reproduction of sound, the films would still be freed from those elements to which we have referred and which are so conducive to visual fatigue (contrast of light and shade, effort to read the captions, etc.) and the eyes of the audience would be relieved from a considerable strain.

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The criticisms put forward explain clearly the statistical results of the enquiries pursued by the Institute in certain groups of Italian schools, up to the present, which are in course of being made among the young of a number of different countries.

The results are synthetically expressive.

If we distinguish between the two groups — children and adolescents — we obtain the following results:

In the first group 27.75% suffer regularly from a feeling of visual fatigue

» » 3.62% suffer from it occasionally;
» » 40.25% have never felt it;
» » 28.43% were unable to give any definite answer;

In the second group 21.28% suffer regularly from a feeling of visual fatigue;

» » 5.42% suffer from it occasionally;
» » 46.38% have never felt it;
» » 26.92% were unable to give any definite answer.

A summary examination of the answers suggests the following observations:

In both groups (children and adolescents) more girls than boys say that they suffer more or less from tired eyes;

A higher percentage of the younger group suffers from this fatigue;

The pupils in the small (country) centres suffer from the phenomenon less than those of the big (town) centres;

The young people attending vocational schools are more troubled in this way than the pupils of the classical schools.

Since the answers of these young people refer entirely to theatrical cinema shows, in public halls, and not to school projections, which are shorter in length and more easily regulated by masters and operators — projections in which all the objectionable features of ordinary cinema shows are attenuated if not eliminated altogether — we might have expected the trouble to be more accentuated in the smaller centres where old and worn films and equipment are more in use.

The returns of the enquiry, however, prove the contrary.

This would suggest that technical defects are not entirely or principally responsible for the visual disturbances felt by the young audience. Other factors characteristic of the life of big cities play their part: the greater physical, moral, and mental tension accentuates the strain, especially on the young and developing organism and reduces the powers of resistance; the use and abuse of strong light.
for study, and in places of gathering and amusement, shorter hours of rest and the general system of physical life and nourishment.

One remark, in particular, which many of the children inserted in their answers to the questionnaire, points to one of the causes of fatigue: the too rapid turning of the films and the over-lengthy parts, as compared with the very brief intervals between them.

In any case it would be unreasonable to assume that all these young people who complain of eye-strain are neuropathics or sufferers from defects of vision.

Children still remain children. Nervous complications and disturbances may lurk ahead of them, but they are not often present in childhood. The causes of the trouble they experience at the cinema are few and simple, and the scientists consulted by the Rome Institute have pointed them out.

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The studies carried out by the Rome Institute claim to be merely in the nature of enquiry and investigation. We have deemed it expedient to overlook all similar enquiries made in the past, since fresh studies and new technique may have done much to render the views expressed obsolete. For this reason we have sought to break new ground in the field of science and to go straight to the children themselves as a check on past findings.

The enquiry will of course be pursued, especially in the technical field, through the studies of specialists, from whom we trust that further suggestions for correcting the trouble may come to light.

The conclusions so far put forward may be summarised as follows:

1° the cinema as such has no deleterious influence on the sight of healthy persons from the standpoint of either eyes or nerves;

2° Neuropathics and persons of weak sight may experience ill effects owing to the phenomenon of intermittence, (due either to the worn-out state of the apparatus or the films, or to the speed with which the films are turned) or to startling changes of light that tire the eyes in following movements of a jerky and abnormal rhythm;

3° Generally speaking, it would be desirable in the case of children and young people:

a) to have daylight or subdued-light screens;

b) not to prolong the normal projection of any part of a film for more than 10-15 minutes, followed by intervals of two to three minutes, and to light up again gradually;

c) to arrange programmes so that longer and shorter scenes should be alternated. Save in exceptional instances, programmes might include: one theatrical film divided into parts not excessively long; one short cultural or scientific film, and one topical film; thus allowing for the necessary brain rest produced by variation of impressions;

d) for the state of films and projection equipment to be systematically checked and supervised, both in schools and public cinema halls, by the appropriate organs.
In the latter Parts of this issue of the International Review we touch on certain very specialized fields of research and medico-surgical utilization of the film. This is obviously not a question of hygiene: that is to say of preventive measures for the individual and the community; but a sector of cinematographic research strictly scientific in character.

It is, however, sometimes difficult to differentiate too nicely. Just as individual hygiene is necessarily correlated to, and sometimes overlaps, social hygiene, so the field of preventive medicine cannot overlook problems of diverse scientific kinds that interest the physician and the surgeon.

The study and research that can be carried out in connection with cancer and malaria, for example, are a matter of both personal and collective defence against two typical forms of disease that decimate mankind. There are aspects of medical and surgical work that the hygienist cannot neglect and to which he has continually to allude. For this reason the two following sections — which are but a foretaste of later work that the Institute has in hand — have been included in the present number.

Meanwhile an international enquiry on the applications of the cinema to surgery and medicine is on foot in the different countries. When the answers reach us, we will publish a special number on the same lines as the present one, dealing with these particular aspects of scientific research.

Without overstepping the strict limits of the two types of disease mentioned, and leaving aside for the moment what the film has been able to accomplish and is attempting to do for them both — since these will be dealt with in extenso later — we give here a few figures that indicate the scope of the ever intenser struggle against malaria and cancer.

The article by Signora Anna Celli and the accompanying note refer solely to the campaign against malaria in the Roman Campagna and are therefore strictly limited in range.

MALARIA

Particulars culled from the official publications of the Health Section of the League of Nations give, among others, the following maximum figures:

Bulgaria: In 1925 there were 13 malarial regions covering a total area of 9552 square kilometres, counting a population of 661,756 inhabitants. Cases of malaria, which had steadily increased during the last few years, had risen to 97,547.
Mexico: during the year 1929 there were 7337 deaths from malaria.
Philippine Islands: First half-year 1929, 7436 deaths.
Persia: First nine months of 1929, 45,506 cases.
Porto Rico: First nine months of 1929, 11,562 cases.
Roumania: in 1925, 164,262 cases.
United States: According to the statistical returns of 1923, 2736 deaths from malaria occurred during that year and there were 2441 deaths in 1924.
U. S. S. R — European territory - first nine months of 1929 - 1,265,033 cases.
Asiatic territory: first nine months of 1929 - 504,321 cases.

Cancer

The cancer statistics are of the utmost gravity, both in point of actual numbers and owing to the steady increase in all countries.

Deaths from cancer and malignant tumour in Germany which numbered 62,728 in 1923, and 64,366 in 1924, have increased. In Prussia alone the figures rose, in 1928, to 40,668; that it to say, to 11.69 per every ten thousand inhabitants.

In Austria, during 1925, 884 deaths from cancer were recorded; in Spain 14,306; in Belgium 6214; in Denmark 4710; in the United States — in 38 States, corresponding to about 95 million inhabitants — there were 85,575 deaths from cancer. In France the figure of about 40,000 deaths, given by the latest statistical returns, is all the more impressive from the fact that in 1906 only 3.51 deaths occurred per ten thousand inhabitants. In Hungary the cancer death-rate is in the neighbourhood of 7000 persons yearly. And lastly, in Norway, from a proportion of about ten deaths per ten thousand inhabitants, the figure rose to about twelve in 1928.

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There is no pause in the fight against these scourges of all kinds that decimate the race of man. The film offers itself as a most potent weapon of campaign, as an assistant to hygienists, doctors, and specialists of all kinds.

For this end, the Rome Institute appeals to the collaboration of all those who postpone personal considerations of all kinds to social interests; to all those who are ready and willing to lend a hand in defending society against the evils that undermine it, against all the lurking causes of death that strike their deadly aim at the very heart of the nations.
On the occasion of a recent session of the Hamburg Association of Natural Sciences a number of films were projected to demonstrate the latest methods of teaching anatomy.

It may be affirmed that the Hamburg Institute of Anatomy, after many years of fruitless effort, has been the first in the world to develop systematically methods of instruction in anatomical modelling. Different bones of the human body are handed to the young students, to be copied as perfectly as possible in plasticine. In ensuing classes these bones are clothed with muscle, and the nerves and blood vessels are fitted into their proper places.

Later on, entire organs are formed, such as the intestines, the brain, and the organs of sense, so that, by the time he has gone right through the course, the student has modelled the entire human body.

A film record of the processes of this modelling makes the students thoroughly acquainted with the methods and the purposes of their studies.

The study of the inanimate body is coming to play a smaller and smaller part in anatomy lessons. Only now are anatomists realizing the absurdity of teaching students about the different parts of the body, without, at the same time, making their functions abundantly clear.

One example of how the organs of the body are shown in their living reality is a film illustrating the different muscular centres at work in the body of an athlete. Part of this film has already been projected. The anatomical structure of the biceps, for instance, makes a much clearer impression on the memory when their function in the living body is vividly and accurately demonstrated.

It is not generally realized that anatomical instruction should not concern itself only with elementary notions of the different parts of the human body, but also with the manner in which these have been developed. In many civilized countries, these matters are taught in different institutes. And it is hardly ever possible to show under the microscope the vital processes that take place in a cell to a large number of students.

Here again the cinematograph comes to the rescue. Part of a long-meterage film now in the making on the mobile phenomena of the living protoplasm has been projected. This series of films aims at demonstrating logically the diverse and varied movements that go on within the minutest particles of the living body, movements which, with the help of the muscles, produce local movement.

Lastly, some films on physiological development have been projected. For this purpose, slow motion filming is of the greatest help; this method makes it possible to record on the reel the development of an embryo in its earliest phases, as it took place in the course of several hours or days.
Other examples are offered by the scission of a cell of a fecundated ovum and the course of development of the spine and brain.

The cinematograph offers a vast and hitherto untilled field for anatomical instruction. An American anatomist has actually succeeded in recording on the film the development of a rabbit from the cell of the ovum to advanced stages of development: processes which, in the absence of this means, could only be demonstrated, for the purposes of medical teaching, on the tables of the anatomical institute of Hamburg University.

Prof. Poll.

of the Institute of Anatomy of Hamburg University
S U R G E R Y A N D T H E C I N E M A

(From the Italian)

Dr. Luciano de Feo, the Director of the International Institute of Educational Cinematography, asks me to give my opinion on the value of the cinema in the service of surgery. I am very happy to take this occasion offered me to give some ideas which have urged me for many years to pursue this path, and to state the results which we have arrived at to-day, after a long period of preparation, after experiments and attempts which are achieving satisfactory results.

There are two branches in the teaching of clinical surgery: that which teaches students to recognize a certain disease, and that, more strictly surgical, which teaches them to treat it properly. The teacher who has invalides at his disposal can easily discharge the former duty. He will show the sick person to the students, to his private pupils, and to his fellow doctors; point out which organ is affected, what symptoms are observable and must be sought for, and arrive, by means of clinical investigations and from the results of laboratory research at a diagnosis; he will discuss its reasons, explain possible mistakes, and suggest different diagnoses. The presence of a certain disease having been ascertained, methods of treatment can now be discussed, those which personal experience and the collective experience of surgeons have recognized as suitable for the disease.

But this is not the whole of our teaching. We have to show in what the treatment consists and how properly to carry it out. It is not merely a question of teaching how to make out a prescription; in surgical cases, treatment almost always requires more or less complex manual dexterity, which can ensure the desired result only if skillfully applied.

This was the need in our teaching. The physician, even if he does not wish to apply himself to surgery, must know what surgical interference consists in so as to realize why, in a given case, the treatment should be surgical rather than medical; he must also know how it is carried out so as to understand the limits of its application and, still more important, the right moment for its application. He must, therefore, «witness» an operation so as to «know» it. The matter is still more complicated, when we have to teach the doctor who is about to begin to perform by himself the act of operation. More or less detailed descriptions, accompanied by diagrams and drawings, and practising on cadavers are not enough. So called operative medicine, which includes classic operations performed on corpses, though roughly useful as a guide, is only a makeshift, and the conditions which an operating surgeon meets with in real practice are very different. To begin with, when operating on living subjects we are faced by the difficulties created by hemorrhage and asepsis; in operating we have to consider the necessity of preserving organs and important parts, and to limit our efforts to what is compatible with the powers of organic resistance of the individual. Again, when we apply surgical treatment, we are dealing with a diseased organ, and it is unusual that the part
once opened will permit of our repeating an operation on an organ affected by a given disease.

Theoretical teaching, while necessary, is certainly not enough. It is therefore requisite that the student should be actually present and follow all the phases of the operation, the technical subtleties and the difficulties which arise — in short all those complicated facts which form an operation and which, just because they are carried out on a living person, very every time with the different anatomical conditions produced by the lesions.

Whatever the form of the operation done, it is limited to a very restricted space; often at such a depth that, unavoidably, only a few persons can observe directly and follow from beginning to end the whole process. Attempts have been made, but with hardly any success, to obviate this difficulty by building operating theatres with galleries so as to give a view from above, in such a way that the hands of the assistants and surgeons shall not interfere with direct observation of the process. With the same object in view, special apparatus have been constructed, which, by means of refraction from mirrors, permit of the operation being projected to a certain distance.

The cinematograph has solved the problem. It enables us to allow numerous spectators to observe, from the most favourable position, the whole process of the operation; nor is this all, during the projection every single stage is explained by the words of the surgeon and their scope is made more easily understandable by diagrams and suitable text. It is also possible — and indeed highly important — to show the operation several times. One point in which, according to my experience, it is possible to improve the usefulness of surgical films is by adding diagrams or animated drawings, which I have found very useful for the better understanding of the technique. We have already added to some operation films diagrammatic figures, which make it easier for the students to follow the different phases of the surgical interference.

I think it is possible to improve on this point by adding, according to the circumstances, normal anatomical figures and by availing oneself of so-called animate drawings; these elucidate any complicated manoeuvre which it would be difficult otherwise to understand clearly. I think that in some cases slow-motion projection would be of great use: the exact technique of some movement or movements to be carried out would certainly be made more lucid by dividing them into their component parts, or phases.

The didactic importance of the cinema for surgery has been proved by what we have often observed in the course of our lessons. Having examined the patient, discussed the diagnosis, and decided upon the treatment, we pass on to the exhibition of its technical details, explaining directly by word of mouth the cinematographic representation of the operation. When the spectator has thus got a clear idea of the reason of the manoeuvres of the surgeon, on being present later at the operation he will be able to understand all the stages and the results which otherwise, for those not yet expert, would be incomprehensible.

The importance of the cinematograph is not limited to schools. Surgical
operations are not merely the constant reproduction of a certain invariable technique; they are the result of a series of factors which, if they generally sum up to a certain sort of operation, are accompanied by individual methods, by minute observations — the result of personal experience — and by modifications which are often due to lengthy preparatory personal effort. Perhaps the old adage is applicable to few so aptly as to surgeons: if two surgeons were to perform the same operation under similar conditions, it would not be the same thing. There are different ways of doing a thing; the work of a man who excels by training, experience and aptitude, is a very different matter from that of one who has not these advantages. It is here that the cinematograph offers us the easy way of learning those technical details which facilitate the execution of any given manoeuvre, those little tricks which lead us surely to the goal. It allows us to compare two different ways of doing the same operation and to adopt one rather than another, so that we can arrive at the better method without having to pass through a more or less lengthy series of mistakes, which is often, otherwise, the only way of learning. Let us consider the case of a surgeon living far away from a great city who wishes to perform an operation he has never witnessed. He will search through books for as exact a description as possible, he will try to find a guide in diagrams and drawings; but what help could be so valuable to him as a film which would make him an actual spectator of the thing?

The importance of cinematography to surgery is, therefore, not confined to the schools, but comes as a benefit to mankind, as is obvious when the result of a given treatment depends on the skill and completeness with which it is carried out. These conditions will be still more apparent when one reflects on the fact that every surgeon, by reason of his surroundings, his school, his personal tendencies, and also because of the greater frequency of certain illnesses in one country rather than in another, acquires special skill in a certain series of operations. The cinema carries the instruction that he can impart beyond the more or less narrow circle of his collaborators and makes it accessible to whoever wishes to learn.

Surgical progress, which has made such great strides in the last ten years, has not stopped; every year sees new modifications in technique already in use and new types of operation. Everyone can realize the importance in such cases of direct vision compared with even long written descriptions which can scarcely succeed in giving an exact illustration.

There cannot be two opinions at the present time regarding the importance of the cinema in connection with surgery. In our congresses we see only a few films, but, by the interest with which they are received, we can judge of the importance that they will acquire in a few years. Some medical societies are already beginning to ask for films illustrating operations, and I believe that the day is not far off in which a more active exchange will be instrumental in producing a general improvement in technique, with real benefit to sufferers.
I wish to add a few more words on the best way of obtaining and distributing these films. Apart from the perfection of photography, combined with suitable lighting equipment, the adoption of panchromatic films, and careful adjustment as between the field of operation and the camera, I do not think that much advantage would be derived from the use of sound-films. There is usually silence in the operating theatre and the explanation of the operations can be made better by suitable captions, diagrammatic drawings and animated drawings. Whilst the operation is being screened the surgeon can call attention to the most important moments and point out the manœuvre accomplished, explaining and illustrating the most difficult details. I do not wish by this to assert that the sound film may not also be useful. We are still in the infancy of this new development, and however much I consider that it would always be preferable for the teacher to explain *viva voce* the steps of the operation as these appear upon the screen, it would be beyond the mark to exclude the possible future advantages of the sound-film. One advantage may already be admitted: the record, together with the details of the operation, of the words of some great Master, which would be preserved as interesting scientific documentation. As regards the technique of taking the film, it is necessary that the field of the operation shall alone be in the first plane, so that the details of the photograph (and it is the details which are often most important) shall be well in evidence, and that even the minutest details shall not escape observation. In this matter great progress has been made since the first surgical films were made thirty years ago, in which the surgeon and his assistants were seen clearly and the operation badly; in the present-day films nothing is seen of the surgeon except his hands at work, while the needle, the thread, the nerves, and the arteries are clearly visible.

The most serious obstacle to overcome is to get many surgeons to take part in making films, and to increase the diffusion of those already in existence. It is not only a question of environment, habits and mentality: the financial side is also of great importance, owing to the cost both of copies of the films and of projection equipment.

These are factors which can be eliminated if one reflects that surgical cinematography, even if intended for a restricted number of persons, acquires, by its importance as a means of progress and perfecting in our art, a definite value which benefits not only individuals but the whole community.

April 1930-VIII.

Roberto Alessandri.
THE HAMBURG FILM ARCHIVE AND THE INSTITUTE FOR SCIENTIFIC PHOTOGRAPHIC RESEARCH.

(From the German)

The Hamburg Film Archive (Hamburger Film-Archiv) for public utility was founded by a group of far-seeing industrialists and scientists, with the object of establishing an office for consultation and technical assistance on all photographic problems, especially those dealing with moving images, for State and scientific institutions, clinics and medical institutions. The need for the foundation of such a film collection was all the greater from the fact that the State has not got the means to give large financial support, and, up to the present time, apart from Berlin, there is no such central body for scientific cinematography in the whole Reich.

In 1929 the Archive received fresh stimulus and developed into an independent Research Institute, with the advent of Dr. Eppendorf, director of the General Hospital (Allgemeines Krankenhaus Eppendorf), Prof. Dr. Brauer, and the Surgical Clinic of the University of Hamburg, who are especially interested in this matter. At present the Institute is housed in the hospital buildings; new, modern offices are to be built.

The following facts regarding the Film-Archive and the Institute for Scientific Photography may be of interest to the readers of the International Review.

Seeing that the State is unable for the present to put the necessary funds for its proper development at the disposal of the Institute, the Archive has, from the start, been organized so as to be able to carry-on without state assistance and yet to achieve its aim, which is to supply State institutions with films at a low price, and to assist them with advice and in other ways. The Archive is therefore organized on business lines; it is intended to be a free research Institute, to which State and university institutions may have recourse, and make full use of. It is under the direction of young and enthusiastic scientists and technicians, and supervised by an advisory council of elder scientists and industrialists. The tasks of the Archive are as follows:

1. As a privately financed business archive, its funds are derived from fees received for services rendered to all branches of the business. The cost of production of the films is calculated with a margin for profits. This work supports the Institute.

2. It elaborates and investigates scientific problems of various orders in collaboration with clinics and university institutions. We distinguish three sorts of medico-surgical films as educational:

   a) the purely teaching film intended for students. This demonstrates briefly, but fully and clearly, some special subject, the phases of some disease, with patients, preparations, moving pictures, operations, etc.
b) post-graduate films, intended for practising doctors and specialists, with the intention of rapidly and exhaustively showing doctors new methods of treatment and operations. These films serve as models for expert operators who wish for information respecting special methods of operating. Our clinic has hitherto worked more especially on these lines; it has taken a whole series of films on new ways of operating, which are devised and carried out in the clinic, such as: operations on the rectum, according to Prof. Sudeck's method, through a posterior V-shaped incision; prostatectomy in cases of carcinoma; surgical treatment for prolapsis of the rectum with suspension and intraperitoneal operation; muscular plastic surgery in radial paralysis; etc.

c) Scientific research films, which record on the film phenomena and changes which could not be easily observed by the human eye, nor otherwise demonstrated. For example, cinematography of Röntgen ray images, the reactions of the pupil of the eye, etc. Under this section are included microscopic cinematographic photographs. A perfect film, taken in the Tropical Institute, shows the development of botriocephalus latus, the movements of spirochaete, etc. Other institutes, such as the Ethnographical Museum (Museum für Völkerkunde) and the Institute of Social Research (Institut für Umweltforschung) have included teaching and post-graduate films in their work.

3. The Film Archive, in its capacity as a private institute, is entitled to deal in films photographed in state institutions, holding the proceeds of such sales at their disposal for scientific purposes or for the production of new films, etc. The Film Archive also stores films, registers them, and keeps a card-index.

Dr. Helmut Schmidt.
Professor at Hamburg University
THE TREATMENT OF CANCER BY RAYS

A scientific cultural film produced by the Cultural Cinematographic Section of the Emelka Company in concert with the Women's Clinic of Munich University.

Radio-therapy, that is to say the treatment of disease by radio-active substances or Röntgen Rays, plays a very important part in the treatment of cancer at the present time. The Health Section of the League of Nations has set up a special Research Commission to study the problems of radio-therapy from the international standpoint.

In view of the importance of this method of treatment and of the successes already achieved thereby, the Cultural Cinematographic Section of the Emelka Co., working in concert with the Women's Clinic of Munich University has produced a film on this subject.

This film is divided into three principal parts. The first part deals with technical principles, the second with scientific methods, and the third part illustrates the results actually achieved in the treatment of uterine cancer.

The technical part, showing how the rays are produced and how the radio-active preparations are put together for the production of all the radioscopic apparatus, demonstrates the means necessary for this kind of treatment. It also gives an idea of the technical equipment of a modern Röntgen Ray section, and shows the Röntgen apparatus, Röntgen tubes, and the light apparatus for radioscopy.

The part dealing with method shows how these technical means are used in treatment by rays. Schematic drawings show the effects of the light.

Lastly, the statistical part gives us an idea, demonstrated by radioscopy, of the treatment of uterine cancer.
This film gives a precise notion of the value of radioscopy. It was made primarily for the purposes of instruction, but being of a very comprehensible kind, it lends itself also to general exhibition.

CANCER

The film imagined and created by Jean Benoit-Lévy, with the collaboration and under the patronage of twelve official hygiene organizations in nine different countries for the war against cancer, is not of a strictly scientific order. It belongs to the category of films which, by means of dramatic action and plot, lend themselves to the popularization not only of the most important rules of hygiene, but also of general medicine, so as to call the attention of the world to the greatest social scourges.

The film shows that two factors are of prime importance.

a) the recognition of the enemy;
b) the development of the best possible means of fighting it.

It is fairly easy to recognize the enemy. Do not neglect any of even the slightest lesions, of those disturbances of the human body which suddenly occur, which
are not suspect to the lay mind, or which are neglected because the sufferer considers them of no importance.

The disease should be recognized and diagnosed immediately in order that the doctor’s work may be of use and prevent irreparable damage to the human body.

The way to develop the means of combating the disease is by following the dictates of modern science: surgical operation, radio-active treatment.

Cancer has assumed the proportions of a grave social problem, which it is the duty of everyone — not only doctors and surgeons — to combat.

Anti-cancer centres are being established everywhere and scientific research is being actively carried on. It is a collective, no longer an individual, campaign.

This is the idea of the film produced by M. Benoit-Lévy, which is of great importance to the collection of social welfare films.

The film unites the purely scientific side to « cinematographic » or spectacular expression, so as to interest the audience and point out to them their duty towards themselves and society at large.
THE CINEMA IN THE CAMPAIGN AGAINST MALARIA

The cinematograph has become the most efficacious and rapid of all the means of anti-malaria campaign in the Province of Rome.

During the past three years, every autumn, before the shepherds and peasants of Vico, Guarcino, Piglio, Trevi, Marano, Agosta, and Jenne, wend their way down to the marsh lands (figs. 1 and 2), they are shown persuasively on the film all the dangers of «fever», the means of avoiding it, and of treating it (figs. 3 and 4).

On holidays and in the evenings, the educational cinemas of the Luce Institute give numbers of shows in the Agro Romano. At Civitavecchia, thanks to the initiative of the Red Cross; at Tarquinia, thanks to the Agrarian University (fig. 5); at Anagni and Sora, in the Campagna, shows of this kind are given during the pauses in agricultural work. Dr. Luigi Sirle, a medical officer of the Roman Province, is a pioneer in this Campaign; he is validly supported by the Luce Institute.

The peasant and the shepherd, long used to the solitude of the deserted countryside, are observers par excellence. Their eyes grasp the image at a glance, while their ears take in little or nothing of lectures, delivered in an idiom that differs from their everyday talk. On this account, the usual anti-malaria lectures were sterile in their results; nor did British and American cinema shows meet with much greater success. The environment these depicted were foreign to our peasantry, and the rude country labourers were not in a position intellectually to apply foreign stuff to their own environment, here in the old familiar «campagna». Our peasants are able to identify themselves only with educational films of local production.

The General Health Direction, in 1925, on the occasion of the first Malaria Congress, had a big national film prepared, under the guidance of Prof. Gosio, depicting the progress of the anti-malaria campaign in Italy, and more especially in the Agro Romano.

On the occasion of another Congress — the Pro Infanzia Congress — the Rome Health Office had a small film made, to form part of a general film on «Child Welfare in Rome».

This little film, which I thought out, and which was made under the artistic direction of Dr. Ambrogetti, depicts the life of children in our countryside, assisted by all the means of anti-malaria prophylaxis, right from the cradle of the new-born infant well protected from mosquito bites (figs. 6-7). The teachers at the De Amicis Schools also explain and demonstrate to the children the origins of the fever, how it is propagated, and how it can be avoided (figs. 8-9-10).

The great malaria film, on the other hand, tells the history of malaria, from its origins to the present time, and is divided into 5 parts.
Malaria, from the times of the ancients, has been one of the scourges of mankind and has desolated whole areas.

Paludism—malaria was the first equation known to the peoples of old. Our forefathers, under the terror of malaria, here built temples to the Goddess Fever, and here the early Christians offered up vain prayers to the 

*Madonna della Febbre.* The scourge, as it grew more and more homicidal was attributed to the evil influences of the stars and the earth (fig. 11).

The ancient Etruscans and pre-Roman peoples were already masters in excavating — more cunningly than moles or rabbits — underground passages and galleries, which automatically dried the watery and boggy valleys of Latium.

The Romans soon learnt from the Etruscans how to drain these morasses; the Cloaca Massima was first and foremost a drainage system rather than a sewer.

The cutting of the aqueducts by the Ostrogoths in the Middle Ages, if it was not actually responsible for malaria, certainly did much to aggravate it. The Ostrogoth army, encamped in the neighbourhood of the newly formed marshes, were literally decimated thereby. Often, however, there has been no apparent cause for the recrudescences of malaria. Malaria,
like all biological phenomena, is subject to vast fluctuations of a more or less regular kind, according to time and place.

Thus in a given neighbourhood, while local conditions remain unchangeable, the scourge may be attenuated, or even disappear completely, but always with the risk of fresh outbreaks and fresh recrudescence.

During the happier periods of truce — which mostly coincide in time with each of the great epochs of the past — the more fertile valleys of the Campagna were re-cultivated and re-populated, to feed and enrich the City. But later the vortex of the fatal exacerbations of the scourge — undaunted and implacable — ever a menace to the life and the health of man and even of the more useful domestic animals, swept away all efforts at land colonization and scattered and stultified the heroic works built up by man.

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It is generally supposed that the fall of the Western Empire was responsible for the abandonment of the Roman Campagna.

But we may infer from the episcopal organization of the Campagna during the Middle Ages that a Christian community could not have been of sufficient importance to require a bishopric if local health conditions had not allowed of the formation of a centre of population of some importance (figs. 12-13).

During the Renaissance the Campagna once again was alive with villas and palaces as in the days of Imperial splendour. The lordly hospitality of Popes and Cardinals entertained friends there, and organized the chase, as at Magliana (Fig. 14).

Ostia became not only the first fortress of the epoch, but a holiday resort of the Popes (fig. 15).

But later the outbreaks of malaria became more frequent and more lethal.

Just as we can reconstruct the periods of prosperity of the Campagna, so also we can follow the path of the destructive fever. We need only, recall the medieval monastic farm colonies doomed to inevitable catastrophe after a long and unequal struggle with malaria.

Thus the papal lance was as impotent as the imperial lance against the fever fiend. More than one prince of the Church succumbed to the « Roman fever » just as more than one Emperor had succumbed.

In later centuries malaria grew more and more destructive. Ostia was abandoned; then Magliana shared the same fate. Other centres of the Campagna, even such elevated places as Isola and Galeria, were depopulated by the marsh fevers. The monasteries in the neighbourhood of the city grew pestiferous and uninhabitable. After 1870 again, malaria threatened the lower valleys of the City of Rome; even some of the surrounding hills were not immune from the fever.

Healthy Rome became a small oasis in the midst of a pestiferous desert.
Part II.

Neither the so-called miasmas that rise from marshy areas nor, in a general way, the stences arising from putrefaction are the direct or indirect cause of malaria. Neither good food, nor good houses, nor good clothes can avail, by themselves, to protect man against the fever.

To take men to colonize these unhealthy wastes was nothing more nor less than to take them on a journey to the grave, before the discovery of modern defences against malaria. At the end of last century, a French Army Doctor, Major Lavaren, in Algeria, and the Italian doctors Marchiafava and Celli, in the Roman Campagna, discovered the cause of malaria. It is produced by minute living creatures (protozoa) that live in the human blood and destroy it. This discovery cast light on the agent of the disease, but the manner in which it was propagated remained a mystery. In May 1898, in British India, after long and clever research, the Army doctor, Major Ronald Ross, demonstrated how malaria among birds is produced by specific mosquitos. Immediately afterwards the Italians Grassi, Bastianelli, and Bignami confirmed the great discovery in respect of human malaria. The females of certain mosquitos, called Anopheles (i. e. noxious) suck specific forms of these protozoa, which, in their bodies, complete a cycle of further development. And then, with the saliva, the young protozoa are re-inoculated in man when the mosquito bites.

The mosquito completes the first phases of its life from larva to egg, and to nymph, in stagnant waters. Hence paludism generates malaria by breeding the malariferous mosquito. As a rule the mosquito does not bite by day; but in the evening, towards night-time, and as dawn approaches, it attacks man; these are therefore the most dangerous hours for contracting the fever. During the cold months mosquitos hibernate in cellars and stables, and rarely bite.

Part III.

As far back as the 17th Century, Countess Anna of Cinçon introduced into Europe from Peru the specific remedy against the fever: the bark of the quina — quinine.

The film reproduces the episodes that Cardinal Morichini had painted in fresco on the walls of the Pharmacy of S. Spirito in 1850.

The third picture represents Cardinal Di Lugo ordering his attendants to give quinine to the sick, while another servant is seen pounding the famous bark in a mortar.

Cardinal Di Lugo distributed the famous drug to the poor of Rome free of charge. But who among the country labourers of our Peninsula could purchase
quinine at the high price it cost, up to a few years back? A whole season's work did not bring in enough to buy a few grammes of quinine! Then, thanks to the efforts of Angelo Celli, at the beginning of this century, the State took over the duty of supplying the great specific remedy against malaria, not by way of a legal charity or act of grace, but as a dutiful measure of public safety. The remedy is prepared pure and in a palatable form (sugar-coated or chocolate-coated pills) by the Central Military Pharmacy of Turin.

**Part IV**

Doctors, school-masters, and nurses of both sexes are the soldiers and the van-guard of the anti-malaria fight. The auxiliary staff is trained in a special school at Nettuno.

Teachers and nurses distribute the preventive and curative quinine to the little ones in kindergartens and schools. Children suffering from malaria are sent in summer to the anti-malaria sanatorium of Borghetto.

Adults are treated in the country by stationary or travelling dispensaries. The task of the prophylaxis nurse is to scour the countryside on horse-back or in small vehicles, day by day — each having a certain area apportioned to his vigilance — to ensure the necessary preventive measures among persons who have not contracted the disease and notify all cases of malaria to the doctors. In summertime quinine is distributed in the fields, when work is in full swing, during harvesting and threshing (figs. 17-18).

The task of the Red Cross staff in the Pontine Marshes is no light one.

Hydraulic and agrarian reclamation work is being carried out with the utmost energy all over Italy, in the Campagna, the Pontine Marshes, and all other infected districts.

**Part V.**

Anti-mosquito wire-netting across windows (figs. 18-19), and a triple series thereof at the entrances to dwelling houses, confining animals in sheds so as to keep them protected from sucking and infectious ticks, smoking out the winged mosquitoes, destroying the larvae by filling in pools and cleaning out pits (fig. 20); scattering petroleum and a certain powder, known as *Vert de Paris* (figs. 8-9), etc., contribute to sanitary success, which prepares the way for agricultural and economic prosperity (fig. 21).

The Health Department's film illustrates the millenary ruin caused by malaria and the enormous progress made during the past 25 years in Italy to reclaim the land from the evil. Rome — a small oasis in a pestiferous desert in 1870 — has become a great healthy city, surrounded by fair gardens; villages, once razed by malaria, have re-arisen; new villages have been built.
But the path from the laboratory to the country bristled with immense difficulties, though these may have seemed little or nothing to supermen!

Quinine was the primary cause of the success of hydraulic and agrarian effort; this is used on a big scale as a preventive measure against the disease, and thanks to it a new, healthy, and industrious population is growing up to repopulate the country that only a few years ago was deserted during the long summer months as an accursed land. Prof. Gosio very truly says: "The enormous advantages of land reclamation on a large scale are indisputable. . . . but, apart from the huge capital required, if this great work is not supported by all the inhabitants, by works of small reclamation and personal quinine prophylaxis, its effects can never be enduring."  

Anna Celli.

Anna Celli, contributes an article on the malarial scourge in the Roman Campagna, a scourge which afflicts abandoned, marshy lands in every country. The anti-malarial campaign began years ago, before the war, when all battles had something of the spectacular and the chances of victory dazzled us.

Agrarian-forestry transformation and systematization are, however, in full progress at the present day. Demographic progress, the changed tenour of life, and the need of rendering all nations independent, at least as far as the products of primary and indispensable necessity are concerned, have rendered the reclamation and cultivation of all lands previously abandoned to bogs and malaria an urgent necessity, provided they lend themselves to being rendered fertile by man's labour.

Side by side with the reclamation of the land, there has been an agrarian transformation from old-style methods to intensive cultivation.

The advent of specialists in hygiene has made victory possible in a battle that formerly constituted a losing game, however fiercely and earnestly waged. When shepherds led their flocks to abandoned marshy lands, and horses and buffaloes had to wade in flooded fields reeking with miasma, the efforts of men were frustrated, since the primary cause of the evil remained as a continual menace to life. The hygienic battle that is now being waged, however, has made victory certain; the farmer is everywhere assisted by doctors and nurses, who give him advice and suggestion and defend him against the dangers he has to face. Little by little, as the work of canalization proceeds and the pumps are put into action, lands that were formerly an abandoned marshy waste are beginning to flourish under cultivation, and malaria is disappearing.

This practical improvement is accompanied by a spiritual one. Years ago, in that part of the Roman Campagna to which our contributor refers, a handful of men started a crusade that seemed, at that time, to be mere madness, but was, in fact, an act of heroism. Three names stand out in that period: those of Angelo Celli, the hy-
gienist, Giovanni Cena, the poet, and Domenico Orano, educationist. Their collaborator, Alessandro Marcucci, has carried on to this day the work they started.

The three diverse but correlated forms of improvement are represented in the various districts by land reclamation and irrigation societies; and the principle is definitely accepted that there must be two controlling forces: the regulation of the waters and the control of the national savings. The absolute necessity of completely reclaiming the land, in the economic and hygienic interests of the nation, has been proved; and to this end the dispensaries and branches and first-aid depôts of the Red Cross are everywhere on the increase; the old-time hovels where the peasants lived have been transformed into decent cottages with all modern necessities and conveniences; schools are being opened everywhere, and are followed and aided by the cinematograph, either as fixtures or in the form of travelling cinemas, offering instruction, warning, and amusement; with the result that the men who were once isolated sentinels in the war against disease and have now developed into a compact body of planters and farmers, are brought into touch with the life of the world around them.

The work carried on by the General Direction of Public Health is completed by the general and specialized teaching of the Higher School of Paludism, which was created in Italy by Royal Decree on May 8th, 1927. This school provides for the instruction of future doctors, engineers, and farmers, and at the same time takes an active part in the work in malarial regions during epidemics. In the anti-malarial school of Nettuno there are technical courses for doctors, Red Cross nurses, officers belonging to the different armies, and students. By means of hygiene school courses, the Pontine Anti-malarial Institute, the Sicilian Compulsory Insurance Syndicate against accidents in the sulphur mines, the Anti-malarial Institute of the Venetian region, and the Experimental Anti-malarial Station, which was opened in the historical Farnesina Palace in Rome under the Rockefeller Foundation, in 1925, with branches in Sicily, Sardinia, Calabria, Istria and the Roman Campagna, the Universities are resolutely attacking the land improvement problem.

And, lastly, by Royal Decree of August 15th, 1925, the coping stone was put to the nursing structure by the formation of an auxiliary corps of the Board of Health: a body of volunteer visiting nurses, which is completed by the Maternity Institutions and Childrens' Aid Societies, and by the special Militia created for the control of roads and forests.

***

Land improvement and malaria are the two contrasting points of agricultural life. Drugs and medicines whose curative effects cannot be dealt with in this editorial note, may assist the work of redeeming the land. But much more important and more essential than this is land reclamation on a large or small scale; intensive cultivation, plentiful and well-housed live-stock, and the work of the farmer.

There is some very precise information on this matter in a learned report on «Land reclamation on a big scale in relation to biology and hygiene», which was presented to the International Congress on Paludism held at Algiers in May, by Prof. A. Missiroli,
Director of the Rome Experimental Station for the anti-malarial campaign, founded under the auspices of the General Direction of Public Health and the Rockefeller Foundation.

A table showing the progress of malaria throughout the centuries, based in part on Angelo Celli's fundamental work: «The History of Malaria in the Roman Campagna» which is drawn from historical documents, reveals how the malaria curve rose whenever agriculture declined: towards the fifth century of the Imperial Epoch, the eleventh century of the Middle Ages, and the eighteenth century. On the other hand, as the agricultural table rises, the malaria curve falls proportionally.

As far back as in the days of the Roman Empire, hydraulic works were carried on for the purpose of reclaiming marshy lands, and comprised:

a) draining the land by mechanical means;
b) drainage of stagnant waters;
c) raising tracts of land by artificial means; and
d) salification of ponds and stagnant waters along the coast.

These works have been carried on at intervals ever since, as contemporary writers testify, during the various periods of agricultural prosperity and decadence (Missiroli, op. cit.).

In 1560, Pius V, instituting the Agricultural Court, pointed out how air is rendered purer by the cultivation and drainage of the land (Aer nostrae alme Urbis ex axidua agrorum cultura, silvarum et nemorum extirpatione palustriumque locorum exicatione factus est tutior, clementior et salubrior).

Sixtus V sponsored the hydraulic reclamation of the Pontine marshes, towards the year 1600, the work being entrusted to the Dutch, who have always been experts in land drainage.

The reclamation of the Maremma, in that period, induced Machiavelli to declare that «unhealthy districts are becoming healthy thanks to a multitude of men who have suddenly occupied them».

in.
Names and figures give us a clear idea of what has been accomplished. With regard to the names, it is sufficient to mention the Isola Sacra, Pietralata, and San Cesareo in Latium, Alberese in the Grosseto zone, Coltano and Vettola in the province of Piza, Punta Sabbioni, Arquà Petrarca, Galzignano, Annone Veneto and Catajo's Castle on the Euganean hills in Venetia, properly so-called; Merano in the Upper Adige, Queto in Istria, the Valle di Comacchio in Emilia, Sanluri in Sardinia, Fusaro in Campania, Stornara, Liola, Varcaturo, Porto Cesareo in Apulia, and Francofonte in Sicily.

The battle of the land reclaimers, whether agricultural technicians or engineers, hygienists or teachers, embraces millions of hectares, and comprises the three phases of the undertaking; drainage, cultivation, and education. And the results have been prodigious.

It must be remembered that, in 1913, there were not more than 200 unsettled inhabitants, consisting of shepherds and those who went from time to time to gather crops. At the present day, barely 17 years later, the population of the Roman Campagna has increased to 70,000, while the percentage of illusess and death from malaria is decreasing by leaps and bounds.

Little by little as the land is reclaimed, it is either cultivated by Land Improvement Organizations or is divided into lots among peasants, preference being given to ex-service-men. Farmhouses, drinking water, schools, churches and places of meeting or amusement, where there is frequently also a cinematograph, have sprung up throughout the whole Campagna, as well as motor roads or farm roads, which connect the agricultural centres with the various surrounding towns. Man grows attached to land that he has reclaimed and that has become his own, and is encouraged to rear a family there and bring up strong, industrious sons.

In the land improvements of the Val d'Adige, the whole hydraulic and forest situation from Merano to Lavis has been completed, as well as the corresponding mountain basins and the Val Passiria. So far, 25 farmhouses have been built there, and 10 big buildings; while there are 7 kilometres of new roads, and 15 kilometres of new canals. Three hundred and sixty hectares of forest, where the trees were ready for felling, have been re-forested, in addition to all the land put under special cultivation.

At Sanluri, in 1920, there were 200 hectares of cultivated land and 2000 hectares that were uncultivated and malarial; while today there are 50 kilometres of canals, 45 kilometres of roads, 150 farmers living in new and modern habitations, 200 head of cattle, 800 hectares under grain cultivation, 521 hectares under vegetables, 500 under fodder, 10 hectares planted with olive trees, and 17 hectares that are used for other agricultural industries.

At Stornara, there were 17,800 hectares under land improvement. At the present day, there are 76 kilometres of road, 106 kilometres of canals, a number of rural buildings, two different irrigation plants, and 831 head of cattle. Meanwhile, the improvements are being continued without interruption, and the first area of cultivable land is being granted to farmers.

At Coltano, more than 90 families of ex-service-men farmers are living on lands that were at one time abandoned to marsh and malaria. The corn in this district yielded 12 quintals per hectare in 1929.
At San Cesareo a new townlet has grown up, with about 1000 inhabitants, formed of 100 farming families of ex-combatants.

Among the various works of land improvement and agricultural reconstruction that have been carried out in Alberese is a special horse-breeding establishment to which the name of the district has been given.

In the Isola Sacra, the ancient Libano of Venus,—so-called on account of its wealth of gardens and orchards,—was later abandoned and fell into a state of desolation. It lies in the delta formed by the Tiber before it widens out into the Tyrrhenian Sea. After it was abandoned, it was invaded by the waters, that stagnated and allowed malaria to reign supreme. From time to time a shepherd would drive his flock onto the fields, but found it impossible to resist the unwholesome miasmas arising from them. At the present day, under the improvement scheme, there are 40 kilometres of roadway, 26 farmhouses, a great building for 12 working-men's families, and 300 farmers; and, in addition to the areas under cereals, fodder, vegetables and industrial cultivations, there are 40,000 new plantations of poplars, acacias, mulberries and pines.

Apart from the improvement schemes carried out by private persons or associated organizations, the Opera Nazionale Combattenti alone has reclaimed or transformed more than 543,000 hectares of land within the period of a few years.

It must not be forgotten, however, that, in addition to the land improvements carried out by the Opera Nazionale Combattenti and also by the State, a number of manufacturers have carried out reclamation schemes in different malarial zones in the Kingdom: as, for instance, the land improvement at Castel Volturno and the Pontine Marshes, the valleys of the Maccarese, Port Trajan, etc. Throughout the entire territory of the Governatorato of Rome, that is to say, in the greater part of the Roman Campagna, there were only nine deaths from malaria in 1928, 5 of which occurred in August, 3 in September, and 1 in October.

One of the most practical and original systems of land improvement is the so-called raising of land. The lands that lie below the level of the waters are raised by heaping loam upon them. The marsh water absorbed by the pumps and driven into the river or sea is replaced by a system of canals which, by a kind of paradox, brings the water back, for irrigation purposes, to the place from which it was taken to get rid of malaria.

A remarkable report drawn up by Dr. G. Pecori and C. Escalar, and published in the September-October number of the Rivista di Malariologia last year (pubd. by G. Sanarelli) gives the following course of the malaria campaign:

<table>
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<tr>
<th>Year</th>
<th>1926 malaria patients</th>
<th>3580 deaths</th>
<th>14</th>
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<tr>
<td></td>
<td>1927</td>
<td>2435</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>1928</td>
<td>2373</td>
<td>9</td>
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Missioli's above-cited admirable report gives the following data from statistica tables referring to the Roman Campagna of which Anna Celli speaks in her article:
Hygiene and land improvement, as we have said, are completed by a spiritual improvement. Confining ourselves to figures and investigations in that area of the Roman Campagna of which Anna Celli speaks in her article, there were only eight schools in 1908, with very few scholars; while at the present day there are 50, with 2000 scholars. In two of these schools there are some beautiful decorations by an artist who is a great lover of the country, Duilio Cambellotti.

These schools are attended not only by children, but also by men and women employed in these new agricultural centres. All those who have attended the schools regularly, — men, women and children, — receive prizes, when the schools close in June, of useful articles of wearing apparel. The day of the prize-giving is a great festival: groups of scholars go in procession to the schools, bearing aloft great placards with the name of the school surrounded by wreaths of flowers.

Nor is the Church behindhand in this work of regeneration. The Circolo di S. Pietro has taken over the task of religious, moral and civil assistance in the Roman Campagna; and there are more than 50 chapels in the region today, which are attended by thousands of peasants on Sundays and other Holy Days (A. Lancellotti in La conquista della terra, Rome, February, 1930).

The possibilities of the cinema in this formidable work of redemption are infinite: hygienic medical propaganda, the spread of culture and education, an added interest to daily life, and a means of keeping in touch with the outside world.

The Istituto L. U. C. E. and the Opera Nazionale Combattenti have been carrying on the campaign by means of their travelling cinemas, in addition to the permanent cinemas that exist in the various little towns of the Campagna. In a striking article on « Agrarian propaganda by means of the Cinematograph », which was published in the February number of La conquista della terra (Rome), G. Rossi observes that the enthusiastic reception given everywhere to the travelling cinema is at times quite moving. The cinematograph campaign of the Opera Nazionale Combattenti alone has shown films in more than 4790 different rural centres, to a public of more than 3 million spectators of the farming class.

The ordinary and specialized cinematograph production is making equal progress. The General Direction of Public Health of the Ministry of the Interior produced, among others, a great film dealing with malaria. In the film Vita Nuova the Istituto
L. U. C. E. gave an illustration of the general work of land reclamation and in other films dealt with the particular land improvement being carried out in Calabria, Coltano, San Cesareo, Stornara, Apulia, Borato, the great Emilian scheme, and also with the work of home colonization; and has also released 1790 metres of negative on the anti-malarial campaign and propaganda.

* * *

The work of the pioneers, the greatest of whom was Angelo Celli, is nearing victory. Within a short time the reclamation of land and body and spirit will be so complete that nothing will remain of the marshy, malarial solitude of the past but a painful memory.

This is one of the greatest of hygiene problems, and one to the solution of which the cinema can and does give the greatest assistance; bringing education and propaganda to the knowledge of all, so that the new generations that grow up on the reclaimed lands shall be strong and healthy and intelligent, to the benefit of the whole nation.
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THE HYGIENE FILM CONSIDERED AS A UNIVERSAL DOCUMENT

The cinema is being turned to good account to broadcast knowledge of the several branches of hygiene. It is particularly valuable as a "propagandist" in the rural districts furthest removed from the life of the big cities, small centres of workers and others, and schools where children and young people are trained for life's battle and where they should learn the elementary rules of self-protection against the risks of contagious disease.

In another part of this Review, we deal rather extensively with the work that each of the nations is doing in this field by means of the screen, and with its possibilities in connection with the various forms of general and special hygiene.

The hygiene film has many different aspects however.

There is the film the sole purpose of which is to reproduce a certain aspect of some particular case. Films of this type, whether they refer to a single individual or to a number of persons, have but a relative value, even nationally; they are useful for a certain definite propaganda, for the instruction they offer to students and others who may be interested, and as documents that may be included in future collections of hygiene films, when the causes leading to their production have disappeared or been got rid of.

Then there is the strictly local film, intended to meet general needs or some special requirement of preventive medicine. This type of film lends itself to illustrating the phenomenon in its full range, but always within the possibilities of presentation and development of a given country.

It may also be of use beyond the frontiers for comparative purposes, but its essential value does not change, and the study of the phenomenon, varying from country to country both in its manifestations and methods of cure, will be classed among national documents.

Lastly, there are the types of hygiene film in which, by a careful scientific and technical adjustment, the documentation of various phenomena of social life throughout the world is collected. The first aim of these films is to give the scientist the opportunity of making a direct examination of the phenomena; not merely of comparing phenomena, but also of studying each one in its every aspect, and thus discovering the best prophylaxis of universal application.

In this manner, documentary evidence of the phenomenon, wherever it occurs, is collected and collated by specialized societies and organizations or directly by the various governments interested. The collection must be strictly scientific in character, so that the films may have a universal application; all aspects or elements that might restrict it to the particular life of any one country being eliminated.

Treated in this way, the hygiene film becomes an authentic document of world-wide propaganda.

It is not possible to deal with all hygienic subjects on the cinematograph according to a universal standard, although they might be so treated technically. The difference in habits and systems of life, in climate and economic-social conditions make it necessary that different criterions should be adopted in the prophylactic campaign, in accordance with the various necessities as they arise.

Other manifestations may be presented under a national or universal documentary aspect, according to the way they are dealt with. A film on tuberculosis, for instance, will remain within the scope of its particular country and be little suited for diffusion in other countries if the curative system studied belongs to a special school or country and the possibilities of fighting the disease therein offered. Thus, in a film on malaria, scenes showing the use of aeroplanes, as in the United States, for scattering disinfectants from above over large extents of marshland, would be quite out of place in a country
where the malarial districts are limited in extent and do not necessitate the employment of such costly methods.

The two types of film cited, those on malaria and those on tuberculosis, may, on the other hand, assume a universal character when they offer an explanation and comparison of the different methods of treatment suited to the requirements of each country, or when they are restricted to the examination of the phenomenon from the biological, hygienic and medical points of view, within such limits as must be maintained by experts all over the world.

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A very special aspect of this documentary type of hygiene film is that it frequently reproduces not merely a given phenomenon, but an entire series of phenomena, characterizing life under diverse social conditions.

Thus we have demonstrative films, many of which are quite short in length, showing what has been accomplished by observing, in some centre or series of centres, in rural or urban districts, the principles of personal and general hygiene. Specification and detail have little or no importance in this type of record. What is necessary is to make known and support by evidence the principles and essential necessities of general hygiene. Details do not interest the general public, which requires explanations to be made on broad lines. The investigator or specialized student seeking for knowledge of a single rule or phenomenon is, on the contrary, mainly interested in details.

Such hygiene documents may thus show the life of an entire nation in its towns or rural centres within a single film. A film giving, in hundred-metre strips, a striking impression of agrarian and rural reclamation works, improvements and clearings, the laying out of shady avenues, gardens, and public parks, which are the lungs of our towns, or showing cultivated fields, watered by canals, in places that used to be mere boggy wastes or arid tracts parched for lack of water, with the most recent drainage and irrigation systems; healthy schools full of light and air, surgeries, sanatoriums, modern health and holiday resorts, and sports grounds — such a film is a genuine document in the completeness and widest sense of the word.

Analyses of the phases of movement, of diseases contracted or avoided, and of their consequences, have the value of purely scientific inquiry, the interest of which is restricted to a limited number of students and hygienists. What is of interest for propaganda purposes is a complete and serious view of the hygiene conditions of a country or nation, which may be rapidly shown throughout the world.

Work such as this cannot be produced by individuals. It must be undertaken by international societies and organizations, by bodies which are interested in documentary research, in order to be in a position to advise and conduct prophylactic campaigns in town and country for the benefit of the individual and of the community.

It is a task that could be accomplished by the International League of Red Cross Societies, the Health Organizations of the League of Nations and, technically, by the Rome Institute, which comprises within its field of labour everything connected with education, culture and knowledge, whether for the individual or for the mass.

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A few years ago, an attempt of this kind was made with documentary films and purely scientific films dealing with special diseases, both types being of a "universal" character. They were produced by the L. U. C. E. Institute of Rome, for the Health Section of the League of Nations, in accordance with an agreement made between the Institute and that Office. The cameramen worked under the direction of scientific men and technicians belonging to the various countries interested. The films were very carefully revised in order that they should be absolutely objective and documentary in character and scientifically correct.

The films produced for the first category (documentary) dealt with the organization of mineral water and thermal establishments (Salsomaggiore and Montecatini in Italy); a modern aqueduct, the Serino, of Naples; the general sanitation of some great towns or areas (Genoa, Naples, Milan, Turin and Sardinia for Italy); the construction of a big...
railway line and all the medical and hygienic assistance necessary for treating ankylostomiasis among the workers; the health conditions of certain nations (Holland, Belgium, France, Hungary, Yugoslavia, and visits of medical men to various parts of Germany), etc.

Two films were produced for the second category (specialized and scientific): one on the prevention of accidents during work and the other on syphilis. The latter was taken at the clinic of Professor Madsen, President of the Health Committee of the League of Nations and Director of the State Serumological Institute of Denmark, and produced under his direction.

These films, in fact, constituted the beginning of international cinematographic collaboration in the field of hygiene, with the technical aid of specialists.

It is, however, as we have already said, not sufficient to have a fragmentary knowledge of the life of the world; it must be studied in its entirety to be of any real use. And while it is necessary for hygiene propaganda purposes to dwell on certain details in order that the individual may have a notion of what is good and bad for his health, it is equally necessary that the general public should have presented to it the picture of a strong, healthy, cheerful existence. But to be convincing and inciting, the picture must be conceived on generous lines, and must show the spectator all that has been accomplished throughout the world, and thus acquaint him with what is still unknown to the majority; namely, the universal basic principles of hygiene.

The first stage for the cinema public, therefore, is an exposition of life, shown in its best aspects, even though this end may be attained by means of rude contrasts; and the picture must be presented in an attractive frame, in order to be efficacious. When the public is thus educated, even though the education be on very general lines, it will itself proceed from synthesis to analysis, and ask for the detailed explanation and comment of each single rule of hygiene.

* * *

Among the films produced for the Health Section of the League of Nations, we may cite Rural Hygiene in Belgium as the type of documentary film on the hygienic system of an entire country. The negative is about 1200 metres in length, and deals with the following subjects:

Hygienic improvements in new rural habitations. A rural population living in sanitary houses, built and completed in accordance with modern requirements, is bound to be a healthy population, fit for reproducing a generation of workers. By these means, it has been possible to stop the exodus from the land, to bring the country back to a flourishing condition and to arouse in the peasant a deep-seated love for his land and his home.

Social, moral and religious life in rural centres — baths, medical assistance, schools, churches, isolation of infectious or contagious diseases, re-cultivation of abandoned lands.

Life of workers in the various industries — elementary rules of hygiene to be observed before starting work and on leaving off, medical assistance, hospitals.

Social life of the State — the towns, the political and administrative divisions, the ports, means of communication, systemization of the waters and mountain areas, connection with the greater European and trans-oceanic centres.

Children — open-air schools, medical visits, the care of physically and psychologically deficient children, rational exercise, the care of infants.

National organization of hygiene — the creation of intercommunal lazarets; the work of the State, communal authorities and sanitary inspectors, public sanitary services.

* * *

The film on syphilis already mentioned, which was taken at Copenhagen under the direction of Professor Madsen, is a model scientific documentary film, and, in view of its particular importance, we give below a sketch of its essential parts.

Thirty Danish hospitals and others in the great foreign capitals, such as Berlin, Hamburg, London, Paris and Vienna, continually supply the Danish Serumological Institute with blood samples for examination, which, except when they are forwarded from some part of
Denmark itself, are sent to Copenhagen by aeroplane.

The examination of the serum is made in accordance with the methods followed in the various countries, and different portions of each serum are given to different analysts, none of whom know anything about the origin or diagnosis of the disease, in order that there may be the ampest reciprocal control.

The comparative analyses undertaken by the Seralogical Institute under the direction of Professor Madsen, when the film was photographed, were made on 945 different samples; 40 seralogists from different parts of the world took part in the work of analysis, coming from Germany, Austria, Denmark, the United States, the Malay Federal States, France, England, India, Italy, Japan, Poland, Jugoslavia, Sweden, Turkey, Russia, and so on.

The enquiry was of special importance for checking the clinical diagnosis and serum examination of dubious cases; indeed, the examination showed that while in many cases the Wassermann reaction was negative, although taken according to different methods, the reactions obtained from flakes in suspension were positive.

This film, produced under Professor Madsen's direction, is of the highest scientific value, on account of the careful seralogical researches made by the medical men gathered together by the Institute for the cineraphic analysis of the work done.

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The hygiene film thus assumes, as we have said, a documentary and universal character. It can penetrate everywhere, regardless of frontiers or national boundaries. It can broadcast throughout the world the comparative indices of social life everywhere, and can be of the greatest aid in the study of the problems interesting mankind in wider fields of action than that offered by the film which is limited to the observation and documentation of isolated phenomena.

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**DEMOGRAPHY AND HYGIENE STATISTICS**

Birth and death are elements of a demographic-binomial theorem, the essential basis of which is a hygienic existence.

When the rules of hygiene are disregarded, mortality increases, especially among infants, and births decrease. Leaving aside Bernard Shaw's paradoxes and the super-sensitivity of many persons in regard to the regulation of social life, it is undoubtedly a fact that the greatest, if not the only ally that we have in the demographic struggle is the preventive fight against disease. To render the human organism healthy and strong and able to fight against all the foes that lurk in wait for it in the surrounding atmosphere, is to accomplish a task of high social and human value.

When Solon's legislation eliminated the weak from the battle of life, the phenomenon of selection took place in accordance with the rules of primitive barbarity. At the present day, a weak person is a being who has need of love and every care; who is taken in hand by his fellows and gently led towards a future not altogether bereft of the joys of life of which destiny apparently sought to deprive him.

Care is needed in all the preventive means that man has learnt in the battle of life in order to keep at bay the phantasm of death, and that our young people may grow up to face the duties of life in a sound and healthy environment.

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We will first study the figures taken from the official statistics drawn up by the League of Nations on a group of towns, selected from among the largest in every nation in the world:
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The information in regard to general mortality refers to 73 of the largest towns in the world, and we have the following highest and lowest figures per 1000 inhabitants:

**Europe**

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<tr>
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<tr>
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<td>16.0</td>
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**Lowest**

- Frankfort 8.3 8.4
- Amsterdam 9.0 10.2
- Zurich 9.4 10.0
- The Hague 9.1 10.6
- Basle 10.3 10.5

**Asia**

<table>
<thead>
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<td>47.6</td>
</tr>
<tr>
<td>Batavia</td>
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<td>38.2</td>
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</table>
With regard to the non European continents: in Asia, (with the exception of Tokio, Calcutta, Bombay and Singapore) the death rate is increasing considerably, reaching its maximum at Delhi; in Africa, it is falling rapidly in Egypt, largely owing to the improvement and reclamation works that have been carried out along the Lower Nile, and the medical attendance provided for the people, while the rate is slightly on the increase in the territories of the South African Union; in America, out of 14 centres examined, there is a considerable increase in Montreal, Canada, and a slight increase in Cleveland and Detroit, while in the other towns the rate remained stationary or was more or less on the decrease; in Australia there is on the average a slight tendency to increase.

With the exception of Rome, Warsaw, Leningrad, Tokio, Bombay, and Cairo, and the chief towns of South America, there has been a progressive rise in the general death rate in the various capitals during the five years under examination.

These facts are certainly not very encouraging, and indicate the urgent necessity for intensifying to the utmost the hygienic campaign throughout the world, together with the higher spiritual and physical education of the race.

Side by side with the prophylaxis of disease, we must have sports grounds, where the youth of the future may strengthen itself physically; and we must resume strenuously and resolutely the guardianship of childhood and adolescence and the fight against the ills and vices that undermine the health of the race (alcoholism, drugs, etc.)

---

**EUROPE.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Infant Mortality per 1000 born alive</th>
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<td>- Genoa</td>
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**ASIA.**

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**AFRICA.**

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Infant Mortality per 1000 born alive

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**SOUTH AMERICA.**

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**AUSTRALIA.**

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</table>

The high death rate is probably to a large extent due to the wearing effects of the war. But it is in regard to infants that hygiene is of the maximum importance and becomes a highly responsible function.

The data for the comparative examination of this branch have been taken from 62 of the greatest world centres, with the exception of certain nations such as Bulgaria, Esthonia, Portugal, India, and Mexico, for which the exact figures are lacking.

We had the following comparative data from 1925 to 1929:

**EUROPE**

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<td>Deaths per every 1000 born alive</td>
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**ASIA**

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**Africa**

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**AMERICA**

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**AUSTRALIA**

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<td></td>
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</tr>
<tr>
<td>Brisbane (1928)</td>
<td>48</td>
<td></td>
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</table>

Out of the 62 towns examined, there was a more or less important rise in the death rate in the four French towns (of these, the rate in Lille rose from 78 to 123 per thousand); Cologne in Germany; Birmingham, London and Glasgow in Great Britain; Belfast in Ireland; Rome and Naples in Italy; in Amsterdam, the Hague, Cracow, Barcelona and, outside Europe, Yokohama and Montreal.
The most noticeable fall in the rate was at Frankfort-on-the Main (70-50), Dublin (112-96), Genoa (107-77), Warsaw (160-124), Madrid (146-115), Budapesth (125-101) Capetown (70-47) and Chicago (75-61).

The average rate in the United States was decidedly low, less than 70 per thousand.

Although these statistics are satisfactory enough on general lines, they still suggest certain observations; namely:

- a) that the tendency of the infant death-rate to rise is much more noticeable in non-European countries than in Europe itself;
- b) that the infant death rate is in any case still excessively big. It is quite true that infant mortality is necessarily higher than the average of the general death rate, on account of the inferior organic resistance of young children and also owing to the numerous diseases which attack them but do not affect adults; but apart from these considerations, it is appalling to reflect that in some places the infant death rate is equal to a fifth of the births, and that in 25 out of the 62 towns (14 of the 25 being in Europe) it is equal to or higher than one tenth of the births.

It is above all in this field of action that specialized hygiene and medical assistance can be of most valuable aid to general social welfare.

### EUROPE.

<table>
<thead>
<tr>
<th>Country</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
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<tbody>
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<td>13.6</td>
<td>11.5</td>
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<td>16.4</td>
<td>16.3</td>
<td>16.4</td>
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<td>21.3</td>
<td>22.1</td>
<td>19.8</td>
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<td>17.4</td>
<td>16.4</td>
<td>16.3</td>
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<td>18.7</td>
<td>13.0</td>
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<td>11.6</td>
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<td>16.1</td>
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<td>16.5</td>
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<td>16.7</td>
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<td>Norway</td>
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646
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<th>1927</th>
<th>1928</th>
<th>1929</th>
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<tbody>
<tr>
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<td>Lisbon</td>
<td>—</td>
<td>—</td>
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<tr>
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<td>24.7</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>Barcelona</td>
<td>25.5</td>
<td>24.9</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
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<td>11.9</td>
<td>11.2</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>Basle</td>
<td>12.1</td>
<td>11.9</td>
<td>12.4</td>
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<td>9.1</td>
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<td>Zurich</td>
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<tr>
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<td>27.8</td>
<td>27.8</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>Moscow</td>
<td>30.3</td>
<td>30.5</td>
<td>25.1</td>
</tr>
</tbody>
</table>

**ASIA.**

| **Dutch Indies** | Batavia | — | — | — | — |
| **India** | Bombay | — | — | — | — |
| | Calcutta | — | — | — | — |
| | Delhi | 46.6 | 48.6 | 48.0 | 54.5 | 54.7 |
| **Japan** | Tokyo | — | 26.6 | 29.1 | 27.0 | 24.0 |
| | Yokohama | — | 30.4 | 28.4 | 31.1 | 32.9 |
| | Osaka | — | 3.1 | 30.6 | 36.2 | 34.3 |
| **Persia** | Teheran | — | — | — | — |
| **Straits Settlement** | Singapore | — | — | — | — |

**AFRICA.**

| **Egypt** | Cairo | 50.5 | 52.3 | 53.0 | 41.8 | 43.9 |
| | Alexandria | 47.6 | 49.7 | 51.8 | 41.8 | 44.2 |
| **S. A. Union** | Capetown | 21.3 | 21.6 | 22.7 | 22.9 | 23.8 |
| | Johannesburg | 25.3 | 24.3 | 23.7 | 24.5 | 25.7 |

**NORTH AMERICA.**

| **Canada** | Montreal | 32.8 | 28.7 | 27.8 | 27.0 | — |
| | Toronto | 22.6 | 21.1 | 21.6 | 19.5 | — |
| **Mexico** | Mexico | — | — | — | — | — |
| **U. S. A.** | New York | 20.8 | 21.2 | 21.6 | 20.9 | 20.5 |
| | Philadelphia | — | — | — | — | — |
| | Chicago | — | — | — | — | — |
| | Cleveland | — | — | — | — | — |
| | Detroit | — | — | — | — | — |

**SOUTH AMERICA.**

| **Argentina** | Buenos Ayres | 24.8 | 23.6 | 23.2 | 23.2 | — |
| **Brazil** | Rio de Janeiro | 23.2 | 22.8 | 21.6 | 21.7 | 21.4 |
| | Bahia | — | — | 30.0 | 30.8 | — |
| **Chili** | Santiago | 25.5 | 27.0 | 30.1 | 30.6 | 30.5 |
| | Valparaiso | 32.3 | 33.8 | 36.5 | 43.1 | 40.2 |
| **Peru** | Lima | — | — | — | — | — |

**AUSTRALIA.**

| Sidney | — | 20.7 | 20.3 | 20.3 | 21.5 |
| Brisbane | — | 23.6 | 21.8 | 19.0 | 16.8 |
| Perth | 19.6 | 19.7 | 19.7 | 21.3 | 22.3 |
The birth rate, in which all the nations of the world are at least as much interested, demographically, as in the death rate, is even less encouraging.

The decrease in the birth rate shows the need for a higher conception of social duty in addition to a more hygienic system of life.

A reduced birth-rate means national retrogression; it means that we renounce future hopes of world success; that we are committing suicide through the unborn children who should perpetuate our race. It means that we accept the risk of being conquered in years to come by those peoples who, having a different conception of their duty to life, have insured the increase of their population, or at least have not allowed it to drop below a certain level.

The data examined refer to 61 of the greatest towns in the world, 42 of which are European towns and 19 outside Europe. They give us the following comparative figures:

**Europe**

<table>
<thead>
<tr>
<th></th>
<th>1925</th>
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<tbody>
<tr>
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<tr>
<td>Moscow .</td>
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<td>24.9</td>
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<td>Naples .</td>
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<tr>
<td>Barcelona .</td>
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<td>23.3</td>
</tr>
<tr>
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<tr>
<td>Berlin .</td>
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<td>9.6</td>
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<td>10.0</td>
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<td>10.0</td>
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**Asia**

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**Africa**

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**America**

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**Australia**

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<td>Brisbane .</td>
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</table>

Out of the 51 towns examined, Lyons, Dublin, Rome, Turin, Genoa, Naples, Madrid and Budapest in Europe — that is to say, 8 out of 42 — show an increase in the birth-rate; and a similar increase was shown in Yokohama, Osaka, Delhi, Capetown, Santiago, Valparaiso, Sidney and Perth in the non-European towns; that is to say, 8 out of 19.

These figures certainly do no honour to Europe, especially when we consider that only 20 out of the 42 European towns exceeded the average minimum necessary to counteract the death-rate (namely, 16 per thousand) and that in several of these 20 towns there is a tendency to decrease; while outside Europe all the towns examined exceeded the average-minimum rate.

***

We are able to give a final comparison for ten towns only of the three different rates: general death-rate, infant death-rate, and births, the necessary data for the other towns not being available.
1929

<table>
<thead>
<tr>
<th>City</th>
<th>General Mortality per 1000 inhabitants</th>
<th>Infant Mortality per 1000 born alive</th>
<th>Births per 1000 inhabitants</th>
<th>Difference + or — between births and Deaths</th>
</tr>
</thead>
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<td>101</td>
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<td>- 0.3</td>
</tr>
<tr>
<td>London</td>
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<td>70</td>
<td>15.7</td>
<td>- 2.3</td>
</tr>
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<td>86</td>
<td>9.6</td>
<td>- 2.1</td>
</tr>
<tr>
<td>Vienna</td>
<td>14.4</td>
<td>79</td>
<td>10.0</td>
<td>- 4.4</td>
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<tr>
<td>Moscow</td>
<td>15.0</td>
<td>131</td>
<td>24.9</td>
<td>- 9.9</td>
</tr>
<tr>
<td>Rome</td>
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<td>92</td>
<td>22.8</td>
<td>- 10.0</td>
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<tr>
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<td>115</td>
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<td>+ 7.8</td>
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<tr>
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<td>113</td>
<td>24.0</td>
<td>+ 9.6</td>
</tr>
<tr>
<td>Cairo</td>
<td>26.7</td>
<td>211</td>
<td>43.9</td>
<td>+ 17.2</td>
</tr>
</tbody>
</table>

The highest contribution hygiene can give to demography is to combat the causes of general and infant mortality.

In the matter of the birth-rate, on the contrary, it can be of little or no use until education has brought about a change of attitude in the mind of the citizen and a realization of his duty to himself, to his country and his race.

PERSONAL HYGIENE

Mens sana in corpore sano.

Prevention is better than cure.

The need for the propaganda of personal hygiene, both for the individual and for the public good, is obvious. It is by tackling the individual that we can prevent and treat disease in the mass of the population. He who takes care of his own person, who fights and routs the germs of disease, and succeeds in himself avoiding contagion, accomplishes a work which is of benefit not only to himself, but also to his neighbours.

One of the most important tasks of the cinema is to teach hygiene and to arouse in the individual a sense of responsibility towards his own health and that of his neighbours.

Modern knowledge has diffused everywhere the most common facts of preventive hygiene, the principles of which are, however, known only to a few. It is therefore necessary to pass this information on to the mass of the people of all classes. The cinemagraph, which is the finest publicity agent, has every opportunity for assisting in the war against disease waged by governments and hygiene institutions, Red Cross Committees and Sanitary Squads, assisted by the individual work of hygiene scientists and students.

It owes this genius for propaganda to its unique gift of showing things visibly, so that all eyes may see, and also to its ability for poking fun at bad habits - Castigare ridendo mores.

For the film, even if intended for hygienic propaganda and genuinely instructive, can be really amusing; it therefore attracts the people and shows them, in an entertaining way, the first principles of the science of health. In proof of this we quote from a Saigon newspaper on the screening of a hygiene film: «To tell the truth we went unwillingly to the cinema. We came away pleased both with what we had learnt and with the way in which it had been presented». How many people, who have gone to educational films expecting to be bored, have
had to confess that they have often found that it is just these films which make the best impression; that, even if they are not beyond criticism, they arouse new ideas and give food for thought. So that educational films may attract a larger audience, it is necessary to give them attractive titles and to maintain interest in them by means of a plot into which the ideas one wishes to impart are interwoven. This applies especially to those films which are not meant exclusively for such people as already understand and agree with the principles inculcated, but which, being shown to the general public, insinuate their lesson cunningly and convey their warning to the most ignorant.

Theodore H. Sierks, of the Division of Health Education, Los Angeles County Health Department, recently called attention in America, in an open letter to the Film Daily of New York, to the great hygienic propaganda which can be carried on by the cinema.

All over the world, the power of the cinema for health propaganda has been recognized; doctors and philanthropists have contributed to its development. A great number of scientific films dealing with medicine and surgery, addressed to scientists and students, have been produced to teach about the structure of the human body, the development of illnesses, and surgical methods of operation. At the same time, not a few films have been produced for the general public with the object of teaching them the most elementary ideas concerning hygiene and the prevention of disease. In this respect the famous motto of the temple of Delphi «know thyself» — which might well be adopted as the universal slogan for the preservation of health — ought to be completed by the injunction «protect thyself». We must insist on the fact that besides teaching the means of defence, one must, at the same time; arouse the necessary wish and will in the individual. Many people to day have the necessary knowledge, but they do not use their energy to put it into practice. Mere teaching is not enough, one must also educate and convince the public.

The educator’s first task is to use the simplest method of contrasting the right and wrong ways of doing anything — even if it be merely a question of dusting, washing one’s hands, or eating. Moving pictures are much more efficacious than stationary ones (e.g., posters); the lecturer can call attention to the development of dental trouble owing to unsuitable foods, or the compression of the intestines caused by sitting in wrong attitudes. Nothing is so efficacious as the cinema for impressing on the spectator certain details to which we pay no attention in every-day life. It may seem strange to assert that the image of anything may make a much greater impression than the thing itself. The fact is that habit has blunted our perceptions. To see a person in a tram coughing in some one else’s face — so long as it is not our own! — does not arrest our attention so sharply as to see it on a film, shut in by the frame of the screen, and very obviously stressed. All around we see children playing in dirty yards; the cinema calls our attention to it, and shows it to us «close-up», thus revealing all its nastiness. As the separate scenes are presented to the view, the spectator clearly recognizes what is «bad», «mistaken» or «unreasonable».

As was proved in November 1929, during a «health campaign» organized by the Italian Health Department, it is necessary to catechise the people thoroughly on the importance of preventing illness and the carrying-out of due precautions. It is futile to treat only sick people, who have already caught a disease; we must address ourselves to those who are well, or believe themselves to be so, and tell them how to preserve their health by fending off the causes of illness, discovering the almost imperceptible beginnings, taking precautions in time and correcting bad habits and vices. The «Health Campaign» laid great stress on the necessity of popularizing «regular examination of healthy people», or putatively healthy people, without neglecting other measures of preventive medicine, especially anti-diphtheric inoculation. During this month of intensive propaganda, recourse was had to all modern methods of publicity, not last among which were cinematographic exhibitions. (See also Dr. Giovanni Perilli «La Medicina
Many countries have established travelling cinemas, so as to bring even to the most remote country places instruction on the advantage to health of the observance of hygiene. The farm worker, who is almost always cut off from all intellectual contacts, is in great need of teaching and propaganda on the new methods of hygiene. The travelling cinemas carry out very useful work in this respect. Motor-cars carrying cinematographic apparatus and several films are sent around, and lectures are given, illustrated by films, on common illnesses and how to prevent them. Belgium, Bulgaria, Egypt, France and her colonies, India, Italy, Poland, Roumania and Russia are the countries which up to now have made most use of the educative possibilities of the travelling cinema.

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It may be asserted that hygienic films and those dealing with social welfare are, by their origin and aims, of an international order. The need to know the course of an illness, how to fight it, and how to protect the people from contagion is universal, and should be so considered even if the disease is confined to a particular country. In fact, even in the case of certain illnesses that, for climatic or other reasons, chiefly infect certain countries, the cinema cannot (except under special circumstances) reflect national measures only.

In addition to purely national production, it would be well to create, through the efforts of institutions of different sorts interested in the matter, a series of films of international interest, representing phenomena not confined within the frontiers of one country, but of interest to the world at large. Furthermore, the cinema could make public with the minimum waste of time, the knowledge of different modern precautional methods in use in various countries and recent scientific discoveries; it could also warn against dangers not already known, the importance of which has not yet been fully grasped.

We will now give some account of what has recently been done by the film in teaching hygiene and preventive medicine.

There are already films demonstrating the dangers of over-fatigue, the need of brushing ones teeth every day and washing ones hands before meals, and of using soap liberally. Some films, such as A Healthy Man's Morning (produced in Russia by the stage director Rochal) shows the importance of normal rest and sleep, dental hygiene, hygienic clothes, low-heeled shoes, etc. (Les nouveautés du Cinéma soviétique, Moscow).

Dental caries and diseases of the mouth can be easily prevented. The cinema shows the importance of wholesome and regular food for the preservation of a healthy mouth. The recent meeting of the «Dental Society» at Chicago showed how scientific films dealing with the care of the teeth are rapidly increasing. Thirteen films were screened during the assembly: the most interesting was that of Dr. H. W. Mac Millan, of Cincinnati, showing the physiology of mastication. Dr. T. B. Mc. Crum has also produced two films on the care of the teeth (Movie Makers, New York). The Chilian Government, convinced that the health of the people depends on proper feeding, has decided to open a great campaign on this subject, making use both of the press and the cinema (Giornale di Sicilia, Palermo). In Italy, the medical officer of Trieste, with the object of fighting public ignorance concerning the care of the mouth screened at the Fenice Theatre a film which shows the damage caused by neglect and the direct and indirect illnesses which may be caused by dental caries. This was preceded by a lecture by Prof. Grandi on How diseases of the mouth and teeth affect national economy. (Il Piccolo, Trieste). At Trieste also, Dr. Rosato gave a lesson on stomatology and the hygiene of the mouth, illustrating it cinematographically (Il Piccolo, Trieste). In Great Britain, at Birmingham, 50,000 school-children and their families were present before Christmas at the screening of propaganda films dealing with the care of the teeth, which had been produced in co-operation with the British
Dental Board (Daily Film Renter, London). At Salford (Lancs.) during "hygiene week" in February of this year, many films were shown dealing with the care of the person, the teeth, and the benefits derived from natural and artificial sun-treatment etc. During the whole of the campaign lectures were delivered and films screened in public halls (Daily Film Renter, London). In Germany, the Ewald-Film, of Berlin, has produced a film, under the direction of Dr. A. Cyst of the University of Zurich, dealing comprehensively with dental hygiene (Film-Kurier, Berlin). The Boehmer-Film of Dresden has also screened a film dealing with the same subject (Bildwart, Berlin).

The National Motion Pictures Co of Indianapolis recently produced a film entitled The Confession of a Cold., so as to teach four things: the seriousness of colds, their causes, how to cure them, and how to prevent them.

The film conveyed a number of obvious, but oft unheeded lessons: how bronchial and pulmonary diseases are caused by germs contained in expectoration. You must not spit on the ground! When coughing or sneezing always hold a handkerchief in front of your mouth! Pay attention to the early symptoms of tuberculosis: coughing, persistent fever, spitting blood and loss of flesh.

In Paris, Jean Benoit-Lévy has produced a set of films dealing with the prevention and cure of tuberculosis in adults and children: Tuberculosis in poor homes and the healthiness of Garden Cities; The protection of new-born babies by means of hygiene and B. C. G. (Bacillus Calmette-Guerin); A Messenger of health: the district nurse; The preventive institutes of Cantalen and Flavigny; The working of a dispensary and "Placement familial". The work of the Placement familial des Tout-Petits, founded by Dr. Léon Bernard, consists in removing, as soon as possible after birth, babies from their mothers suffering from contagious tuberculosis; the babies are sent to healthy families living in the country near a small social hygiene centre. A health visitor inspects the children in the families where they are put out to nurse and controls the distribution of milk. Thanks to these institutions, many children of tuberculous parents are saved, if removed immediately after birth from their contagious mothers. In the same series are films showing sanatoria for the treatment of tuberculosis of the bones, as those at the sea-side at Zuydoote and Berck, or the one at Odeillo (Eastern Pyrenees); Sanatoria for the treatment of pulmonary consumption at Bligny and The sanatorium village of Passy-Praz Coutant (Haute Savoie). In the latter the patients are divided according to their social position. In these films, which are intended for the public, all merely scientific or disgusting scenes have been avoided. Another film by J. Benoit-Lévy deals with propaganda against tuberculosis caused by insanitary houses; it is given in dramatic form and is called Children's Souls.

In Italy a film was shown at Cremona, during November and December, illustrating all that is being done in the city and the province against tuberculosis (Regime Fascista, Cremona). Dr. Pino Cheni gave a lecture at the «Università Popolare» at Trieste on The latest treatment of tuberculosis illustrated cinematographically (Il Piccolo, Trieste). The German Central Committee for the Fight against Tuberculosis (Deutsches Zentral-Komitee zur Bekämpfung der Tuberkulose) has issued a film entitled Kissing Forbidden.

The French National Office of Hygiene has produced a film dealing with diphtheria, showing how this terrible disease can be cured by Dr. Ramon's vaccine (Sémaphore, Marseillais).

In Madrid, at a meeting of the Society of Hygiene, presided over by Dr. Mariscal, Dr. Palanca dealt with the problem of typhoid fever in Spain. He screened various graphs showing the diffusion of the illness in various Spanish provinces and asserted that there has been an increase of cures throughout Europe during 1929 (El Debate, Madrid). In Russia, the Vufku at Kiev has produced a film entitled Typhus and dysentery (Association pour les Relations Culturelles avec l’Étranger, Moscow).

The Sanitary Authorities of S. Paolo of Brazil have organized the production of films for instructing the public how to take precautions against yellow fever. The educational gifts of the film are of special value in
the centre of Brazil where popular scientific instruction is lacking (O Pais, Rio de Janeiro).

In America, Dr. J. H. Means has produced several teaching films, which form the nucleus of a medical cinematograph. Amongst the most interesting is a film on the technique of the transfusion of blood, and another one, in the course of being produced, dealing with hernia from the point of view of diagnosis and of operation (Movie Makers, New York).

Hygiene, both general and private, for the public at large and for the individual, thus wages its war of prevention of disease.

We have only been able to quote a few examples of the valuable work in this domain that is being carried on everywhere with help of the screen. The examples are few, but the most recent. They prove that at the present time, all over the world, personal hygiene is considered the necessary basis of the problems of social well-being and population, which are of interest to the whole world.

THE ANTI - ALCOHOL AND ANTI DRUG CAMPAIGN

Alcoholism is a form of chronic poisoning resulting from habitual addiction to alcohol, even when this does not produce actual intoxication.

It is a common error to suppose that alcohol is necessary to persons engaged on heavy work; that it imparts energy and restores strength. As a matter of fact, alcohol is not necessary to anyone, but is harmful to all.

It affords an artificial excitation which soon gives way to physical and moral depression and weakness.

The habit of drinking spirits soon leads to alcoholism. But men who are used to daily imbibing an excessive quantity of wine, beer, etc., become alcoholized in time as surely as the spirit bibber.

Aperitifs and «cocktails» (absinthe, vermouth, bitters) and aromatic liqueurs and cordials — such as créme de menthe, etc., are still more deleterious, because they contain other poisonous essences in addition to alcohol.

Thus, even if we regard wine and beer as drinks that give «tone» to the organism — a point on which the opinion of doctors and specialists is very much divided — it nevertheless behoves us to carry on a vigorous campaign against alcoholism proper, that is to say against the abuse of all kinds of drink — even in the form of «tonics» — and especially of spirituous drinks, which do not strengthen, but excite artificially, and necessarily produce organic and moral depression.

The drink habit renders men indifferent to their families, causes them to neglect their duties to society, takes away all pleasure in work, and leads to poverty, theft, and crime. When it leads to no more sinister abode, it fills the hospitals, for it is a cause of the most varied and terrible maladies: paralysis, madness, stomach and liver diseases, and dropsy; it is also a frequent cause of tuberculosis. Furthermore, it complicates and aggravates acute diseases, such as typhoid, pneumonia, and so on; which may take a light form in a healthy man, but are wont to be fatal to drinkers, owing to their enfeebled powers of resistance.

Nor must we forget that the sins of the fathers are visited on the children. How can a healthy progeny be born of alcoholized parents? If once they survive the first months of life, the unfortunate children run the risk of growing into epileptics or weak-minded, and are apt later on to succumb to tuberculous meningitis or phthisis.

In the «Carrozza di Tutti» (1), Edmondo De Amicis describes tersely a tragic scene he witnessed between a man and his wife in a public tramcar. «The man kept on staring at me fixedly, with a sneer on his frothy lips, defiantly rolling his head, as if trying vainly to eject the insult that rattled in his spirit-burned throat, like phlegm in that of a dying man. Suddenly, as though his legs had been smitten, he doubled up

(1) »The Public Car», Milan, Treves, 1902.
Then, after he had been got down « I still gazed for a while on the inert body, stretched out like a corpse, with bare head lying in the dust, and, standing beside him, at the woman, who continued to cry out with clenched fists, as though flinging to the winds all the hatred of her sex against the infamous poison that turns home into hell and condemns women to bear an accursed progeny, predestined to gaol and hospital ».

But drink is not confined to the working classes only; a point to which De Amicis subtly calls attention: « At a certain point a drunken man drew the attention of one member of the company, who pointed him out to the others, and all started to stare at him; he had fallen asleep and became the butt of general scorn and laughter. A row of five shilling bottles sneering at a mug of four ale! »

In America, Mr. Leif Jones, President of the United States Temperance League, declares that the cinema has its share in the good results obtained by the anti-drink campaign (The Daily Film Renter, London). An American film entitled « The Police Force », which was shown at Frankfort on the Main, made a considerable impression; it depicts with striking realism the fight of the authorities against the boot-leggers, life in the low quarters of Chicago, and the dangers that beset secret police agents. (Frankfurter Zeitung, Frankfort). In Germany a film has been produced on « Heredity » showing the alcoholic and criminal propensities of the children of degenerates. This film is inspired by the doings of the Düsseldorf vampire. The American periodical « Variety », however, holds the view that this film is merely sensational and is not likely to pass the United States censorship.

In Great Britain, Mr. F. Evans, in a lecture on « The Cinema and Modern Society », acknowledges the beneficent influence of the cinematograph, to which he attributes two outstanding merits: that of having averted the Red Peril and of having played a worthy part in the anti-drink campaign (The Cinematograph Times, London). Under the suggestive title « An Enemy of the People » a film has been released in Austria by the Pan Film Company of Vienna, depicting the excesses caused by wine, the dangers of giving drink to children, a bloody row in a public house, and, lastly, the rehabilitation of a workman in a home for inebriates.

In Switzerland, there has been shown at Geneva an anti-drink propaganda film entitled « Pierrette » which has met with great success (Journal de Genève). In the days preceding the monopolization by the Federal State of all wines and intoxicating liqueurs, a film « Switzerland and Alcohol » was shown everywhere, down to the smallest villages, with a view to influencing the people to vote for the monopoly. This film demonstrates the consequences of intoxication, and the necessity for the government to control the manufacture of alcohol. In order to impart an entertaining character to the film, some scenes were shot of vineyards, the grape harvest, and in the wealthy vine-farms belonging to the Swiss peasantry (Emmenthaler Blatt, Langnau).

But if alcohol is harmful to health, it is no less deleterious to the working capacity of man. From this point of view a number of films have been produced in Russia: among others the propaganda film « The Alarm » by scene director Petrov of the Sovkino, which depicts the decline in the working powers of a workman under the influence of intoxication. An accident he incurs at work induces him to reform his ways (Bulletin d'Informations, Moscow). The Mejrabomfilm is also preparing, with the assistance of the People's Public Health Commissariat, a film on alcoholism, entitled « Can you recognize yourself? » (Les Nouveautés du Cinéma Soviétique, Moscow). Another Sovkino Film, staged by Yourtzeff, entitled « A Strong Character » represents the efforts made by young communist pioneers to combat drink, which was undermining the health of their parents (Association pour les Relations Culturelles avec l’Étranger, Moscow). « The Oblique Line » produced by the scene directors of the Ivanov and Galaè, Cos. illustrates the unequal fight of a workmen's Club against the public houses. The intervention of the men's wives leads to victory. The story of the « The Tankala Hostess » is on the same lines; this is the work of scene director Sbitozarov, and contrasts social rural forces and the kulaks; the pea-
santry at last succeed in replacing the local pub by a tea-room. Among scientific films, M. Tenike has produced one on « Alcohol » screening a libretto written by the People’s Public Health Commissioner Semachko and Prof. Furtikov, showing the experiments of the Physiological and Pathological Institute and of the Institute for the Study of Nervous Activities, attached to the Communist Academy. (Bulletin d’Informations, Moscow).

A new enactment requires all scenes depicting drunkenness to be banned in Singapore; this drastic measure is justified by the apprehension that if the natives watch white men, even on the screen, disposing themselves in an unseemly manner under the influence of drink, it may tend to increase the « yellow peril » (Variety, New York).

While the film is thus on all hands contributing its share to the anti-alcohol campaign, many persons complain that, on leaving the cinema, the public is greeted at every street corner by bars and public houses. The contrast is striking.

The film could fulfil a useful task by stressing the advantage there would be in handing to workmen who do heavy work in houses — furniture movers, carriers, etc. — instead of the habitual glass of wine or beer, its equivalent value in cash, which might serve a more useful purpose.

Anti-dope propaganda films have been shown with advantage in many countries under a variety of titles, as for instance « The White Poison », shown at Buenos Ayres, depicting the social dangers and evils attaching to the abuse of opium, cocaine, and morphia. (Imparcial, Buenos Ayres).

A film on drugs has also been prepared in Egypt, under the direction of Hussein Bey Helbaoui, director of the Cinematographic Service at the Egyptian Ministry of Agriculture. It aims at warning the Egyptian youth against the drug temptation and illustrates the disastrous effects on health of drug taking. The latter part of the film is vocal, Hussein Bey Helbaoui delivering a short address in Arabic and in English to explain the object of the pictures (Bourse Egyptienne, Cairo).

This brief survey does not claim to have exhausted all that has been done by the film in the fight against drink and drugs. Many other films, as for instance « Narcotics », have been made and successfully exhibited. We will return to the subject in later issues of the Review and will always be grateful to persons who call our attention to new films dealing with these problems.

**THE FILM IN THE SERVICE OF EUGENICS AND CHILD WELFARE**

There are three points to be considered in connection with what is generically spoken of as « infant welfare », namely:

- Pre-natal conditions (eugenics);
- Childbirth;
- Baby-rearing.

**PRE-NATAL CONDITIONS.** — The most primary hygienic considerations counsel:

a) The necessity of proper care of mothers-to-be: disinfection and cleanliness of lying-in rooms, linen, and person;

b) a healthy and « non-toxic » condition of the mothers; wholesome diet, fresh air, light, sun, pure water, etc., and the avoidance of all that may represent a risk and a danger for the child to be born: alcoholism, and so on;

c) training the future mothers to a knowledge and understanding (not merely « hygienic ») of children: nursing, cleanliness, disinfection, etc., by means of special mothercraft courses, more particularly in the poorer districts (such courses have been organized in Germany, England, France, the United States, Italy, etc.).

The ideal would be for the future mother to follow courses of instruction, illustrated by film and otherwise, on the duties in front of her; no better means than the film offers itself for training women in the universal profession of « mothercraft ». In Russia a film entitled: « Hygiene for Women » has been produced by J. Poscisky. (Les Nouveautés du Cinéma Soviétique, Moscow).
CHILD BIRTH. — This is a strictly medicosurgical domain. Hygiene, however, plays its part, inasmuch as it is the logical complement of the doctor’s care at the moment of birth, in the form of prophylaxis of contagious diseases, the disinfection of eyes, mouth, and body, and the sterilization of clothing.

But the specialized character of the hygienists’ and doctor’s work in this domain does not allow of our dealing with it to any purpose in a general Review, which has to consider hygiene merely as a preventer of disease. This aspect will, therefore, be dealt with in due course in an issue dealing entirely with scientific cinematography.

BABY-REARING. — This is the most fertile field of child welfare work. Statistics tell an alarming tale of infant mortality, due solely to unhygienic conditions.

A baby is a physio-psychic organism in formation. Its feebleer organic resistance to disease renders it an easy victim of the lurking foe, that only a methodical observance of the rules of hygiene can defeat.

From the moment they come into the world, babies are fragile creatures demanding the greatest care: baths, disinfection of eyes and mouth, perfect cleanliness in all that touches them; the most careful attention to nourishment.

We are told that babies ought not to be kissed — at least not on eyes and mouth. Kisses are dangerous... even from the standpoint of hygiene! Nor should we taste baby’s food out of the receptacle it is fed from. Children’s hands must be kept scrupulously clean. They ought not to touch dusty or dirty objects, nor fondle animals. Their food must at all costs be kept pure and uncontaminated by insects. Swat that fly! Don’t hawk and cough when babies are around. Keep them away from infected premises and close your doors to hygienic suspects! Children must not be kept in dark or close rooms; they need fresh air, gardens, sunlight. All these are points that can be treated in a popular manner in the «movies».

In France M. Benoît-Lévy has produced a film: «The Mother to be», prepared by Dr. Devraigne. Every detail of baby-rearing of any importance is stressed herein. Experts regard it as a complete training course on the care of the new-born, so writes Henry Bouquet in the Monde Medical of Paris (vide also le Courrier Saigonnais, Saigon). The first hours of life, the handling of the infant, breast-feeding, mixed breast and bottle-feeding, the sterilization of milk, the cutting of the first teeth, insufficiency and excess of weight and their causes and remedies; the incalculable results of poverty, drink, and unhealthy dwellings, and of lack of hygiene — all these matters are lucidly and eloquently illustrated by the film, which is addressed mainly to a female audience.

In France again the Isis Co. has released a film entitled «Parquerolles», the scenes of which were shot in the island of that name which harbours a sanatorium for sick children. The film illustrates the life of the little ones in the institute, the open-air lessons and the general life and treatment. (Cinaedia, Paris). Jean Benoît-Lévy has produced also the following films: «St. Francis’s Day» «Co-operative Childhood» (School Colonies) «The Open-air School of Pantin».

Films of a like kind have been produced in Russia: e.g. the one produced by the Cultural Section of the Mejrabpomfilm «Mother and Child» — a film to teach mothers the proper care of babes and sucklings (Bulletin d’Informations, Moscow).

In Russia again the Sovkino has released a film entitled: «Our Ultimatum». This film deals with the development of healthy lungs in children. It also shows the first practical experiment made with the Choufan method in the U. S. S. R. (Assn. pour les Relations Culturelles avec l’Etranger, Moscow).

The notes on personal hygiene published in this issue refer to some films dealing with tuberculous infection and the transmission of the bacilli from mother to child.

From information received directly from the International Council of Nurses we may add that in Austria two films were produced in 1928, both dealing with the care of children. One of these has special reference to tuberculous children. Both films were made in co-operation with the Universitäts-Kinderklinik of Vienna.

There is no home production of child welfare propaganda films in New Zealand up to the present. The efforts made by Sir Truby King, when Director of the Child
Welfare Department at Wellington, however, were instrumental in obtaining the best films produced in England and the United States for the purpose.

The National Panel of Lectures, Films, etc. published by the British Central Council for Education and Health gives particulars regarding films dealing with health and child welfare produced in the United Kingdom and those obtainable from the International League of Red Cross Societies.

In England again King Edward's Hospital Fund has had a reel exhibited, entitled «A Century of Progress»; this film, which was produced in 1926, illustrates the work done on behalf of public health during that period.

The American National Health Council disposes of at least seventeen films dealing with nursing; one of these is of Canadian production and the others come from the United States. These films aim at keeping alive public interest in nursing and at appealing to the right type of woman for child welfare work. Miss Lilian M. Gilbreth, of the Frank B. Gilbreth firm, of Monclair, N. J., has issued a number of «nursing films» and other motion pictures illustrating hospital research work.

A great number of films have been produced in various countries to promote the care of children in sanatoriums and institutes. Cameraman Kaufman, in the Ukraine, has turned a film entitled «The Crèche» dealing with such matters (Kino, Kiew).

An interesting film was recently shown at the «Bath Venture Club» depicting the work done in the Bath Orthopaedic Hospital, the rickety children treated in this institute taking part in its production (The Daily Film Renter, London).

The Berlin Provincial Office for the Health and Prosperity of the Young (Landeswohl-fahrts und Jugendamt) has produced a film illustrating life in orphanages and the work done in the Reich Capital for the welfare and health of the young (Borsen-Kurier, Berlin).

The Luce Institute in Italy, working along the same lines, is bringing out a series of films dealing with juvenile interests: the Opera Nazionale Balilla (Young Boy Scouts) and other juvenile associations; mountain and seaside holiday camps; children's life in the crowded quarters and open parks of the big cities.

Sports are shown in these films, not merely as muscular exercise and amusement, but as an essential feature of health cultivation. The germs of disease are repelled by lungs and bodies that have been immersed in sunlight and fresh air.

Child welfare is in fact a primary consideration in all civilized countries at the present time.

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Puericulture is one of the highest expressions of social health providence. In another part of this issue of the Review attention is called to the statistical evidence on the alarmingly high rate of infant mortality in the big cities of the world during the last five years.

This high death-rate points to something radically wrong in the general treatment of infants, and is a matter of grave social, moral, and demographic importance, especially since it involves not only a disastrous waste of life, but the likelihood of an unhealthy surviving population.

All this stresses the necessity of strengthening the campaign waged by social institutes and private persons on behalf of childhood - a campaign in which the film is the most effective of all weapons to hand. For the cinematograph gives us a realistic and convincing picture of the peril and conveys a vivid and a speaking lesson on the duties of mothercraft.

THE PROJECTION HALL OF THE DRESDEN INTERNATIONAL HYGIENE EXHIBITION

One of the most interesting features of the International Hygiene Exhibition which is to open this month at Dresden is a projection hall (Lichtspielhaus). It has been planned and directed by Herr Fritz Behner, who for many years past has been president
of the Dresden exhibitions and Director of the Film publishing house that bears his name, which specializes in the production of educational films of a scientific and propaganda type.

The Lichtspielhaus dates back to the first Dresden exhibitions and its organization has been constantly improved in the light altogether excluded. The Cinema Office of the Exhibition has brought out a whole series of films at the request of the interested firms. Among hygiene propaganda films belonging to the Lichtspielhaus collection we may mention «Aus Not geboren» («Children of Poverty»), for propaganda work among the masses, a film which has already gone of experience. We may mention that, for the first time in Europe, sound films were exhibited here two years ago (Lignose-Breu- ing System). The technical material ensures perfect projection and the public, in addition to a highly commodious hall, has a trained staff at its service ready to give any explanations that may be wanted on matters connected with the cinematograph.

Films of an educational, hygiene and social welfare interest have been shown at the Lichtspielhaus. Commercial films are not the rounds of 150 German cinema halls and has also been projected on the trans-atlantic liners of the German shipping companies.

The projection programme of the Lichtspielhaus is arranged in advance from week to week, and the fact of the exact day and hour when each film will be shown being known in advance is a great advantage to visitors to the exhibition who are specially interested in some particular subject.
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<tr>
<td>Coronas, gold-tipped (in packets of 20)</td>
<td>4.90</td>
<td>Royal, (in boxes of 20)</td>
<td>34.65</td>
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<tr>
<td>Triumph, Rose petal-tipped (in packets of 20)</td>
<td>4.20</td>
<td>Heros, (in boxes of 25)</td>
<td>34.44</td>
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<tr>
<td>Sphinx, straw-tipped (in packets of 20)</td>
<td>4.30</td>
<td>Novitas, (in boxes of 20)</td>
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<td>Coronitas, gold-tipped (in packets of 20)</td>
<td>3.15</td>
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<td>17.48</td>
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<td>2.70</td>
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The Director of the International Labour Office
The Director of the International Institute of Intellectual Cooperation are present at the meetings in an advisory capacity.

OPRESCU Prof. Giorgio, Secretary.
de FEO Doctor Luciano, Director.
We have to inform our readers that the back numbers of the Review are almost entirely out of print. We therefore regret to be unable to comply with any further requests that may reach us for past issues and inform our readers that all new subscriptions as from the 1st July 1930 can only be accepted for the issues published in the course of this year.
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PUBLICATIONS OF THE I. E. C. I.

Institut International du Cinématographe Educatif (Inauguration). Agotada

Enquête sur le cinéma faite dans les écoles de Neuchâtel, Lausanne et Genève (par A. de Maday).

Social Aspects of the Cinema.
Le cinéma sous ses différents aspects d'ordre social.
Aspectos sociales del cinematógrafo.
Gli aspetti sociali del cinema.
Die sozialen Aussichten des Kino.

ABOUT TO BE ISSUED

The Cinema and Eyesight.
Le cinéma et la préservation de la vue.
El cinematógrafo y la vista.
Il cinema e l’igiene della vista.
Das Kino und die Hygiene des Auges.

Cinema and Hygiene.
Le cinéma au service de l’hygiène.
El cinematógrafo al servicio de la higiene.
Igiene e cinematografo.
Hygiene und Kino.

The Cinema and Scientific Management.
Le cinéma au service de l’organisation scientifique du travail.
El cinematógrafo al servicio de la organización científica del trabajo.
Organizzazione scientifica del lavoro e cinematografo.
Das Kino im Dienste der wissenschaftlichen Arbeitsorganisation.
In conformity with the lines laid down by the Governing Body of the I. E. C. I., the next number of the Review will be devoted to another special question: the utilization of the cinema for the purposes of scientific management.

The I. E. C. I. has devoted great care to the study of this question, which it means to deal with comprehensively in view of its novelty and the very scant material at present existing in its regard.

This special number ought, therefore, to be of particular interest. In order that a single issue may deal with the whole of the question, we have decided to issue a double number for July-August, consisting of over 200 pages, which will appear early in August.

We are confident that our readers will second our constant efforts to make of the Review a great open tribunal for discussion and enquiry, by collaborating with us in the ever wider diffusion of the publication.
Everyone is aware that alone and unaided it is no easy matter to attain to perfection in sporting technique. Any man who is really resolved to get into proper training and to show his mettle is likely to attain his end sooner or later and more or less completely. It is all a question of time and degree. In any case, he can hardly take the wrong turning, as only one path is open to him. There are not a variety of ways to choose between to cultivate courage and perseverance. But the actual action or movement involved by a sport is a different question. We must make quite sure that the movement is just the right one and conforms to the correct "mechanical figure". Each individual, for instance, differs from his fellows from the standpoint of the length and proportion of his leverage; he may differ entirely from his neighbour and resemble to some extent another man; but, in any case, he cannot get away from the limitations of his physiological ensemble, which, rendered still more complex by the inevitable presence of psychophysiological factors, represents a positive or negative coefficient, as the case may be, of his sports efforts.

No person addicted to watching sports can have failed to note that the number of athletes who do not know how best to utilize their advantages is almost equal to the number of those who seem unable to correct their natural disadvantages. But we can hardly perceive such points in respect of ourselves. Although for years past I have called attention to the usefulness of an acquaintance with the "mechanical figure" of each individual (a thing now made possible by X-ray photographs) the importance of this factor of bodily training is not apparent on the surface.

In any case, this is merely a starting point. There is nothing like the reproduction of a given movement to enable us to correct its defects and increase its efficiency. The sportsman has to depend in this matter on the eyes of his trainer or comrades. But he ought to be able to use his own eyes.

*It is here that the cinema comes in.* An instructor or yesterday's adversary, who interrupts his own exercises to catch, may offer criticism: if this is done frankly, without mincing matters, but without exaggeration, it may help somewhat. But it is generally a very difficult matter to realize just what are the defects alluded to.

If once a man can see with his own eyes, he is readily convinced; and then it becomes a comparatively easy matter to correct faults in posture and muscular mobilization, and to judge of the expediency or intensity of certain efforts and of his own skill in applying the law of least resistance — that most important factor of bodily economy, and hence of final success.

It may be objected that I here have in mind those rare candidates for championships — the objects of bets in international contests, in whose regard points of physical development and training are an important matter. Not a bit of it.
I am speaking for everyone. Now close on thirty years ago, when considering «incitements to sport» likely to influence the young, I placed in the first rank this goad, practically unknown to or unrealized by our forefathers of old: utilitarianism. «Let us not count» — I then wrote — «either on the pursuit of health or the culture of beauty». Do not let us even wish that these incentives may play a leading part with the young, since such ambitions would tend to make them self-centred to a degree conducive to withering and sterile egotism. But once let it appear in bold letters on the screen of public opinion that the sportsman is at an advantage in the struggle for success — that he runs a better chance than non-sportsmen — that sports make him apter to face «those changes of environment, trade, and position, habits, and ideas which the fertile instability of modern life renders inevitable...» (1) then athletics will «catch on» with all. And this is just what took place. And the tragic happenings of 1914-1918 proved that sport was no less valuable as a preparation for the trials of war than for the works of peace.

In Germany and Italy we have recently witnessed some interesting efforts to nationalize sports. The means may differ, but the end is the same. In the latter country we find a form of up-to-date Lycurgus rule, while the former offers something of a compromise between Spartan constraint and that Athenian liberty to which England holds fast. Other countries are hesitating between the two tendencies — which, after all, may not be so incompatible as we used to suppose. We shall learn much from these experiments.

Whatever may be said of methods and circumstances, the utilitarian idea holds its own. In the uncertainty as to what the «fertile instability of modern society» may hold in store for him, every young fellow is the better for knowing how to manage a machine, a horse, or a boat, how to use his fists, how to save himself by a run, a jump, or a quick recovery... from awkward and dangerous situations. Let alone that in this way he is also able to help others and that the community of which he forms a part is the richer for his increment of productive efficiency.

All this is «sports education», which people will persist in confusing with mere physical education on the one hand, and on the other hand with competitions and championships — three aspects of bodily training that differ completely one from the other; three problems which complicate one another as soon as it is sought to deal with them according to the same methods and processes.

The use of the «corrective cinema» would lend itself more especially to sports education. It could render its most valuable services to those learning the several «sports» of safety, defence, and locomotion. It would render possible economies of time and money, while producing better technical results than those at present achieved.

The practical difficulties are not very great. While awaiting the time when each gymnasium, riding-school, shooting-gallery, swimming-bath, etc., shall pos-

sess its own cinematographic equipment — a by no means extravagant fancy (who, indeed twenty years ago would have dreamed of the automobile as within the reach of the American workingman, as is the case at the present day in so many American factories?) — while awaiting this, then, the cinema is well able to go to the sportsman, wherever he may be training, or the latter can remove bag and baggage to the proximity of the camera. The first suggestion seems the best from many points of view, and especially because the training sportsman should be «caught on the hop», so to speak, in his familiar surroundings, and even, if possible, unawares. In this manner only can we obtain precisely «the curve of his technical defects». And that is just what we want, if I am not mistaken. The more indiscreet the camera, the better its chance of acting as a corrective.

Pierre de Coubertin.
THE SLEEPING BEAUTY IN THE WOOD.

(A FREE VERSION OF PERRAULT’S FABLE).

(From the Spanish)

Note

The original version of Perrault’s fable occupies only five pages. In order to adapt it to the cinematograph, it has been necessary to introduce some new scene into it, and even entire parts, since the shortest cinema play is wont to last one hour I have, however, respected the precious folklore fable, and kept as far as possible to its essential lines.

In this version I have attempted a number of things with greater or lesser success.

The number of fairies specified in the banquet scene is seven. Since each of these has to express her wish, it would have been necessary to repeat seven times over the same scene—a process which would be monotonous on the screen. But the picture would have been lacking in animation if a lesser number of fairies had been present. In order to avoid this difficulty in the scenario, I have made the fairies appear in groups of three; each group acts as a single person and expresses the fairy’s wish.

Certain Christian symbols and phrases that do not appear in Perrault’s original have been introduced into this version. Infantile and popular fancy are so deeply impregnated with Christianity, that the images and phrases introduced will appear quite natural.

I have also endeavoured to simplify the story by suppressing one character in the second part: the old woman who is unaware of the order throughout the kingdom against spinning and continues to spin in her secluded nook. It seemed more plausible to make the bad fairy play the cruel part of deceiving the Princess and let her carry out herself the prophesy that she should be pricked by the spindle.

There is a hiatus in Perrault’s fable between the scene of the baptismal banquet and the Princess’s slumber. I have sought to fill in this long gap by introducing the pictures illustrating the Princess’s upbringing.

Perrault’s fable does not suggest any effort on the part of the parents or courtiers to prevent the fulfilment of the doom.

This is in fact the triumph of the fatalistic views of the ancient world. In the third part of this version I have introduced certain scenes at variance with this classic view of destiny: the Princesses make a determined but vain effort to overcome the doom.

In the pictures inspired by the legend and in its several versions, it is taken for granted that the palace and all its denizens fell asleep. It does not seem out of place to include the parents of the Princess among the victims of the doom.

The division of the story into pictures does not follow any rigorous cinematographic order, but merely a coordination of ideas necessary for logical grouping.
All minute details of architecture, costume, etc. have been left out, assuming that scene directors and producers are those best fitted and best able to reconstruct the scenes proper to the period.

PART I.

BIRTH OF THE PRINCESS

1st Picture

A typical eastern palace: either after the style of the Kremlin, or else resembling some Hindu temple or of Maya architecture.

A monumental stairway in the centre of the façade starts from a mound in front of the palace.

On either side of the palace and behind it a great fir-wood stretches to the horizon.

The palace is adorned with banners and surrounded by triumphal arches, as though for some great fête.

An oriental crowd of rich and poor slowly take up their position on the rise in front of the palace.

2nd Picture.

As in the pictures of the Magi and shepherds of Bethlehem, persons of all stations are arriving, some on foot, others on heavy cars, elephants, and dromedaries, bearing gifts sent by the governors of the Kingdom and by friendly Asiatic potentates. The humbler donors ride up on mules and asses and bring doves and birds and baskets of fruit.

3rd Picture.

When the procession of gift-bearers has passed on, the crowd moves forward to occupy the best positions near to the stairway, down which the heralds are expected to come; the air is full of eager expectancy.

4th Picture.

Three of the King’s Heralds, preceded by trumpeteers, slowly descend the monumental stairway; they halt midway, and announce, in the King’s name, the happy birth of an infant girl « as lovely as the Shulamite, as strong as Judith, and as welcome as the Angel of the Annunciation ».

5th Picture.

The crowd is thrilled with joy; the people raise on high their gifts and wave scarfs and multicoloured streamers.

6th Picture.

The donors ascend the steps preceded by the heralds, raising on high their gifts: the crowd follows their movements eagerly till the last has disappeared — a poor
boy carrying a little humming-bird, who plays with it as he goes up — they then disperse, leaving the mound at the foot of the stairway empty.

7th Picture.

The great inner courtyard of the Palace. It is paved with lovely coloured tiles like the rich Arabian courts. Ranged along the four sides of the quadrangle are brilliant coloured birds in cages; soldiers are seen changing the guard; some stand beside the columns, as rigid as marble, while others walk up and down the portico. The rich gifts brought are scattered all over the courtyard, which presents something of the confused aspect of a depot of war booty.

8th Picture.

The grand banqueting hall of the Palace decorated for a feast. The walls are lined with mirrors that multiply the palms and branches of almond-blossom that decorate the tables and hang in great festoons from the ceiling. So great is the profusion of plants and flowers that the hall suggests a beautiful garden.

In a fine crystal cradle lies the little baptised infant, now a week old; she is a lovely oriental-looking baby with almond-shaped eyes.

At either end of the board the King and Queen are seated, awaiting the arrival of the fairies. The table is laden with bowls of fruit — pine-apples, bananas, mangoes, etc.; colossal cakes alternate with the bowls of fruit and with precious porcelain jugs full of wines and sherbets. Tripods full of burning incense diffuse their perfume from the four corners of the hall.

9th Picture.

The guards stand two by two by the doorways and the fairies enter in groups of three; they salute the King and Queen and then go over to admire the sleepins-babe. The fairies appear as lovely youths and maidens. The former are all clothed in fern leaves, with a branch of myrtle at their waist; they are crowned with garlands of daisies and jasmin. Some are clothed like Greek dancers with bare legs and arms. Others are veiled. Others again are in symbolic costumes like those worn by the Sybils; these are entitled to the places of honour at the board. All of them carry wands.

After the entry of the fairies, sylphs, elves, and gnomes crowd on to the table; they turn summersaults amid the fruit bowls and the jugs of wine.

10th Picture.

The groups of fairies move in harmonious rhythm, as in the figures of a ballet. The first group of three approaches the cradle and raising their wands above the baby’s heart; pronounce the following wish:

«May the Princess be loved by all who behold her; by those who listen to her voice, and even those who only hear her name!»

The group withdraws rhythmically and makes room for another.
«May the Princess dance the dances of all peoples and sing the songs of all races!»

They make the ritual signs on the infant's mouth and feet, and slowly withdraw.

The third group advances; the fairies make a great sign of the cross above the infant and pronounce their wish:

«May the Princess never see her Kingdom at war!»

After each wish the royal parents bow to the group of fairies and thank them.

11th Picture.

As the fourth group of fairies are approaching, a loud knocking is heard at the door. The King asks his guests if any of the fairies are missing, but all shake their heads in denial. The knocks are repeated more loudly, but the guards don't open. All stand listening in the hall.

12th Picture.

Suddenly the door is flung open and an old woman, worn in body and attired in rags, enters. In her attitude there is all the violence of the Pythonesses and the Eumenides.

For a moment all the fairies stand paralyzed with amazement while the newcomer advances and stands beside the cradle.

13th Picture.

While the groups of fairies draw back with the instinctive horror that black magic always inspires, the King and Queen hasten across the hall and stand beside the cradle to protect their infant from the ominous intruder.

14th Picture.

The old Fairy stands out grimly between the royal couple. She looks formidable old, as though she had spent long years imprisoned in a tower. Her hair has grown stiff and wild like evil weeds in a field and form a grim aureole around her face; her mouth is convulsed as though uttering a curse.

Her gown, unchanged for many years, is dropping in rags from her body; instead of the golden wand, shining like a sun-beam in the hands of the young fairies, she clenches in her fist an iron bar that she has wrenched from her prison window.

Still standing in front of the cradle, between the King and Queen, and raising aloft her naked and bony arms to give greater emphasis to her words, the hag pronounces:

«The Princess shall obtain all that the fairies have wished her, but she shall perish on her twentieth birthday, pricked by a spindle».

Horror of the royal couple and the groups of fairies, who threaten the spoiljoy, raising aloft their golden wands to avert the curse.
The fourth group advances — the first-born among the fairies; their rank is marked by their dress, similar to that of the sybils; they gaze at the sleeping infant and pronounce the last wish:

«The first-born and beneficent fairies change the death doom that has been pronounced into a gentle sleep that will last a hundred years!»

The bad fairy makes cabalistic sign in the air: her fierce countenance seems to summon up all the powers of darkness. A thick fog envelops the hall, descending slowly on the board, the cradle, and all the groups of fairies.

The King’s messengers are seen riding forth in all directions, even into the remotest villages, to summon the people to the public squares, where a royal decree is to be read out, forbidding anyone to spin in any part of the country and ordering the spinners to destroy spinning-wheels and spindles.

A succession of oriental towns and villages are shown in which the royal decree is being read out. Crowds of people; women in hot dispute. When the messengers read out the edict, the people understand its purport, and disperse to obey and destroy the forbidden objects.

The crowd returns bringing spinning-wheels and spindles. Pyramids of the condemned stuff are built up. The King’s messengers set fire to them in the presence of the people, who wish long life to the Princess.
PART II.

THE MAGIC EDUCATION OF THE PRINCESS

1st Picture.

A large cave full of visible marvels and yet fuller of invisible wonders. Enormous musk-plants drop living green stalactites. Gigantic ferns spring from the earth and intertwine their fronds with the musks. Unopened ferns take on the semblance of mysterious phantoms rising from the ground. Fungi of all forms and colour, of startling aspect: some look like umbrellas; others like lamps; some like giant corals with fleshy chalices. Here and there an isolated rock looks like a living being. In the background, phosphorescent water-falls light up the whole grotto. The little Princess is seated in a clear space in the centre. She is four years old by now, and gathers the fungi in her hands, gazing in wonder at their strange shapes. All of a sudden she is startled by a sound from the outside.

2nd Picture.

A procession of sylphs, gnomes, elphs, and imps enter the grotto by the main entrance, like school children flocking to a feast; some tumble from the roof with the agility of acrobats; through the side openings of the cave others wriggle in with serpentine movements. (« These « spirits of nature » can be acted best by marionettes, ably handled as in the « Teatro dei Piccoli »).

3rd Picture.

« Nature’s Sprites » advance towards the spot where the little girl is seated; they laugh and shout, gesticulate and romp in the gayest manner with « the little daughter of man ».

4th Picture.

The sprites touch the ground which they find hard, and go off to gather wild herbs and grasses from the woods to soften it. They pick up the little girl in their arms and seat her on the rustic throne, play with her tresses, pat her cheeks, and rock her as though to make her sleep.

5th Picture.

When they have set the child down, the « sprites of nature » dance wildly around her.

6th Picture.

The child points out to them the musks that hang down above her head, which she is unable to gather. Three imps jump up in the air and gather one which they hide in their clothing. in.
7th Picture.

The child turns towards the depths of the grotto, and gazes smiling at the phosphorescent waterfalls; she asks « Natures’s sprites » to pick her a little of the « burning water »... The elphs gather a fungus in the shape of a goblet, fill it from the cascade, and bring it to the little Princess.

8th Picture.

The evil fairy spies in through a crack amid the rocks to watch the princess playing with the elves.

9th Picture.

The great park of the Royal Palace. Tall isolated trees — araucarea, fir trees, and ilexes. An avenue of palm trees opens in the background, traces a perfect line, and ends in a circular lawn of exquisite texture, shaded by palm trees. Royal peacocks are perched on branches of the trees, and pheasants fly from one spot to another. From time to time gazelles and young deer run across the lawn, rapid as arrows in flight, enter the woods and disappear.

The Princess is ten years old by now and is playing on the lawn with other children of her own age. Her white tunic, of the simplest cut, distinguishes her from her little play-mates.

10th Picture.

The group forms a circle; the Princess is placed in the middle and the others dance round her.

The Princess, waves her arms gracefully to direct the dance; of a sudden she pauses to watch above her head the ring of another dance, invisible to all but herself, performed by « Nature’s sprites » with much greater élan than the daughters of man can attain.

11th Picture

A royal procession advances majestically along the palm avenue: the King, the Queen, their chamberlains, ladies, and pages. Upon reaching the circular lawn, the procession pauses to watch the girls at play. The King turns smiling to the Queen. The children continue to dance their merry round.

The gay spectacle suddenly brings back the terrible threat to the minds of the royal parents: as in a vision they behold above their heads the body of the girl at twenty, dead or alive, lying on a bier... The parents’ eyes grow dim and the Queen’s head sinks on her breast.

12th Picture.

Night time. The sumptuous music and dance hall of the royal palace. Mandolines, psalters, violins, and harps are arranged in the corners on stools.
An old dancing master stands beside a harpist explaining the steps.

Four ladies of honour — dancing mistresses — teach the steps, the courtseys, and all the movements that must be carried out round the Princess. The Princess listens to the explanations and repeats them with the greatest exactitude.

The Princess is about to complete twenty years and is seen in all her eastern beauty, soberly dressed, with a brilliant scarf that falls from her shoulders to her feet which she gathers up or allows to fall as the various figures of the dance require.

She smiles sweetly whenever the dancing mistresses address her, and follows the various figures faultlessly, but with the slight air of shyness that all pupils have in the presence of their teachers.

13th Picture.

Invisible to the ladies, but not invisible to the Princess who is aware of their advent, the fairy god-mothers appear one by one, detaching themselves from the walls, like mists materializing into human bodies; they also start to dance without advancing into the centre of the room.

14th Picture.

The Princess almost ceases to pay heed to her mistresses. The magic spirit of the dance that belongs to fairies alone takes possession of her body.

The Princess performs a new dance, miraculously inspired, that nobody has ever taught her, without paying any heed to the sounds of the harp; she sings as in a state of extasy.

The dancing mistresses gaze at her first in surprise, and then, carried away by the beauty of her dance, they urge her on with cries of admiration.

The musical instruments ranged in the corners of the room start playing by magic and diffuse throughout the whole ball-room waves of harmony that intertwine and form a sort of musical aura similar to that which musical geniuses alone can produce and no human heart resists.

15th Picture.

The dancing mistresses and musicians withdraw from the centre of the room, leaving a vacant space for the Princess to dance in.

16th Picture.

A monumental clock chimes the hours of the night.

A lady of honour approaches the dancer and begs her to stop so as not to exhaust herself, reminding her that on the following day she will complete twenty years and will have to take part all night in the festivities in the royal palace.
17th Picture.

The Princess, happy with her success, recalls the wish that was pronounced after her birth and repeats it with a prophetic air: « May she dance all the dances of the world and sing songs of all peoples! »

18th Picture.

On hearing these words the ladies of honour recall the threat that was then pronounced, and they almost see the body of the Princess, motionless and rigid, lying on the shawl that envelops it.

19th Picture.

The Princess, directing her steps towards her apartment, approaches the monumental stairway of the palace. She listens to a song she is unable to recognize, and turns her head from side to side in quest of the spot whence it issues; at last she perceives that it comes from the top of the palace, and she makes her way to a wide staircase that leads to the atticks, which she mounts.

21st Picture.

A low attic, in which the old fairy is spinning, accompanying her movements with a song. The young girl greets her merrily. The hag answers with a mocking curtsey. The Princess sits down on a rustic stool beside the spinner.

21st Picture.

The Fairy continues to spin with unmatched skill. The Princess follows the progress of her work with ever growing surprise.

As the yarn lengthen, flowers and geometrical designs appear on it. It falls gradually from the wheel onto the Princess’s lap.

22nd Picture

The old woman looks at the Princess’s face and seeks a moment to catch her unawares and prick her with the spindle. The princess raises the yarn to the height of her eyes to gaze at its fine texture.

The hag rapidly pricks her arm with the spindle.

The Princess sinks to the ground and falls into a deep sleep.

The hag rapidly flings aside her wheel and spindle and hurries down the stairs.

23rd Picture.

The Bad Fairy arrives in the room underneath, which is the audience chamber. In the centre stands a huge richly inlaid table; the walls are lined with tapestries; here and there rich Chinese vases adorn the apartment.
The King and Queen are seated in front of one another; the King holds his pen as though writing; the Queen has a Persian cat on her knee. The royal couple fall asleep and the cat purrs on.

The Bad Fairy casts a hasty glance at the scene and descends another flight.

24th Picture.

The guards’ hall: armour in the corners, two big deerhounds. The sentries as they stand are seized with the magic slumber and remain rigid as statues, with swords raised. Even the dogs drop asleep.

The Fairy appears in front of the Royal Palace, rapidly runs down the staircase, follows the path to the neighbouring wood, and disappears among the trees.

THIRD PART.

The Hundred Years’ Sleep

1st Picture.

Royal carriages drive up to the palace.

Four young princesses, holding falcons on their wrists, alight and look aloft at the palace; they have come from neighbouring countries to make an effort to wake up the Sleeping Beauty, for the strange rumour of her fate has spread and all the sovereigns of Asia are moved to pity.

2nd Picture.

They ascend the monumental staircase and walk noisily into the hall, talking and gesticulating.
3rd Picture

They mount to the attic, where the Princess is lying on the rough floor, close to the wheel and the spindle of her doom.

4th Picture.

The four princesses gaze at her in pity; they are moved, and call on her in the words of the eastern poets.

« Rose of Saaron, Spring is here; arise! »
« Cup of Myrrh that perfumes the world, arise! »
« Joy of this Kingdom and of all Asia, we are sad. Arise! »

Her face and body are still animated with life, but she does not move.

5th Picture.

The four Princesses appear at the head of the stairway bearing the fair sleeper on a sheet. They descend slowly and lay her down on the landing.

6th Picture.

Musicians and dancers of the people come up with bronze and copper instruments, their wrists and ankles adorned with bracelets, rattle-snares, and castanets.

7th Picture.

The Princesses give the signal for the music and dance to start. The players begin to beat their drums and play their timpanos.

The eyes of the Princesses are glued on the fair sleeper; and, from time to time, they make impatient gestures for the music to go louder and quicker. The women dance wildly and click their castanets close to the ears of the lovely Sleeper.

9th Picture.

A dog appears at the edge of a towering pine wood.

Bearing the body of the Fair Sleeper, still lying on the white sheet, the princesses advance slowly, at a rhythmical pace. At a point in the wood where the grass grows soft as a down bed, they lay down the beloved body and stand round it waiting.

10th Picture.

A cavalcade of knights rides up on magnificently caparisoned horses. The cavalcade halts noisily near the Sleeping Beauty. The Princesses turn round their heads to see.

11th Picture.

The cavalcade is followed by a long file of heavy war wagons bearing soldiers and war material.

The Princesses gaze at the Sleeping Beauty and veil their eyes with their shawls.
The Sleeper sleeps on unperturbed. The Princesses turn sadly to gather up the four corners of the sheet and, skirting the wood, return towards the palace.

12th Picture.

A small clearing in the pine wood. The four Princesses enter it, carrying the Sleeping Beauty on her living bier, and take her to the back, where the waters form a series of cascades. They lay her down where the sound of the waters is loudest and still hang round their friend as though awaiting a miracle; but the Sleeper sleeps on. After a long pause, they gather up the corners of the sheet and carry the Princess from the wood.

(D. G. Rossetti’s well-known painting «Dante’s Dream» might be taken as a model for this and the preceding pictures).

13th Picture.

More years have gone by. The Royal Palace still stands, but no sentries guard it and it seems entirely deserted. Weeds have overgrown the old lawn surrounded by the trees of the wood.

Puss in Boots emerges from the wood: he carries a peasant’s wallet on his back and leans on a rustic stick. He gazes at the palace; remembers that a dread enchantment weighs on it, gives a loud and terrified miaow, and runs back into the wood, peering suspiciously around him.

14th Picture.

Little Red Riding Hood comes out of the wood, with her basket on her arm; she beholds the palace on which the hundred years’ enchantment lies so heavily, makes the sign of the Cross, and runs away.

15th Picture.

Aladin steps out from the forest with his wonderful lamp in one hand and in the other a handful of phosphorescent stones. He recalls the story of the Sleeping Beauty. He halts, murmurs a prayer with lowered head, rouses himself, and returns into the wood.
FOURTH PART

THE SLEEPING BEAUTY WAKES

1st Picture.

The Royal Palace is entirely hemmed in by a forest of pines and fir trees. From afar its towers, cupulas, and highest terraces alone can be seen.

A group of hunters comes riding through a pathway in the wood. The sound of the horns and the barking of the hounds startle the deer and the pheasants, which are seen flying in all directions.

2nd Picture.

The group of hunters ride up. They are dressed in oriental hunting attire, but with a military note befitting the suite of a hereditary Prince. There is a brave show of horns and hawks; splendid hounds surround a cart on which the day's bag of wild boars, deer, and birds are piled up.

3rd Picture.

The Prince, in the centre of the group, gazes at the horizon onto which the wood opens, perceives the palace hidden amid the trees, and asks the oldest member of his suite where they are.

4th Picture.

The old man narrates the story of the palace in which sovereigns and courtiers, servants, and all familiar creatures are asleep. He accompanies his story by gestures of horror. The Prince, on the contrary, is excited by the story, he rises eagerly in his saddle and points to the palace as a conqueror points to a city he means to take by assault.

5th Picture.

The other hunters surround the old man and spur on their camels to listen to the mysterious story of the palace and hear tell of the nightly visions which, according to the peasantry, appear on its towers, and of the vain efforts of the Princesses of Asia to arouse the Sleeping Beauty.

The Prince continues to point to the palace, but no longer as though it were a prize to be conquered. Hearing the tale of the Sleeping Beauty, sacrificed in the full blush of youth to the wicked enchantment, his heart has filled with a heroic feeling of pity. He is resolved to venture all to save her.

6th Picture.

Amid the acclamations of his suite, three knights offer to accompany the Prince, who spurs forward his horse, followed by his faithful bodyguard. The rest of the
suite remain behind, feeling that the hunt has been spoilt, and turn wistful eyes on the slaughtered boars and deer.

7th Picture.

The horses leave the path they have so far followed and pick a way through the wood overgrown by weeds. The branches of the thick growth strike their faces; trunks that have been smitten by lightning impede the way. Ahead of them all, the Prince rides forward on his splendid horse, heedless of all obstacles.

8th Picture.

One of the horsemen, whose face has been cut by a passing branch, begs the Prince to turn back. The Prince in answer merely smiles contemptuously and signs to him to leave.

9th Picture.

A bog appears. The trunks of trees stand out from it, for it is a submerged tract of the wood; giant crocodiles sleep with the heavy sleep that has invaded the palace; hippopotami, half immersed in the mud, are likewise still and petrified. To the right and left of the bog the wood, with its dried and seer trees close against one another, forms a wall which the horsemen stare at in dismay, realizing that they cannot possibly get through it.

The Prince talks with one of his two followers, discussing how they can get through the morass. The other loses heart, bows deeply, and takes himself off.

10th Picture.

The Prince spurs on his horse and enters the bog, followed by the last horseman of his suite who has stuck to him; they pass, immersed up to the waist, amid the sleeping beasts, and reach the opposite bank.

11th Picture.

The wood is veiled in unnatural darkness; from all sides confused forms appear, as of persons or clouds of mist that solidify around the horsemen and prevent their seeing; a will o' the wisp advances and retreats along the road as though to mock the two adventurers.

12th Picture.

The third hunter addresses the Prince earnestly, pointing out the risks of the enchanted region into which they have entered: a demonaical land in which only death can await them. Tears run down his terrified face as he recalls the Prince's parents who are awaiting his return.

As he is speaking other vague and errant forms pass between him and the Prince and terrify the horses, who rear and try to bolt.
13th Picture.

The Prince listens calmly, while he holds firmly on the reins and forces his horse to stay quiet. He seizes the axe from his companion’s belt and grips it with a firm hand. He kisses his friend on the brow and seeks to enhearten him; then plunges alone into the wood, now followed, now preceded or accompanied by the shapeless forms that would impede his path, which he drives off with lusty blows.

14th Picture.

The Prince has at last got through the savage forest and approaches the monumental stairway to the palace, bathed in the midday sun.

15th Picture.

Extending his arms towards the palace, he salutes the moment of his victory, thanking the God of heroes and his own strong heart. He then alights from his horse, and caresses it as the good friend of heroes, with his arms around its neck.

16th Picture.

The Prince takes in at a glance the façade of the palace; he airily ascends the great stairway, whose marble flags are intergrown with weeds, and bangs at the door that stands solid as a rock.

17th Picture.

He snatches the axe from his belt and deals blow after blow violently on the door, till it splinters and gives way.

18th Picture.

The Prince enters an ample vestibule and comes to a second door, which he demolishes with his hands alone. He ascends the inner staircase.

19th Picture.

…and reaches a magnificent hall in which there stands only a couch, that upon which, long years ago, the Princesses composed the Sleeping Beauty for her long slumber.

20th Picture.

The lovely maiden lies asleep in the full beauty of her twenty summers. Her hair is unbound, the motionless folds of her tunic are composed around her, her hands crossed on her breast like a sleeping figure on a tomb, her shapely shadow is revealed on the wall as the Prince approaches her.
21st Picture.

The Prince stands beside the Sleeping Beauty; he makes the sign of the Cross above the maiden; then slowly bending down over her, he kisses her on the lips.

22nd Picture.

The Sleeper’s eyelids flutter; her head moves; her tresses stir on the pillow; her hands fall apart, while a smile appears on her lips, as though from the mysterious depths of some dream. Slowly the Sleeping Beauty rises on her couch. Meanwhile the Prince’s hands are spread out over her. Seeing her move...

23rd Picture

... he assists her to rise. Standing on her feet she turns a puzzled look on the man who has rescued her; attempts to take her first step as though she were just learning to walk; then touches the bed, and the walls of the room, as though to convince herself of their reality.

24th Picture.

The Prince flings wide the windows. The sun — the foe of dreams — pours in in floods; the Princess gazes out at the forest and beholds the old familiar scenery as it was submerged in her memory a hundred years ago.

25th Picture.

The Prince and Princess descend to the floor below, where the Princess’s parents are sleeping. As they approach the royal couple they stir, at first rise languidly, and then run towards their daughter with great signs of joy.

26th Picture.

The royal couple and the Princes wend their way downstairs and enter the other apartments where the guards are slumbering. They too awake, and, after a moment’s hesitation, come towards their liberators.

27th Picture.

The royal couple, the Princes and the guards pass into the room where the sewing maids of the palace are sleeping their enchanted sleep — some with their needles raised; others cutting out cloth, others trying gowns on a lay-figure. They make the same movements of surprise and indecision, and evince the same joy at being liberated.

28th Picture.

The Royal couple, the Princes, the guards and the maids penetrate into the colossal kitchen of the palace, where the chefs and cooks were overcome by sleep in
the midst of their work: some skinning boars, others lighting the fires, others again preparing a magnificent cake. The same agitation, the same joy at being reawakened.

29th Picture.

The crowd of the royalties and courtiers and servants enters the great central courtyard of the palace — the courtyard of the natal gifts. As they appear, the sleeping birds wake up and begin to sing; from all sides the animals of the palace come running and flying in — splendid dogs, deer-hounds, bull-dogs, cats, doves, and chickens, to the amusement of all present.

In this scene of joy of men and beasts symbolic of all fables, the King blesses the princely couple, amid the acclamations of the people just awakened from their hundred years’ sleep.

Prof. Gabriela Mistral.
AN ENDEAVOUR TO DEFINE THE EDUCATIONAL CINEMA

(From the French)

There is no need for me to remind the readers of this Review of the immense resources that the cinema offers for teaching and propaganda. The reasons that urged the Italian Government to create the Rome Institute and the articles published in the Review are convincing evidence. If, in taking up my pen, I stress this point, the reason is that there are still a number of people about the world who are ignorant of or indifferent to the fact; and I must insist upon it as the starting point of my argument.

The Institute’s programme of work and action is summarized in its statutes: to favour the production, the diffusion, and the exchange between the several countries of educational films bearing on teaching, the arts, vocational and agricultural training and orientation, hygiene propaganda, and social education.

The field thus indicated is so vast that it will not be waste of time to fix its boundaries and to attempt to define, with some degree of precision, when a film may and when it may not be considered educational.

When I wish to get hold of the precise meaning of a word. I am wont to refer to the dictionary, and — so far as the French language is concerned — that of Littré is the leading authority. But — amazing discovery! — « Educative » (educatif) does not appear in it; though « educator » (educateur) does. Thus linguistic purists might maintain that educatif is not a French word. It’s meaning, however, is clear, and it is correctly formed; and if we prefer to keep « educator » for a person who educates, we may well adhere to « educative » for an institute, a method, an object concerned with or pertaining to education.

(Ed. Note). The need for a definition of the « educational film » which our eminent contributor, Jules Destée, has approached with the acumen that distinguishes him, is stressed in a resolution passed by the Congress on « The International Activity of the Educational Cinema » held in Algiers from the 13th to the 27th April 1930.

We reproduce here the exact terms of this Resolution (No. 10):

«...that the qualification « educational cinema » be registered in due legal form by the League of Nations, in such manner that it may be used only by bodies and organizations set up for the purposes of instruction and education and not by enterprises and associations of a commercial character ».

We are happy to publish the resolution of the Algiers Congress, which, as we say above, touches on the definition of the educational cinema. In any case, the problem of the exact definition of the « educational film » appertains to the Governing Body of the I. E. C. I., which will take it up at its session of next October. A report prepared by the Director of the Institute, raising all the necessary points for consideration, will serve as a basis for the Board’s discussion on this fundamental point.
But the full meaning of educator and educative can only be appreciated if we know what education is. Littré informs us that this word may have three meanings: 1) the action of bringing up and training a child or a youth; intellectual or manual abilities as a whole that are acquired; moral qualities as a whole that are developed; 2) in speaking of domestic animals the whole of the means we use so as to render them docile to man’s will; 3) the knowledge and practice of the usages of the world.

We are not concerned with meanings 2) and 3). The first alone claims our attention. Littré gives « instruction » as a synonim, but he properly points out that instruction is concerned with the mental faculties alone and refers to knowledge that renders us more skilful and erudite. Education embraces both the heart and the mind, and refers to knowledge that is acquired and to the moral direction given to the sentiments.

This definition is clear and indicates that the domain of education is wider than that of instruction. There can be no education without instruction, but sometimes we have instruction without education. From the social standpoint, education is perhaps more important than instruction. When we say that parents « bring up » their children, we can accept this word in its literal meaning, since all good education aims at raising children to a higher moral and social level.

Thus, to start with, the educational cinema embraces all films that aim at completing any form of teaching, at strengthening, supporting, and rendering more comprehensible the teacher’s words; and this is true not only of teaching in the strictest interpretation of the word, but also in its broadest and most liberal sense: whether we have in mind lecturers or propagandists of all kinds in the sphere of hygiene, child welfare, agriculture, history, geography, the sciences, the arts, vocational training, the prevention of labour accidents, etc.

It stands to reason that films of this kind — which are infinite in their variety — can possess full instructive worth only if they are strictly appropriate to the subject dealt with and to the public for whom they are intended; and that their educational value depends on their strict adherence to truth, without any faking, without any inventive flights, or any preconceived tendencies in their presentation.

Here, then, are some elements for a start in definition; I should like to add another trait that distinguishes the nobility and dignity of the educational film: namely, its disinterestedness. The educational film is not made to make money.

It ought to enlarge the minds of those who watch it, but not deflate their purses, for they have come to learn, not to watch a show. The educational film supports the word; it should never be used for lucrative ends. It is these two characteristics — the diffusion of culture and the absence of commercial interest — that justify its claim to preferential treatment on the part of governments and their tariffs.

It is again these two characteristics that enable us to differentiate between the scientific cinema and the entertainment cinema. The boundary between the educational cinema and the cinema «show» is therefore clearly defined: all invented films — whether comic, dramatic, or star-featuring — a non-specialized audience, paid seats, and absence of verbal commentary, etc., must for the time being remain extraneous to the Institute’s interest.
I say «for the time being», because we may hope and expect that one day — in the more or less near future — some of the films shown in public cinemas may have an educational value. If and when this day comes we might remove the ban on «paid seats». It would indeed be to the general good to have a little instruction and morality introduced into amusement!

But I put forward this hypothesis with the utmost caution, for it bears us into the dangerous region of morals, where opinions are so frequently at variance. Such and such a spectacle that appears moral may have a demoralizing influence. It is not sufficient for the close to show us crime punished and virtue rewarded; the adoption of any such rule, moreover, would often be in flagrant contradiction with the realities of life.

I remember once hearing a talented actor recite twice running one of De la Fontaine's fables: «the Grasshopper and the Ant». In the first version the Ant was the hero and taught his good lesson of thrift; in the second, the grasshopper claimed our sympathies and the ant seemed avaricious and heartless. So true is it that quite different lessons can be deduced from one and the same theme!

It should be added that some films that are highly moral in one country may not be at all moral in another. One man's meat is another man's poison.

But in trying our hand at a definition of the educational film, it is certainly not with any desire to confine the activities of the Institute within definite limits, for this would evince a failure to appreciate the unlimited territory which experience may by degrees reveal to us, and I am far from wishing to circumscribe it; what I have in mind is, more especially, a solution — so urgently needed — of the problem of customs tariffs.

It seems to me that by defining for the present the educational film as above, by adhering to the exclusion of all commercial exploitation and the obligation of using the film as a complement to some form of teaching, we should provide the fiscal authorities with a sufficient basis of discrimination.

But it may be objected, «your definition defines only the instructional film, and at the beginning you pointed out that the sphere of education was wider!» I fully admit this, but in order to reach any conclusion, we must choose the line of least resistance. We shall hardly meet with any if we speak of a corollary of instruction; we might be held up altogether if we attempted to go much further.

It is clear that we cannot expect Customs officials to verify whether a film is educational or not; the examination of the films might somewhat relieve the monotony of their existence, but it is clear that they have neither the competence nor the time to carry out such inspections. They are accustomed to summary inspections of weight and value, not of quality. But we can offer the administration simple guarantees in the form of declarations from the shipper and the consignee attesting that: 1) the film is intended for teaching; 2) it will not be used for commercial ends.
I may cite the example of Belgium, where the film has nearly won its battle, so far as exemption from duty is concerned. Here is the circular which M. Janssen, General Director of the Customs, sent round to his subordinates on the 10th August 1925:

«Pursuant to the provisions of the Law of the 8th August 1835, the Government is authorized to grant exemption from Customs duties in the case of objects for scientific collections, collections of antiquities, coins, art or natural history, intended for public institutions belonging to the Government, the Provinces, or Communes, as well as to public institutes of science or arts and to learned societies that do not trade in these objects.

«On the other hand, apparatus and instruments for demonstration and teaching intended for physical and chemical laboratories and scientific research laboratories, are admitted freely under No. 1119 of the Customs Tariff.

«With a view to regulating the enforcement of the above-mentioned dispositions, I have decided that hereinafter the Customs may admit free of charge under clause 1119, subject to the conditions hereunder specified, certain objects — not yet expressly exempted by the Tariff now in force — when imported by scholastic establishments to be used for exclusively instructional purposes. Among these objects the following are here specified: instruments of pure and applied sciences including optical apparatus, apparatus for projection, cinematography, and photography; apparatus for general and industrial physics, mechanics, electricity, industrial testing; machines, apparatus, and other scholastic material of a kind intended for teaching; photographs and films obviously intended to be screened in the course of teaching; collections intended as a means of teaching.

«The privilege of Customs exemption will be granted only under the authority of the Inspector of Customs, at Brussels or Antwerp, or the competent Controller of Customs in other districts. These officials are required to assure themselves carefully that the articles in question are bona fide scientific and technical material, effectively intended for public or private teaching institutes or establishments. They shall, furthermore, require a declaration signed by the Head of the Institute or establishment, certifying on his personal responsibility that the imported material will be used exclusively for teaching or to form part of a collection that will not be used for other than didactic purposes. This undertaking further involves the obligation to produce the objects thus admitted upon the request at any time of the Customs authorities and, in the event of the sale of the material, and before any removal thereof, to pay customs duties chargeable under the Customs tariff at the date of the declaration of the transaction.

«In the event of any question arising, the Customs shall submit the matter to the decision of the Administration.»

It will be seen that the Belgian Customs grant free entry to educational films that come within the definition I have proposed above. As regards discrimination, all that is required is a quite simple form of declaration; this declaration, moreover, sufficiently guarantees the interests of the authorities, since the directors of teaching establishments, the presidents of lecture clubs, popular education, Red Cross So-
cieties, etc., are persons of repute, the list of whom is known to the State that grants them subsidies.

In short, this circular, liberally applied, might constitute a first step, and a very welcome one, along the path indicated by the Institute. It is to be hoped that the friends of the Institute will use their endeavours to obtain similar measures from their respective governments.

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The Belgian circular may perhaps be reproached with covering somewhat narrowly only particular cases. Like reasons might be adduced for granting the same privileges to associations combining at the same time the instructional character and the character of disinterestedness. Only an association, in fact, can form an important collection of films. Small establishments cannot think of forming any large collection, since each film can be used only once or twice in the same school. On the other hand, a number of schools, associated together in a kind of cooperative society, might arrange to form a series of films, to be placed in turn at the disposal of one or other of its members.

A group of this kind might be constituted in the form of an association without monetary aims or interests, a form of association recognized in 1921 by the Belgian law. It is easily controlled and can afford the fullest guaranties as to absence of commercial exploitation, thereby simplifying the task of the Customs administration, when they wish to view the films. On the other hand, since popular scholastic and education institutions are subsidised in proportion to their activity, it would be logical that the State should not take back with one hand (Customs) what they give them with the other (Public Instruction). If therefore, a National Institute of the Educational Cinema could be formed, under State patronage and control, composed entirely of institutions approved or subsidized by the State — thus affording the Customs Administration the fullest guaranty to which they are entitled — we should have a concentration much to be desired and that would greatly simplify the matter.

But we do not limit our aspirations to this. Certain films that are not scholastic, travel films for instance, may have an educational value, and it would be greatly to the interest of general culture for these to play a bigger part in the programmes of public cinema shows.

I realize, however, that at this point the problem is growing highly complicated. The duties on such films bring in considerable revenue to the public coffers, and ministers who are inclined to relinquish a tangible and substantial receipt in the less obvious interest of general culture are few and far between.

The financial difficulty is further complicated by the difficulty of discrimination. Who shall pronounce on the educative value of a film? Most countries possess their supervision and censorship organizations. The task might perhaps be committed to these bodies. But they are not everywhere identical in kind; they do not judge according to the same standards; their members are not always in.
adequately competent, since, as I have already pointed out, all appreciations of this kind are open to debate.

To overcome these difficulties, which at present appear insurmountable, we must look to the ever growing influence of the Educational Cinema on public opinion in the different countries; to the work of the Rome Institute, and the dynamic force inherent in all ideas of general culture.

In closing this paper, it is hardly necessary for me to state that I do not imagine that I have found a definite solution, but that I merely submit by way of opening the discussion certain considerations, which every one may answer with the objections, emendations, or additions that he deems expedient.

JULES DESTRÉE.
PRELIMINARY DRAFT INTERNATIONAL CONVENTION FOR THE ABOLITION OF CUSTOMS BARRIERS AGAINST EDUCATIONAL FILMS.

In October 1929, the Governing Body of the International Educational Cinematographic Institute examined a detailed report prepared by the Institute on Customs legislation in the several Countries relating to films in general and educational films in particular.

The Governing Body, being convinced of the absolute necessity of promoting measures aiming at demolishing customs barriers against educational films, committed to the I. E. C. I. the task of studying the question and discussed the lines to be pursued. In December 1929, an International Committee of Experts met at the Secretariat of the League of Nations in Geneva, and a preliminary draft convention was drawn up in the light of the very wide and complete documentation got together by the I. E. C. I.

This preliminary draft convention was without delay submitted by the Secretary General of the League to the consideration of the Economic Committee. In January 1930 the Executive Committee of the Institute examined and completed the draft. On the 20th May, the question was passed over to the Council of the League of Nations by the representative of Italy, H. E. Dino Grandi, Minister of Foreign Affairs, who submitted the following report:

In October 1929 the Governing Body of the International Educational Cinematographic Institute noted that import duties on educational films were one of the obstacles to their distribution and it thought that the best remedy for this situation lay in the conclusion of an International Convention. The Governing Body therefore appointed a Committee of Experts to draw up a preliminary draft International Convention for the abolition of all revenue duties on educational films.

The draft Convention framed by the Committee was subsequently approved by the Permanent Executive Committee and Governing Body of the International Educational Cinematographic Institute, and is now submitted to us with the request that we communicate it to States Members and non-Members of the League, for their observations (Document C. 212. M. 100. 1930. XII).

The Committee, without defining the term «educational film» and looking at the matter from the practical point of view of the execution of the Convention, has limited the categories of films entitled to benefit by the fiscal advantages provided for in the draft Convention. It was at first thought desirable to add to the list enumerated in Article IV «recreational-instructional» films, but on examination the position of these films was found to differ considerably from that of educational films and it was thought that their situation might be improved rather by exemption from taxes on performances.

From the point of view of the advantages to be granted, a long discussion took place as to whether the abolition or only the reduction of Customs barrier should be proposed. It was thought that reduction would in some quarters be regarded as reactionary and that even reduced duties would constitute a serious obstacle to the free exchange of educational films. Accordingly, the draft Convention provides for their complete abolition.

My colleagues on the Council will, I am sure, appreciate the usefulness of the initiative taken by the International Educational Cinematographic Institute. Educational films are potent factors in physical, intellectual and moral progress and contribute towards the mutual understanding of peoples in the spirit of the League.
Accordingly, I am of opinion that we should accede to the request submitted to us. I note, however, that the Economic Committee of the League has not yet had an opportunity of giving its official opinion on the Convention. As this is a Customs question I think it essential that, when the text is communicated to Governments, it should be accompanied by the Economic Committee's opinion. I therefore propose that the Secretary-General should be asked first to forward the draft Convention to the Economic Committee, which will meet on June 2nd, with a request for its opinion, and then to communicate it for their observations to States Members and non-Members of the League together with any suggestions from the Economic Committee.

On the 5th June the Economic Committee was officially invited to examine the question in the following report of the Secretariat of the League:

The Council has asked the Economic Committee (i) to give its opinion on the Preliminary Draft International Convention for the Abolition of Customs Barriers against Educational Films which has been drawn up by the International Educational Cinematographic Institute. (Document C. 3, M. 1, 1930, XII, distributed with E. 590).

The Economic Committee had already considered the matter at its session last January. It then expressed itself generally in favour of the object of the draft, which is to encourage the international circulation of educational films by granting Customs facilities.

The document now before the Committee reproduces the main lines of the Convention submitted to it in January, with certain changes made since then by the Permanent Executive Committee of the International Educational Cinematographic Institute. Taken as a whole, and in broad outline, this draft seems to serve the desired purpose, and may therefore be regarded as a useful basis for discussion at a diplomatic conference.

It is possible, however, that the suggested machinery to enable those concerned to avail themselves of the Customs privileges conferred by the Convention may not prove sufficiently flexible, and that the international exchange of educational films, which it is rightly desired to encourage, may be attended by some complicated and vexatious formalities. The Economic Committee will judge how far such fears are justified.

With regard to the actual provisions of the draft, the Secretariat need only make the following observations on points of detail:

1. Article X, paragraph 2, lays down that the High Contracting Parties may only take measures to prohibit or restrict the import, export and transit of the films in question if these measures are dictated by considerations of public safety.

It will be seen that this clause restricts, in respect of educational films, the powers granted to Governments by Article 4 of the International Convention for the Abolition of Import and Export Prohibitions and Restrictions of November 8th 1927, and consequently raises the question of the relations between the two Conventions.

In order to dispose of any difficulty that might arise in this connection, and also having regard to the fact that the object of Article X of the draft is the same as the object of Article 4 of the Convention of 1927 — though the second is more complete than the first — namely, the abolition of all restrictions in the nature of economic protection, it would seem advisable to replace paragraph 2 of Article X of the draft by a clause to the following effect:

«The High Contracting Parties agree to apply the provisions of Article 5 of the International Convention for the Abolition of Import and Export Prohibitions and Restrictions of November 8th 1927 to all matters connected with the import, export and transit of educational films.»

If this clause were adopted, it would be necessary to reproduce the text of Article 4 of the Prohibitions Convention as an annex to the Convention on Educational Films.

(i) See document E 590.
2. The Protocol to the preliminary draft introduces, under the head of «Interpretations», N. 1, a distinction between final import and export and temporary import and export, which is not to be found in respect of similar cases in any international instrument, because it has no object. The exemption from duty provided for in Article 1 refers to the final import and export of the films, and could not refer to anything else, because, by definition, temporary imports and exports are, exempt from customs duty.

These latter operations may simply be made conditional upon the deposit of security equivalent to the amount of the duties which would be levied in the case of final import or export. It should, however, be observed that even this formality of furnishing security will necessarily lapse in consequence of the exemption from import and export duties provided for in Article 1. Any reference, therefore, to temporary imports and exports seems unnecessary.

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The Secretary General of the League is now taking steps to circulate the preliminary draft Convention among all the States Members and non-Members of the League in order to ascertain the views of the several governments with the intent of convoking a diplomatic conference.

We trust the answers may be promptly forthcoming so that this important task may be brought to an early conclusion by a discussion which we trust will pronounce the final word on the matter.

The Institute has brought all its energies and all its zeal to bear on the problem, hastening matters wherever possible and choosing the paths of least circumlocution. All the nations are beholden to the Secretary General of the League, who has never hesitated a moment to second the Institute’s efforts to bring this Convention into being.

We reproduce hereunder the terms of the draft project which Prof. Pella, Jurisconsult at the Hague, prepared with much forethought.

There is no need to repeat here the importance of the matter at issue to educational cinematography in all countries, both producers and consumers. The preliminary convention has been drafted in a form to guarantee fully and from all points of view the economic, social, and moral interests of all States. Enthusiastic adherence has been expressed to the Institute from all parts of the world. The organs of the League, such as the Child Welfare Committee, have fully approved the initiative and expressed the hope that procedure may be hastened as much as possible. The International League of Red Cross Societies has warmly approved the resolution; so have the League of University Women, teachers, University students, and others. Producers view the Convention in the light of the vast new possibilities it would open up to the production and publication of good films; to the consumer it promises the essentials of success; facility of exchange, facility in examining the films, a knowledge of the international capital in educational cinematography, reduction of prices through the elimination of Customs duties, which often represent a prohibitive percentage, owing to the low cost of educational films.

We shall continue to agitate this question in the pages of the International Review and keep our readers informed on the situation. We are happy to publish in this number a masterly paper by Jules Destrée, showing how keenly the importance of the question is appreciated among the governing classes.

LEAGUE OF NATIONS.

PRELIMINARY DRAFT INTERNATIONAL CONVENTION FOR THE ABOLITION OF CUSTOMS BARRIERS AGAINST EDUCATIONAL FILMS.

CONVENTION.

List of Heads of States.

Recognising that Customs duties on educational films considerably restrict the production and distribution of those films and that the serious disadvantages resulting from
Customs measures have not been balanced by any financial advantages for the States which have adopted them;
Noting that, although Customs tariffs make no distinction between educational and other films, many States have already adopted Customs measures to facilitate the international circulation of educational films;
Convinced that educational films are especially potent factors in physical, intellectual and moral progress;
Persuaded that educational films contribute towards the mutual understanding of peoples in the spirit of the League of Nations and that it is in the higher interests of international civilisation to intensify the exchange of the said films;
Considering that, in order to attain this end, Customs barriers against educational films must be removed:

Have appointed as their plenipotentiaries —

(List of plenipotentiaries)

Who, having produced their full powers, found in due and good form, have agreed upon the following provisions:

PART I

Article I.
The High Contracting Parties undertake to ensure, within six months of the entry into force of the present Convention, exemption from all Customs duties and all necessary charges of any kind, except statistical duties, in respect of the import, transit and export of educational films.

Article II.
The High Contracting Parties recognise that the provisions of the present Convention apply to educational films in one or other of the following forms:

a) Negatives, printed and developed.
b) Positives.

In the case of tone-films and talking films, the advantages of the present Convention shall apply also to the accessory records or films.

Article III.
The advantages provided in this Convention shall be granted to educational films on production at the Customs office of the certificate issued by the International Educational Cinematographic Institute in conformity with Articles VII and VIII.

Article IV.
For the purposes of the present Convention the following shall be regarded as educational films of an international character:

a) films intended to make the League of Nations and other international governmental organisations known;
b) films prepared for use in education of all grades;
c) films intended for professional training and guidance, and films for the scientific organisation of work;
d) films dealing with scientific or technical research;
e) films dealing with hygiene, physical training, and social preventive and welfare work.
Article V.

The advantages of the present Convention shall further extend to films required for their own exclusive use by learned societies and by scientific institutions which have obtained this privilege from their Governments.

Article VI.

Any request made for the purpose of ascertaining the international and educational character of a film so that it may enjoy the advantages of the present Convention, shall be forwarded for consideration to the International Educational Cinematographic Institute. Such requests shall be accompanied by an opinion as to the educational character of the film regarded from the national point of view, and by all information and documents in support.

The opinion provided for in the foregoing paragraph shall be issued in each country by a qualified body appointed by the respective Governments.

Article VII.

After a favourable examination of the request provided for in Article VI, the International Educational Cinematographic Institute shall issue a certificate stating that the film is entitled to the advantages granted by the present Convention.

In the case of the films referred to in Article V, the Institute shall issue a certificate exclusively intended for the institution which desires to import the film.

Article VIII.

Should the International Educational Cinematographic Institute consider that the film is not of an international and educational character, the person claiming for the film the benefits of this Convention may apply to the Committee of Experts provided for in Article XIX. If the Committee recognises the international and educational character of the film, it shall communicate its decision to the International Educational Cinematographic Institute, which shall issue the certificate referred to in Article VII.

Article IX.

For the solution of the questions contained in the foregoing Articles, the Council of the League of Nations shall appoint a Permanent Committee of Experts.

Article X.

Nothing in the present Convention shall affect the right of the High Contracting Parties to censor films in conformity with their own laws.

The High Contracting Parties may only take measures to prohibit or restrict the import, export and transit of the films, if these measures are dictated by considerations of public safety.

Part II.

Article XI.

If a dispute arises between two or more High Contracting Parties regarding the interpretation or application of the provisions of the present Convention and if this dispute cannot be settled either directly between the Parties or by any other means they may
employ to reach an agreement, the parties to the dispute may, if they are all agreed, submit the dispute for friendly settlement to any technical organ that may be selected either by the Council of the League of Nations or by the parties concerned.

The advisory opinion given by that organ shall not bind the parties to the dispute, unless it is accepted by each of them.

Article XII.

If it is found impossible to settle the dispute in conformity with the provisions of the foregoing Article, the High Contracting Parties agree to submit it for decision to the Permanent Court of International Justice. If the High Contracting Parties between which a dispute arises, or any of them, were not Parties to the Protocol dated December 16th, 1920, relating to the Permanent Court of International Justice, this dispute shall, if they wish, and in conformity with the constitutional rules of each of them, be submitted either to the Permanent Court of International Justice or to an arbitral tribunal established in conformity with the Convention of October 18th, 1907, for the Pacific Settlement of International Disputes, or to any other arbitral tribunal.

In regard to technical questions, the above organs may ask for an advisory opinion from the Permanent Executive Committee of the International Educational Cinematographic Institute.

Article XIII.

The present Convention, of which both the French and English texts shall be authentic, shall bear to-day's date; until... it may be signed on behalf of any Member of the League of Nations or any non-Member State which was represented at the Conference that framed the present Convention or to which the Council of the League of Nations shall have communicated a copy of the said Convention.

The present Convention shall be ratified... The instruments of ratification shall be forwarded to the Secretary-General of the League of Nations, who shall notify their receipt to all the Members of the League and to the non-Member States referred to in the foregoing paragraph.

Article XIV.

On and after... the present Convention may be acceded to on behalf of any Member of the League of Nations or any non-Member State referred to in Article XIII which has not signed this agreement.

The instruments of accession shall be forwarded to the Secretary-General of the League of Nations, who shall notify their receipt to all the Members of the League and to the non-Member States which are parties to the present Convention.

Article XV.

Countries which are prepared to ratify the Convention in conformity with the second paragraph of Article XIII or to accede to it in virtue of Article XIV, but which desire authority to make reservations regarding the application of the Convention, may signify their intentions to the Secretary-General of the League of Nations. The latter shall immediately communicate these reservations to all the High Contracting Parties on whose behalf an instrument of ratification or accession has been deposited, and ask them whether they have any objections to offer. If no High Contracting Party has raised an objection within six months of the said communication, the participation in the Convention of the country making the reservation in question shall be regarded as accepted by the other High Contracting Parties, subject to the said reservation.
Article XVI.

Ratification by a High Contracting Party or its accession to the present Convention implies that the rules laid down in the Convention will be applied to the other Contracting Parties in accordance with Article XIX.

Article XVII.

In the absence of a declaration to the contrary by a High Contracting Party made at the time of signature, ratification or accession, the provisions of the present Convention shall not apply to colonies, oversea territories, protectorates, and territories under suzerainty or mandate.

Nevertheless, the High Contracting Parties reserve the right to accede to the Convention in accordance with the conditions of Article XIV and XVI on behalf of their colonies, oversea territories, protectorates, and territories under suzerainty or mandate. They also reserve the right to denounce it separately in accordance with the conditions of Article XXII.

Article XVIII.

The present Convention shall not enter into force until it has been ratified or acceded to on behalf of five Members of the League of Nations or non-Member States. The date of entry into force shall be the ninetieth day following the receipt by the Secretary-General of the League of Nations of the fifth ratification or accession.

Article XIX.

Each ratification or accession made after the entry into force of the Convention, in accordance with Article XVII, shall take effect as from the ninetieth day following the date of its receipt by the Secretary-General of the League of Nations.

Article XX.

The High Contracting Parties shall communicate to one another, through the International Educational Cinematographic Institute, within the six months following the entry into force of the present Convention in their territories, a report on the steps taken to ensure the execution of the provisions of the Convention.

Article XXI.

Each of the High Contracting Parties shall inform the International Educational Cinematographic Institute of the organ or organs authorised to give opinions in accordance with the provisions of Article VI of the present Convention, and of the learned societies and scientific institutions benefiting by the provisions of Article V.

Article XXII.

The present Convention may be denounced on behalf of any Member of the League of Nations or of any non-Member State by a written notification addressed to the Secretary-General of the League of Nations, who shall communicate its receipt to all the Members of the League and to the non-Member States which are parties to the present Convention. The denunciation shall take effect one year after the date on which it is received by the Secretary-General of the League of Nations; it shall only operate in respect of the High Party in whose name it was made.
Article XXIII.

The present Convention shall be registered by the Secretary-General of the League of Nations at the time of its entry into force.
In faith whereof, etc., etc.

Protocol.

I.

Annexes and interpretations.

On signing the Convention of this day's date the undersigned plenipotentiaries declare that they accept, in regard to the various provisions of the Convention, the following annexes and interpretations:

Annexes.

1. Every request of the kind referred to in Article VI of the present Convention must be accompanied by:
   a) The opinion given by the body mentioned in the last paragraph of Article VI. This opinion must state all the grounds on which the film has been held by that body to be educational from the national point of view (limitations, cuts, etc.), together with the name of the producing firm.
   b) A brief description of the subject and of such technical or scientific directions and sources as there may be (books, publications, scientific indications, etc.).
   c) A list of the titles and sub-titles of the film, accompanied if possible by a display sheet (a sheet containing the first and last photograms of each scene, with the title of the scene at the side).
   d) An exact statement of the length of the film with and without titles.

2. The certificates issued by the International Educational Cinematographic Institute in accordance with Articles VII and VIII must contain a synopsis of the particulars required in Annex 1. They must give all necessary information to allow of rapid verification by the Customs authorities.

The International Educational Cinematographic Institute may issue certificates in any of the following forms:
   a) A single certificate for one subject, in virtue of which the national bodies referred to in the last paragraph of Article VI may issue certificates for each copy of the actual positive, reference being made to the series number and the principal features of the certificate issued by the Institute.
   b) A general certificate for an unspecified number of copies of one film.
   c) A special certificate in the cases covered by Article V:
      i. Form of single certificate:
      ii. Form of general certificate:
      iii. Form of special certificate.

3. The Permanent Committee of Experts referred to in Article IX shall be composed of... members.

These members shall be appointed by the Council of the League of Nations from among qualified persons of different nationalities, on the recommendation of the Governing Body of the International Educational Cinematographic Institute, after consultation with the International Committee on Intellectual Cooperation.

In the event of the resignation of a member or members of the Permanent Committee
of Experts, or in the event of any other occurrence involving a vacancy, the Committee shall be completed according to the procedure specified in the last paragraph.

The Permanent Committee of Experts shall have its headquarters at the Secretariat of the League of Nations at Geneva. The Director of the International Educational Cinematographic Institute shall act as secretary to the Permanent Committee of Experts, and shall receive the applications referred to in Article VIII.

The Permanent Committee of Experts shall give its decision within 6 months of the date on which the application referred to in the last paragraph was received.

The conditions in which the Permanent Committee of Experts is to work shall be laid down in regulations to be drawn up by that Committee at its first session, and approved by the Council of the League of Nations.

The necessary expenses entailed by the meeting of the Permanent Committee of Experts shall be defrayed by the International Educational Cinematographic Institute in accordance with Article 34 of the latter's General Regulations.

**INTERPRETATIONS.**

It is agreed:

1. That the provisions of Article 1 shall apply both to the final import and export and to the temporary import and export of educational films.
2. That certificates issued by the International Educational Cinematographic Institute shall be regarded as certificates of the educational nature of the film and not of its scientific or educational value.
3. ..... 
4. ..... 

**II.**

**RESERVATIONS.**

The High Contracting Parties which make the reservations set forth hereunder subordinate their acceptance of the Convention thereto; their participation, subject to these reservations, is accepted by the High Contracting Parties.

1. ..... 
2. ..... 
3. ..... 

**III.**

**DECLARATIONS.**

By country A...
By country B...
By country C...

The present protocol shall, so far as it creates obligations as between the High Contracting Parties, have the same force, validity and duration as the Convention concluded on this day’s date, of which it is to be regarded as an integral part.

**FINAL ACT.**

(List of Governments)

Having received the invitation forwarded to them by ..... with a view to adopting a Convention for the purpose of ..... 
Have for this purpose appointed the following delegations.
(List of delegations)

Which accordingly met at ....

The Council of the League of Nations appointed M. .... President of the Conference. The secretarial duties were discharged by the following members of the .... Section; ....

As the outcome of meetings held from .... to .... the following instruments were agreed to:

I. Convention dated .... concerning ....

II. Protocol to the Convention.

The Conference also adopted the following recommendations:

I.

That the Council of the League of Nations should as soon as possible communicate the text of the Convention for signature or accession to all Members of the League of Nations and to those non-Member States to which the Council shall deem fit to send it.

II.

That the Governments of the countries on whose behalf the Convention has been signed should inform the Secretary-General of the League of Nations of their position as regards ratification of the Convention, should the instrument of ratification not have been deposited within two years of the date of signature.

III.

That each Government should consider the necessity of ensuring preferential treatment as regards import duties on blank film intended to be used for cultural, educational or scientific purposes.

IV.

That, in order to encourage the exhibition of recreational films whose educational character is duly recognised by the national organs of the different countries, each Government should grant fiscal and other facilities within its country to these films, even when they are shown in public picture-houses, as is already the case in Germany (Lampe certificate).

In faith whereof, the undersigned have appended their signatures to this Act.

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The Economic Committee, after lengthy discussion, in which all the delegates expressed unanimous approval of the fine initiative of the I. E. C. I., passed the following resolution:

«At the request of the Council of the League of Nations, the Economic Committee has examined the preliminary draft International Convention for the abolition of Customs barriers against films of educational value, drawn up by the International Educational Cinematographic Institute. The Committee is of the opinion that this preliminary draft might form a useful basis of discussion at a diplomatic conference. The Committee recommends, however, that care be taken that the terms of this Convention should correspond as closely as possible with those of other conventions concluded by the League of Nations, more particularly the Transit Convention and that on the Abolition Prohibitions and Restrictions on Imports and Exports.»
THE LEAGUE OF NATIONS ON THE SCREEN
FIVE YEARS EDUCATIONAL EXPERIMENT

INTRODUCTORY.

The League as a subject for films has its own special limitations. In relation to the cinema-going public it is a topic at once too old and too new to awake an automatic response, as do romantic adventures or feats of national prowess. It is too morally unimpeachable and too politically unfamiliar to call out superficial emotion and thoughtless applause. In any case it is intrinsically more difficult to show a peace conference dramatically on the screen than a cavalry charge or to present examples of friendly international co-operation as episodes of box-office value. A theatrical League of Nations film has yet to be produced. When it appears, it will probably be a «Talkie».

Turning to educational films, whether for children or adults, an additional bugbear has to be faced — the accusation of propaganda. Propaganda is a much abused word, which partizans fling at those who are occupied in spreading ideas which they dislike. To persons who dislike the League of Nations all efforts to describe and explain it seem to be propaganda. To those who secretly or openly approve of war or consider it a necessary evil, persons who openly disapprove of war and consider it needless seem to be propagandists. Nevertheless, the existence of the League of Nations, its aims and organisation, and the World War out of which it arose are salient facts of modern history. Their comprehension is essential to an understanding of the life of to-day. No nation can afford to omit them from its educational programme, and they are not subjects easy to learn.

If films are employed to simplify the task and make the subject both easier and more interesting, their producers must boldly face the great difficulties latent therein. They must picture the story of the World War and the League dramatically, they must tell it with complete international impartiality and they must assume a definite attitude as regards war — the attitude of the Covenant. Finally, their selection of incidents must convey what they believe to be a broadly accurate conception of sequences of events and their significance.

The following account of an experiment made with teaching films dealing with the League of Nations, begun five years ago in Great Britain and extending to other countries, may therefore be of international interest, particularly in view of the international convention for free trade in Educational Films now under consideration.

HOW THE EXPERIMENT STARTED

The League of Nations Union, a Society which exists to educate public opinion in Great Britain concerning the League and its work, began its use of the cinema
for this purpose by attempting to construct very simple, cheap one-reel films to enliven its meetings. Early in 1925 the Union formed a small cinema committee to make a more serious cinematographical attempt. This committee was joined by one or two educationalists who were desirous of an opportunity to experiment with historical films in school teaching. All the committee were amateurs, with little knowledge of cinematography, though with some experience in the literary construction of scenarios. Moreover, some of them possessed the practical psychologist's awareness that pictures in scenes, like pictures in words, must be made up of a mass of carefully selected details, most of which, even when they happen to be observed separately, will not dwell in the memory, though they are essential to the general impression it is desired to produce. Furthermore, they were convinced that an educational film should be worked out as a logical sequence in thought and also as an artistic whole, not merely a succession of scenes loosely strung together. It should be a vehicle for the graphic and attractive presentation of important facts and important ideas. These high ideals combined with ignorance of technique were further hampered in their expression by shortage of funds for experiment. The Committee could only employ a producer with a small studio, who for the good of the Cause, did his work as cheaply as possible. The production of the first attempt, a two reel historical teaching film, cost only two hundred and seventy pounds.

**The Star of Hope.**

The Scenario of the new film was carefully thought out so as to utilise the limited material at command, which consisted mainly of scenes from scrapped one-reel films, and some new, cleverly drawn diagrams and maps, interspersed with document pictures procured from the Imperial War Museum, the War Office and Societies occupied with relief work immediately after the War, such as The Friends' Council for International Service, The Save the Children Fund, The National Council of the Young Men's Christian Association; also from Pathé's Gazette and other contemporary sources.

In July, 1925, *The Star of Hope*, in two reels, was ready for exhibition. Its purpose and meaning were explained in «Notes for Teachers», a pamphlet for the consideration of those who may be intending to use *The Star of Hope* in their history course.

**Experimental Exhibition in Various Parts of the World.**

The first appearance of *The Star of Hope* on the screen was during the Summer School of the League of Nations Union, at Cambridge, in July, 1925, where it was received with acclamation. Almost simultaneously it was exhibited at the Edinburgh Conference of the World Federation of Educational Associations. Next it was taken to Geneva and shown during August. In September it was seen and
cordially approved by the Second Committee of the Assembly, as well as at three public meetings of Delegates and others. On all these occasions the exhibition was eminently successful in arousing interest in what was then something of a new departure. In many cases genuine admiration was expressed.

Then the Secretary of the League of Nations Union, Dr. Maxwell Garnett, took a copy with him on a lecturing tour in the United States, where the film was very warmly received.

Mr. F. S. Marvin, the well known historian, took a copy with him to India that same autumn and showed it with success in Calcutta, at a meeting organised by the Mohammedan Literary Society and to large gatherings in other parts of the Peninsula and in Ceylon. Somewhat later a copy of the film was sent to Australia. It was also successfully shown to about two thousand children in Brussels. Obviously its appeal was not merely national.

A WINTER'S EDUCATIONAL EXPERIMENT IN GREAT BRITAIN.

The Star of Hope began its educational work in Britain with a successful « Armistice Week » at Oxford, in 1925, culminating in a crowded meeting at the Super-Cinema, where the Vice-Chancellor of the University gave an address. Shortly afterwards the Advisory Education Committee of the Welsh League of Nations Union saw the film and ordered a copy for Welsh use.

Much encouraged by these preliminary successes, the League of Nations Union set about organising mass exhibitions of The Star of Hope to school children. During the winter 1925-6 it was seen by many thousands, of whom a large majority were children in Elementary, Central and Secondary schools.

Meanwhile no opportunity was lost of bringing the film to the critical notice of educationalists, more especially practical teachers.

TESTING RESULTS.

The next step was to test the teaching results on a large scale.

In April, 1926, seven representative localities, six in different parts of England and one in Scotland, were selected, where a total of from forty to fifty thousand children of all ages had seen The Star of Hope at mass exhibitions. In each of these localities a Questionnaire was sent to the Heads of Elementary Schools, with the request that it might be answered by teachers of children in the top form, who had seen the film. This questionnaire was filled up by two hundred and forty teachers, whose classes of boys and girls numbered in all fifteen thousand children, of the average age of thirteen years. Many teachers added separately useful suggestions for the improvement of the film for teaching purposes.
Questionnaire for Teachers concerning the Educational Value of the League of Nation Union's Film «The Star of Hope».

Total number of children 15,201.  
Average age 13 years.  
Standard Top Classes of Elementary Schools.

Summary of replies from 240 teachers:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was your general impression of the film favourable?</td>
<td>227</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>2. Did the film help you to make the class realise:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) how the League was formed?</td>
<td>185</td>
<td>47</td>
<td>8</td>
</tr>
<tr>
<td>b) that it is an active force to-day?</td>
<td>228</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3. Did the film help you to make the class realise that War:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) is contagious (from blackening map)?</td>
<td>216</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>b) is horrible (from graves and devastated area pictures)?</td>
<td>226</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>c) is expensive (from cartoon and diagrams)?</td>
<td>224</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>4. Did the Disputes map and the Aaland Island pictures help you to make the class realise that the League is a peacemaker?</td>
<td>236</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5. Did the Refugee pictures help you to make the class realise that the League has many duties besides settling disputes?</td>
<td>223</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>6. Did the class understand the organisation of the League?</td>
<td>72</td>
<td>124</td>
<td>44</td>
</tr>
<tr>
<td>7. Do you think that the class did better compositions because they had seen the film?</td>
<td>158</td>
<td>22</td>
<td>60</td>
</tr>
<tr>
<td>8. Do you think that there are too many pictures:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) of the Aaland Islands and the people?</td>
<td>Large majority think pictures not too numerous.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) of the refugees?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. How many lessons should be given:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) in preparation for the film?</td>
<td>Large majority in favour of 2 or 3 preparatory lessons and 1 or 2 to follow up.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) following up the film?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Which of the diagrams is:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) most successful?</td>
<td>War maps most successful. Finance great difference of opinion. Large majority think diagram of League organisation not understood.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) least successful?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Enquiry and its Results described to the British Association for the Advancement of Science and to the International Committee of Educational Experts at Geneva.

The results of this Enquiry were described by Mr. G. T. Hankin, H. M. I., in a paper read before the Educational Section of the British Association for the Advancement of Science, at its meeting in August, 1926, at Oxford. In those days the use of films in history teaching was still a novel and dubious suggestion to the learned, but they showed an appreciative and benevolent interest in what they saw and heard. Some of the unlearned were frankly delighted.

In July of that same year, 1926, the International Committee of Educational Experts, appointed by the League to consider the instruction of the young in the aims and organisation of the League of Nations, met at Geneva for the first time, and a Memorandum from the League of Nations Union on the British experiment with *The Star of Hope* was laid before them. The value of films for the purpose they had in view was mentioned in the report of the Committee of Experts to the Council, and submitted to the Assembly, September 1926 (Document A. 26).

When *The Star of Hope* had been shown in four Continents and had justified its existence before large numbers of very diverse people, the time had obviously come to apply the experience thus gained to the improvement of the film as an instrument for League teaching. The Cinema Committee of the League of Nations Union had been closely watching its progress with this end in view, and were much encouraged by discovering that the criticisms and suggestions received from British teachers, who had seen the film and taught classes who had seen it, largely coincided with their own. They therefore set about the construction of an enlarged and improved film on the same subject.

The World War and After.

The main intention of this film, as of its predecessor, was to help teachers to ensure that every child leaving an Elementary School should know definitely about the existence of the League of Nations, its organisation and its work, as important facts of recent history. The scenario was planned to set forth, one by one, a few main, outstanding facts and ideas concerning the Great War and the League; each fact by itself, but following one another in strict historical sequence, so that the final impression left on the mind might be that of a connected whole, a big reality about which there is much more to know.

*The World War and After* was ready for exhibition on Armistice Day, 1926. Its four reels contained the best teaching material in *The Star of Hope*, re-cast in combination with much that was new. It has been in continual demand ever since, and has been three times revised and brought up to date. As in the production of
the earlier film, a constant hindrance has been lack of adequate funds. Where a professional producer would have estimated his expenses in thousands of pounds, the League of Nations Union Cinema Committee has been compelled to estimate in hundreds or even in fifties and less, and the film has, of course, suffered from this enforced economy.

The World War and After is now in its fourth year of educational use. A general outline of its Scenario follows. (Note: Sentences in quotation marks are captions).


Part one. The Great War.

The film begins with two lively scenes in a London slum. «When neighbours are quarrelsome... One blow may start a street fight». These are followed by an immediate application of the analogy to the historical events of 1914.

The murders at Sarajevo — «Austria accuses Serbia». Both countries are hatched over in the map. The screen goes black and the word War appears; when it clears Austria and Serbia are seen turning black.

«Other nations join in». Map of the World, Austria and Serbia black. (Label «1914»). Each country, with its dependencies, turns black as it enters the war.

«In 1918». The blackened map turns white, whilst across it flash the words The War ends.

Part Two. What the War left behind.

The pictures on this reel, whether still or moving, are all document photographs, taken at the time and place indicated.

«The War left behind nine million dead».

«Lands laid waste and millions of people homeless».

«The war left the countries of Europe broken up». Moving map, showing Europe with frontiers as in 1914. Many of the frontier lines break into fragments and lie in heaps on the map.

Part Three. The League of Nations.

The third reel shows how the attempts of Statesmen «to mend a shattered world» result in the formation of a League of Nations to prevent war in future.

The Covenant of the League is signed as part of a peace treaty.

The remainder of this reel shows, firstly, the growth of the League, demonstrated by moving lists and diagrams, and, secondly, its organisation, illustrated by moving pictures of Assembly and Council, views of Geneva, the League office, the International Labour Office and the World Court at the Hague, with scenes
showing their work. The conclusion is financial: a moving diagram of the League's expenses and of the contribution of each State Member towards meeting those expenses, is followed by a comic cartoon of John Bull carrying a burden of taxation of which war debts are a heavy part, while his contribution to the peace agency of the League is infinitesimally small by comparison.

Part Four. The League at Work.

The fourth reel of the film begins by a reproduction of the map of Europe, with its frontiers as they were in 1914 broken up, the final scene in reel one. Slowly the broken lines begin to move and form themselves into the national boundaries of the New Europe of the Nineteen Twenties. This is followed by a series of close-up maps, in which seven new nations carved out of old ones are hatched in, and their names shown by labels.

The rest of the film is a visual demonstration of the historical fact that the reconstruction of Europe has led to many disputes, and that a main part of the work of the League of Nations has been to prevent wars by the peaceful settlement of international disagreements. By way of example the disputes over the Aaland Islands and the Greco-Bulgarian frontier incident in 1925 are presented in detail, with maps, moving diagrams, pictures of the place and the people.

Two Pertinent Comments.

Firstly, the film teaches political geography as well as history.
Secondly, it contains no direct moral teaching, but the fundamental underlying assumption is that war is an evil, regrettable in the past and to be avoided in the future.

Explanatory Notes for Teachers.

Extracts from the pamphlet accompanying the film.

« The World war and After. » An Educational Film, designed to assist teachers in carrying out the desires of the Eighth Assembly of the League of Nations (1927); The National Conference of the Central and Local Education Authorities of England, Wales, Scotland and Northern Ireland (1927); The Declaration of the leading Teaching Associations (1927) that « All children and young persons should receive instruction in the creation, aims and activities of the League of Nations ».

« The World War and After » can be used profitably for the upper classes of Elementary Schools, for Central, Junior Technical and Secondary Schools, in Adult Education and for instructional purposes in mixed audiences. In schools it provides a nucleus of interest round which a series of lessons can be grouped, graded in difficulty according to the capacity of the pupils.

« 1. Teaching Notes. »

« Position of The World War and After in the History Course. » The ideal method of employing this film is to introduce it when the class has arrived at 1914
in its course of European History. The history of the League of Nations then falls into its proper place, and serves as an opportunity of gathering together into a connected whole, and bringing into touch with the world of to-day, the general historical notions that have been inculcated in previous years. Constant comparisons are possible with the past on such subjects as the differences between the causes of wars and the excuses for beginning them. Some scenes, e. g. the migration of refugees, will help to make occurrences in past ages more vivid. Moreover, the barriers between geography and history, in certain of their aspects, will be broken down effectually.

Where the film cannot be shown at the precise moment demanded by the course, more care will be needed to introduce it logically. More stress, perhaps, will be laid on its geographical side, or recent occurrences may be found a useful link in the children’s minds. In any case, the film can be utilised to provoke thought, and to arouse interest in history in the making, and in the problems which every adult citizen will be called upon to face; but without some previous instruction much of its effect will be lost.


The Scenario shows that this film lays stress upon a few main points in an historical sequence of events.

The first point stressed is that one violent act may precipitate a terrific war. This suggests the question: Can it do so except amongst peoples ready to settle differences by a resort to violence? Before 1914 Europe was an armed camp; the great nations’ snarling at each other’s heels, competing with one another in a race for armaments, foreign possessions and spheres of influence. The war spirit was awake. War was talked of, prepared for, dreaded by some, hoped for by others. The World War, and the incident that ignited that conflagration, must be comparatively meaningless to children who know nothing of the history of Europe in the preceding years or why a great war in Europe must necessarily involve many peoples throughout the world.

Another main point stressed in the film is that Europe, as it existed before 1914, was broken up by the war. Since then old nations have swelled or dwindled, some are almost wiped out, whilst new nations have arisen. If children have not some general idea of the old Europe, they can hardly comprehend with what a chaos of conflicting claims and national and racial discontents the newly created League of Nations was confronted in the years that followed the Peace Conference at Versailles.

A large majority of the teachers consulted agree that two or three preparatory lessons are required to enable children to benefit fully from a film, however vivid, dealing with the World War and the history of the League of Nations.


« There is also a general consensus of opinion amongst the teachers consulted that the film should be followed by two or more special lessons. The children have
received a number of vivid impressions — new material for thought. It is suggested that the first lesson after the film should be devoted to helping them to recall the more important of these impressions, and to arrange them in sequence. As the class does this work collectively, each child can write down a brief summary, in skeleton form, of the main points. It has been found that a skilled teacher can extract all the facts from the class; under his guidance they do all the work themselves. No more information should be given during this lesson. The picturesque details that made the story vivid and arresting can be allowed to sink away into the forgotten or half-forgotten. The great salient ideas or occurrences that are to be remembered should be brought into their rightful prominence.

This process is considered extremely important. It forms the connecting link between the reception of new ideas and the self-expression that follows later. When a film is exhibited to large bodies of children at the same time, the interplay of the minds of the teacher and his class is temporarily lost. This lesson gives the opportunity to the teacher to restore it, and enables him to fulfil his rightful function — a function that a film cannot fulfil. It should be an aid to the teacher; it can never take his place.

When the children have taken the first follow-up lesson with the teacher, they are ready to deal with the new knowledge and the impetus to thought given by the film by attempting active individual work: e.g. essays, discussions and private reading. Each teacher will, of course, develop the work in the direction that seems to him best. It is interesting to note that a large majority of teachers have stated that the compositions of children who have seen The Star of Hope, have benefited thereby. The World War and After suggests a great variety of subjects for compositions, in addition to subjects for sketches and diagrams.

«It should be borne in mind that this film is merely an introduction to the study of the League of Nations. For obvious reasons, it confines itself to the League’s direct work in preventing strife after the Great War, and perforce leaves unpictured the manifold political, economic, social and humanitarian activities by means of which the League is promoting peaceful co-operation amongst the nations. The teacher has, therefore, a wide field for further study for himself and his pupils.»

The pamphlet concludes with the Scenario, followed by some description of various technical devices used to convey a few simple fundamental ideas from several points of view, in pictures, diagrams, maps, or symbolic scenes, to appeal variously to various types of mind and to make the ideas more lastingly impressive. Lengthy captions are avoided whenever possible. A documented analysis of the historical matter employed is added for reference.


In July, 1927, The World War and After was shown at Geneva to the Committee of Educational Experts, who at their previous meeting, in July, 1926, had included films amongst the educational instruments available for instructing children and
young persons concerning the League. After seeing *The World War and After*, they passed the following resolution: «This Committee of Experts thanks the British League of Nations Union for affording them an opportunity of seeing the Film *The World War and After*. The Committee are convinced of its educational value and consider that similar films, or adaptations of this film, might prove of great value in many countries in assisting in the instruction of the young in the history and work of the League of Nations.»

**INTERNATIONAL USE OF THE FILM.**

A striking confirmation of the opinion of the Committee was received last year from Finland. A copy of the film was borrowed for a month to show to the upper and continuation classes of Elementary schools in Helsingfors. Afterwards the Inspector of Primary schools there wrote in his official report: «The Film, *The World War and After*, is a particularly successful means of awakening the interest of young people in the work and significance of the League of Nations... The pupils comprehend its contents without difficulty» (The difficulty of English captions was met by Finnish explanations by teachers as the film was shown). «The film», he continues, «is so striking that the impression will remain in the mind». The teachers tested results by follow-up lessons and essays where the children showed that they had got the right impressions. «The school film is the most effective means of bringing to the consciousness of young people the work and significance of the League of Nations... There is in the class books of the Primary schools a chapter on the League... but it is short, and contains only facts. It requires extending and deepening, for which purpose a school film like *The World War and After* is particularly suitable». He considers this film «suitable for Finnish conditions especially because the question of Aaland has been very largely and sympathetically treated». (Finnish Legation, London, Dec. 1929).

This spontaneous tribute to the fairness with which historical international disputes are treated in the film was very gratifying to its authors.

It is difficult to estimate to what extent *The World War and After* is being shown in other countries. Copies have been borrowed at Geneva, Holland, France, and Ireland, and purchased for educational use in Wales, Denmark and South Africa.

**FOUR YEARS EXPERIENCE OF EDUCATIONAL USE IN GREAT BRITAIN.**

In England and Scotland, during the years from November 1926 to April 1930, the League of Nations Union officials estimate that this film has been seen by over half a million children and approximately four hundred thousand adults.

To give one example, the Local Education Authorities of the City of Birmingham and the surrounding area, combined to lease three copies of *The World War and After* for a fortnight and hired or borrowed twenty cinema houses, in which to
exhibit it to some 30,000 children. Afterwards the Secretary reported: «Tremendous enthusiasm has been shown both by the children and their teachers. In connection with the exhibitions, one of the local papers is running an essay competition». Prizes for Essays in connection with the film are not unfrequently offered.

Some places repeat the exhibition of the League film year after year, so that senior children leaving the Elementary schools each year may see it before their departure. Localities book copies for Armistice Day six months in advance. Sometimes teachers from several schools arrange with the local Branch of the League of Nations Union to borrow or hire a cinema house for a Saturday morning and show the League film to one or two thousand children. Sometimes the film is sent to schools for classroom study or for exhibition out of lesson-hours in the school hall.

It will be seen that *The World War and After* is widely recognised as an educational instrument of some value. Expert criticism is another matter and difficult to apply to a cheaply constructed film that is maid of all work for League teaching, serving for public shows, mass exhibitions to children, and school lessons. Its success is a remarkable tribute to the power of even imperfect cinematography as a vehicle of ideas.

**Relative Educational Value of a Film in League Instruction.**

Incontestably films can be used with some effect in conveying instruction concerning the League of Nations to children and adults, but the question remains could that instruction be equally well given by other means. It is part of the wider question: What value have films in history teaching?

Evidence on this subject has been collected during the past year by means of an Enquiry organised by the British Historical Association and financed by the Carnegie Trustees. A highly qualified Enquirer has conducted a series of immediate and deferred tests as to the relative results of history lessons without films and history lessons accompanied by films dealing with the subject of the lesson. These tests have been carried out in Elementary, Senior and Secondary Schools in several parts of England, including London, with the cordial assistance of teachers and Educational Authorities. Six historical films have been used for the purpose, one of these being *The World War and After*.

A full account of the enquiry will shortly be published, but from information already received, little doubt remains as to the class-room success of the League film. Despite its length and its shortcomings from the standpoint of the professional producer, it seems to convey clear and comprehensive impressions to the minds of children, which no other form of instruction could convey within an hour. In some Elementary Schools it has been shown by the investigator to boys and girls about the age of thirteen who have had no previous lessons bearing on the subject, and yet hundreds of these children have unmistakably grasped the general meaning
of the film and its logical sequences, and re-produced these impressions, together
with their recollections of scenes, maps and diagrams, in essays written the next
day or shortly afterwards. Still more noteworthy is the fact that when test essays
on the film were asked for six or seven months later, the children still remembered
the general impressions it had left on their minds even when they had forgotten
most of the details. In fact they had learnt the lesson taught by the film and
henceforth the League was something real to them. This was the case with children
of average intelligence, not merely with those considered by their teachers as specially
bright. « The amount of information acquired and clear grip of the lessons of the
film were quite astonishing », said the investigator.

In other schools where the children had the advantage of preparatory and
follow-up lessons, the film helped to enlarge, coordinate and deepen the impres-
sions received from the lessons.

Thus in the class room, as well as outside, there seems to be a wide and defini-
tive scope for carefully constructed educational films, which compress the most
essential facts concerning the League into a series of pictures on the screen. The
language of moving pictures is more comprehensive than that of words. It can
express some complex ideas more simply, more directly, and far more rapidly than
words can do. And it is international and worldwide. British experience during
the last five years with the Union's experimental films certainly tends to endorse
the opinion expressed by the Committee of Educational Experts after they had
seen The World War and After: « Similar films or adaptations of this film might prove
of great value in many countries in assisting in the instruction of the young in the
history and work of the League of Nations ».

C. M. Wilson.
On account of its exceptional value in regard to the social aspects of the cinema, the Rome Institute has pleasure in publishing a Bill presented to the Argentine Chamber by the representatives of the cinematograph censorship, together with the Report by the Hon. Dr. Bard, presentor of the Bill.

The Bill and the Report have aroused considerable discussion in cinematograph circles in the South American Republic and generally throughout the country.

La Pelicula, of Buenos Ayres, writing on the subject in its issue of 1929, states that the Bill is marred by a serious practical defect: that of the suggested division of cinematograph spectacles into two classes.

It is also felt in some quarters that the creation of Censors’ Commissions on the lines already existing in Europe and in some States of North America, would mean absurdly complicating, by the formation of organizations unsuited to the psychology of the Argentine people, a question that in itself is sufficiently simple. The Hon. Bard, declares La Pelicula, who has hitherto been distinguished by the clarity of the laws he has proposed, must have forgotten that, dealing as it does with shows of such a popular order as those of the cinema, the law in question would merely limit the free trade of the industry.

The arguments brought to bear against the Bill and the Bard Report cannot be discussed and criticised by the Rome Institute.[They touch on two complicated questions, which have been dealt with on various occasions, the pro and contra opinions being set forth in this number itself and in the numbers previously published by the International Review of the Educational Cinema.

The points at issue are whether:

a) it be advisable to create special cinematograph shows for children (the division into two classes would involve ipso facto the creation of such special spectacles) or whether, on the contrary, the evil, real or imagined, should be tackled at the root; by modifying the conception and working out of the films themselves, so that — without giving the youthful public the impression that there is a desire to keep it away from the ordinary shows and to administer to it a form of art ad usum delphini, which would result in driving away the mass of children and young people from the cinema — the ordinary projection given in the public cinemas might be truly «universal» in character, without exclusion or limitation of age or sex;

b) it be advisable to maintain the present system of censorship and control of films or to substitute for it more suitable means, that for the moment have not been defined or indicated, or else simply to leave the general public to act as its own censor.

As we have said elsewhere, the public is undoubtedly the most effective censor of every form of art. It manifests its opinion in the clearest and most expressive way, by
the desertion of those shows that do not appeal to it, that are not consonant with its sense of beauty and of the harmonious, moral, and social aspects of life.

The North American film market was perhaps the first to realize this danger and its inevitable consequences and to proceed to remedy the evil with the utmost solicitude. It appreciated the necessity of a production dictated not only by the more or less spectacular conceptions and views of the scenario writer, who works shut up in his study and is frequently not in contact with the life of the world, but of a production answering to the views and ideas and wishes of the public itself, as evinced in its elementary criticism and its assiduous frequenting of the shows that it likes, while those that it does not like are abandoned to the fate that dogs all obsolete forms of art.

These are questions that are not easy to settle, as we have said, and that are certainly not to be settled by superficial criticism, but that must be exhaustively discussed and examined, and subjected to inquiry or a series of inquiries before any final solution can be reached.

The Bard Bill and Report, which, as we have said, have a noble aim of social research in regard to the cinema, are valuable just for this reason, that they once again bring the problem up for discussion.

Hence it is desirable that they should be made generally known abroad by an Institution whose main object is to raise the tone of the screen to suit the minds and souls of children and young people.

TEXT OF THE BILL.

Art. 1. — All cinema shows given in the Capital or within the National territory shall be subject to the conditions laid down in this Act.

Art. 2. — Cinema shows shall be classified in two categories:

a) Shows for children, of either sex, under the age of 15;

b) Shows for adults aged over 15 years.

Children aged under 6 may not be admitted to any cinematographic shows.

Art. 3. — Cinematographic representations of the first category shall be given twice a week between the hours of 3 and 8 p.m. They may not last longer than three hours each and an interval of twenty minutes must be allowed half-way through the show. The municipal authorities may fix the times that seem to them most suitable for shows of this type according to the needs of the districts under their jurisdiction and according to the season of the year.

Art. 4. — Shows of the first category must have educational, recreational, and moral aims; all films of a dramatic, detective, or sentimental kind, or of a sensual tenour, are rigorously precluded.

Art. 5. — In each of the municipalities of the national territory honorary Censorship Commissions shall be set up, consisting of five members nominated from year to year by the executive department of the municipality concerned. The said Commission shall consist of a head-master or head-mistress of a secondary school or, in the absence of these, of a head-master or head-mistress of a primary
school; and in the event of their being unable to serve, of a head-master or head mistress of corresponding grade, chosen according to length of service, and of two mothers and one father of a family domiciled in the district. These commissions shall be nominated, in each of the municipal districts, by the Executive Board concerned, and shall be completed by the Municipal Controller, acting as Chairman, who shall have a deliberative vote. The Commission shall carry out its task in such municipal office as the Executive Board may see fit to designate.

Art. 6. — In the Capital of the Republic the Censorship Commission shall likewise be an honorary body; it shall consist of fifteen members, and shall be divided into three sub-commissions, each of which shall consist of five members. The sub-commissions shall function by monthly turns and by a majority of their members. The favourable opinion of each one of the sub-commissions, when pronounced unanimously by the members present, shall be sufficient for the purposes of this Act. Where such unanimity is lacking, the film under consideration must be submitted to the criticism of the plenary Commission.

In either case, permission to show the film shall be notified to the interested party by the municipal Controller who, in the case of a permit granted by a sub-commission, and whenever he may deem it expedient, shall be entitled himself to examine the film before signing the notice. In the event of the said functionary finding himself in disagreement with the opinion of the sub-commission, he shall submit the film for re-examination by the plenary Censorship Commission. He shall himself preside at this Commission and shall be entitled to vote, and, in the case of parity of votes, shall be accorded two votes.

Art. 7. — Each censorship sub-commission shall consist of: a president of the scholastic district of the Capital, who shall take the chair, the director of an educational institute, and one father and two mothers of families. All the members shall be nominated by the national Executive Power; they must be domiciled in the Federal Capital, and the last three must be chosen from among the biggest taxpayers in the Commune, possessing the requisite qualities, and they must not be legally separated from their lawful spouses.

Art. 8. — The following duties are entrusted to the Commission and the sub-commissions:

a) to classify the programmes and cinema films and authorize in writing their public exhibition;

b) to examine any complaints submitted by teachers or parents against particular cinema shows, and generally supervise the enforcement of this Act within the circuit of their jurisdiction.

Art. 9. — Where any part of a film has not been submitted to the Censors, a permit may not be granted for the unviewed part, but the Commission shall limit itself to expressing its opinion of the scenes examined.

Art. 10. — Each Commission shall keep a register in which all permits to exhibit and all refusals thereof shall be registered.

Art. 11. — Any cinematographic firm or company of any kind submitting to the Censorship a film that has already been refused a permit for exhibition in the
same district, without having introduced into it the required alterations, shall be liable to a fine of from 500 to 1000 pesos.

Art. 12. — The members of the Censorship Commission established by this Act shall remain in office for a period of three years and shall be re-eligible, with the exception of public functionaries who fill the post for the duration of their office. In the case of such permanent officials, they also shall remain in office for three years and be re-eligible.

Art. 13. — The executive department of each municipal district shall lay down its own rules for ascertaining the age of children desiring to attend cinema shows.

Art. 14. — Cinematographic firms are required to apply for the requisite authorization of the Censorship before exhibiting any single film. The same permission must be asked for the public projection of films in clubs and private associations. The censorship applies to the exhibition of all films, whether for valuable consideration or otherwise.

For this purpose an application on unstamped paper must be presented to the Chairman of the Commission, requesting that the film be examined, and the Commission shall meet to grant the permit requested, unless there is any impediment to its being accorded. In the Federal Capitol, the Chairmen of the Commission shall pass on the application to the Chairman of the acting sub-commission.

Art. 15. — The fact of permission having been granted to exhibit a film in a given municipality does not exonerate it from the requirement of submission to the censorship of a different municipality before being exhibited within its area.

Art. 16. — The cost of projecting cinematographic films before the Censorship Commissions or sub-commissions, as often as these may require it, shall be borne by the applicants for permits.

Art. 17. — All publicity matter exhibited or distributed by the firm or party interested must be submitted to the Censorship together with the film to which it applies.

Art. 18. — The members of the Censorship Commission, or such persons as they may see fit to authorize for the purpose, shall have free access to all cinema halls. Not more than one member of a Commission, or more than one person designated by it, may under any circumstances avail themselves of this right contemporaneously.

Art. 19. — Firms or cinema managers may not project films or parts of films the public exhibition of which has been prohibited by the Censorship Commissions. Permission to exhibit shall be put in evidence in the cinema programmes or at the entrance to the halls. The programmes or notices must likewise indicate in which of the two categories provided for in this Act the show is classified.

Art. 20. — The programme announced may not be altered, and under no conditions is it permissible to alter the class or category of show that has been announced.

Art. 21. — Sudden changes of light must not be made during the projection of films of either of the two categories. The captions must be projected in black
on a light green screen-space. All titles and captions must be shown on the screen for at least fifteen seconds. The first row of seats must be placed at a distance of at least ten metres from the screen.

Art. 22. — Censorship Commissions shall not authorize the projection of films, even of the second category, whenever, in their opinion, these may be in any way deleterious to public order, morals, or decency; if they are anti-patriotic, or contain cruel or repulsive touches, scenes, or subjects.

Art. 23. — The Commissions shall prohibit the exhibition of films whereof the titles and captions are badly drafted, or contain faults of spelling; if they are morally objectionable, or if it is not possible to read them from all points of the hall.

Art. 24. — The police authorities of each district are required to see that films that have not been passed by the Censors are not exhibited in cinema halls; that children under 15 are not admitted to shows of the second category, and that children aged under six are not admitted to any cinema shows; they are required to lend their support to the Censorship Commissions wherever these require it.

Art. 25. — The Censorship Commission and sub-commissions shall take minutes of their proceedings; to be recorded in a special register under the direction of the Chairman or Secretary of the Commission.

Art. 26. — Each Commission shall lay down its own working rules. A majority of its members shall form a quorum and decisions shall be taken by a majority of those present at each meeting. Members are required to attend except in the event of justifiable and duly substantiated impediment. A fine of five pesos shall be levied by the Commission in the case of all unjustifiable absences.

In the case of repeated absences, the defaulting member shall be reported to the higher authorities with a view to suspension from office for a period of not more than five days in the case of members depending on the said authorities; other members of the commissions shall be liable to a fine of 50 national pesos.

Art. 27. — All infringements of this Act, on the part of firms or other interested parties, shall be punishable by a fine of from 1000 to 5000 Argentine dollars, according to the gravity of the offence committed.

In the case of a repetition of such offence, a fine will be inflicted amounting to twice the amount of the fine originally inflicted. In either case the fine shall be determined by a majority vote of the Censorship Commission and shall be levied by the executive department of the municipality concerned.

Art. 28. — The municipalities respectively concerned shall meet the costs involved by the functioning of the Censorship Commissions. Any fines levied in execution of the present Act shall also be applied to this purpose.

Dr. Bard's Report.

I consider the cinematograph as a fundamental part of culture when films of a moral, scientific or educational character are projected; but the greater number of films that are shown to-day are unfit to be seen not only by children, but also
by adults. We have, as a matter of fact, numberless sensational dramas abounding in pornographic scenes, unedifying pictures that do not in any way assist in raising the moral tone of the persons frequenting the cinema.

We are living in a very difficult age from the standpoint of social manners and customs. It is not that we personally are inferior to our neighbours in the matter of morals. The nude, in all its forms and manifestations, has afflicted us as it has afflicted other countries. Liberty and licence of every description have been copied by us in imitation of what is going on abroad; and in this field the cinematograph, with its exhibition of the nude, its dramas of passion and crime, has been a great factor of degeneration and delinquency.

The cinema might be a powerful aid in the education and culture of the people. It could collaborate with science, and do much to popularize the arts. And it could succeed in all these tasks just because the cinema has taken such a tremendous hold on the general public. But while it may constitute one of the greatest factors of progress, the cinema is liable to prove also one of the greatest dangers to social safety, a means of encouraging social depravity. Its creations are produced and exploited solely for gain, frequently at the sacrifice of the highest social interests and, what is worse, of the moral well-being of children. Considering what a powerful means of suggestion the cinema possesses, it is impossible to deny the harmful effect it may have on children and nervous, excitable women, and also on men of weak character; and it is equally impossible to discount the evil consequences that may ensue. Doubtless, of all these evils, we ought to concern ourselves most with those affecting children, since the soundness of the foundations we are preparing for the civilization of the future depends on the child's physical, moral and intellectual formation. Humanity is passing through an agitating period of contrasting ideas, a period almost akin to dementia, in consequence of the often unaccountable fears and desires that are driving it towards the destruction of every idea of virtue and goodness. Underlying all this, there is an uneasy sense that children should be separated from the environment we are living in and brought back to the moral guidance of their parents. It is therefore the duty of the statesman to make every possible use of his power to protect children against the physical and psychical dangers that beset them.

For this reason it is our duty to defend the young from the dangers of the cinematograph. There is no kind of public amusement which has greater possibilities of influence than the cinema. This is the case, in the first place, on account of its cheapness, which tempts school-children to play truant and spend the few pence for their dinner in an hour's entertainment at the pictures, watching the representation of improbable scenes of crime, in which the delinquent is transformed into a hero and held up to the admiration of the audience for his courage and ability in obliterating the traces of his crimes. The cinema is also the most popular type of amusement with the mass of the people. In the theatre, the plot can be followed only by the exercise of the intelligence, whereas in the cinematograph every movement and action is so exaggerated that the general public, even when it does not altogether understand, is impressed by scenes of violence, exciting action, and pictures of refined voluptuous-
ness that have a dangerous reaction on human psychology, agitate the nervous system, and disturb the organism generally, since it is always the lowest passions and most bestial instincts that attract the majority.

It is this atmosphere of wrong-doing, crime and social perversion that is the common, every-day environment in which our children and young people are growing up.

Parents would never dream of taking their daughters to a cabaret or to assist in some orgy, but, as if it were the most natural thing in the world, they let them go to cinemas to become absorbed in much more immoral scenes, presented in a far more and striking and impressive fashion than anything they would see in a cabaret.

It must be admitted that a large percentage of films constitute a complete school of crime, brutal excitement, and physical decadence, which is poisoning mankind and undermining the dignity of the human race.

Nothing can equal the cinematograph in its influence on the weak and ignorant, for it is obvious that a visible presentation, with an appearance of perfect reality, followed movement by movement on the screen, is easy to understand and full of suggestion.

Young girls of a sentimental type often pine to become cinema actresses, simply because they are always viewing love scenes with heroes unlike any they are likely to meet with in real life. They are filled with memories and impressions and unsatisfied desires that create a morbid condition of mind and feeling.

Children of the tenderest age form a permanent legion in the audiences of local cinemas. The child is notoriously extremely imitative on account of the facility with which he receives impressions, which are absorbed by his malleable character in every detail. The pictures of vice and misconduct exhibited on the screen unsettle and weaken the minds of children, stirring them to a condition of nervous excitement and arousing the suggestion of vice that is latent in everyone and especially in the young. The consequence is that, almost without knowing what they are doing, children begin to imitate the criminal attitudes and deeds that they have seen portrayed on the screen by some world-renowned actor, who is transformed into a hero for the nonce, and who acts a scene of murder or robbery or sensuality so realistically as to impose himself on the audience — in the pathological psychic condition produced by the continual view of such scenes — as a person to be applauded and envied for his particular type of criminality or disease.

We are justified, therefore, in considering these films as an alarming factor in the increase of child criminality and misconduct, which is becoming a scourge that shames our civilization.

Protective action by the State is particularly necessary for children, because we ought not to wait until an evil has arisen to cure it, but on the contrary take every means to prevent its arising. The State must therefore concern itself with these problems, prohibiting children and adolescents from viewing, in the popular amusements they frequent, anything that may incite to crime or perverted sentiments.

Cinematograph censorship must be conducted with the utmost energy, because society's interest in safeguarding its own peace and quiet and rescuing the
young generation from corruption and incitement to vice and crime is of much more importance than any commercial interests that the cinematograph may represent. In an interesting article published by Dr. M. C. Bertero in «The Primary School and the Cinema» (Scuola primaria e il cinema), from which I take some extracts, because I think they deserve to form part of the report I am presenting to the Chamber, the writer says:

«I do not know of the existence of any special study on the physio-psychological action of films on children’s minds. The definite formation of the mind takes place under different conditions from those of the other organs of the body. Puberty results, according to the individual, in a particular somatic and psychico-cerebral formation (Münzer). Sound bodily development is a function of given hygienic and physical factors. To ensure normal physical development, account must be taken of the substratum of primitive passions and instincts, exponents of an atavistic stage of civilization; and it is also necessary to consider the individual intelligence and imitative spirit of each child in relation to its family environment in order to understand all the educational difficulties that the schoolmaster must overcome, and also in order to obtain the formation of normal psychological types.»

There is no doubt that one of the chief determining causes of precocious criminality (between 14 and 16 years), which is becoming such a general scourge, is to be found in the cinema. The excitement irradiated by the screen impresses the higher nervous centres of children sometimes more than the same acts in real life would do. The emotions displayed by children during a performance prove the truth of this statement. The images of the screen remain in the child’s memory longer than the images made on its mind during a reading in class. This fact alone proves that the cinema could be used as a powerful educational medium. In fact, the cinema is efficaciously handled by schoolmasters in many branches of education in Europe, Australia, Canada, and the United States.

I am firmly of the opinion that the images of the cinema, carefully and expressively arranged, may have an influence on the development of child mentality. They cannot logically prevail over the inhibitory power of the reason, which is always embryonic in the child, but they have a direct influence on the psychological state of the child for good or ill.

The cinema, as a rule, offers us films of artistic construction, splendid by reason of the reproduction of the beauties of nature or owing to fine acting, so that, though purely photographic projections, they carry us away mentally into a milieu of real facts and of real life, with all its diverse aspects of good and evil, through a succession of visual hallucinations, if I may so express it. At the present time, the attendance of children in cinemas is enormously on the increase, compared with a few years back, while both in town and country districts the shows are practically continuous on Sundays and very numerous during the week.

The Argentine Penal Code applies the penalties of articles 128 and 129 as punishment for specified forms of immorality, which we may define as »absolute immorality«, and does not cover cinematographic spectacles; then when a film displays nudity and sexual questions, it complies with the precepts of social prophylaxis.
by posting up «not fit for children and young persons». This is not the type of
immorality to which I allude. I have in mind what I might term «relative
immorality», that is, to say things that are immoral in relation to the age of those
present at cinema shows, who consist to a great extent of boys and girls of school
age; this is most reprehensible owing to the collective effect it produces in lowering
the moral tone of the growing generations of citizens.

We must first of all define the characteristics that a film ought to have in order
to be considered suitable and moral for children.

All that is good, beautiful, and just is obviously perfectly moral; but it is absurd
to suggest that in practice we should demand such an ideal combination in the im-
ages of life reflected on the screen. I consider that it is enough that a film should pre-
sent two only of these qualities, unmarred by anything actually anti-moral. In order
to justify my opinion, it will be as well to analyse, one by one, the above three
elements of morality in relations to the cinema.

The sense of justice — whether correctly understood or not — is the most
highly developed sentiment in the rudimentary ethics of the child; it determines most
of the impulses of children: their acts of violence against their companions and of
disobedience to the will of their parents. An understanding of this sense of justice
is the main requisite of a good educational system, and one which it is to be hoped
our schoolmasters possess.

The endless series of «cowboy» films, for instance, aims at adapting all the
details of the scenes to the satisfaction of this sense of justice, in order that children
may follow the story with understanding and enthusiasm.

This type of film is, in every case, liable to be dangerous to children of neuro-
pathic heredity; concentrating all their mental faculties to follow the pictures that
pass before their eyes, they return home with a lasting impression that is often bad
for them. I have often found girls and boys suffering from serious nervous troubles
after watching one of these shows, and have at once realized that I had to deal with
psychologically abnormal children.

It is a good thing, at any rate, that these cowboys do not use weapons in their
fights, or, if they sometimes carry one, it is only that they may drop it dramatically
at the proper moment, without harm to anyone. What a difference from the fights
in cabarets, taverns and other places of amusement of the kind which abound as
normal film pictures! Such pictures should be considered immoral for this rea-
son alone, even if there were no others.

If I were not afraid of being considered illogical, I should be inclined to declare
that one of most valuable assets of the cowboy films is their athletic feats, which
makes them of the greatest moral utility.

The main part of a cinema programme is formed of films with a dramatic back-
ground. The least noble of human passions, the most degraded and basest, form the
principal theme in these. They end, no doubt in the triumph of justice,
but the end does not justify the means, and appears only after a series of
pictures that may be beautiful in their expression, but are substantially cruel,
dishonest, obscene, or even criminal.

in.
The cinema film might be compared to visions of a battle ending in a magnificent victory (a fine wedding concluded by an artistic kiss between two youthful figures standing out against a celestial background); but in this battle there are scenes of passion that cause only harm to the spectator. The ingenuous feelings of the child are marred, and the efforts of the teacher to guide him with the tenderness of a mother are neutralised by the deforming and deteriorating influences of the cinema.

These social drama films, in which adultery and divorce and passion are the fundamental subject, are undoubtedly immoral films for children to see. No doubt there are some dramatic films with a refined and pleasing love-story, every picture of which is fresh and wholesome and instinct with noble sentiments; in which bad passions may exist, but do not predominate, and in which love is not wicked and living means happiness. Among these we may number « In the Garden of Illusions », « Steps in the Snow », « Uncle Tom’s Cabin », « Father and Son », « A Mother’s Sacrifice », « Honour thy Mother » and « A New and glorious Nation », in order to show that the social-drama film can be suitable for children when it unites the characteristics of the good and the beautiful. Indeed, I consider this type of film the most educational of all, because it impresses on the child the satisfaction to be drawn from good feelings and actions, which is the best protection against committing bad ones.

I wish to note and endorse at this point the well-deserved public condemnation of nearly all our own national films, which give a false idea abroad of our degree of civilization, and are a source of corruption for both minors and adults in the country itself.

The natural psychological affinity between the actors on the screen and the spectators, the particular expression of the Argentine language, the pleasing pictures of rural life, the intense thirst for knowledge in the provinces, the life and miracles of the capital, together with the preparation of the mind for national products by means of the propaganda of producing firms, all these facts accentuate the evil of these so-called national films, and justify the attitude of suspicion and apprehension shown by parents towards such projections.

And yet, what poetry might be drawn from the enchanting Argentine countryside and from the ingenuous simplicity of the provincial population !

What beauties could be found among the feminine types of the different regions, what refinement of feeling and habits among the families of the higher nobility ! Why should we forget all the legends and stories that form the wealth of the national theatre and of our literature ? « Peach Flower », « In the Sierra » « Nobody’s Children » are all excellent national films, but they are practically the only ones that might be so described. Of films that are suitable for children only there is not one.

In the big towns the cinemas are open for several hours every day, whereas in the provincial towns they are open for certain days in the week only.

When the scenes presented in these cinemas are scenes of vice and evil passions, they seem to me like the murderous fire of machine guns in respect to their direful effect on public morality and their vulgar and libertine ideas.
The defence and protection of a wholesome concept of life requires that the educational influence of school should not be undone by the insidious working of adverse moral forces; and it can easily be proved that the interminable series of films unfit for children is capable of producing the greatest harm.

A lad of fifteen, with the love of country in his heart that he has received from his school education, may face without serious moral consequences the impressions aroused by a film showing ultra realistic scenes of the worst passions. And that this is so is proved by the fact that these lads, reacting against such evil stimuli, prefer a football match or any other form of sport rather than to pass the time watching a sensual film of doubtful morality. These young lads will become dignified citizens and valuable units in social life.

From this point of view, the social defence of the educational action of school deserves completer and more circumstantial study.

Those who look to the future of Argentina with hopeful minds must not allow themselves to be dazzled by the exterior wealth and brilliance of the Federal Capital, where the leading institutions of our intellectual production in science, letters, and arts, and the big enterprises of our national commerce are gathered, but where also there is the highest degree of social parasitism and all forms of criminality. The clearest expression of the national life, in all its latent possibilities, will be more readily found in the more or less advanced civilization of the provinces and the country.

The best means for divining the future of the nation is to compare the strength of its productive, agricultural, live-stock, and financial capacities with its exportation, and to consider this in relation to its importation requirements from all parts of the world.
NOTES AND SUGGESTIONS ON THE ENQUIRIES

(From the Italian.)

In little more than a year from the date of its foundation, the International Educational Cinematographic Institute has fully justified its existence by making known all over the world the latest results of experiments with the educational film; publishing a survey of legislation in its regard in all the leading countries; pointing to the dangers of the cinema, and studying ways and means to eliminate them; publishing in its interesting monthly Review a number of papers of exceptional importance, such as the study of «Criminology and the Cinema» by Dr. Albert Helwig; and promoting enquiries by the «questionnaire» method, from which much interesting information and valuable suggestions may be expected.

Enquiries of this kind, if well carried out, should place the Institute in a position to formulate a complete plan of action aiming at the social and cultural ends of sound educational cinematography. The March number of the Review contained two questionnaires: one drawn up by Dr. Rouvroy, addressed to students, and one by Dr. Luciano de Feo, the Director of the Institute, addressed to schools.

Both authors, with a modesty and objectivity that does them credit, appeal to specialists to collaborate, by completing their preliminary work and making suggestions of a kind to emend or complete their questionnaires.

This invitation is so courteously extended that I cannot resist the temptation to set my own mind to work along «educational cinema» lines, and project on the screen of the Review’s pages some thought images of my own, turned in the light of my long-standing scholastic experience and some reminiscences of experimental psychology.

I will abstain from suggesting any changes in the school questionnaire, which if interpreted in a broadminded way, with the assistance of the accompanying circular, may stand as it is, as it offers sufficient scope in itself for additions or modifications; and I will confine my attention to the essential parts of Dr. Rouvroy’s general questionnaire, which is mainly of a scientific character.

BIological antecedents and somatic constitution.

An eminent Professor of the Rome University, Sante de Sanctis, has already answered these two points. His contribution to this part of the enquiry is highly important not only on account of the positive data submitted — the fruits of personal investigation and experience — but also, and principally — on account of his negative answers, which, in my modest opinion, would straightaway suggest the pruning of the questionnaire of certain parts that are not essential to the purposes of the enquiry, or that would entail waste of energy, while achieving
results of doubtful value, such as investigations of neuro muscular tonus, dynamometry, spirometry, etc. among the onlookers at ordinary and scholastic cinemas. If Prof. De Sanctis, as he asserts, has never made any experiments of this kind in his experimental psychology laboratory, we may take it that he has not considered them necessary or useful; and I think we may be satisfied with his very reasonable observation on dynamography due to the interest aroused in the onlooker, an interest that depends on the more or less happy choice of film.

Moreover, while there is urgent need of a general understanding on the aims and boundaries of educational cinematography, and on the best means of diffusing it, I have doubts as to the expediency of side tracking students into what I may term labyrinthine fields of experimental research, constantly beset with perturbing elements, as for instance the diverse physio-psychic temperaments of the subjects of experiment, their changing vital tonus according to the hour of day, their diverse preceding occupations, changes of mood, and so on.

Not all the experimental investigations suggested by Rouvroy, however, should be set aside or postponed to another time. To speak of one only: the fatigue of eyesight is not a matter to neglect, and a careful study of this point can and should be made. I myself, though blessed with normal sight and physical strength, after sitting occasionally through lengthy programmes containing two or three items, in popular cinemas that draw bigger audiences the longer the show, have felt a mist before my eyes and a certain sense of giddiness on coming out, and have reflected sadly on the deleterious effects such lengthy shows must have on the eyes of the young and of children who haunt such "picture palaces," Cinema orgies should be prohibited by law, or at any rate rigorously prohibited for children.

With respect to the excitement of the organs of sight produced by cinematographic shows, I think it would be useful to put the following questions to physiologists and psychologists:

«So long as the psychic excitement caused by the known illusion on which cinematography is based, continues uninterrupted, in the absence of accidental interruptions of the projection, do you consider that the same thing happens with physiological excitement? May not the retina and nerve centres experience as many successive shocks as there are inevitable starts and jerks in the thousands of photographs successively projected on the screen? And may not these successive and persistent perturbations, when exceeding a certain limit to be determined, have a pernicious effect comparable to that of a drop of water falling persistently from a height on to the same spot of the palm of a hand?»

Psychological Constitution.

The questionnaire is excellent in this regard and should undoubtedly be the means of eliciting much interesting information. One of the numerous questions moves me at once to call the attention of students to a system of physio-psychological investigation to which the cinema ought certainly to be applied: mimicry. In
this field both French and German students have published much interesting matter, and we in Italy can boast the fine work of Mantegazza and De Sanctis.

Is there any need to waste words to recall that three quarters of world cinematography is nothing else than mimicry more or less well-expressed and reproduced by photography?... that the exactitude of expression, that it to say its faithfulness to the thought, feeling, and action it interprets, might benefit by the really scientific study of its physiological mechanism and psychic equivalents in accordance with the well-known theory of psycho-physical parallelism. Not only the study of criminology, but painting, sculpture, and teaching might learn much from a more painstaking study of mimicry — facial expression, attitude and gesture — by means of the enlargement and slowing down of cinematographic images.

If the Review will continue to afford me the hospitality of its pages, I propose to write further on the question of cinematography as applied to the study of the subject to be educated from the standpoint of physiognomy, and on the didactic lines to be followed by educative cinematography.

**Vocational Orientation and Culture.**

No one, surely, can doubt the utility of the cinema in this field. A great number of films deal with general vocational education, though many of them are produced for the publicity purposes of given industries. There are very few films dealing with the rationalization of labour.

Those illustrating the different phases of certain processes of agricultural or industrial production tend to present these in a positively seductive form, as free from all risks and dangers as they are from tedium and hardship or unpleasantness. All this far from «orienting», tends to misguide the young and induces them to go in for careers for which they have no proper aptitude.

How can this be set right? This is another point I should wish to see included among the questions.

**Social Propaganda**

The clear and simple questions regarding propaganda on what I would term social preventive measures are admirably framed. As an Italian and Fascist I should like to see a few others added to them, as for instance:

Do you consider that films showing up the evil aspects of class struggle and excelling the (Fascist) corporative organization of the State, and depicting the advantages of peaceful co-operation of workers and employers, would tend to promote good feeling between the classes of society. What particular subjects would you suggest?

In the special field of propaganda appertaining to the I. E. C. I., I should like to see a few questions of the following tenor:

1. What means do you think the Institute ought to dispose of?
2. Do you think it would be possible and useful for the Institute to form an International Film Archive of all the films of an educational character? — that it should circulate a detailed systematic catalogue of these? — that it should present gratis exhibitions in its special hall to students of such questions or to a specified category of associated students and subscribers?

3. Do you think it would be possible and useful for the Institute to open competitions for scholarships in connection with the most important centres of educational cinematographic production?

4. Would it be desirable that officials specialized in certain branches of educational cinematography, furnished with Government questionnaires, should be entrusted with missions to the centres referred to in the preceding paragraph and send reports on the results of their enquiries to be published in the Review?

5. Do you not think it would be desirable for the Institute to promote, in different countries, the formation of Commissions of study of a complete scheme of elementary instruction, and instruction in particular branches of study, from the primary schools to the universities, by means of the film, along the lines already current in Russia?

6. Would it not be desirable for the Institute to open prize competitions for the production of playlets for children, and to assist their making by furnishing small and blank films free of charge, or at a nominal charge?

The above questions are not definitely drafted, but are put forward merely by way of suggestion.

I leave it to others, who are more competent and better fitted than I am, to modify them, reduce or amplify them, and put them into proper shape.

Ettore Tosi.
THE INTERNATIONAL ASSOCIATION OF FILMS FOR MODERN EDUCATION.

(From the French)

We recently announced the foundation at Locarno, in August 1927, of the International association for films intended for modern education (1); we also stated that during the following year it was officially inscribed in the commercial register of Geneva, whilst waiting for the League of Nations to draw up the statute of international associations. On p. 8 of the same number of the Ére Nouvelle, when publishing the statute of our association, we gave the list of the Executive Committee.

At the Congress of Elsinore, in August 1929, the Committee was re-elected, the only alteration being the substitution of Dr. Kurt Lewin of Berlin, director of the Psychological Institute, the seat of which is in the ancient imperial castle, for Herr Peter Petersen of Iena, who was in Chili.

The following report of the Assembly at Elsinore was distributed to the members of the association by the Secretary General, Miss Grace Cruttwell of Castlegate, St. Andrews, Fife, Scotland.

Report of the 1st General Assembly of the Association for films for the New Education. The first general assembly of the members of the I.A.F.M.E. was held at Kosmorama, Elsinore, Denmark, on the 15th August 1929, under the presidency of Mrs. Marion Beaufait, president of the executive committee. Dr. Decroly, M. Ad Ferrière and Miss Cruttwell, members of the executive committee, also spoke, (the other two members, Dr. Peter Petersen and Dr. Kurt Lewin were unable to come to Denmark) Mrs. M. Nemes and Dr. Paul Bengler also spoke.

The President gave a short account of the work done since the foundation of the Association at the Congress of Locarno in 1927, of the results arrived at, and of the drafting of the Statutes and the registration of the Association in the commercial register of Geneva as an international organization. The President announced that the International League for New Education had voted that our association should take steps for closer co-operation with the I. L. N. E., with the object of reciprocally helping one another, but without financial relations or obligations.

This question was placed, a few days later, before the Assembly of the International Committee and voted unanimously.

The President then gave the floor to Dr. Decroly, who communicated his project for the immediate commencement of organized work, starting with films already in existence, especially those of Odenwald (Dr. Paul Gehee), «Chez-Nous» (Dr. A. Ferrière) and the films on child psychology by Dr. Kurt Lewin. Dr. Decroly omitted to quote his own work, which is of the highest psychological interest.

Dr. Ferrière, next called attention to the necessity for interesting the public in the New Education, and to the Association’s project, so as to achieve its aims for

(1) Vidi l’Ére Nouvelle, January 1929.
getting into touch with all firms producing good films. He said: «We have seen the
great interest of the Congress in the films which have been shown to it and that
these have demonstrated their utility for exhibiting the New Education as a con-
crete and living reality».

Dr. Ethel Daring, expert on vocational orientation for children at Cornell Uni-
versity, stressed the great importance of the influence of films on child psychology,
recognized by eminent psychologists and used in the training of teachers. These
films are of greater value than direct contact with children for the observation of psy-
chological details, because the film can register a greater number of psychological
traits and the teacher’s conclusions can be checked and criticised on seeing the same
film different times. Dr. Daring was certain that such a type of film would be
in great demand in American Teachers’ training Colleges.

Dr. Virgil E. Dickson, director of the public schools of Berkeley, California, cal-
led attention to the valuable help which the work of the I. A. F. N. E. could give
to the progress of new educational systems in America.

Dr. Paul Dengler, director of the Austro-American Educational Institute at
Vienna, referred to the efficacy of the film for demonstrating the homogeneity of
child psychology the world over.

At the end, Miss Cruttwell put forward a request for the recruitment of new
members for the Association (subscription of five shillings) so as to permit the Asso-
ciation to begin its work of organization in the different countries. She remarked
that at the present time the cinema is the best means of propaganda for the new
educational systems and that members of the association could contribute in the
highest degree to the work which the I. A. N. E. is doing, both among teachers
and the general public.

In reply to the question: «What methods are suggested for collecting funds
to facilitate the production of new films?» the following means were suggested:
1. The possibility of raising funds by the means already existing: the produc-
tion of films and sale of copies of them;
2. Collaboration with such firms producing films as it is possible to get into
touch with;
3. Subscriptions from institutions interested in this sort of work;
4. Gifts from private persons.

Among the many films screened daily at Elsinore, special attention should be
called to the scientific ones of Dr. Kurt Lewin and Dr. Decroly, and illustrations
of schools run on the new system as shown in «Chez Nous» at the Clochette near
Lausanne, the school at Odenwald, the school at Roches and other types of American
schools.

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On the 26th October, 1929, Dr. Ad. Ferrière wrote to the heads of the Customs
of 33 countries, to which four others were added on 27th February 1930, when Fer-
rière again put the question to five European countries which had not yet answered.
The question was what duty was payable for the temporary or definite importation
of the film «Chez-Nous». The 33 letters of October 1929 were written in Esperanto. On the 28th October Sweden wrote that she did not understand Esperanto. On the 6th November Denmark wrote to the same effect, adding that she only paid attention to correspondence in English, French or German. Norway appealed to the Swiss Consul, who transmitted her reply in French. On the 5th November, Hungary replied in Hungarian, Roumania in French, and on the 21st Holland replied in Dutch. Jugoslavia alone answered in Esperanto on the 22nd November. The Anglo-Saxon countries, England, Canada, the United States, the Union of South Africa, and Australia, all answered; whilst of the Latin countries only Roumania and Portugal replied. Amongst the other countries not named above, Germany, Austria and Greece have answered. The rest is silence.

The essential facts gathered from the answers are as follows:

Temporary Importation — The duty is repaid on the films leaving the country, if they are exhibited free of charge, in Hungary, Jugoslavia (a renewable period of three months), Roumania, Greece (with a special permit of the Minister of Finance) and Portugal.

No duty payable: Austria (14 days), Australia. No duty if an association or public school of the country asks the Director of Customs for the temporary importation of a film not imported for valuable consideration, in United States, Canada, Union of South Africa, and Germany.


Permanent Importation — Variable customs duties. For example: Germany: 400 marks per 100 kg.; Austria: 1.20 gold crowns per kg. plus 2%; England: 5 pence per foot; Holland: 8% ad valorem; Portugal: 5.5 gold scudi (31 Swiss francs) per kg.; Jugoslavia: 250 dinars per 100 gm.; Greece: 2 gold francs per kg., and a further 75% representing sundry duties; Union of South Africa: half-a-crown per 100 ft. or 30% ad valorem; Canada: 1.5 cents per foot.

From the above it will be seen that educational films, especially those for the new method of education, are considerably handicapped, thus paralyzing the international exchanges of our association, so that films can only be circulated in the country of origin.

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Let us hope for better times. Many important bodies are working on our side: among others, the International Institute of Educational Cinematography at Rome, founded by the League of Nations, under the directorship of Dr. Luciano De Feo. It has started a great enquiry on customs duties on educational films. I have in front of me the answers that the Institute has received and if, one day, this chaos gives way to a single rule for all countries, it will be entirely due to Dr. De Feo.

We quote the following about the Institute’s Review, from a letter written to us in October last by the Institute in Rome: «The review is in five editions, in five different languages; it is from every point of view a tremendous effort which we are making, but we do it with pleasure, being convinced that we are serving a cause of the greatest importance, for which we count on your fraternal co-operation.
Undoubtedly, all who can help in distributing the Review, in enriching it and making it known will be doing very important work. With this aim in view we have put the annual subscription at 18 Swiss francs; to those who help to distribute it we allow a discount of 25%. If you think that it is possible, through your correspondents, to obtain for us support of the kind indicated I should be very grateful.

Meanwhile, we send you our Review in exchange. In Nos. 1, 2 and 3 we have published a complete study on the fiscal question as regards educational films; we can inform you that a definite report has been laid before the Council of our Institute and that an International Commission of Experts has been asked to draw-up a plan for an international convention, for the suppression of all customs duties on educational films. We hope that this convention of ours may be approved by the Council of the League of Nations during 1930 and subsequently ratified by an International Conference.

We wish the splendid Review of the Institute of Educational Cinematography all the success it deserves.

We are convinced that the most useful educational films for the improvement of mankind are those which can be prepared by the students of normal schools, the students of educational institutes, the future parents and the teachers themselves of the systems of new education. Scientific films, psychological films which show the typical reactions of children of all ages to their environment, films dealing with eugenics and child welfare, educational films showing the possibility of personal initiative, games and child life in model schools, as, for example, in the film «Chez-Noirs», are all worthy of the widest distribution. Customs barriers against this form of film are real impediments to progress. The sooner they fall, the better for all.

Ad. Ferrière.
It is necessary that on quitting their studies for the school of life young people should have attained to the highest possible standard of physical and mental development, so as to fit them to contribute the whole of their strength and ability to the sphere of life in which their lot is cast. They must indeed be perfectly acquainted with their environment, if they are to play a worthy part in it. Children should be taught to know the world in which they live and all the manifold works of man, and to be interested in and love it, for only real knowledge and real enthusiasm can stimulate them to effort and to deeds that will safeguard and improve it.

No superficial and rule-of-thumb knowledge of their environment will avail them; school must open up to them the right way to knowledge and to social adaptation. Thanks to native biological instinct — the sense of curiosity that is born with the child — and under the intelligent guidance of his masters, he learns, bit by bit, to know the world that surrounds him; he acquires life's object-lessons by degrees, through observation and intelligence; his judgment helps him to grasp physical and biological phenomena in a way to arouse creative effort and the will to increase the psychic wealth of the world.

Thus it is that the school of to-day no longer teaches the child merely by words and phrases that aim at awakening the image of things in his mind, for the image the mind's eye conjures up is weak and unsubstantial. The child is led direct to nature, where life's vivid pages are discreetly opened before him, and he is left there to gather impressions in the light of his own understanding and impelled by his natural craving for knowledge.

Thus the ideal school of to-day is the farm-school, where the animal, vegetable, and mineral worlds and all the natural phenomena of life surround the child and offer appetizing food to satiate his spiritual hunger. In this manner his natural intuitions are developed, and thus alone can he acquire a clear understanding that will help him later on to fill the horrible intellectual void of which we become aware with shame and dismay on quitting our studies and midway through the journey of our life. Later on, his own commonsense and a pliable and creative spirit will help him to sort out all these early, fertile and correct impressions, which are the bases of character and human understanding.

The direct observation of his native environment, however, is not sufficient to develop the child's mind. His immediate surroundings are but a part of his own country and his country but a small part of the world. His own visible world is too narrow a sphere to develop fully the child's mind and knowledge; he must travel beyond this to be fitted later on to play his part in life.

There is no doubt that the ideal method of the modern school is study travel. Take, for example, the pupils of Dr. Lietz's renowned school, near the Harz Mount-
ains in Germany, who, after travelling their own country on foot from end to end, have visited Greece and advanced further south towards the land of the Pharaohs. But such journeys are not always a practical possibility, and only those who have undertaken them realize fully the manifold difficulties with which they are beset.

It is here that the magic powers of the cinema stand us in good stead. The cinema brings the distant and the unattainable within the sphere of our physical vision. By its means the sons of Attica may behold the Olympia of their dreams, with its sacred spots and its renowned masterpieces of ancient art. Through it they will learn to know Thessaly with her fertile meadows, the lovely Vale of Tempe, and picturesque Pelion; Macedonia with her bubbling cascades; Thrace with her peaceful people; Epirus, patron of the arts and benefactor of the nation; the Ionian Isles with their peculiar civilization, the sunny and perfumed Islands of the Aegean.

Through the cinema, the child may get to know neighbouring peoples; watch the change that is coming over Turkey, and how Bulgaria is moulding her future. This magic carpet will bear him yet further, and reveal to him the beauties whereby Switzerland attracts tourists from all corners of the globe; the conditions in which the English pursue their phlegmatic yet busy lives; how the thoughtful and philosophical German is tackling his after-war problems. And yet further afield, the screen will reveal to the child the life of the mystic Indians, communing with the divine spirit on the banks of the Ganges; the Japanese, in the land of the Rising Sun and the chrysanthemum, divided between Bushido and modern industrial life; and, travelling yet further, it will show him with what fierce impetus the Pacific breaks on the coral reefs to assuage its fury before reaching the serene Australian coasts. Coming back westward to the land of the Pharaohs, he may behold the mysterious source of the White Nile in the great equatorial lakes, and how in its course it receives the Blue Nile, flowing down from the Abyssinian mountains, teeming with rich and fertile matter. And then, on its banks, he may watch the modern African, ever alert with kilometer and telegraph, regulating the irrigation of the plains, to wrest abundant crops four times a year from the generous Egyptian valleys.

And lo! beyond the Atlantic, the country that Christopher Columbus reached by so long and perilous a voyage. Here the social instinct has gathered together in a single town a population equal to that of all Greece. Here the boundless ambition of mortal man threatens the empire of the skies and has pierced the very clouds with his audacious buildings. Here in New York, the wonder city, man's restless energy — with giddy movement and the indomitable daring of his ways of communication — has created a ceaseless menace to the safety of his own life and limbs. Worlds and yet more worlds, with their innumerable secrets! Zoology; botany; agriculture; industry; trade; ethnology. What multitudes of diverse and exotic civilizations!

And all these worlds are still so dark, so unknown to the child; for the most brilliant descriptions by his master, the richest bibliography, the most scientific maps can afford him no living picture of them. This the cinema alone can give. And when we remember that the child understands and thinks through
his eyes and that he feels and loves best what he has seen, we shall realize at once the highly important part the school cinema is destined to play.

But our intellectual gains are, after all, of lesser importance than our moral gains. Post-war pedagogics is well aware of this, and for this reason it is pursuing moral aims, for man has learnt that mere knowledge does not spell happiness, since all his knowledge did not save him from the catastrophes of the great war! Only a higher moral sense, with a wealth of lucid facts at its service, can save us from mutual hatreds and from flying at one another's throats.

Many prejudices and misunderstandings would be dissipated by a closer observation of the life of the different peoples and a real understanding of their civilizations through the cinematograph. When we can watch the Egyptian fellah toiling under the fierce African sun so as to supply us with cotton; the peoples of the several industrial countries hard at work, their hearts beating time to the rhythm of machinery, to transform the raw material that pours in from the four quarters of the globe into manufactured goods to meet our needs; when we see how the staples whereby we live are brought to us from the fertile regions of the earth by innumerable ways and across so many countries — even enemy countries — and watch the ceaseless labour with which great students, regardless of race or religion, toil through long vigils to benefit all mankind: when all this is brought before our eyes and understanding, how unjust and selfish we should be to think that by quarrels and hatreds we can sever our ties with the great human family, just as we divide up countries by frontiers.

The cinema can most effectively promote the great ideals of justice and brotherhood which, since the war, are more than ever the main object of the diplomatic relations of all civilized countries. It will show us clearly what sacrifices each of the peoples is making to ensure the livelihood of all; and thus without wounding our proper pride and our natural predilection for the country that gave us birth, it should help us to extend our sympathies beyond national frontiers to all men. It may be that in this manner the springs of hatred and enmity will gradually dry up. Cinematograph films inspired by the great pages of universal history, the history of civilization, and the great moral ideals that have arisen since the war, should surely free the educators of the great nations from all ambition to shine as the creators and heroes of new catastrophes!

Anna Yannapoulo
Professor of Pedagogy at the «Arsakion» School in Athens.
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SOVIET FILM ACTIVITIES (1)

GENERAL INFORMATION. — The Council of the People's Commissariat of the U. S. S. R., after carefully examining the position of the cinema in that Country, decided to create a single producing and renting centre for the whole territory of the Republic. As a consequence of this, all cinematographic organizations now existing in the Union must, without exception, adhere to the centre and act as subsidiaries of it; the centre being responsible for unifying the policy of the whole business.

In connection with this process of centralization, the optico-mechanical trusts of the Soviets will be united into a single combine: this will embrace the production of photo-cinematographic cameras; the photo-chemical trust (production of photographic films, plates, and cards) and the new general trust for the production, renting, and trade in cinematographic films.

This organization will comprise also the scientific and research institute of the cinema and photographic industry and the practical schools of photo-cinematography of Moscow and Leningrad.

This concentration of the manufacture and renting of films, the production of Soviet films, and the increase in the output of cinematographic cameras will give a much wider scope to all branches of the trade and make it possible to meet the needs both of the more distant populations and of what may be termed the cine-social organizations.

On the other hand, the fact that the management of the cinematographic theatres has been entrusted to a central organization embracing the entire Union will do away with any present discord between production and the requirements of the several halls, and will render it possible to regulate distribution according to a settled plan—and to make the fullest use of films in stock, to the general benefit of the business.

In like manner, the difficulties of the cinema in sorting out films of sovietic policy answering to the requirements of the several states of the Union, the problem of technical staff, and the crisis affecting the scene-producers themselves, will all be overcome by this system of rationalizing production and renting.

Artistic and political «soviets», or committees, have been set up in connection with each film factory to deal with literary and artistic matters. The managements of the factories are required to consult these soviets. They will be formed by the representatives of the party's regional organizations, of the vocational unions, and of the manufacturers, studios, and workers employed in the film industry.

The more important attributions of the artistic committees (soviets) are:

a) to examine and consider plans of production and control the activities of the trade;

b) to examine the scenarios, the films themselves, and the captions;

c) to criticize finished films and films in the making;

d) to organize the centres of cinematographic production attached to the central cinema societies;

e) to prepare the reports of the local soviets from both the artistic and the political standpoints;

f) to keep in touch with the press.

The creation of two new specialized theatres is one of the outstanding and most tangible results of the general activity of the Union. One of these theatres has been opened by the State Polytechnic Museum at Moscow and will be devoted entirely to the exhibition of unpublished technical and tecnico-economic films of soviet and foreign production, accompanied by lectures by experts on the questions dealt with.

The other theatre has been opened at the Museum of the Revolution at Moscow, its

(1) According to official information kindly furnished by the Vols Cinematographic Section.
precise object being to place the leading social and political problems of the day before the public in an attractive form by the film. There is a reading-room attached to this theatre, containing all reviews and publications dealing with social and political questions.

The Soviet Government has paid special heed to the question of vocal films. «In order that our ideas may triumph» said one of the members of the Government «it is necessary to raise the intellectual level of the workers, to develop their understanding, and to achieve this as thoroughly and as rapidly as possible by getting at the great masses of the population.

«The sound film will prove itself a powerful means in the Soviet Union for teaching the alphabet to the unlettered by simple and practical methods and for the diffusion of science in its simplest forms as widely as possible».

«The Soviet Government does not recognize retrograde factors that would tend to impede the spread and triumph of the new technical methods. The sound film constitutes a most formidable force, that will not only bring the different parts of the country into closer touch, but will help weld together the several factors of our social and political anatomy and contribute to diffuse our scientific experiments and achievements throughout the territory of the Union.

«The sound film is still in its infancy. It needs to be perfected and combined harmoniously with the radio. We may forecast from the rapid advances of science, and more especially of physics, that this fusion will soon be accomplished. Once this goal is reached, there will be no hindrance to the spread of ideas.

THE SOVIET CINEMA INDUSTRY.

a) THE VOSTOKKINO: The Vostokkino (Eastern Cinema) has organized a competition for the best scenarios on the customs of the national republics and regions. Writers from the Daghestan, the Tartar Republic, and the Bashiri steppes have competed. A prize has been awarded to Guireef, of Daghestan, and to the Tartar writer Yakkin, for a scenario on the organization of the kolkhoz.

The literary section of the Vostokkino has prepared 32 subjects for the new social and political education films to be released during the present year: these embrace the following subjects:

- general politics;
- economic reorganization;
- scientific films;
- social hygiene and customs;
- eastern travel;
- the East beyond the U. S. S. R. frontiers.

The eastern cinema work of the Vostokkino is in full swing. The first year was a period of organization, research, and technical and political reconstruction. The present year, during which production is to be started in earnest, will witness the creation of 10 big artistic films, 7 documentary films, and 14 short meterage films.

The film studio of Yalta in the Crimea and one of the Sovkino studios at Moscow have become subsidiaries to it.

While building up and rationalizing its production, the Vostokkino is centralizing the network of cinema halls in the Crimean, the Daghestan, and the Cossack Republics, and is preparing to take over also those of the Bashiri and Tartar Republics.

The latest film produced «The Thirsty Land», under the direction of J. Reisman, depicts scenes of life in Turkmenistan, in the remote auls which have viewed the cinema for the first time in their history. The film which was shot in a mute form is being transformed into a vocal film.

b) THE VUFKU: The Vufku, which controls the cinematographic studios of the Ukraine, is releasing a series of short-meterage films for the spring sowing campaign, which will deal not only with agricultural work, but also with the struggle against the kulaks (the wealthy peasantry) and organization problems. Films recently published or about to be issued by the Vufku comprise: Agrominimum; Sugar Beet Cultivation; five other short films on beetroot cultivation; the Care and Rearing of Stock; the Misdeeds of the Kulaks; The City to the Rescue of the Country with Seeds.

For the spring sowing campaign, the KIEV studio has mobilized 14 groups of scene directors and, at the same time, is
preparing a series of films and animated drawings. The Odessa studio is doing as much for the agrarian propaganda in the Ukraine.

As many as 25 to 30 copies will be issued of all the special films for the sowing season, so that they may be broadcast by the travelling cinemas. The films will be accompanied by pamphlets which will serve as a guide for the lecturers, to be diffused on a big scale among the peasantry.

Among the new films of a theatrical order, completed or commenced by the Vufku Co., we may mention «The Land» created under the direction of Dovjenko — this reproduces country life in the Ukraine in a series of scenes of fantastic breadth and richness; *Sel*, a purely communist propaganda film, produced by scene director Belinski; *Karmal*, of a historic-documentary character, recalling the doings of the vagabond Karmelul, leader of the peasants in the fight against the land-owners in Poland, produced by scene director Lopatinski.

c) To use an expressive sovietic phrase, the Mejrabpom Co. is fighting on the front of illiteracy. It has composed a sound film, «A. B. C.» divided into six or seven consecutive lessons, aiming at rousing the illiterate to the ambition to read. The scenario is by Prof. Netchaef and is presented in a characteristic theatrical guise with the object of attracting the general public. The experiments made in regard to the wholly undiducated in the Mossylicat works show that 80% of the workers present at the projections remember accurately the letters and certain of the words of the films. The producers have sought to impress the simplicity of the mechanism of letters on the pupils. The reading exercises are prepared in such a way as to teach progressively letters and words by association of ideas and to induce the readers themselves to repeat the titles of the several pictures.

The Mejrabpom Film dealing with the Abkasia expedition, which was «shot» under the direction of A. Tiagai, is complete. The expedition has gathered a rich collection of views of the Tiberda military road; made the ascent of the Ali Bek glacier, and, during the last days of September, traversed the Glukhowski ranges, notwithstanding the depth of the snows which rendered progress almost impracticable. A complete film novelty is the photographing of the town of Mikoyan Schakhar, of recent construction, and the reproduction of the life of the mountain shepherds with their flocks.

«The New Man» is the title of the latest health propaganda film of the Mejrabpom Co., now in the making under the direction of Leo Kuleho. The film will show a number of examples of the deplorable consequences of wrong feeding and will endeavour to popularize the scientific bases of rational food for the individual and collectivity. It will point out the values of food power, showing how nourishment can be wholly used by the human organism, and will also deal with the advantages of communal kitchens as a means of freeing housewives from so considerable a part of domestic labour and giving them a chance of devoting themselves to more profitable occupations.

A Mejrabpom innovation which has both moral and pedagogic qualities consists in the creation of a kind of children’s censorship for films in preparation for the young public. The children will thus be given a chance to judge for themselves of the value of the films intended for them. The first results of this experiment, carried out at the Moskvochvey works, have given rise to a number of acute criticisms on the part of the young audience, leading to the alteration of the films, which will be further submitted to both children and teachers.

In like manner, the scene director, V. Jemciujni, consulted the taste of the public before releasing his new film on «Opium». The experiment was highly successful and suggested the need for cuts and additions corresponding with the various criticisms received from different parts of the Union.

d) The Sovkino: The first studio of the Sovkino, in Moscow, has organized finishing courses for artistic workers who wish to enter the scene directors’ and producers’ categories. The programmes of the courses embrace the following matter:

- historical knowledge
- artistic sociology
- scenario writing
- cinema technique
methods for the creation of films by scene directors.

Leading experts have been invited to give lessons in these classes.

Specialized courses have also been organized for sound films, in which not only theorists in cinema technique teach, but also such masters as Shorin and Taguer.

The following films are announced from the several Sovkino studios: «The Rhur» — a politico-economic propaganda film; the Coal of «Nivelling»; «The Iron Torrent»; «The Idle Man»; «The Super-Rapid»; and others films working class-struggle questions into dramatic plots; the «The Isba Paradise»; «Little Peter»; «The Secret of Youth» describing country life from a purely theatrical standpoint; «In the days of the Tsars» — dealing with preparatory Bolshevik work prior to the October Revolution; «The two Mothers», which attempts to raise one of the most delicate social questions, that of deciding which is the real mother — the woman who has given birth to a child and then abandons it, or the woman who has taken it over and brought it up with loving care.

Here is a brief list of other films that have already been released in the Soviet cinemas: «A Strong Character» — depicting family life in which the alcohol curse plays a part; «The unknown Man» — an industrial propaganda film for the young; «The Five Year Scheme», a long meterage sound-film to promote the complete carrying out of the five-year film production scheme.

In the making: «Their life for our happiness» — a purely revolutionary type of film, recalling the work of the precursors of the revolution; «Ashamed to tell it» — an original film seeking to analyze feelings of shame and fear in the life of sailors; «Town Images», and lastly, «Futile Rancour» — defending the entry of women into positions of command and showing how all feeling of resentment and envy on the part of men in this regard is merely a survival of times and feelings that have had their day.

The Sovkino is also keenly interested in the spring sowing season, having prepared in this connection the films: «Tilling the Soil»; «Weeds»; «Preparing the Ground for the Spring Sowing of Cereals in the South East of the U. S. R.» and «For the Seed Campaign».

The Sovkino Educational Film Section is preparing plans for educative and popular science films. Among the most recent films created we may mention: «The wealth of our Forests»; «Timber Supplies»; «Utilizing the Wealth of the Woods»; «Our Wealth consists in Our Forests», prepared for the fourth year of instruction of the School of Workers and Peasant Youth, and, lastly, a film on «The five-day Week». Then come films for children of a recreational kind, with scenes from real life and animated drawings. We are further informed that the Children's Section of the Commissariat of Public Instruction will publish, in concert with the editorial office of the Theatrical and Cinematographic Press, a monthly and bi-monthly periodical, «The Children's Cinema», devoted to questions of school and instructional films. The principal subjects dealt with will be education, specialized film production, scientific films, and national and foreign topical films. The painter Ivanoff, we are told, has attempted a combination between photographs taken from life and animated drawings.

The latest films of the Sovkino Co. of a historico-dramatic character comprise: «The Army of the Far East», directed by Michael Egeroff, recalling the Russo-Chinese conflict up to the peace of Khabarovsk; «Kamchatka and Sakhalin» directed by Vulifov, which is of interest also on account of the photographs of the Kluchevskaya Sopio Volcanoes at 5000 metres above sea level, the Avatcha, now in full activity, and the Siberian Pacific coast.

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Once again the Soviet industry has taken a leading part in rationalizing the film industry. The concentration of control and direction has not only enabled the several studios to specialize in their own branches of work; but it has imparted a vital rhythm to the business which can hardly be paralleled excepting by the American industry, all due allowance for diversity of style and policy being of course made.
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SOCIAL ASPECTS OF THE CINEMA

Psychic exhaustion. One of the strongest arguments brought against the cinematograph, especially in regard to children and young people, is that already touched on in the March and April numbers of the International Review, concerning the psychical exhaustion caused by the projections themselves, the effect of which is considerably aggravated by the pre-existing state of nervous strain typical of the student period.

Gaston Varenne, professor at the Lycée Condorcet in Paris, makes a comparison, in an article published in l'Animateur of Paris of May 2nd, between oral and cinematographic methods of teaching. His article is written with the object of discovering the causes of scholastic surmenage, and eventually correcting it. The writer is of the opinion that the former method does not arouse interest and produces a sense of weariness, while the latter method awakens the student's attention and provides convincing ocular demonstration which no words can produce.

Laurent writing in The Cinema of London, expresses the same opinion in his examination of the so-called auditory and visible methods of teaching. He thinks that scholastic programmes should contain very few ideas, in order that the children's minds should not be unduly wearied. A very useful aid to such programmes could be given by the cinematograph.

On this subject, Dr. Théodore, professor of demography in the higher schools for the study of social and international questions in Paris, deals with the educational aspects of the cinema and the wireless in an article published by La femme et l'enfant (Paris) in its number of March 15. He thinks that the peculiar sensibility of children is powerfully affected by a too abrupt succession or too crude accumulation of sensory stimuli, especially when the stimulus reaches them through the sense of sight. These stimuli are substantially of the nature of spiritual toxins, more especially as cinema and wireless programmes are generally based upon themes of love and passion that should not be allowed to come within the knowledge of children.

According to educationalists, therefore, teaching by the cinema offers the best means of obviating or reducing the exhaustion caused by study. Under this system, the children would be in the best condition of mind and body to benefit by the restful and educational vision of films suited to their youthful and unformed minds.

The cinema and immorality. The problem of the immorality of the cinema, or, more correctly of its actual or potential influence on the criminal and immoral instincts that are latent in the unformed mind of the child, has always been a subject of discussion and study for psychologists and educationalists; it is a problem that interests the politician, on the contrary, only in relation to its possible repercussions on the legislature. That is why the House of Commons recently rejected a proposal that the House should make an inquiry into the subject.

The most recent information to hand at the Rome Institute, of later date than that published in the last number of the International Review, shows that the doubts in regard to the so-called morality of the cinema are as alive as ever.

A Spanish priest, Don Ruffino Trúebano, of Oviedo, made a very earnest appeal to young people in a lecture on immorality and the cinema, which was given in the premises of the Women's Catholic Union, exhorting them to flee from the unwholesome influence of the screen, and begging mothers not to take their children so frequently to the cinema, which, according to the lecturer, encourages vice and bad habits in children to such an extent that it is almost impossible to correct them later on in life (Region, Oviedo).

The lecturer's opinion was shared by the Hon. Martire, an Italian member of Parliament, in an article in the Osservatore Romano.
(City of the Vatican); by the Tribuna of Rome in its number of April 9; by Mlle De Rostu, head of the juvenile Patriotic League of Frenchwomen (Courrier de Genève), and by the Cinématographie Française of Paris, in its number of March 15: all these writers deplore the fact that even the respectable press does not abstain from advertising immoral films, with the result that heads of families are unable to judge where they may take their children with safety.

But the name of those who share this view is legion. The Rev. Mr. Werbert, in a study on Children and the Cinema published on the occasion of the Second French Catholic Congress of the Cinematograph (Le Courrier du Cinéma Éducateur, Lisle), and M. Fourmond (in Dossiers du Cinéma, Paris) are likewise in agreement on this subject, the latter affirming that the darkness which is necessary in the cinema has a considerable share in demoralizing young people, and offers the greatest opportunity for corruption.

In America, the Rev. H. E. Fosdick (Daily Review, New York) speaking in the Presbyterian church of Riverside, affirmed that American films, almost the whole of which are vulgar and sensual, dishonour America. This view is in striking contradiction with the affirmations of the local industry and the principles set forth in Will H. Hays' code of film morals. According to the Rev. Mr. Fosdick, the only thing to do would be to start a crusade all over the world against the invasion of the Transatlantic film. The Rev. H. Othen of Winnipeg is of the same opinion, according to the Canadian Digest of Toronto, in its number of March 15, while M. A. Abbot (The Film Daily, New York) considers the present cinematograph production to be unsuitable for children, because it abounds in love scenes, and scenes of cruelty and physical suffering, which repel the youthful immature mind, but at the same time may unconsciously influence it.

A special criticism, which comes under the heading of cinematograph morality, has been made by E. Gascoin in l'Ami du Peuple of Paris, in its number of March 17. He observes that American films, under the pretext of reproducing the life and customs of Paris, are wont to show only its worst aspects and most degenerate individuals; and he further asserts that European producers and cinema critics and artists sin in the same direction.

These points of view have undoubtedly a politico-moral significance that cannot be disregarded. If moral principles, however much they may differ in detail, are essentially one and the same everywhere, and if producers are bound to observe these principles rigidly at home, they have no right to ignore them altogether in representing the life of other countries.

Inquiry on the cinema and young people. In the March number of the International Review, we published the text of the inquiry addressed by the Rome Institute to school-children on the cinema as a whole. We are still awaiting replies to the questionnaires sent to other nations, but have received up to now about 26,000 Italian replies. They will be sorted and tabulated with the greatest care and rapidity.

In order to complete the inquiry, the Institute sent out contemporaneously a questionnaire letter to teachers reproduced in note (1).

(1) Enquiry concerning the cinematograph. The International Educational Cinematographic Institute, of the League of Nations, at the beginning of this year started to circulate a questionnaire concerning the cinematograph, addressed to school children, in which they were invited to answer a number of questions drawn up by the Institute with a view to ascertaining the type of film best suited to the mentality of children and adolescents, their film preferences also in the domain of teaching, and, lastly, the impressions they had received from the films they had watched and the influence of these on their thought and lives.

But this enquiry, which has already involved the distribution of over 200 thousand questionnaires, in eight different countries, and which is growing and spreading as a result of the success it has met with, is not sufficient in itself, and it is fitting that it should be followed by a further enquiry addressed personally to teachers, to those responsible for the education of the young and for forming their minds and habits.

The youth and inexperience of the pupils inevitably renders their evidence incomplete and one-sided in so far as their grasp of life in general and in detail is concerned. This is the raison d'être of the present questionnaire, which aims at completing the evidence.

The Rome Institute, by its statutory rules and the distinct policy which the League of Nations laid down for it at the time of its foundation — a policy since confirmed by its Governing Body — as well as by its international function, which places it outside and above all business and commercial interests, aims at pursuing on the widest scale possible the study of all the educational, cultural, scientific, and moral problems directly or indirectly pertaining to the cinema.
Investigations of every kind are still being carried on in all parts of the world.

At Milwaukee, it has been ascertained that 31\% of the students are at what is called the «dangerous age» in connection with the cinema, and that a fourth of these at least pass 45 minutes daily as «screen fans»

Guided by these studies and enquiries, the purpose and the task of the Instructive is to convert the screen into a means of social uplift, an auxiliary to all forms of activity of social-educational value, and at the same time to ensure to the cinema its full and essential value as a means of healthy enjoyment, free from all the more or less deleterious influences it may produce.

In carrying out this task, which is one of universal interest, the institute is supported by the co-operation of all institutions and organizations which, and all individuals who, either by reason or their office or spontaneously, are responsible for the guardianship of childhood and youth.

Without wishing to formulate for the teachers an actual questionnaire of a hard and fast kind, the I. E. C. I., has limited itself to suggesting certain questions to them, while leaving it to their own initiative to add to their answers any further suggestions, indications, or remarks which their experience of life and teaching and their knowledge of the special psychology of the young may suggest.

Here are the points laid down in the questionnaire:

1. **Utility of the Cinema** - as a means of entertainment pure and simple (theatrical cinema), and as an instrument of teaching, science, and culture.

2. **Influence of the Cinema** - on the formation of character (distinguish between ages and sex).


5. **Should the Cinema be regarded as a source of immorality, as a distortion of life, and incitement to crime?** (distinguish according to ages and sex of the children influenced).

6. **What actual evidence is there for this point of view or on what grounds is the conviction based?**

7. **Does the attendance of children and young people at the cinema detract from their attention to school duties?**

8. **What impressions do children and adolescents receive from cinema shows (distinguish between ages and sex)?**

Point out the differences of this influence according to the temperament, education, and social standing of the pupils.

9. **What type of feature film (dramatic, historical, religious, political, adventure) do you regard as most suited and least harmful to the developing character of children and adolescents?**

Which type do you consider least suitable and most dangerous?

10. **Methods of teaching by means of the Cinema** - What system do you consider preferable in teaching a subject wholly or partly by film?

Should the cinema be regarded as a supplementary or integrative means of teaching? Within what limits and under what conditions?

(Exhibitors' Herald World, Chicago). In an article by George H. Green, published in the March number of the *Revue Internationale de l'Enfance* of Geneva, it is stated that, according to experiments made on children of school-going age, race prejudices are due to a mental attitude to which school contrib-

Has the cinema an absolute or relative superiority over lantern slides?

Which of the two methods do you prefer? - within what limitations and under what conditions?

In teaching what subjects can the cinema render the greatest assistance? Why?

What influence has teaching by film on culture, on instruction, on the understanding of the phenomena of life?

How could cinematographic teaching be graduated according to sex, age, and the general curriculums?

9. **Captions** - Do you consider a large number of captions as useful, superfluous, or undesirable in teaching films?

Are you in favour of oral comment and explanations, especially during pauses in projection?

Or do you consider that the teacher should make his comments etc., only before or after the showing of the film?

10. **Sound Films** - What special advantages over mute films do you consider that sound or talking films afford in teaching?

11. **Repeating** - Do you consider that repetition by the pupils, either in word or writing, of what they have seen on the screen is more or less profitable than the repetition of oral lessons?

12. **Illustrative Pamphlets** - Do you consider it desirable to complete lessons by the Film with leaflets, pamphlets, and other means of summing-up the purpose of the several pictures?

13. **Text Books** - Do you consider that school text-books can be replaced or supplemented by film lessons explained by written commentary?

What special characteristics do you consider that the new cinegraphic text-book should possess, and to what criteria should it conform for the greatest didactic and cultural efficiency?

Do you consider it desirable in this connection that cine-scholastic activities should be co-ordinated, or do you think it better to leave the choice to the personal initiative of the several teachers, according to the special methods of teaching pursued and their special understanding of children?

14. **Diverse Fields of Action** - Do you consider that the film lends itself to utilization in the extra-scholastic domain: for the analytical study of child psychology, its tendencies, and chances in social life and in study?

For a system of vocational orientation?

As a means of after-school recreation? Under what limitations and conditions?

As stated above, it is hoped that teachers will not limit themselves to merely negative or affirmative general answers to the several points.

Indeed the work and studies of the Institute would be considerably helped by a full and candid expression of the several teachers' views on the problems of the cinematograph as a whole, dramatic no less than scholastic.
butes 10%, the press 10%, books 50%, the family 10%, actual experience 10%, and the cinematograph 10%.

At Dumfries, in Scotland, according to the Daily Telegraph, an inquiry was made among 300 scholars on the subject: «What kind of films don't you like?» Of the boys, 98% said the love films, while 94% of the girls did not like war films or those on crime and brutality.

When these scholars were asked how often they went to the cinema, 60% replied once a week; 20% twice and 8% three times. Two boys said they went four times a week, and there were only three who said they had never been to a cinema.

The following were the chief reasons put forward for their frequenting the cinema:

to get way from their mother’s watchfulness;

to escape boredom;

and because the films amused them.

The subjects most preferred by boys were adventures of cowboys and Indians, while the girls preferred comic films.

Nearly all of the children complained of the discomfort of the theatres and especially of the seats.

The following figures are taken from the results of an inquiry published in Paris Midi, by Georges Orner:

out of 674 students, 500 liked to go to the cinema, 98 did not care to go, and 76 were indifferent;

out of 590 students, 79 go to the cinema because it is instructive, 151 because it is interesting, 49 to pass the time, 164 because it is beautiful, and 19 to watch the scenery;

out of 117 children 52 did not want to go to the cinema because it hurt their eyes, 19 because they did not like it, 16 because it does not appeal to children.

With regard to the subjects preferred, 1437 children and young people gave the following replies:

434 were in favour of comic films, 265 preferred dramas, 246 liked travel films, 163 liked topical subjects, 188 preferred historical films, 107 liked geographical films best; 37 had a preference for scenery, 29 for war films, 25 liked scientific and industrial films best, and 23 declared in favour of detective dramas.

There is a considerable percentage of difference between purely entertaining and cultural films and other films. The former received altogether (for comical films, voyages, topical subjects, historical, geographical, landscape and scientific films) 1140 votes against 265 votes for dramatic films, 29 for war films, and 23 for detective films.

Criminal or immoral elements of the film. Numerous American associations attribute the growing increase of delinquency to the cinematograph. In order to discover how much ground there was for this assertion, a Washington pastor went to see 628 films in different parts of the town, and endeavoured to discover what their moral influence might be. His observations showed that the subjects of 15% of the films had nothing to do with crime; that in 33% the repentant law-breaker returns to the path of rectitude, that in 17% he is killed; and in 5% sent to prison (Le Courrier Cinématographique, Paris).

From another source we note the following confession:

«I wanted to do as they did at the cinematograph; I was obsessed by the memory of a film I had seen a few days earlier, was the defence put forward by a young girl, A. Cassagne, who attempted to kill a chauffeur last September by discharging three shots from a revolver at him. As the medical experts found the girl to be mentally normal, she was condemned by the Court of Assize of the Upper Garonne to 10 years hard labour.

Specific immoral acts also have their part in the subject under examination.

An article published in the Osservatore Romano, of the City of the Vatican, calls the attention of governments to the spread of the cinemas and the danger it represents for young people. Le Bon Cinema, of Montreal in its March number, affirms that 90% of the films that are exhibited are immoral, and asks Catholics to join together to put a stop to this evil.

According to the Film Daily of New York, the Mayor of Dallas would like to issue measures to prohibit children from entering cinemas until a stop has been put to the exhibition of films founded on crime.

Among the latest films whose exhibition
of London, a more or less similar criterion actuated the Erith District Council in arranging for the revision of licences granted to cinema lessees. At Glasgow, it has been requested that there should be a national censorship to stamp out the insidious immorality of films.

The Mayor of Minneapolis (Film Daily, New York) holds the opposite view, and considers the cinema the most suitable means for the intellectual and moral education of the masses; the Mayor of Dallas (Today, New York) has rejected a memorial signed by the mothers of his district, who wanted to have a direct censorship of films, stating that he is perfectly satisfied with the films that are projected in his town; and the Rev. C. Wunder (Today, New York) after dwelling on the high educational value of the cinematograph, in a lecture given in New York, declared that producers can judge the preferences of the public with the utmost precision from the greater or smaller cash returns realized, and that in this way the public exercises the only form of censorship that is really efficacious.

In this connection, the Congress of the School Officers' National Association, which was held recently at Blackpool, drew up a resolution recommending a new legislative measure fixing the hours in which unaccompanied children may enter cinemas, with the object of preventing children playing truant, or who are unable to attend school for any reason, from spending the time at the cinema without their parents' permission.

In any case, if the control systems actually in force are to be recognized and retained, the persons selected to carry out the work must offer the highest guarantees of morality.

During a discussion in New York on the censorship of the cinema, Messrs. J. S. Summer, member of the League for the Suppression of Vice, M. L. Ernst, one of the directors of the movement to make the censorship laws more liberal, and the Rev. Dr. C. F. Potter, founder of the Unionist sect, were in agreement that the present moral level of the cinematograph is a very dubious one, if not actually low and harmful (Today, New York); but they seemed unable to de-
cide whether the remedy lies in a more rigorous censorship.

While the Mayor of Chelsea in Massachusetts has ordered the cinemas in which undesirable shows have been given to be closed, measures have been taken at Torquay and Scarborough in England (The Daily Film Renter, London) that at least one adult should be present against every fifty children and that half the attendants should be men.

**Films for children.** In other numbers of this Review we spoke of the possibility and practicability of having either special films for children, or cinemas for children only.

There is a diversity of opinion on this subject also. A deputation of the Council of Public Morality in England had a discussion with the Censor, E. Shortt, on the advisability of admitting children to certain classes of show only. The same subject has been dealt with by Parliament in England, by the direction of the Sovkino in Russia, and the United Parents' Association, which organized a special spectacle at Roxy, New York, to which 6000 children were invited, of whom 400 were deaf mutes (Today, New York).

But special shows and special films do not solve the problem, even admitting that they are practicable and efficacious. A number of men who have been studying the subject are of the opinion, in fact, that the only solution would be the institution of special cinemas for children. The Parents' Magazine, New York, recently published an article by the journalist, C. Seitz, in which, after asserting that the majority of films are unsuited to children, who nevertheless flock to the cinema in America to the number of five millions daily, he declared that the only remedy would be to insist on managers of cinemas having a so-called children's hour.

In its general lines this opinion is shared by M. Lacoin (Courrier de Genève, Geneva), by Margaret Carter, in an article on a children's theatre with fixed prices and hours of opening (Revue Internationale de l'Enfant, Genève) and by M. Lahy-Hellebecque. M. A. G. Poncet, Under Secretary of State for the Fine Arts in France, writing in l'Écran, Paris, justly observes in this connection, however, that although moral principles must without question be upheld in films, the proposal to create special cinemas for children is out of the question at the present time, from the practical and commercial point of view.

**Cinema and justice.** The film, and especially the sound and taking film, continues to find its way through the austere portals of the Law Courts. Judge J. Gordon, of Philadelphia, admitted a talking film as legal evidence in a recent trial (Exhibitors' Herald World, Chicago).

Meanwhile, the police is also making use of the film in its task of repressing and preventing vice and crime. At Evanston, in Illinois, specialized offices are collaborating in the production of films illustrating crime and robbery, for the information and instruction of policemen (Movie Makers, New York) and the German police has also begun to make extensive use of the film for the instruction of its officers and the general public in the repression of crime. To this end, the Berlin police, in collaboration with the UFA, is preparing a film dealing more particularly with female crime. The Independence Belge informs us that the police of Saxony has also produced a film of this type, in which it appeals to the general public to collaborate with the police in the repression of crime.

**Government policy and state interests in the film industry:**

In the last issue of the International Review, we referred to the co-interest which the Government of the Reich had taken, or was proposing to take, in industrial film enterprises.

In a spirit of strict impartiality we publish herewith a note on this point culled from the Film Rundschau, of Essen. Given its international status and its aims, the Institute is, of course, extraneous to all such polemics and does not take part pro or contra in debates of the kind that crop up in one country or another. We state the question without comment, and leave it to the logic of facts to justify in due course one or other of the conflicting theses.

The central Cultural Committee of the Guild of Cinematographic Labour of German Catholics (the F. E. D.) at its meeting of the 17th December at Cologne, in which delegates from all parts of Germany took
part, expressed surprise that the Government of the Reich, without obtaining the consent of Parliament, had purchased the majority of the shares of the Emelkka Company, at very unfavourable conditions to boot, and unanimously passed the following resolution:

«The Guild of Cinematographic Labour of German Catholics, protests on principle against the State taking over a cinematographic business. According to our conception of the state as an organic whole, we must energetically denounce the growing tendency to incorporate cultural associations into the State.

«The right of control and the duty of promoting culture, both in a material and an ideal sense, appertains to the State and is dictated by interest in the common weal. Its influence on cultural life is strictly limited in a country of varied political mentality. Culture is dependent on the religious and moral forces of the nation.

«It is perfectly true that, in order to promote an efficient policy, the State must take measures to unify these manifold forces and but it is not possible to create a uniform culture through the cultural policy of the State. This holds good for all the several means of culture, including the cinematograph.

«Any attempt to influence the formation of political ideas though the State taking over a cinematographic enterprise is destined to failure in view of the diverse mentality of political parties and the economic and cultural conditions of cinematographic production.

«We trust that Ministers and Members of Parliament belonging to our Party will use all their influence to safeguard by all means our politico-cultural principles, and that the course of action pursued in this instance, to which we attach great significance, will be desisted in. The decisions already taken ought to be revoked as soon as possible».

THE CINEMA, AGRICULTURE, AND PLANT DISEASES

The ever increasing increment in cereal cultivation in Italy — and more especially in wheat cultivation — is urging experts and farmers to give their earnest attention to the question of phytotherapy, or the treatment of plant diseases, to enable them to detect, prevent, and combat the diseases of the precious cereal, thereby contributing more efficaciously to the fulness of the wheat production.

Numberless and insidious enemies of wheat in the form of microphytes and insects are incessantly at work to stultify the efforts of the farmer, who is bound, if he is prudent, and careful, to give due importance to this horde of often invisible pests, to recognize the first intimations of their advent, and to circumvent them.

Unfortunately, however, the lack of definite knowledge in regard to these parasites, to the conditions favouring their increase, and the means for combating them, frequently forms an insuperable barrier to their successful extermination.

The cinema can be of great use to cereal growers in the task of overcoming these difficulties, by giving vivid illustrations of the commonest and most noxious diseases of wheat caused by animal and vegetable parasites, as well as the means of preventing or combating the scourge.

The screen can show us, with the utmost accuracy and detail, the whole gamut of the insects which most frequently attack wheat, such as the «Sitotroga cerealella Oliv.» or Angoumois grain moth; the «Plodia interpunctella Hb.» or Indian meal moth the «Calandra granaria L.» or granary weevil and; the «tenebroides mauritianicus L.» or cadelle.

The screen can teach us the various preventive measures to take against these insects, the utility of hastening reaping and threshing as much as possible, the necessity of not leaving ears of corn on the ground and of clearing off the chaff with the utmost rapidity, and of leaving the clean dry corn on the ground as short a time as possible.
The screen can also make the farmer realize how very important it is, for the safe keeping of corn, that it should not be stored until he is quite sure that it is sound and does not harbour insects.

The cinema can then give a rapid illustration of how granaries should be built above the ground level in order to avoid damp, what attention must be given in order to make sure that the temperature of the granary is as low and regular as possible; it can show that the floor should be smoothly made of cement, and the walls and ceilings kept whitewashed; and that all corners should be round and every part of the inside free from cracks, in order that cleaning and washing operations may be thoroughly done and there be no chance for insects to deposit their eggs. Other necessary measures that the cinema can illustrate thoroughly comprise: the hermetic closure of cracks and openings, the protection of window openings by fine wire netting, the construction of granary roofs in refractary material in order to avoid the rising of the inside temperature, and lastly, the construction of silos.

When the film has achieved its aim of showing that it is not sufficient to know how to grow corn, but that the farmer must also know how to defend his product from damage in both field and granary, it should teach him to distinguish between insects which are really injurious and those that are not only harmless, but even assist man in his fight against the former.

We know that the grain moth (fig. 1) does very serious damage to crops everywhere. Little by little, as successive generations of this insidious creature continue to develop, the wheat grains decrease in weight, sometimes even to the extent of 30%. But this marked loss of weight is not the only damage; we must take into consideration also the refuse etc. of the insects that may remain in the grains, sometimes constituting as much as 20% of their apparent weight. The farmer frequently complains of the damage done by moths to
Fig. 2.

Fig. 3.
stored wheat, but he does not take into consideration the equally serious damage done by these insects to growing crops.

It is true that it is easy to overlook this injury, the chrysalis case being very light in weight and escaping detection in the midst of the chaff, after threshing, especially when the threshing is done by machine. The nearer the cornfields are to the house and to agricultural centres, the more serious the damage from these insects, for the adult moth leaves the granary and flies to the cornfield to deposit a new nest of eggs.

In Italy alone the grain moth does damage to the tune of millions and millions of lire every year.

This extremely pernicious insect has, however, a natural enemy in this country, a little insect of the hymenoptera order called Dibrachys boucheanus Ratz. Most farmers know nothing of the usefulness of this insect in wheat cultivation and imagine it to be a new enemy to be fought against, whereas, on the contrary, it is a friend in need, destroying numbers of moths. Prof. Roberto Emegna of the Luce National Institute, an earnest phytopathologist, recently produced a film illustrating the usefulness of this little insect from the farmer's point of view. The film gives the entire biology of the moth and shows the damage it does to the wheat crop, and in contrast gives the biology of the Dibrachys.

This interesting lesson can be imparted much more effectively by the cinema than by any ordinary teacher. The spectator can follow the life of the grain moth up to its maturity as a straw-coloured adult measuring from 12 to 15 mm. across the wings, at which stage it attacks wheat and other cereals (fig. 2). He will see these moths break out from the chrysalis in the granary and proceed to their mating; and watch the female moth a few days later seeking to deposit her eggs. If she cannot escape from the granary, she will deposit the eggs on the upper stratum of the wheat, in the longitudinal groove of each grain. The female deposits from 20 to 30 eggs on each grain, her total deposit varies from 120 to 190.
eggs (fig. 3). The eggs take from four to fifteen days to hatch, according to the season.

As soon as the larva comes out of the egg, it penetrates the grain through its softest point (it penetrates the wheat grain through either the beard or the longitudinal groove) and by the time it has absorbed all the farinaceous substance, it reaches the embryo, which it devours. Thus the grain is emptied of its farinaceous substance and the larva attains to the stage of maturity (fig. 4).

During the interval until it reaches the stage of the perfect insect, it works to prepare the way for its exit from the grain, gnawing towards the supercicies of the kernel and gradually reaching to the pericarp, which it leaves intact. Thus there appears on the grain a tiny unbroken disk which is the door that will be opened by a delicate push as soon as the opportune moment arrives. After this operation, the larva covers the walls of its niche with silky threads, enclosing itself within a tiny cocoon as a means of defence against possible shocks, such as those caused by the shoveling of the wheat, for instance. As soon as this labour is ended, the larva is transformed into a chrysalis; and in the next stage (during the second half of May) the adult insects of the first generation follow their instinct, abandon the granary and fly to the cornfield, to deposit their eggs on the ears, between the husk and the grain.

The damage caused by the moth may, as we have said, be counteracted to some extent by an insect which does a really beneficent work of prevention and cure and is a valuable ally of the farmer in his fight against the grain moth.

The Dibrachys, or Vespetta del grano, feels the wheat grain with its antennae to see whether it contains the larva of the moth (fig. 5). When it finds that the larva is inside and has discovered a suitable point of entry, it perforates the grain with its proboscis, prickling and paralyzing the larva and depositing its own eggs on it. The tiny larvae (fig. 6) that are hatched from the eggs of the Dibrachys suck the juices of the moth larva (fig. 7) and are rapidly fattened and transformed into pupae (fig. 8).

As soon as the insects numbering from 14 to 16, reach the adult stage, they leave the wheat grain; the male awaits the female outside the little hole perforated in the kernel, assists her to come out, and as soon as she is outside, they mate.

The Dibrachys produces six or seven generations a year at the expense of the grain moth.

It would be an excellent measure to breed these very useful parasites on a large scale. Students can and should lend their valuable aid to the farming class. There ought to be close collaboration between the scientific man and the practical farmer, the latter pursuing a steady labour of investigation and inquiry and the former assisting him in every way by scientific solutions of his many problems. The result would be an enormous and rapid progress in agriculture.

The cinematograph, on its side, will be able to illustrate new technico-scientific discoveries on a continually increasing scale, and to overcome the attachment of the farmer to the customs and beliefs of his forefathers by a persuasive propaganda that will help to form a new technical mentality in the farming class, conducive to the progressive improvement of agriculture.
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The «Bildwart» Supplements:
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This Review is recommended by the German Educational Authorities
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REVIEWS


The fact that the author of this book is a journalist and used to the polemics of the press is obvious from the very first pages. His interesting articles in the Film Mercury are widely read. In the present volume he gives free play to his pen while setting forth the results of observations and enquiries that are not without value and merit attention.

The book is divided into 21 chapters, each of which deals with a separate problem; the cosmopolitan crowd of producers, cinema managers, and actors, pass in rapid review before the readers' eyes, together with censors and critics, who give the cinema industry so many hard nuts to crack. The most pungent and ironical chapter of all is that on the censorship. Practically everyone admits by now that the censorship is, after all, but a tentative effort to avert greater evils and that it fulfils its purpose only partially and uncertainly.

On this point perhaps the author shows a little too obviously the parti pris of the journalist. Outstanding facts, such as the arbitrary nature of most of the measures of the censorship, the divergence of opinion shown in criticising any given film, etc. tend to make less impression owing to their cheek-by-jowliness with other statements that verge on the paradoxical. One argument offered by the author, and obviously made for effect rather than for solid argument, is that, the main object of the censorship being to protect the public against the incitement to crime and immorality inherent in a number of screen spectacles, the censors, who pass their lives watching such reprehensible scenes, are likely themselves to grow into the most perverse of men. The influence exerted by the screen on the masses is a generally recognized fact, but few will be inclined to follow the Author to this logical deduction!

One chapter of special interest is that dealing with the lines of conduct which different forms of religious belief have seen fit to lay down in relation to the cinema. The Author aptly remarks that much, perhaps too much, has been expected of the industry; at the same time the laudable desire to raise the moral tone of film production is too reasonable to admit of criticism.

Tamar Lane is a cinema enthusiast; he has faith in the cinema and in its future. But his faith is not of the proverbially blind order, for he discerns the faults against which this yet infant art has to fight. His criticism is not of the destructive order; it is constructive and should contribute to the development and improvement of the cinematograph.


This is a painstaking study based on an enquiry made in regard to 10,052 children, and records precise data on the attitude of children towards the cinematograph. The question may be growing time-worn, and floods of ink have been used in the attempt to solve this Gordian knot that no Alexander has yet succeeded in tackling. But the work of this author commands respect and consideration owing to the abundance of evidence she submits, all duly classified and commented on, so that it affords much valuable material for students.

It may not be out of place to mention that the children examined and divided into three categories - children attending the public schools, boy scouts, and juvenile delinquents - are all American, and typically American. It is probable that a similar enquiry conducted in a European country would yield very different results.
qualities common to children the world over, there are nevertheless race differences that cannot be discounted; and these differences are perhaps more apparent in children than in their elders.

Here at any rate we have the answers of a large number of typically American youngsters to the interesting inquiries contained in the questionnaire compiled by Miss Millar, which is given in extenso in the appendix. No point of interest to students of the question has been overlooked: the numerous answers, carefully examined and weighed, give an idea that everyone can appreciate of what the cinema means to the millions of children who daily haunt moving picture shows, seeking therein all that life promises... and does not yield.

Children look to the cinema solely as an amusement, and this is right and natural. It is up to their elders to select the shows and present them in a way to attract and benefit the young audience. This is no easy matter, to be sure: of old it was recognized that the path to the stars is a thorny one! We must bear this in mind now that it is so generally and so bitterly lamented that nothing is being done to obtain a cinematographic output of a kind fit for children — a criticism as harsh as it is hasty. One need only reflect on the great difficulty of selecting books suited to children — and yet writing is not an art of yesterday, and multitudes of writers have devoted themselves to writing for children. No wonder that in the domain of the cinematograph — an invention little more than a quarter of a century old — the efforts made in this direction still leave so much to be desired, and that the cinema has not yet been able to occupy the position due to it in the social life of the several nations — a position it is slowly but surely conquering.


The British National Vigilance Council entrusted to the Cinema Inquiry Commission appointed by it the task of conducting a comprehensive inquiry on the psychological influences of the cinema. The returns of the enquiry and of the studies made by a special sub-committee of the Commission, are fully set forth in this volume, illustrated by graphs and tables that help considerably to give the reader a clear notion of what has been done in Great Britain in the domain of the cinema. The returns of the enquiry, as published here, are valuable mainly from the pedagogical standpoint; they record in detail the results of an experiment conducted in a school in which a single class, divided into two sections, were given alternately oral lessons without any form of ocular demonstration; lessons by educational films without verbal comment, and educational film or lantern slide lessons, explained verbally.

The main result of this inquiry — as of so many others of the same kind — is to show that, among all new inventions, the cinematograph is that which lends itself best to the purposes of instruction.

No one denies the value of visual memory: why not, therefore, seek to cultivate it in children, and to turn it to the fullest account? And as the crowd that frequents the cinema is nothing else than a big child, to whom the mentality of a child of 14 is attributed, why not seek to educate and improve it by employing those means which have yielded such excellent results whenever they have been resorted to?

Much has been done in the domain of the educational cinema, but much more remains to be done, and no doubt will be accomplished if once teachers and educators realize the full importance of this modern method of education and give it the attention it deserves.


This is a useful and practical manual compiled for the benefit of all those who realize the importance of social and religious education, and, being aware of the powers of the cinematograph, wish to use them for these ends. The volume is addressed to those who are not versed in cinema technique and contains a mass of information indispensable to the amateur.
The book is divided into 4 parts and a number of chapters, in the course of which the authors expound very fully the problems appertaining to the screen.

In the first part entitled: "Past and Present", a brilliant sketch is given of the career of the cinematograph up to the present; its struggles and its successes, while the merit of its invention is claimed for Thomas A. Edison. The authors proceed to survey rapidly the various fields into which the cinema has already found its way, as though to demonstrate the position due to it in every branch of human knowledge. Manufacturers, educators, scientists, all have realized its great persuasive force and have turned to it and entrusted to it the mission of disseminating ideas, among adults and children alike. Thus the cinematograph, after its early tentative days, having now reached maturity, is no longer an exclusive monopoly of the trade, which exploited it merely for the purposes of amusement, but has become one of the most powerful means of propaganda in the hands of those who understand how to use it.

Part II, entitled "Exhibitors' Problems" gives useful information on the renting of films and their exhibition to the public.

Part III contains a number of different programmes for schools, churches, charitable institutes, communities, industrial organizations, Y. M. C. A. and Y. W. C. A. halls, children and young people, the titles of the films that may be obtained against payment of forwarding expenses only being marked with an asterisk.

And lastly, Part IV sets forth the legal and technical problems that have to be faced by persons who, not being versed in cinema technique or acquainted with the legal steps that have to be taken by all who wish to give public performances, do not intend on this account to be cut off from availing themselves of this modern and highly efficacious means of promoting and spreading ideas.

Such, in brief, is the content of this volume which contains so much valuable and practical information and which, if widely read and circulated, should do much to help in the utilization of the cinema for education.

The responsibility for better motion pictures by Catheryne Cooke Gilman.

To raise a question is the first step towards solving it. History and experience prove this. When Froebel raised the question of recreation and called attention to its importance in the lives of children, there was far from being any general consensus of opinion on the subject. The exaggerated utopian doctrines of Jean Jacques Rousseau went far to convince the partisans of the old school of the wisdom of their obsolete and false ideas on the upbringing of children; and to confirm methods which, far from assisting in the physical and moral development of children tended to repress all spontaneity, to force the poor defenceless little beings into premature maturity and deprive them, in their tender years, of the innocent pleasures which the circumstances of life itself so often deny us later on. Nevertheless Froebel's ideas had their intrinsic value and in the long run they triumphed.

By degrees, his adversaries were disarmed and left without solid arguments to fight him; slowly but surely, with a determination worthy of the cause that inspired him, the German educator managed to smooth all difficulties and to replace schools, with their iron discipline and severity, by Kindergartens, where the little ones were trained amid flowers and games to face the future struggle of life.

The value of games in the training of children once being recognized; it being also realized that the child who plays till it is worn out is likely to be the hard worker of tomorrow, and that the child who leads his comrades and invents new games has the stuff in him to become a leader of men, it was only natural that the invention of the cinema should arouse in this regard a problem deserving of the greatest attention.

The cinema is not mere child's play, but of all forms of amusement it is the most accessible to all classes of the community.

It has often been said that only the book can be compared to the cinema in the influence that it exerts on all classes. In point of fact, nothing is quite comparable to the cinema. We have only to reflect that there are still a great number of unlettered people
in the world — though they are on the decrease — who remain extraneous to the influence of books; that the labouring classes remain to a great extent altogether outside their influence. In most countries, indeed, the worker who actually buys books to read them is very small. And although public libraries are multiplying on all hands, to the great benefit of culture, it must be recognized that the influence of literature on the masses is still relative and restricted.

What of the newspaper, the reader may ask? No doubt the newspaper gets everywhere, and there is hardly a workingman who does not read it and thus keep in some kind of touch with the progress of civilization. But if the newspaper gets everywhere, everyone gets to the cinema; and the cinema has the advantage of being « legible » even to the unlettered. There is hardly a village lost in the mountain heights or in the remotest countryside that does not now enjoy its Sunday cinema show, or receive at least, from time to time, the visit of a travelling cinema. As for the towns, the picture-palaces multiply day by day and are crowded ever more densely with a public drawn from all classes.

When the cinema was dubbed « a school for crime », it was considered under one of its many aspects only, the least favourable to be sure, but not the only one. The abuse it called forth, moreover, was in itself a recognition of the fact that it was capable of exercising a considerable influence on the masses, and this was the first step along the road of enquiry, the purpose of which was to see that this influence be put to worthy use. For it is obvious that if the cinema can represent a school of corruption, it can equally well serve the purpose of a school of sound moral influence.

This is the point that Catheryne Cooke Gilman seeks to bring out in her volume : « The Responsibility for Better Motion Pictures », in which she rapidly surveys the several aspects of the cinema, paying particular attention to that of the censorship, which up to the present has been the only means excogitated for safeguarding the young against the bad influences of the cinema. Mrs. Gilman fully recognizes the great educative and anti-educative possibilities of the cinema. A single glance, as she aptly observes, may undo the painstaking efforts of months and years of missionaries, teachers, and diplomats. As for the American output in motion pictures, Mrs. Gilman judges it with the severity that many of her compatriots express in its regard and she is all the more irritated by the faults she criticizes owing to the fact that 90% of the films shown throughout the world are American products. Mrs. Gilman remarks that this fact, in itself, ought to rouse a proper sense of responsibility in American producers.

Mrs. Gilman views the censorship not as a means of settling the difficulty, but merely as a palliative. No censorship can ever alter the moral sense of a people; no censorship can ever fully achieve the purpose at which it aims. For instance, when the censorship intervenes with the warning « this film is unfit for children unaccompanied by their elders » what possible good can anyone expect from such a notice? Not only teachers, but the merest man in the street is aware from his own experience that chronological age and mental age or development are two very different things. A youth of 16 of tardy development may assist at a spectacle that a much younger child of precocious intelligence cannot view without receiving impressions of a kind to weaken his moral sense, which is still in course of development, and therefore uncertain and easily unbalanced.

In summing up, Mrs. Gilman, leaving aside the censorship and bearing in mind the spread of the American film, foresees two possible ways out, the first of which reduces itself to a check on the exploitation of American films. In short, Mrs. Gilman is in favour of applying the same policy to films exported from the United States that applies to all other American commodities. She suggests that the control of film exportation should be entrusted to the Department of Commerce, which would be qualified to pronounce a favourable or adverse opinion on films; apart from this there should be no check on exportation, the importing country being entirely free to accept or reject a disapproved film, after being duly informed of the facts.
The second solution contemplated by Mrs. Gilman is none other than that suggested by Mr. William Marston Seabury in his book on "The Problems of the Cinematograph — the Cinema and the League of Nations." Mr. Seabury suggested the creation of a Cinema Committee under the League of Nations, whose task would consist not in censoring or prohibiting, but merely in suggesting new lines of work and policy to cinematographic production, by examining all films produced and reporting upon them.

Such, in brief, is the content of Mrs. Gilman's booklet, which obviously reflects a sincere desire to contribute to the improvement of cinematographic production in general and American production in particular, considering that this is the most widely disseminated throughout the world.

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**MANUFACTURED TOBACOS OF THE HUNGARIAN ROYAL TOBACCO MONOPOLY**

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ROME

JULY-AUGUST 1930

LEAGUE OF NATIONS

MONTHLY PUBLICATION OF THE INTERNATIONAL, EDUCATIONAL, CINEMATOGRAPHIC INSTITUTE
INTERNATIONAL EDUCATIONAL CINEMATOGRAPHIC INSTITUTE
LEAGUE OF NATIONS

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INTERNATIONAL REVIEW
OF
EDUCATIONAL CINEMATOGRAPHY

THE CINEMA AND SCIENTIFIC MANAGEMENT

MONTHLY PUBLICATION
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Out of print.

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Social Aspects of the Cinema.
Le cinéma sous ses différents aspects d’ordre social.
Aspectos sociales del cinematógrafo.
Gli aspetti sociali del cinema.
Die sozialen Aussichten des Kino.

The Cinema and Eyesight.
Le cinéma et la préservation de la vue.
El cinematógrafo y la vista.
Il cinema e l’igiene della vista.
Das Kino und die Hygiene des Auges.

Cinema and Hygiene.
Le cinéma au service de l’hygiène.
El cinematógrafo al servicio de la higiene.
Igiene e cinematografo.
Hygiene und Kino.

ABOUT TO BE ISSUED

The Cinema and Scientific Management.
Le cinéma au service de l’organisation scientifique du travail.
El cinematógrafo al servicio de la organización científica del trabajo.
Organizzazione scientifica del lavoro e cinematografo.
Das Kino im Dienste der wissenschaftlichen Arbeitsorganisation.
One of the first among the duties entrusted to the International Educational Cinematographic Institute was a technical enquiry into the possible uses and applications of the cinema. Obviously this study upon which the Institute has already embarked and which it intends to pursue to its conclusion, was no matter for improvisation. The fruits of experience and expert opinion could alone point the way to practical results. By these means the Institute could hope to accomplish the second and no less important part of its mission, namely, to indicate both to producers and consumers all that the cinema may have to offer in the vast field of education.

The Institute’s first study related to the cinematograph regarded as a social problem. In the March number of the Review and again in one of the first special “Monographs” The International Educational Cinematographic Institute endeavoured to lay the foundations of an enquiry into the influence of the cinema on the public in general and upon children and young people in particular.

Among the subjects treated were the relations of the cinematograph to morals and crime, with special reference to the young, and the laws in force for the safeguarding of minors, particularly as regards film censorship. The enquiry included, in fact, anything that touched upon the social effects of the cinema.

This work gave proof of the Institute’s determination to direct its energies towards aims extending beyond those implied in its statutory functions. It was quickly followed by the May number of the Review, which was devoted to the cinema as a means of propagating and disseminating the principles of hygiene — a special number which was republished and supplemented in another monograph dealing with individual hygiene problems and the possible use of the cinema in this domain. The study was divided into an explanatory and a technical part. The purpose was to explain the kind of film preferred and best suited to spread far and wide those principles the application of which is not only a social necessity but a direct contribution to the welfare of mankind.

Immediately after the monograph entitled “Cinema and Hygiene” came one on cinema and eyesight. “Do films hurt the eyes?” It was discussed at great length, but with no definite result, whether and, if so, how far cinematographic projection is injurious to children’s sight. Our work was limited to setting forth and enunciating the problem, the solution of which we left to the experts.
In this connection we should mention that the International Educational Cinematographic Institute has initiated a world enquiry into the cinematograph regarded from various points of view. A questionnaire addressed not only to schoolchildren but to their teachers has been sent in different languages to several countries in hundreds of thousands of copies. Each questionnaire contained a hundred or more questions, so that some really comprehensive result may be anticipated. So far the Institute has received more than 30,000 replies.

One of the questions asked of schoolchildren referred to this effect of films upon the eyesight. The first results of the enquiry (covering about 19,000 replies) were published in the fifth number of the Review (May 1930) and in the special monograph on cinema and the eyesight. Thus the Institute has not relied upon theory and science alone to elucidate this very important point; it has collected valuable first-hand evidence. Upon the conclusion of this first phase of the Institute's activity which extends in every direction where the cinema may be of use and which will include the publication of further special numbers of the Review or other monographs devoted to agriculture, vocational guidance and training, social hygiene and the prevention of accidents, etc., the Institute will proceed to examine and catalogue films deemed to be in one way or another genuinely educational by authorized national Committees or by the Institute itself. It will then make a practical study of the organisation of both the production and distribution of such films, since the Institute desires to be a real agent of international collaboration for the purpose of popularising educational films.

In the meantime the International Convention for the abolition of Customs duties on educational films is to be discussed by a diplomatic Conference. If, as there is every reason to hope, this convention is adopted, educational films, no longer obstructed by almost insuperable barriers, will circulate more freely. The opportunity of ascertaining the educative value of a film before buying it will not be the least of the advantages of this freedom of circulation.

Let us now say a few words about the present number, which is devoted to a much-discussed problem of the day — scientific management, the importance of which is both economic and social.

The aim has been to discover and to reveal to those who may have only a theoretical acquaintance with the subject, the practical forms of a system of rationalisation based upon the principle of minimum effort. This problem vitally affects the economic and social life of nations and deserves the attention of all whose concern it is to ascertain — with due regard to the conditions of work peculiar to each country or area — the general rules or standards for determining the best way of improving manufacturing processes, reducing cost of production and making a rational use of human labour.

Can the cinematograph help in this field? If so, under what conditions and to what extent? And, as a corollary, can and should film producers help in popularising the cinema for this purpose? How could they so help? The International Educational Cinematographic Institute has endeavoured to treat these questions in the present number of the Review.

The discussion has purposely been restricted to scientific management in industry, to the exclusion of agriculture and intellectual work, since the latter has little to expect
from the cinema while the former, on the other hand, presents so vast and complicated a field for film activity as to require separate study, the results of which, when completed, will appear in a publication devoted exclusively to agriculture. As regards intellectual work, we shall consider individual cases of possible cinema application in the columns of our Review.

As will be seen from the information kindly collected for us by one of our collaborators much has been attempted and much already done to employ the screen in the service of human labour.

The Institute's enquiry into the uses of the film in the various branches of scientific management is still proceeding. The replies which continue to be received are daily adding to an already abundant supply of material, and the whole will be examined with the kind assistance of specialists so that it may be presented in detailed and final form to the International Committee of experts, which will be asked to lay down the lines of the Institute's further work in this domain.

The present number of the Review furnishes the necessary basis for discussion by the Committee of Experts now being appointed, in the pages of the Review itself and also, we hope, in the technical and daily press of the different countries, with a view to elucidating all the possible aspects of the problem. The material in this number, too, will be supplemented and reappear in a separate publication which the Institute will send out to every country. It will be followed by another publication containing the views, reports and minutes of the Experts' Committee as well as any further matter of particular interest in this connection which the International Educational Cinematographic Institute may have been able to collect.

Discussion is therefore now open. The Institute has wished to bring officially to the notice of film producers this new and vast field of cinematographic activity and to quote the excellent example of a number of organisations in various countries. This example should be encouraged and followed in order that the cinema — that marvellous instrument for the spread of knowledge — may make its contribution to the rationalisation of human labour.
THE APPLICATION OF THE CINEMATOGRAPH TO SCIENTIFIC MANAGEMENT

(From the Italian)

I.

DELIMITATION OF THE QUESTION.

The cinematograph has already been applied to various labour questions and is finding fresh applications every day, but the subject with which we are here concerned permits of no digression or diversion, however tempting they may be. Our business is to ascertain and suggest, not how useful the cinema may be in connection with all the different aspects of labour — sanitary, economic, industrial, commercial, agriculture, educational — but how the cinema may be of service to that organic coordination of ideas known as "scientific management". That and nothing else is our concern.

Even after thus circumscribing our subject — the field still remains a vast one — we must make a further delimitation if we are to avoid another error in connection with this intervention of photography — an intervention, be it said, highly desirable — in the sphere of scientific management. Our task is not to seek, manufacture or exhibit scenes which can be equally well illustrated by lantern-slides, that is to say, pictures, diagrams and tables which can be examined without the aid of movement. If that were all, the cinematograph would be superfluous. What we are after are moving scenes or, better, scenes which cannot be properly understood without movement or in which movement serves some particular purpose of scientific management. The cinema could, however, be used — within the sphere we have already delimited — in such a way as to strike a balance between scenes, diagrams and tables that can be observed when stationary and images which follow one another in rapid succession. By this we mean pictures which, although offering every facility for observation and possessing their full didactic value while stationary (lantern-slides), can nevertheless be shown on the screen at the time when a hand or a person is constructing them. This method is an effective substitute for the cold and motionless slide, and we shall revert to the matter in due time and place.

II.

SCIENTIFIC MANAGEMENT AND ITS BRANCHES.

Now that we have reduced the subject to the examination of the applications of the cinematograph to scientific management both as so far effected and regarded as possible in the future — it only remains, at this first stage in our enquiry, to review one after another the various headings and subheadings of this new chapter of science and to make sure whether and under what conditions the machinery
of the cinema can effectively be employed in each particular case. If we conscientiously pursue this method and proceed consecutively from beginning to end, we may be virtually certain that we shall have forgotten or omitted very little.

This, therefore, shall be our procedure.

The field of specific enquiry and the delimitations and sub-divisions of scientific management have not of course been definitively laid down. These are still matters for discussion and controversy. For our part, we propose to follow, at any rate approximately, a line we have already traced and which we may define briefly as follows: 1° Examination of the productivity of the worker, both quantitative and qualitative (including times taken) at the moment and place at which it is decided to transform the ordinary methods of work into rationalised methods; 2° examination, at the same moment and place, of working tools and movements; 3° still at the same time and place, an examination of the degree and nature of the worker’s fatigue; 4° numerous experiments changing either simultaneously or successively the conditions governing work with a view to discovering which conditions permit of increased and improved productivity with a reduction or anyhow no increase of fatigue. As these conditions include the aptitude or better adaptation of the workman himself, we come to 5° the bio-psychical examination of the candidate for some particular task. This examination, however, should be a continuation of a series of studies and selections starting in the elementary school or in post-elementary classes and which may be grouped under 6° vocational guidance. Moreover, since it is impossible to carry out the above-mentioned investigations without 7° a detailed study and thorough knowledge of the occupation in question (qualities required for its exercise, tools and pieces of work, characteristics of the raw material used and transformed, etc.), this must constitute a further heading. Next, rationalisation can and should be considered in connection not only with industry, but with administrations and office-work; we must therefore add 8° scientific management in offices and commercial firms. Similarly, for sufficiently evident reasons, we must include 9° consideration of improved pay for the worker in proportion to quantitative and qualitative improvement in output. For further information concerning this programme we may refer to the monograph we published in the review «Le Assicurazioni Sociali» (Rome Jan.-Feb., 1929), which in its turn contains references to our earlier works on this subject.

The difference between «Taylorism» proper and our own view of scientific management will be clear to everyone. The latter is based upon conceptions and experimental studies initiated by various European investigators — physiologists, anthropologists, statisticians, experimental psychologists, factory medical officers — before Taylor devised his system or at any rate before it was known. We have dealt with this point in our study of the anthropology of classes and occupations (1908-1910) and only mention it here in passing.

We shall therefore consider one by one, from the point of view of possible cinematographic application, each of the points mentioned above, which, as will be seen, deal, as indeed they should, exclusively with scientific research with a view to increasing and improving production, the human factor being throughout
taken into account. The use of the cinematograph will therefore for the moment be recommended in so far as it can contribute towards such scientific research. In a word it must be regarded as a new and special instrument to be used to discover something fresh or to throw additional light on what is already known or imperfectly known.

Nevertheless, we do not wish to exclude the use and application of the cinematograph in two other fields of activity which, although they do not come within the scheme we have outlined above, are very closely connected with it:

(a) Vocational teaching — to some extent even independently of scientific management;
(b) the diffusion, among all classes, of an exact knowledge of what scientific management really is.

III.

Preliminary observations:

Psychology of A) method of observing objects and movements.

Before entering upon this subject, we desire to make two purely psychological remarks essential in this matter of observing objects and movements. (It should be borne in mind that the purpose of observing objects and movements is to discover something which, when looked at in the ordinary way, is not perceptible to the eye).

The two remarks in question have never been made in connection with studies such as this, and in other fields of research, where they should be taken into consideration at every stage, they are unknown. Both, as we have said, relate to the method of looking at objects and movements to discover something new. The first refers to the way of arranging objects and to the detailed decomposition of movements so that they may be better observed; the second refers to a minute nomenclature of the smallest details and least features of objects and movements, again in order to see and discover them better. These two remarks are entirely apposite to the observation of objects and movements by means of the cinematograph. Let us begin with the first of the two and point out that the eye only sees in objects and movements what it is normally in the habit of seeing; it only sees, in fact, what it has learnt to see from regarding objects in their most usual aspect. In a landscape, for instance, the eye only perceives what it has learnt to perceive from the habit of looking at the landscape from in front or horizontally. It does not observe what it could see if it looked from above and perpendicularly. A photograph of a landscape taken from an aeroplane is not recognized by those who know the scene or have seen many ordinary photographs of it. Photographs taken from above present a fresh landscape in which things can be seen differently and new features can be discovered. Similarly, if we watch the successive movements of the legs and feet of a man walking, or the oscillations of the head or hips, we do not observe the many successive positions in space taken up by these parts
of the body. But we should see them quite clearly if they were shown to us under different conditions.

In the one case as in the other (objects, movements) the eye ends by discovering by different means what is there, but what it did not see before. For example, specialists in scientific physiognomy have often pointed out that satisfactory examination is only possible by the simultaneous and successive study of front face and profile. We have proposed this method and proved its worth in the observation and study of wounds, examining them from the front and in profile so as to obtain different and complementary photographs which enable us to «look at» the wound better and discover its details. Experts in «scientific judicial enquiry» have observed that the photograph of a place (scene of a crime) should not be a single view taken from the front, but should be multiple so as to furnish that series of police photographs which we have called «panoramic and complementary» and which allow of an all-round view of all the objects present, each photograph supplementing the others.

In the one case (front-face and profile) as in the other (all-round view) the eye when it falls on the photographs, is able to see what it could not see by the ordinary methods of vision and photography. Therefore scenes of work or of men at work might be filmed simultaneously from two or more different points, or large mirrors should be placed in the background in such a way that, at a single look, the eye can see the several sides of an object, sides which ordinarily we do not see and which we may call «invisible and complementary». It may be mentioned that this system — without reference to the psychological considerations set forth above or to the analogy it bears to modern methods of inspecting scenes of crime — has already been suggested or applied in the observation of men at work by means of the cinema:

It should further be noted that the method of looking at things so as to see new and unrecorded details can also be employed by looking at and studying the photographed image turned back to front. Let us take for example a photograph of a scene which it is desired to look at when stationary, separately from the succession of scenes or photographs which make up a film. Let us suppose that in the photograph the worker's bench is on the observer's right and the window on the left; let us then turn the photograph round so that the bench is on the left, the window on the right. Every photographed image turned round in this way at first presents a new aspect. This system was suggested by experts in police photography when they recommended that copies of photographs should be taken reversed, as stated above, so that the eye might receive this new and different impression and possibly discover something fresh.

Looking at things from above and perpendicularly; looking from the front and from the side and comparing the two views; looking «circularly» by means of a number of panoramic and complementary photographs — all these are new ways of looking which may enable things to be seen which could not be seen before. The cinematograph, by means of views taken simultaneously from different points
by the play of mirrors, and the turning round of photographs from front to back, can effectively help towards this end.

The foregoing remarks refer in the main to a « new » way of looking at objects, but they obviously apply equally to the observation of gestures, the succession of small separate movements which constitute a gesture, in the case in point, a working gesture. By the slow-motion process the cinema shows to the eye the hammer descending upon the anvil, the file passing across the iron in a way quite different from that in which the eye normally observes these movements. Just as Marey’s brilliant photographic experiments revealed to the eye the different successive positions taken up by a horse’s leg when trotting or galloping, — positions which had never before been observed or imagined, — so the slow-motion cinema multiplies our visual powers. If our senses were more acute — an idle wish — we could, as philosophers contemplating the universe have rightly said, hear the buds bursting and see the grass growing. This unattainable wish, however, is partly fulfilled, since the cinematographic image has developed our visual sensibility and, thanks to slow-motion allows us to see and, better still, to watch that imperceptible succession of movements which previously escaped our notice.

We shall see in a moment that the principle of « decomposition » with a view to seeing better and discovering, also applies to objects. Every object must be observed not as a whole but each of its parts in detail, as if a net were placed between the eye and the object, so that we had to look separately at that part of the object contained in each mesh of the net.

IV.

PRELIMINARY OBSERVATIONS

PSYCHOLOGY OF METHOD OF OBSERVATION EMPLOYED IN ORDER TO FIND

(B) A NOMENCLATURE FOR OBJECTS AND DECOMPOSED MOVEMENTS.

We now come to our second general observation, which, like the first is also psychological. We have already noted that the eye sees afresh if the position of objects or its own position is shifted and if objects and movements are broken up into their component parts. We may even quote Montaigne’s profound saying that « the eye really sees only what is already in the mind ». This aphorism, which is relevant to the observation of any fact or object, has a quite special application to the observation of things and movements by means of the cinema. For us it means that, unless we have in our mind an exact, detailed and objective nomenclature, under which each smallest feature or function of an action we are observing is known by some name — whether noun, adjective or verb — these features and functions escape our notice, however vigilant, and are as if they did not exist. Here again the principle is derived from the technique of scientific police description. A. Bertillon, the clever inventor of this system of description, considered that, in order to describe a face exactly without omitting any feature at all, it was necessary
1° to decompose — almost mechanically — the aspect assumed by a human face into its innumerable parts, dimensions and special peculiarities 2° to give to each of these parts, dimensions and peculiarities (and even to each graduation of these categories) a name to distinguish it from all the others. If the examining mind is in possession of this rich vocabulary of names — this nomenclature — it sees at once, in the face to be examined und described, what it would not have seen if not familiar with that nomenclature. It sees just because it knows these names; «the eye really sees only what is already in the mind» (As regards the needs of an *objective* nomenclature for purposes of observation and classification, see our «Metodo Statistico», new edition, Messina 1930, last part, Chap. I or the French edition «Méthode de Statistique» Paris, 1925).

Returning to the question with which we are here concerned, we may note the great importance of this maxim and the lesson it may teach us when, in connection with scientific management, we turn to the observation of the successive decomposed movements of a worker. Here the slow-motion picture, by revealing to the eye a series of movements and positions previously unknown or imperfectly known, not only forces our attention to dwell upon these different phases — hitherto imperceptible — but compels us to give them a name. The enumeration of the different movements made is one of Gilbreth's fundamental principles of any first analysis of work. And to «enumerate» surely means to «decompose» to make an effort to observe one by one the various movements which make up a working gesture and to call each by its own name. The series of names thus arrived at — fixed, as it were, in the mind of anyone engaged in studying a particular work — facilitates the continuation of this study or the examination of similar working process. This series of names, making up a nomenclature, obliges other specialists to take account in all subsequent observation of these successive names, which after all represent a series of movements. This happens even without recourse to slow motion (in cases when there is no absolute need for it, but when direct observation of a succession of movements is enough, at any rate in the most apparent phases). For example, the movements of a worker are decomposed into their successive stages (either by direct observation or with the aid of the cinema) with the result that these stages can be defined one after the other as: looking at (the object); taking hold of (the object); movement of hand through space; movement of body; grasping of tool; bringing of tool into contact with object, movement of tool, etc. A series of movements, in fact, which the eye is not accustomed to differentiate one from the other, becomes fixed in the mind of the specialist, if he has a special nomenclature, in such a way that each of these fractional movements is automatically observed. And this, it will readily be understood, is of great value to the scientific analysis of work.

To sum up, therefore the slow-motion cinema affords facilities for a minute description of successive movements and time-stages, allows us to see better and — if we have a detailed nomenclature — to observe better.
Possible applications of the cinema to the different branches of the scientific organiser's work.

1) Quantity and quality of production; superior and inferior human "samples".

We have said that the first stage in scientific management consists in examining the quantitative and qualitative productivity of the individual worker or gang of workers. If we desire to organise a specific task, we must first decide what it consists in then see how it should be done, what changes can be made or new methods employed or how to organise it as it should be organised. One of the first things to be done is to see how much is produced in successive periods of time (e.g.: first half-hour, second half-hour of days work, etc) and what quality of work is produced in these same periods. We must in fact study quantity, quality and time all three together. We shall refer lower down to the methods to be employed in this matter. Here we will only say that, thanks to a preliminary enquiry based upon individual curves of the daily output of each worker, we can pick out one who works better and more, one who works less and not so well, or the group of these two categories. « Notice the best work and the best workers » is Gilbreth's first commandment for the use of those who wish to rationalise labour.

A film of the best workers will show how work can be done (even before scientific management has been applied) and a film of the other workers will show how not to work. These films may be used (a) in order that the scientific organiser may observe (by the slow-motion process, lateral or all-round vision, etc) right and wrong ways of working and (b) in order to teach the right way to those who are willing to learn — assuming, of course, that the best method of work is the which is furnished by observation of the best worker or workers.

This selection of a standard worker or standard method of work has obvious drawbacks, but it may be corrected by changes of method suggested by the scientific organiser after a close examination of the film. It remains, however, an a posteriori selection, a choice, that is to say, from among the existing workers, whereas the selection should really be made a priori, that is, long before the workman starts work The process of selection should in fact date back to the successive periods of general vocational guidance, and specific selection, referred to later on.

In any case, a cinema film showing the best and worst work at the outset of the enquiry is not without its uses.

At this first stage of investigation we may also recommend the observation of individual symptoms of fatigue at successive periods in the days work. This too, we shall be dealing with in greater detail, but we should like at this stage to mention the value of such a study as a means of ascertaining which worker or workers among the whole staff or in a gang — given an equal qualitative and quantitative output — suffer less fatigue. In this way we shall obtain a human "sam-
in.
ple» even in the matter of fatigue, and a film showing his manner of working would certainly serve a useful purpose.

Thus at the very beginning the cinematograph would give us pictures (which we can study at leisure, repeating our observation as often as we like) showing samples as they are at the moment when the scientific management expert starts his enquiry. These samples cover quantity (of output), quality, working speed and degree of fatigue, each characteristic being considered separately or along with all the others.

VI.

Possible applications, etc.

2) Examination of movements and tools.

The second paragraph, we said, is devoted to the examination of movements and tools, again at the time when the organiser first institutes his enquiries. Here, too, we must first see things as they are, that is, we must note the movements, tools and working speed of the above-mentioned «samples» or of other workers.

With regard to movements and the times taken to execute them (the two problems are akin), we must refer to the ingenious experiments devised by Marey and Frémont, who worked by means of a rapid succession of photographs, care having first been taken to attach luminous points to the hand, arm or leg of the person whose movements the photograph was to record, or to adopt some other procedure. The views obtained — either when looked at one after another or through the recording of successive movements of the body by the same view — allowed the movement itself to be examined, and especially those features which normally escape notice, or rather, which are not registered by the eye as it watches a moving body, but which become perceptible when fixed by photography. The modern applications of the cinema to the study of movement and more particularly that part of a movement which is not generally perceptible to the eye, really originate in the clever photographing of a succession of very rapid snapshots of the kind to which we have just been referring. To-day, thanks to the cinema, movement studies are being carried out in many fields, including the gait of persons known as normal and of persons suffering from nervous complaints.

In the sphere of labour the cinematography of movements lends itself to a wide variety of observations, all of the greatest importance. The method by which movements can be better observed, decomposed, new movements discovered, time and fractions of time counted, has been applied for so long and so successfully that we need do no more than touch upon it.

A movement or gesture is a succession of smaller movements. It must therefore be broken up into its component parts, and these examined one by one. And — be it noted — they must be examined in respect of their direction, extent and duration. The cinema allows movements to be decomposed and furnishes the elements required to express these directions, extents and durations or times numerically and sometimes geometrically.
Decomposition is made possible by the slow-motion process, which, as it were, lays bare the succession of small movements making up what is a discontinuous whole to the eye as it sees them under ordinary visual conditions and which, without the aid of the cinema, would be imperceptible.

The cinema makes it possible to express the extent and direction of these movements in diagrams by means of the projection and immobilisation of the successive photographs, one by one, upon a sheet of paper, on which are marked, by coloured points, the successive positions assumed by the different parts of the body or by the tool in course of movement.

The cinema allows the duration or time of movement to be expressed in exact figures by various means known to all experts in film chronometry. (R. Thun). The times, or rather small fractions of time, within which the successive phases of the working gesture are executed, have long been calculated, as they still are, by means of a clock indicating hundredths of a minute. Each individual worker has his "time sector". That is to say, given several workmen doing exactly the same job, we find that for some the chronometer records short time-fractions, for others very short ones, for others long fractions. The time-specialist in only interested in the short or very short time-fractions and studies them in those workmen for whom they are recorded. He adds them together, and the result, together with the manner in which the movements are executed, may serve as a scheme for a new system of work or for the training of the worker all of whose "time sectors" are rapid. In all this the cinema, which for purposes of time-measurement has almost reached perfection may be of great help. It may further be noted that, as regards work done by machines, the minimum times sufficient for such and such part of the work and the minimum time for the whole task are more and more frequently indicated by the manufacturers of these machines in the instructions they issue for their use. In the case, therefore, of work done by men and machines combined, the task of studying times and fractions of time called partial or elementary times is transferred from those who use these machines to those who make them. But this does not mean that the former need no longer continue to pay close attention to the problem. Quite the reverse.

The foregoing applies also mutatis mutandis to the positions of the worker and the necessary changes they undergo during work. The position, too, is in a sense a movement, which it is desirable to examine in the way we have already described.

As regards tools, their examination — with a view to detecting their more intimate or less visible characteristics and suggesting any necessary alterations — is better undertaken by direct observation than by the cinema. The latter, however, is useful when we come to study the handling of tools. We are then once again concerned with movements. The method of obtaining a rapid succession of photographs showing the positions and movement of tools is an old one and, as we have said, goes back to pre-cinema days (Marey, Frémont, Muybridge); we need not therefore dwell further on the point. The direct application of the cinematograph to the study of movements and times also dates back several years and is well-known.
VII.

POSSIBLE APPLICATIONS, ETC.

3) Observation of Fatigue.

It is not, however, enough to select « samples » , such as are offered at the moment when the organiser embarks upon his study and to observe how they do their work. The element of fatigue must also be observed. The cinema, we said, can, in the matter of fatigue, reproduce samples of the « best » and « worst », that is, it can show us the work of the man who is least tired and of the man who is most tired or of various types of workers in these two categories. But can it — and this is the point — can it ascertain the degree and nature of fatigue and the means and time required to restore the energy of the different types or samples of workers? In other words, can the cinema be included among the various devices to which experimental psychology has had recourse in order to detect and measure the degree of fatigue? Can it help here? At present, at any rate, we hesitate to give an affirmative reply. As regards « fatigue », the cinema can, as we have said, be used to furnish « samples » ; it can also help to spread the fundamental physico-psychological principles concerning fatigue, which it is desirable that the workers themselves should know, such as: what fatigue is, the different forms of fatigue and the various individual ways by which fatigue is caused, the curve of fatigue during hours of the day and days of the week; how fatigue is studied and measured, alterations in the daily curve of fatigue according to changes in the condition of the individual or in his surroundings (Maggiore, Patrizi, Mosso, Joteyko, Treves, Binet, Amar). For the moment, however, we do not see that the cinema could be specifically applied to the ascertainment of fatigue. It could, however, for what it may be worth, be used to record the expression of the face and the position of the body during the expenditure of this or that kind of effort (Binet, Vaschide, Patrizi). In any case the applications we have mentioned, which lie outside the scope of the present paragraph, are more than enough to attract the attention of the scientific organiser to the use of the cinematograph in connection with fatigue. The Berlin « Fachfilm » has published several films which show how to measure the consumption of energy during work, the effort expended on the accomplishment of various tasks (raising of a weight, turning of a handle, etc.). The splendid experiments by Imbert of Montpellier on the graphic reproduction of the effort spent on various tasks (lifting weights, pushing barrows, pressure of hand on shears etc.) and on the manner in which breathing is affected, the behaviour of the pulse, and the loss of strength during these tasks, as well as similar interesting investigations by other distinguished scientists (Patrizi, Féré, etc.), could be freely drawn upon for the making of films of this kind.

We must not forget that the observation of fatigue is an integral part of scientific management. Those are mistaken who imagine that scientific management is simply a question of times and time-measurements. It is also a mistake to
confuse Taylorism pure and simple with scientific management. It is the greatest mistake of all to think that scientific management — in the wide sense — comes to us from America or that it originated there; and only the ignorant believe that the importance to scientific management of the study of fatigue and of the human factor is a recent discovery. All these problems were envisaged and dealt with in European laboratories of experimental psychology many years ago; they were reported upon and proposals were made to include them in the study of scientific management at a time when, in Europe at least, Taylor's system was still unheard of.

VIII.

Possible applications, etc.

4) Experiments based upon simultaneous and successive modifications of variables which may be in a certain relation to work and fatigue.

The fourth item in the above-mentioned tabulation of scientific management, that is, the fourth phase in the task of the scientific organiser, is concerned with the numerous experiments which, as we have already said, change simultaneously or successively the conditions under which work is done (even the «best» work) with a view to discovering the conditions or variables which will give a larger and better output while diminishing or not increasing fatigue.

Such experiments include changes in what we may call external conditions, such as lighting, space between workers, ventilation, temperature (some even propose changes in the colour of walls) and especially changes in hours of work, pauses and rest periods, and even in the nature, intervals between and size of meals, snacks and drinks — each such change being judged by its effect on productivity and fatigue. Similar changes, however, must be made in the conditions and methods of work as regards tools, attitudes, movements and fractions of movements always with the above-mentioned object of increasing and improving output while diminishing or not increasing fatigue. This programme, more especially as regards fatigue, is pre-eminently our own; it was formulated and commented upon in Europe, particularly in Italy, by scientists and experts in different fields, some time before Taylorism was known.

It will be asked whether the cinema can be of any use in this work of patient experimentation. We do not see that the cinematograph can be of any direct aid, since the aim is to calculate productivity and fatigue as the result of each change in conditions — a process attained by other non — cinematographic means. Once, however, the best conditions have been found, the cinema could help, if not in discovering, at any rate in fixing the details of the new system devised at such pains. The pictures thus obtained could also be used, as we shall see below, for purposes of technical and vocational teaching. This point, which concerns the better technico-professional training of the worker, would have to be taken into consideration in any scheme for coordinating information of the kind we are discussing.
IX.

Possible applications etc.


Among the conditions to be modified one after another and experimented with, to see which give the best results from the point of view of productivity and fatigue, the human factor, that is to say, the worker with his physical, physiological and psychical qualities comes first in importance. We have already said that the best man in a gang of workers should be selected to supply material for studying the way work should be done, and we added that this procedure was merely an a posteriori choice from among the human material at our disposal. In this matter, however, what is required is orientation and preparation: the choice, on a larger scale, from among all young people who are about to embark on study or who are preparing to learn some particular trade or, still more specifically, some definite task. These constitute the fifth and sixth paragraphs in our study of scientific management and we may even distinguish between: a) a preliminary school orientation, that is, the study of the bio-psychical personality of children in elementary classes; b) a second orientation, carried out in the post-elementary stage, with a view to advising young people, in a general way, to take up one kind of work or another; c) vocational guidance and lastly d) generic or specific vocational selection. The study of all these points by distinguished scientists and first-class experts like Münsterberg, Claparède, De Sanctis, Clackford, Baumgarten Myers, Lahy, Fontègne, Moede, Stern and others, has led to the establishment of an imposing and coordinated series of investigations into the method of analysing the bio-psychical personality of individuals and thence to the choice from among these individuals of those who possess the requisite qualities for a particular kind of work.

We have already referred to the a posteriori choice of a «sample» worker or of excellent or good workers from the human material available in the factory. We shall now speak of the choice from among those who are first applying for work (selection) and of the indications concerning their future occupation which can be given to schoolchildren long before this—while in the elementary school or in the classes immediately above (orientation). And throughout we shall bear in mind the possible uses of the cinematograph.

Let us start with selection. The essential point to consider is whether the subject possesses the bio-psychical qualities useful or essential to the work which he proposes to take up. Among bio-psychical qualities we must consider the individual physical, physiological and psychical characteristics, according to the classification we adopted many years ago in our various studies of these characteristics for statistical purposes. Many can be expressed directly or indirectly as measures or precise attributes. Their statistical examination, applied to homo-
geneous or comparatively homogeneous groups, led to the discovery of what may be called «the law of the division of human beings according to bio-psychical characteristics», a law which is, as we know, the expression of the curve known as binomial, Quetelet or Gauss curve. It also made it possible (as we suggested elsewhere and abundantly proved in «Lezioni di demografia» 2nd edition, Chap. IV, Naples 1924) to determine, for each of these characteristics, the approximate limits of its «normality» or «exceptionality» highest limit and lowest limit — account being taken, as regards each characteristic, of the graduation or classification of all the various shades or nuances between these two extremes. This result is reached by certain methods we have suggested and examined elsewhere. The whole procedure furnishes us with the bio-psychical relation of a given individual to the group from which he has been selected so that we can show the characteristics by virtue of which such individual is normal or exceptional as compared with all the other members of the group. The methods of tracing these relations are varied. Rossolino, Claparede, Lahy, De Sanctis, Stern and others have supplied methods in respect of psychological characteristics, while others are based upon the proposals of Molissa and Martin for the physical and physiological relations. We ourselves suggested methods, accompanied by numerous examples, both for the physical and physiological characteristics in the human—and also in vegetable — species, as well as for the psychological characteristics (see Chap. VIII of our «Metodo Statistico», new edition). It may be noted further that the direct observation of the constitution, according to the modern views of the «constitutionalist» school (De Giovanni, Sigaud, Viola, Pende, Kretschmer, Mac-Auliffe, Bunak, Vidoni, etc), likewise starts with those elements which are likely to furnish the best choice of worker.

Thanks to this abundance of methods and results and to similar investigations to which we need not here refer, but which are well-known to every specialist, we are able to calculate the physical and physiological characteristics of the candidate and, by means of physio-psychical and psychological tests, his psychological characteristics. It is true that the experts in these investigations are still by no means agreed as to the best means of detecting the bio-psychical personality of an individual, especially for purposes of selection, and even for purposes of vocational guidance. In this expolry of personality (we are referring more particularly to psychological personality) some prefer the questionnaire, which among other advantages stimulates self-analysis; others recommend various general tests, others certain specific tests; others again consider intellectual tests — that is, tests of the intelligence — preferable to sensorial and motorial tests, for the reason that occupational skill is more closely correlated with tests of intelligence than with other tests. Some writers — in connection, however, with certain peculiarities in the individual such as the degree of fatigue — assure us that the exploration of the subconscious mind gives the most significant results. Finally, some maintain that tests of general intelligence are enough and that there is no need to test the special intelligence of every category of worker (A. Binet, Simon, De Sanctis, G. C. Ferrari, Patrizi, Saffiotti, Gemelli, etc.).
X.

STUDY OF VOCATIONAL APTITUDE AND CINEMATOGRAPHY.

By one means or another the candidate’s qualities must be ascertained. Let us see whether the cinema can help in discovering some of these qualities.

Among the detailed lists of the qualities necessary for a particular task drawn up by distinguished experts, we find the following: «Distinguishing of objects not easily visible or ill-lit; their immediate recognition and the distinguishing of them from other objects»; «Exact estimate of distances, heights, speeds, direction of moving objects, accelerated movements and reductions of speed»; «Comparison of short distances... Accurate judgment of angles, especially right angles»; «Rapid recognition of facial expressions... Reading quickly and well... Correct filling up of gaps in vision... Seeing a collection of things quickly and then reproducing all the details», etc. (Lipmann).

Could not these qualities be ascertained by requiring the candidate to observe the successive pictures making up a suitably prepared cinema film? The cinema could in this case constitute one of those means of «psychical exploration» hitherto furnished by fixed images, mechanical or other operations, by collaboration between the subject examined and some system of machines or instruments. A film devised for the purpose and turned quickly or slowly as required can show distances, heights and directions to be estimated, objects difficult to distinguish, long texts to be read quickly, gaps to be filled up and interpreted, and so on, so as to constitute at any rate one means of exploring a candidate’s mentality. Lahy made use of the cinema to measure the «sense of acceleration» in motor-bus drivers. The Berlin «Fachfilm» has published a film that can be used to measure the accuracy with which an observer judges the speed of scenes and movements.

To go further is not the mental operation of describing something seen, the operation of «giving evidence» of some importance when examining a candidate’s powers of attention and other psychical activities? This problem has as we know been most profitably studied in connection with the giving of evidence (Claparède, Stern, Altaville, De Sanctis, etc), but even in the field of selective examination with which the present paragraph is concerned, the cinema may be very useful. We can discover how the candidate for some particular work describes the film some time after having seen it; what he remembers of it and what he forgets, the processes of reasoning by which he tries to fill the gaps in his memory, etc.

Nor is that all. The investigating tests include tables or diagrams representing scenes or actions containing some absurdity, which is not however immediately apparent. The subject under examination, warned beforehand or not, has to look quickly and point out the absurdity.

Could not these tables or diagrams be replaced with advantage by a film made up of situations containing certain absurd features which would strike the quick observer? And what about the sound film? In view of the progress it is making
and since the power of perceiving slight sounds, identifying them and distinguishing them from others is included among the necessary qualities drawn up by psycho-technical experts, it would seem that specially prepared sound-films might very well be used for testing this faculty of perception and interpretation.

There is, however, another possible application of the cinema to the examination of a candidate’s qualities, essentially different in character from those we have been considering. Our earliest teachers, like Lombroso, conceived the idea of exhibiting tables and drawings of a passionate or other kind calculated to rouse some particular emotion in order to watch the observer’s reactions; reactions merely imitative; or, better, reactions of breathing or pulse recorded graphically. Even to-day the imitative reactions of persons watching a film—especially children—are the subject of special attention on the part of the teacher or psychologist who desires to confirm his study of the child’s mind by observation. Why should not the examination of the imitative response and the graphical examination of the spectators’ reactions to a cinematographic scene be included as part of the complex analysis of which we are speaking?

In conclusion: in order to examine a candidate for a specific task, we test his various bio-psychical characteristics by means of questions, direct observation and psychical tests. As regards many of these psychical characteristics (power of attention, suggestibility, etc.), it might well be of some value to confront the candidate with one or more suitably selected cinematographic projections.

We may now be permitted to make a momentary digression and to anticipate what we shall be saying later on concerning vocational teaching by cinematograph, by observing that the cinema may be useful in the training of the selectors and vocational guides themselves. These men are themselves workers, technical experts and are made not born. It is true that they must be sought amongst specialists having very varied and exact ideas, but the cinema may be of some help in completing their specific training. The school vocational guide, for instance (first orientation) proceeds by questions and conversation; he has to supervise and initiate special games, subject children to experimental examinations which test their powers of attention, memory, commonsense, powers of observation, powers of associating ideas, perspicacity, inherited culture and ideas, sense of logic, handwriting, etc. (Pizzoli, De Sanctis, etc.). Is it not desirable that the instructor should learn how others, with more experience than he, carry out these tests and examinations? The cinema will show us the teacher preparing the tests and the pupils carrying them out; it will also show the teacher judging and making his selection from among the results obtained. And in the second stage of orientation, and even more in the stage of vocational guidance, when the tests consist in the performance of special tasks — largely manual or half — intellectual half — manual tasks designed to reveal and measure some particular aptitude — drawings, choice and aesthetic arrangement of colours, decoration, compositions in iron-wire, clay-modelling, various work in wood (Pizzoli) — how is the guide to proceed with the preparation, execution and interpretation of these different tasks? A film showing another guide (model-guide) at work may be of great help.
XI.

SOME REMARKS ON THE PSYCHOLOGY OF "VOCATIONS".

a) Methods of choosing an occupation.

Let us now return to the question of vocational guidance, more particularly the guidance to be given to the lowest classes in elementary schools and to the classes immediately above. Here we require: a) to reveal the bio-psychical qualities of the child; b) to discover its vocation; c) to advise and guide it, if only in a general way, in the direction of some particular class of occupations or away from some other class.

Can the cinematograph help in this psychological «sounding» by the teacher-guide with a view to discovering the child's qualities, bringing to light its vocation and finally advising and guiding it?

At this point it may be well to state what we know or think it possible to conclude as regards: a) the normal method of choosing an occupation and the psychology of vocations; b) the ordinary methods adopted in recognizing an individual vocation and the reasons which explain it.

a) The vocational guide must, of course, be in a general way familiar with the mechanism which governs the choice of an occupation. Does the choice depend upon purely subjective and individual circumstances, such as — to take an obvious example — a congenital vocation (according to the accepted phrase), or is it essentially imposed by various conditions of environment? Or is it simultaneously a function of both these variables? And, if so, which generally predominates?

We may be permitted very briefly to summarise what we have already said in other studies as to the nature of vocations, the way they develop and their importance in the choice of occupations and even in the formation of certain social groups.

We have said, in substance, that the diversity of physical, physiological and psychological conditions in human beings — a diversity produced by a constant law of natural variability — engenders a diversity of being and feeling and therefore a diversity of aptitudes and aspirations, a diversity in the way of thinking and judging, from which ensue a diversity of needs (moral, intellectual, material), varying with each individual, and of interests, a diversity of action and conduct or at any rate diversity of aspirations in the matter of action and conduct. The vocation is the instinctive psychological expression, conscious or otherwise, of the biopsychical personality, which creates aspirations, or inspires action and conduct.

This is a complex mechanism which it has hitherto been the custom to tabulate in the simple form, for example, of individual desire. «The choice of occupation», it is said, «depends upon individual desire». We find, however, that, although this is a powerful factor among the bulk of specialised workers, it has little or no influence upon non-specialists. This complex mechanism is sometimes tabulated as physical constitution, mental constitution, psychical consti-
tution (in other words, the vocation is the result of these constitutions), but this subdivision is an example of wrong nomenclature, since « mental constitution », even if we allow the term, is the same as psychical constitution. Moreover the real vocation, which is sometimes dormant in the unconscious mind, may not be known or may be only imperfectly known to the person in question. Some authorities, without regarding the biological and individual mechanism of vocations in all its aspects, see the origin of vocations in facts, all no doubt of an individual character, but of a highly specific nature, as, for instance, one of the following:

1° The reaction, even unconscious aversion of the child to its father, which suggests the choice of a different occupation contrary and opposed to the father’s calling. The Freudian influence is evident in this conception.

2° Organic insufficiency. The individual, more or less consciously aware of some organic (and psychical) defect in his person, seeks to counteract this defect by choosing a particular trade or profession (Fr. Thalberg);

3. The attempt to sublimate some base instinct from fear of its becoming predominant;

4° or, more simply, the wish actually to satisfy base and unavowable instincts by the pursuit of a calling in which they can find a legitimate outlet; legitimate satisfaction of deep and more or less unconscious illicit tendencies (Stekel).

All these explanations which probe down to deeply hidden and often unacknowledgeable motives, are no doubt influenced by the Tiefpsychologie of the Viennese school, which, in so many parts of its interesting analysis of hidden psychical motives, was anticipated by writers who are often forgotten; for instance, the psychologists and anthropologists who discovered and described the influence on human conduct of deep, primitive strata — atavistic, unexplored and instinctive — which lie at the roots of each individual mind (Italian school of psychology and criminal anthropology).

The vocational guide, we repeat, requires to know all these different possible factors in the choice of an occupation. He must also examine or know the theories and interpretations at variance with or opposed to those we have mentioned — interpretations based purely upon the influence of environment, such as the following: The choice of a boy’s occupation is determined by the professional environment of the father (theory of correlation between occupation of father and son studied by Chessa); it is determined by the prestige or vogue which the occupation enjoys at the moment of choosing (in this case suggestibility plays a part and the factor of environment is obviously associated with the individual factor); the choice is often imposed by local geographical conditions (N. B. Demolins’ succession of categories; the soil, sub-soil and upper soil of a certain zone determine its fauna and flora; these latter determine the nature of the occupations, trades and professions of its inhabitants, whence results the social type of the zone); again the choice of occupation may be imposed by special local conditions of industrial or commercial production (districts where the clock-making industry is traditional); finally, the choice may depend on « chance », a factor which should be extra-individual par excellence. It is not, however, sufficiently realised that « chance » is one
of those proteiform words which need to be defined before they are used. We mean very different things by the word « chance » Are we using it in Carnot’s sense of the convergence of two independent series of circumstances? Or in the sense of exceptions to the laws of probability, as in drawing out differently coloured counters from a box? Or do we mean the occurrence of extremely unlikely events? We could prolong the list indefinitely, for « chance » can be conceived in a variety of ways all of which invite discussion.

As we have seen then the vocation is capable of many interpretations, but these are not mutually exclusive and, as a rule, interpretations of a bio-psychical and individual character do not necessarily exclude interpretations based upon environment, and vice-versa. The study of vocations has inspired a copious literature, with which the vocational guide must be familiar (Claparede, Bovet, Stern, Fontègne, De Sanctis, etc). Here, too, the vocation must be conceived as the result of a complex system of forces — some of individual origin and some engendered by environment — we must note in each particular case which of these forces predominate and try to establish a hierarchy of them according to their general potency. It must further be remembered that among the mass of individuals, each so different from the other, we find certain « characters », in whom the individual bio-psychical forces or factors are more powerful than the environment and others « without character », mediocrities or merely average characters, readily adaptable, in whom the individual forces or factors are more or less easily dominated by the environment. We have dealt with this at length in our studies on the psychosociology of language and we showed the difference in speech between men of marked personality and men of insignificant or no personality.

In any case, having now a clear if only a general idea of the complex mechanism governing the choice of occupation, we must now decide whether and how the cinema can help in discovering the real vocation.

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XII

Some remarks on the psychology of vocations.

b) Methods of revealing vocations.

First, however, we must deal with b), mentioned above, that is, the methods ordinarily adopted to recognize the existence of a particular vocation and the reasons which explain it.

As we know, the system commonly adopted in order to acquire notions concerning the mechanism of the choice of an occupation and concerning preferences and vocations in general is that of the questionnaire: « what trade would you like to follow? What would you like to be? What are your favourite books? Why?... » An enquiry, in fact, into the child’s « professional » and general ideals. This
is certainly a system to retain, although in our opinion, it is, like every other psychological enquiry, attended by the following disadvantages:

1° the semi-insincerity of the person who answers. He takes up an attitude towards the questions rather as if he were in front of a camera; he adopts a pose. It is true that even the « pose » is a gesture indicating personality, just as the most artificial style is, as we have shown elsewhere, an expression of personality and thus « natural ». In order to reach to the real core of the personality the essential thing is to be able to interpret the intentional disguise which appears in the replies as it does in style.

2° Even if the person concerned makes a firm resolve to yield himself up to the enquiry — as Emile Zola so eloquently declared his intention of doing when he acceded to Dr. Toulouse’s request to make a close bio-psychical study of the great apostle of realism, is it quite certain that the replies, though given in perfect good faith, really conform to the truth? This may be seriously doubted when we consider that each of us lives at all times and exclusively on the surface of his being and does not always know wish to know or dare know the real motives that determine his statements, tendencies and acts. Very often, we have said people do not wish or dare to know them; they hide them by subtle psychological processes familiar enough to the investigating psychologist, a specialist in the study of those subterfuges by which the « ego » frequently deceives itself.

It needs deep and courageous introspection carried out with method and an abundant store of psychological knowledge to be able to examine oneself and discover the hidden motives of one’s actions, most of which cannot face the light of day. As a rule, if we wish to discover the motive of some action it is not a good method to question the person concerned as to the reasons which prompted him to perform it; often he does not know why; he gives his own interpretation or conceals the real reasons. The person concerned cannot in fact be both judge and witness. The truth of this was well illustrated about twenty-five years ago by the ethnographic school à propos of the mistake of questioning savages as to the why and wherefore of some particular rite. A sociologist has pointed out the same thing with reference to the study of language, showing how useless and dangerous it is to ask people who utter phrases or words of new formation why they employ these neologisms and whence they come. Lastly, the lesson has been consistently preached by the psycho-analysts with that abundance of detail with which we are all familiar. To ask someone who does something why he does it is the same as asking him what are the causes which he thinks, impel him to act, or what, in his opinion, are the origins or motives of his act. But these are not the real causes, which are often unknown or purposely disregarded, nor the real origins and motives, which are frequently forgotten.

We do not dispute the value of the questionnaire and of interrogations in general, for, although persons who examine themselves and explain or seek to explain the motives of their acts or words, see an image of themselves falsified by refraction, like a stick half dipped in water, it is always interesting to the observer to
note this error of refraction in the light of which the person sees himself or whatever he is being asked to give a reason for.

3° Another common disadvantage of questionnaires is that the replies to them, with their various elements, do not come within the limits of a single strict and objective nomenclature and thus do not lend themselves to analysis and statistical development to the same extent as modern methods of psycho-statistics.

4° We might also add that, while enquiries of this kind on a large scale may be subject to the reservations mentioned above — throw light on this or that law governing the mechanism of vocations and choice of occupation, they are found wanting when it comes to the examination of the special case. The questionnaire has a collective and statistical value for the purpose of revealing those « group laws », within which it is impossible to include the particular individual. In order to « explore » the individual, another method, of which we shall speak in a moment, is preferable to the system of questionnaires.

First we desire to point out one further drawback attaching to questionnaires addressed to the young. I refer to the false vocations peculiar to that age. Who can be sure that the vocation given is much more than the expression of a childish fancy? This question has been treated at length by psychologists (Bovet and others). The case of the child of well-to-do parents who wants to be a servant, coachman or engine-driver is quite common. There is no need to be a professional psychologist to realize the falsity, or rather the passing nature, of such vocations and to explain them. In such cases, however, the psychological examination must be conducted somewhat less superficially and we must be able to read between the lines of each particular reply.

As regards these individual examinations, the dialogue is preferable to the questionnaire. This second method of ascertaining the vocation brings us back to our subject-matter. Dialogue between the vocational guide and the child, but — be it understood — an analytical and a subtly analytical dialogue, since it must be conducted by methods approaching those of the psycho-analysts if we are to touch rock bottom. The dialogue under these conditions leads to discovery; it diverts the child from false vocations and guides him towards the true one.

Observation from outside may enable the guide to discover in the subject of examination physical, psychical and physiological characteristics corresponding to deeply seated vocations; the physio-psychical examination — especially those parts of it in which recourse is had to psychical tests or tests which reveal the psychical personality of the subject — may be a great help in this enquiry; but — let it be borne in mind — the really delicate part of the investigation consists in bringing to the surface of the mind the subject’s real vocation, which is frequently hidden in his sub-conscious self. Did not Sainte-Beuve tell us that the critic’s real mission is to teach a writer what he does not know about his own work? Here the critic is the guide, who, if not always, can anyhow sometimes reveal to the subject things about himself which he did not know.
XIII.

The discovery of vocations and the cinema.

After these necessary preliminaries let us return to the question at issue. We are now agreed that we must resort to enquiries or suitable dialogues in order to discover the vocation. In this operation what help can we get from the cinematograph?

The vocational guide, we said, among his other duties has to:

a) seek and examine qualities and aptitudes;
b) reveal the vocation, if any;
c) advise, guide and divert.

Beginning with a), what we said concerning the application of the cinema to the examination and selection of candidates for a specific occupation is valid here also. Here, too, varied and suitable films may be used as psychical tests to discover the conditions of some particular psychical activity in the subject (attention, memory, suggestibility, etc.). If we take the points of a psycho-technical examination, as carried out in one of those vocational training centres now so common, we shall find that for many of them good films would be especially suitable for revealing the existence of one or other aptitude in the subject. Let us for example take the tests used at Zurich and select those for which the cinema might be used or recommended, 1° keenness of vision, stereoscopic visual sensibility, estimating differences in dimensions, luminous sense, habituation to darkness, 2° auditory sense, metrico-rhythmic sense; 3° olfactory and gustative aptitudes, which do not concern us here 4° motorial aptitudes, such as time taken to react, rapidity of movement; on this point, too, there is little to be said, although the cinema might be employed, as suggested above, to observe the subject’s imitative tendencies during certain films; 5° examination of the intelligence, which is interpreted at Zurich in the widest sense. This examination is carried out either by dialogue or by a fairly large number of tests mainly intended to reveal degrees and forms of the memory and imagination; 6° from all these tests the vocational guide extracts whatever enables him, to judge the subject’s character and attitude towards his work (Arbeitscharakter) bearing in mind two considerations: first, the behaviour of the subject throughout the tests and his manner of approaching and handling apparatus; secondly, the results of the tests when several tests are given in succession. It is possible to gain a more intimate knowledge of the psychology of the character in general through examinations carried out by different methods with a view to throwing light on the temperament, the will, the assurance, self-confidence and special psychical qualities such as powers of concentration, accuracy, and faculty for self-expression.

All this, no doubt, necessitates special tests and the assistance of investigating instruments or material means accompanying the purely psychical study; every special treatise on experimental psychology or psycho-technics abounds in information of this kind, but the presentation of special films should certainly be included as one of these tests.
As regards points b) and c) — the duty of the guide to reveal to the subject his real vocation and to advise and direct him or divert him from some false path — if we examine the different kinds of factors both individual and external (environment), which as we have seen may be correlated with the vocation and the right or wrong choice of trade or profession, we shall agree that suitable films shown to the young in the course of dialogues, which must take the form of friendly questionings and confessions, may induce the subject to correct or modify his vague or false aspirations and may reveal to him ambitions some of which were buried in his subconscious mind or which he simply did not know of. The vocational guide will get the best results by choosing from among the various occupational scenes depicted those which show trades approximating most closely to the tendencies and aptitudes which he has already discovered in the subject he is examining. In particular, such scenes could correct the anti-paternal reaction which may lead a boy to mistake his vocation; they may suggest the sublimation of fundamental instincts which will thereby find an outlet and a social value instead of manifesting themselves in anti-social forms or degenerating into the autodestruction of the personality. The spectacle of a great variety of occupational scenes differing from one another and calculated to arouse in a boy emotions or special mental manifestations apparently non — existent or which had been lying dormant, may awake his youthful interest and thus reveal to him his vocation.

XIV.

FURTHER OBSERVATIONS ON VOCATIONAL GUIDANCE AND SELECTION BY THE ABOVE-MENTIONED METHODS.

We have seen that the tendency is towards a general orientation at first and specific selection afterwards, on the basis of a psychological and psycho-technical examination of the subject very different from the usual school examination. It would be irrelevant to our subject-matter to compare the results obtained by a classification of subjects according to the school or vocational school examination and a classification according to a psychological and psycho-technical examination. It would be still more irrelevant to ask whether those subjects which psychological and psycho-technical examination shows to be more particularly suited to such and such an occupation are those who do in practice succeed best. Are they really the ones who get on best in life? We might also enquire — to return to factory work — whether workmen declared to be excellent by their foreman or technical manager and then subjected to psycho-technical examination are still found to be excellent by the examiner. We need only say that these points have been treated by one writer or another, frequently by the excellent statistical method of "correlations"; and it is generally agreed, at any rate as regards the school examination and the psychological and psychotechnical examination that the latter essentially supplements the former, particularly from the point of view of estimating sensibility, manual dexterity, attention, memory, strength, etc. It is also thought
that the classification resulting from the psychical or psycho-tecnical examination of candidates on entering a vocational school or a factory corresponds fairly closely to any later classification made as a result of courses of study or practical work. Cases are also quoted of candidates for purely intellectual scholarships being chosen by psychological examination with excellent results; in the course of their school career the selected candidates exactly fulfil what the psychological examination prophesied.

In this connection we may recall the recent attempts to establish classes of «gifted» or «more gifted» students from subjects chosen according to the above-mentioned psychological and psycho-technical methods. Studies and experiments made in such different centres as the Schools of Hamburg, Berlin and Leipzig and at the technical arts and crafts schools at Geneva, Chaux-de-Fonds, Paris, etc., have shown the superiority of mixed examinations (academic tests combined with psycho-technical tests) over purely school examinations.

A harder question is whether there is any relation, and if so what, between the school career, aptitudes and special skill on the one hand and success in life on the other. «What qualities are most essential to success in life?» is a problem we have dealt with elsewhere in a statistical enquiry on the distribution of wealth among human beings (1).

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Possible applications, etc.

7) Detailed knowledge of the occupation or the integral occupational monograph.

Anyone who has examined programmes or schemes of scientific management knows that, however substantially they may differ from one another, they all impose as a primary condition a knowledge of the occupation in its various aspects, whether it is to be scientifically organized or to be practised. We must in other words be acquainted with that collection of facts about an occupation which we may call the occupational monograph. Developing the idea, we may even say that this monograph must comprise all the aspects of an occupation and that we must have what we will call an integral monograph of the occupation, to distinguish it from the mere occupational monograph, which is essentially economic in character and which has long ago been traced by economists and statisticians.

The occupational monograph added to the family monograph — likewise conceived and illustrated by economists, sociologists and statisticians (Le Play, Cheysson, etc.) — gave particulars of the different branches and processes of work peculiar to an occupation, demographic facts about the class practising it, information concerning its economic conditions, food conditions, death-rate, diseases,

(1) Compare A. Niceforo, La misura della vita, chap. 5 (1919).
accidents, causes of death, rate and seasonal cycle of unemployment, and so on. Later, it was proposed to enlarge this field of the occupational monograph by devoting more space to the study of man, and it was extended to include studies of the biological and even psychical characteristics of the individuals engaged in a specific trade; physical, physiological and psychical defects, congenital or contracted; a biological examination of all those special matters, such as feeding, which had previously only been studied from the economic point of view but which lend themselves to biological and social study also (1).

The integral monograph of an occupation includes, so far as it concerns scientific management, studies of the environment, natural or otherwise, in which the occupation is carried on; of a special technique or different techniques which may have to be known; of the qualities necessary to exercise it; of systems of apprenticeship and of all the matters with which an occupational monograph normally deals. It also includes, in the way of general information, notions concerning the place occupied by the trade in question among general occupations, the origin of the materials it uses; their quantity, mode of use and the transformations they have previously undergone. Thus an integral monograph includes the history of the occupation.

What we have to do therefore is to amass a complex body of information relating to the occupation. Can the cinematograph help us here? The various notions mentioned above may simply be intended to help study the occupation in all its aspects, but they may also have an essentially informary and didactic purpose, and it is in this direction that the cinema can give us valuable assistance.

A film or series of films representing an integral occupational monograph may serve to inform candidates of the special features of any trade or occupation, but it can also show how to execute work and give to gangs of specialized workers fuller notions than they can acquire within their limited circle. It may even widen the field of observation for vocational guides, who after a close examination of some occupational monograph shown in movement on the screen, can derive fresh ideas for the application of their methods.

The question of apprenticeship will furnish us with an occasion to refer to the use of these integral professional monographs. For the moment we will only observe that there is no lack of special films which recount the history of a trade or occupation, show it as practised, indicate its importance to national or world economy and show us the actors — workers — in their economic, domestic and social life. This is not the place to survey or even to quote them. We can only hope that they conform to the idea of the integral knowledge of the occupational monograph as we have set it forth above.

(1) See our «Ricerche sui contadini», 1905.
XVI.

POSSIBLE APPLICATIONS, ETC.

8) Scientific organisation A) of a cycle of operations, B) of the workshop C) of a whole undertaking.

Hitherto we have been mainly referring to the work of the individual considered separately or of gangs, the workers of which are doing an almost identical task. We may, however, consider a larger series of kindred operations carried on successively or simultaneously, for example, more or less large cycles of operations, or even the work of a whole factory or enterprise, with a view to co-ordinating these numerous kindred operations within a single scheme of scientific management. In all this our special concern is still whether and how the cinema can usefully be employed.

A) Given a certain cycle of operations scientific management, after an examination, shortens the time taken by removing or bringing closer together objects, tools or men. Cases have occurred in which by such a procedure cycles have been reduced from 20 days to 6. Whether the film can be used in making the investigations necessary for such results is open to question, but once the best cycle has been obtained as the result of these enquiries and the new processes of work have been fixed, these could certainly be shown in films for purposes of vocational training or with a view to general propaganda to illustrate how a cycle of operations is shortened. These cycles must of course be shown on the screen both before and after they have been rationalized.

B) Similarly, the organization of a whole workshop, from the manager down to the smallest unit, can be conveniently illustrated by a film, not so much for the purposes of discovery as for demonstration.

Ordinarily, a scheme for the scientific management of a factory is represented by a chart, of which the centre or upper part is occupied by a square representing the general management. From this central or upper square radiate a succession of smaller squares then small circles, then points and other signs, joined or not by lines or arrows and indicating the various functions and the place they occupy in the general hierarchy. Without abandoning this chart, which can be shown on the screen stationary or moving, it would be well to give it more life by making it show each service at work. Thus the first scene would show the general manager's office and would be followed by immediately subordinate offices, such as the chief technical office, works office, administrative office. Then, office by office, the film would show the various branches of work in moving pictures. Let us take as an example the chief technical office. The film will show a) the room in which it is situated and the work of the technical experts responsible for studying the means of executing plans b) the draughtsmen's room at work, c) the shop for reproducing
drawings; the film could then show in separate scenes the various directing services the technical office, the distributing office, the works office, the inspection and testing office, the accountancy office and the service of up keep and repairs. It would then pass on to the commercial and administrative services, which are also suitable subjects for scientific organization. Still following the ramifications of the chart, which can be shown, as we have said, either stationary or in the form of animated drawings, we will pass from the central services to the workshops. Here we shall see in succession at work the moulding shops, foundries, the processes of turning and fitting, the various machines in action, etc. (M. Fossati).

C) But let us leave cycles of essentially manual operations and turn our attention to another form of activity, work in offices, administrations, commercial firms, and consider whether methods of scientific management are applicable to these organizations and, if so, what use can be made of the cinema. Here too, no doubt work can be rationalized, if so desired, by the fusion of several operations or cycles into a single operation or cycle, by reducing the number of operations, studying standard methods of work, employing modern mechanical means of dictating, writing, filing, etc. We may mention in this connection the film published by the Rotterdamsche Bankvereeniging. Investigations have even been pursued to the point of indicating the special qualities to be required of the staff of an office administration or concern (and factory) and how much of each quality every employee or workman should possess; administrative, technical, commercial, or financial capacity or the qualities necessary for confidential posts (cash and accounts) The necessary «percentage» of each of these qualities varies according to whether we are concerned with the manager, chief of the technical service, foreman or workman (H. Fayol).

Although a matter of discussion, owing to the kind of work which it comprises, this method, which some called Fayolism, has its strong supporters and has been applied to the organization of many offices and enterprises of various kinds and also to the organization of large shops, accountancy services and postal money order offices, not to mention the North American municipal offices, where Fayolism appears to be more and more popular.

Here again the cinema, by showing the advantages of the new methods of work, could on the one hand win over the employees instructed to follow these methods and on the other usefully supplement the written instructions found necessary or useful for the use of employees.

A film of this kind could be interrupted from time to time by tables and stationary diagrams, but it must be remembered that such tables will arouse interest if, instead of appearing on the screen all of a piece and as it were crystallized, they are projected bit by bit like a magic drawing which, beginning with a few strokes, is put together little by little or drawn rapidly by a hand appearing on the screen to the astonishment of the spectators, who eagerly await further developments.
XVII.
POSSIBLE APPLICATION TO AGRICULTURE.

Greatly as agricultural work varies from one place to another and many as are its different aspects, it is nevertheless capable of being scientifically organized and once again the use of the cinema must be considered.

Work with the spade, pick, shears or scythe also lends itself to a scientific study of times and movements, and ploughing implements may be studied in the same way. Special apparatus, based on the principle of Marey's drum and placed between the hand of the workman and the instrument on which he is exercising pressure, record that pressure graphically so that we can measure effort and fatigue, their duration and intensity. In this way we can obtain exact graphs for agricultural work of the kind we have mentioned and, after examining these graphs obtained by successively modifying the working conditions, tools and positions of the body the specialist can determine the conditions under which the effort is least without any reduction or even with an increase of output.

Moreover the standardization of certain forms of farm work — making of wine, jam, cheese etc., as the result of rationalized study could in each branch of production be illustrated by the cinema. Films of this kind, by their stimulating capacity, could usefully serve to popularize rationalization. From this point of view animal husbandry could also find a valuable ally in the cinema, which, although it could not here be employed in investigation, could be used to teach, warn and advise (Fontana, Moszezuski).

XVIII.
CATEGORIES OF RESEARCH AND FORMS OF ACTIVITY CLOSELY ASSOCIATED WITH THE FOREGOING.

In thus surveying the various aspects included in the complete study of scientific management, we have purposely lingered only over those for which the cinema can be used to discover some unexpected opening for scientific management and over those for which the cinema may serve to supplement rather than discover. In the first case we have stated conclusions; in the second we have indicated possibilities.

We must now touch upon two matters which, as we said at the beginning, are not really part of scientific management, but are connected with it. These are:

1° vocational training;
2° public propaganda to teach what scientific management really means.

The possibilities of the cinematograph in these two fields are so evident that there is no need to insist upon them, but in mentioning them we should perhaps arrange and as it were catalogue these many and various applications. And this is what we now propose to do.
XIX.

Vocational training, scientific management and the cinematograph.

As regards vocational training and the cinema, a distinction should be made between two cases:

a) The use of the cinema for individual teaching of a specific and technical kind. In this case the pupil has to learn a machine and its component parts, the tools, movements and positions, his working gestures, as we may say. The film, projected slowly or at the normal speed, is a living and suggestive method of demonstration. Thus the screen could show a first-class worker and an awkward worker, so that the pupil might see how work should and should not be done. Such teaching, especially if it aim at imparting standardised methods of work, is essential to rationalisation. «It is given in the form of 
written and oral instructions and by practical demonstrations under working conditions; the workman must be systematically taught the new technique. For each operation a schedule of instructions is prepared by a specialised employee — very often the employee who has made the time — studies; the fullest of these schedules contains a list of all the different parts of the operation. The worker is entitled to know the various details which go to make up the schedule, although the latter is supplemented by verbal instructions and demonstrations on the spot» (Thomson). Written instructions, as Emerson reminded us when he formulated the basic principles of his system — a system which has many points of resemblance to Taylor's, — are an essential part of the method: instructions specifying times and processes of work, tools, speed and even the different degrees and percentages of fatigue. Surely the film would prove a most persuasive and suggestive means to this end?

b) The worker should know the complete task of which his particular job is a part. He will then understand properly what previously meant almost nothing to him and see it as an organic part in a whole productive scheme. He will also acquire notions that may be useful to him in his own particular work. The film is especially well-fitted to show the whole factory and the different sections and shops at work. What we said above concerning occupational monographs may be repeated in this connection, since the cinema can show us the raw material in all its different phases of transformation, beginning before it reaches the factory and following it through all its vicissitudes until it becomes the finished product (a tree, for example, can be shown growing in the forest and then as a finished piece of furniture).

Lastly, the cinema can show, to a worker tied down to a specific task, all the transformations involved in a particular cycle of operations.

c) It is useful and even necessary for the workman to know the hygienic conditions under which his work is performed and what precautions he can take to safeguard his health; he ought especially to know the dynamics of accidents peculiar to the work he is doing, how and why they occur and how they may be
avoided. In all these matters demonstration by cinema is useful, not only to the worker but to the employer. If the latter sees animated pictures taken from life and showing work before and after the introduction of hygienic improvements, if he is shown apparatus and systems of protection against accidents — scenes illustrated whenever possible by diagrams indicating the frequency curve of accidents in a given branch of industry both before and after the adoption of protective measures, he will realise the necessity of introducing more up-to-date and rational systems.

For some time past the labour bureaux of the different countries have issued special publications containing the results of specific enquiries carried out in certain branches of industry or factories; these publications give pictures of premises which suffer, economically and hygienically, from bad internal arrangement, defective lighting, etc., and also show other factories or establishments equipped and installed as they should be owing to the enlightened initiative of some praiseworthy industrialist. They likewise publish photographs of recent intelligent systems of protection, such as masks, eye-pieces, safety gloves, etc.; it would seem that the cinematograph might well replace the use of photographs in showing and encouraging the adoption of these new methods.

The special publications of which we have been speaking devote much space to the scientific study of occupational accidents, and there are, of course, many other such studies which could be transferred to the screen so as to teach (1) the general laws governing accidents; (2) specific causes of accidents peculiar to each branch of work, and in this way serve as a suggestive visual warning to workers.

The scientific study of accidents is a perfectly practicable study involving a general part and several particular parts. We have already indicated the lines which the general study should follow. We said that although accidents were normally regarded as acts of God which befall workers from outside, as it were, they are very often due to the bio-psychical condition of the worker himself, and therefore originate within. His sensibility, attentiveness, presence of mind, nonchalance, intelligence, sobriety and health are all factors which either invite or repel accidents, or rather diminish or increase the possibility of accidents. A wise selection of workers, subject to periodic revision, is, in itself a factor in reducing accidents. This does not mean that external circumstances do not play their part in determining accidents; undoubtedly, they have their due weight and will have to be considered one by one. External circumstances and individual conditions are often found associated. Accidents have their favourite hours and their days and months of maximum frequency. The analysis of this complex system of causes and concomitant causes is the essence of the scientific study of accidents. Prevention is a corollary of such study and the more salient and suggestive pages in the history of accidents can be conveniently reproduced on the screen to serve as a salutary warning.

With regard to the importance of the individual factor as a cause of accidents, the mechanism of accidents is somewhat similar to the mechanism of crime as observed by certain psychologists and criminologists, more especially of the Italian
school. Crime, too, is not an external phenomenon, but is closely connected with the qualities and defects of the criminal, his age, sex, sensibility, intelligence, education, etc. (Altavilla).

XX.

A DIGRESSION CONCERNING SPECIAL VOCATIONAL TRAINING: DOMESTIC ECONOMY.

Since we are on the subject of vocational training, it may not be irrelevant to say a few words on the teaching of domestic economy, which some authorities, including Miss Christina Frederick, would make a special branch of scientific management. The idea is excellent, although there are difficulties in the way. The aim is to save the housekeeper trouble and fatigue by substituting mechanical for manual work and thus saving time (Mme Lassalle has shown how the time required to make a bed may be reduced by 80%). A saving of work and fatigue is equivalent to a saving of money. With a view, however, to a wider programme than that which has so far been adopted or suggested by experts on this subject (see the proceedings of the Fourth International Congress of Domestic Economy, Rome, 1927), we might propose the use of the cinema in order to teach mothers of families:

a) how to keep their household accounts rationally;

b) the nutritive value of foodstuffs and a sufficient daily allowance. In these important matters it is not enough to know how many calories are produced by a particular category of food and therefore what amounts are necessary to support the human frame; it must also be shown that the requisite daily number of calories must be derived from a variety of foodstuffs and it must be explained which these are;

c) besides the two points mentioned above, the cinema must further inculcate that collection of coordinated notions which some term « domestic training » or even « domestic science » and which comprises rational cooking, washing, ironing, sewing and mending; and, in our opinion, this science should include the elements of child rearing both pre-natal and post-natal.

The lantern-slide has in the past effectively helped in the teaching of these various branches of house-keeping, but we may expect even more of the film. How much more effect would be produced by animated diagrams, built up bit by bit before the attentive gaze of the spectator. These diagrams would show, for example, the nutritive value of various foodstuffs, their content in albuminoids, carbohydrates, fats and their equivalent in calories; they could also show the minimum allowance of all these elements necessary for a man at rest, a man at work, an adult, a woman and a child. A well conceived film could illustrate a good and a bad housekeeper side by side, as they carry out their numerous duties, which are not all so simple and humble as we are prone to think.
XXI.
THE CINEMA AND THE VOCATIONAL TRAINING OF THE INFIRM REGARDED AS PART OF VOCATIONAL EDUCATION AND SCIENTIFIC MANAGEMENT.

Is it possible to include the vocational training of the physically and mentally deficient within the framework of vocational training regarded as a part of scientific management, and does it fall within the field of application of the cinematograph? The question is one for discussion. It is however worthy of note that "Fordism" has not despaired of utilising the infirm for certain tasks adapted to their potentialities. Thus, after classifying the various kinds of work (work done standing up, sitting down, work requiring one hand or both, work done by artificial light or daylight, heavy work, comparatively heavy work or work requiring no muscular force, work suitable for the disabled, the blind etc.), Ford has succeeded in making effective use of physically or mentally deficient human material and, by adapting it as well as possible to different tasks, in giving it a productive value. We may also mention the intensive effort made after the war to adapt the various categories of disabled soldiers to some kind of work (De Freminville in the workshops at St. Nazaire, Amar, le Chatelier, Loriga, etc.). For some years, too, an effort has been made to train convalescents in hospitals to various forms of manual work. More especially in the surgical wards, specialists have tried with some success to teach patients work within their capacity. In this way not only have they been restored to the ranks of producers, but their morale has been raised and their character strengthened. Again, experts have tried to improve the condition of certain chronic cases by training the patients to perform certain manual tasks. Could not the cinema help in the education of all these "unfortunates" by showing them the exact movements required of them in their work?

Let us now turn to another class of the infirm, viz. the mentally deficient. Here the cinema can unhesitatingly be employed for instruction. Already many elementary schools have formed groups of deficient children with a view to applying special methods to their education. The degree of deficiency naturally varies; some are merely "of low intelligence" and for them the question is how they shall be prepared for a future occupation. Others are definitely "deficient", and for them simple, useful and productive tasks have been devised, which they are found quite capable of doing after a longer or shorter period of general and special education and adaptation. Numerous are the efforts that have been made, by psychical and physical tests, to classify children when they first enter school in different grades of intelligence, extending from "exceptionally low" to "exceptionally high" and many are the attempts that have been made to ascertain the number included in each of these categories.

Then again, how many means have not been employed to discover and illustrate the "law" of the distribution of persons according to their mental or other psychical differences! We ourselves have devoted much ink and paper to this study.
Certain it is that in one way or another these early selections result in forming groups of mentally deficient cases, and if it is recognized to be useful or necessary that these should be trained the cinema can no doubt be a great help. Films would have to be made of which some of the scenes would serve to enliven and generally awaken the intelligence; the purpose of others would be to fill up certain mental lacunae peculiar to one or another category of abnormal children, while others would have to teach the technical side of their work to persons found capable of doing it. Even when these different functions are not combined, the mere fact of teaching the mentally deficient one kind of manual work rather than another, however simple it may be, itself acts as a strong mental stimulus. The cinema is undoubtedly an excellent way of rousing and fixing the attention of those least capable of sustained attention; it has the same effect on unstable and weak-minded people.

XXII.

Re-education and Maintenance of the Efficiency of the Worker.

A worker’s good qualities are found gradually and naturally to deteriorate if he neglects the bodily and physiological duties calculated to keep him in good health and training, and every scientifically organized business has to take account of this possible deterioration. Besides teaching workmen ideas of general and special hygiene, employers should be recommended to instal premises within the factory itself where the men can indulge in the forms of sport best suited to keep them in training and maintain efficiency. We know of more than one industrial establishment where this system obtains. Simple and rational gymnastics, without complicated and cumbersome apparatus, easy to do and accessible to all, like the various systems of Swedish drill so popular nowadays are the best exercise for workmen either at the factory or in their own homes on half-holidays. The effort expended on rational exercises has the effect of generally renewing the physical and even psychical forces and results in a sense of well-being. We would, however, draw particular attention to exercises with which scientific management is more especially concerned, and these we will call counteractive exercises. These are simple and suitable gymnastic exercises with the object of avoiding deformations as the consequence of sustained application to a specific task (L. Behr and Th. Fuerst of Munich). Such exercises can teach proper breathing; by acting upon the different parts of the spine they can prevent apprentices and employees from becoming hump-backed or round-shouldered and can strengthen the abdominal muscles, which become flaccid as a result of a sedentary life, etc. The special books on physical culture are usually accompanied by numerous photographs showing how to bend backwards, how, when sitting on the ground with the legs parted at a right angle or nearly a right angle, to turn the arms horizontally, how to lie down and get up in a certain way, how to touch the ground with the fingers without bending the knees, rhythmic movements, etc. Special films, showing
exactly how these movements ought to be carried out and explaining their value, would constitute a useful method of education (Fritz Strube of Hanover).

Sport is becoming more and more the subject of statistical studies (See our monograph on the statistical study of sport and athletic aptitudes in the Revista di Antropologia, 1916). Sport must form part of any scientific system for the improvement of the human machine.

It is worth noting in this connection that large industrial concerns are more and more organizing physical and even spiritual welfare institutions on behalf of their workers, and these include the establishment of sports grounds. Special propaganda films, showing the scientific organization of an enterprise, project a picture of the factory playground. This is the case for example in the propaganda film illustrating the scientific organization of a big bank published by the Rotterdamsche Bank and mentioned above.

XXIII.

Dissemination of an Exact Knowledge of Systems of Scientific Management and Their Purpose.

What is scientific management?

The general public has little or no idea. Heads of businesses and workmen, however closely concerned they may be, often know no more, and in their ignorance the workers are distrustful of new ideas.

The cinema therefore must tell everybody what scientific management is. To this end, however, the films must be so prepared as to make the question a live one and to impress the public to which they are particularly addressed.

A first series of films, appealing to the widest and least educated public, will show men, machines, scenes of work, qualitative and quantitative production in different branches of industry before and after scientific organization. "The scientific organizer must help to make the results known and especially must guide the younger generation in the direction of more rational vocational training." This is another commandment, the last, in Gilbreth's decalogue, which we mentioned at the beginning. We could quote many films suited for this purpose, and it would be easy enough to make new ones as various kinds of work become organized on scientific rather than empirical lines.

Confining ourselves to Italy, we may note the existence of a large number of films relating to the scientific organization of different kinds of enterprises; installation of mining plant, organization of big wine-growing concerns, textile businesses, motor works, tobacco factories, building yards, etc.

Secondly, further series of films may be addressed to a more enlightened public. These will show the different phases in the scientific organization of various enterprises, recommend its application and even teach its methods. We may here refer to our scheme of scientific management and our plan of investigation to be carried out at the place of work with a view to increasing and improving production
while reducing or at any rate not adding to fatigue. We might attempt to translate each item in this scheme and plan into cinematographic films which aim at teaching, suggesting and disseminating the fundamental principles of rationalization and the results of applying them. Among the first, for example, would be a film showing a gang of workers at the moment when scientific management studies are begun; it will show how the organizer measures and calculates qualitatively, hour by hour and half-hour by half-hour throughout the day, the output of the gang and of each worker (making up parcels, shaping of buttons, soldering of the bottoms of tins, etc.). Moving graphs will show the conditions under which the output of the gang increases or decreases from hour to hour during the day (law of quantitative and qualitative production at different hours of the day); other graphs will indicate the individual productive capacity of the workmen making up the gang: X’s productivity is sustained almost throughout the day; Y produces little at the beginning of the day but gradually increases his output to a maximum after which it falls off, picking up again after the midday pause; Z starts the day with a good output, but gradually falls off. These different productive capacities are explained by the bio-psychical characteristics of the individual worker. Some of these characteristics occur in a more or less pronounced form more frequently than others, and allow of an early selection of those best suited for a specific task; all these points could be illustrated in other scenes of the film.

The latter will show the effort made to measure the degree of fatigue in the workman hour by hour throughout the day; the forms which this fatigue takes among the different types of workers mentioned above; they will show that the total fatigue of a gang consisting of selected men is less or anyhow not greater than the fatigue of the gang as originally constituted while yielding a better quantitative and qualitative output.

In continuation of these scenes, the cinema will be found particularly suited for demonstrating how simultaneous or successive modifications must be made in the conditions of work if we wish to ascertain the changes in the quality and quantity of output and in the nature and degree of fatigue resulting from these modifications. As we know, these may involve a re-arrangement of the worker’s bench in relation to the window, the adoption of new tools or a new way of using old tools, variations in the hours of work, in the pauses, moments of relaxation, etc. All these points can be illustrated by animated and indeed highly animated pictures. We could introduce into these films scenes to show the methods of testing the faculties and aptitudes of young people during the earlier stages of vocational guidance and later when the workman is chosen for a specific task. At the same time scenes will be included representing the numerous other aspects of scientific management. The Berlin «Fachfilm» already mentioned has published films relevant to this matter; they show how times and speeds are studied, the rational organization of office work (Hinz system), etc. There is however much still to be done in this domain and the field to be worked is a vast one.

Finally, the cinema, by depicting the methods and aims of scientific management, will help to bring home its advantages to workers who at the beginning
are indisposed to change their manner of work. It will also serve to educate the workmen filmed, for they will see from the screen any useless or wrong movements they make; a man may in this way spontaneously correct his error, especially as the scene can be shown on the screen greatly enlarged and at a retarded speed.

XXIV.

The film to be given the place of honour in cinematographic representations of scientific management.

Of all the cinematographic representations that we are considering, one, by reason of its great moral and social educational value, should occupy the place of honour, and that is a film which by means of rapid but unforgettable pictures would illustrate a principle which has really only recently been objectively demonstrated — the principle that work is a boon — physically, intellectually and morally beneficial. Documentary proof of this has been furnished by very exact instruments at the disposal of physiology and experimental psychology. Thanks to these researches, it has been possible to demonstrate clearly that work, if it accords with aptitudes and vocations or if it is simply not at variance with these, constitutes a physical and intellectual exercise which develops sensibility, stimulates the circulatory functions, serves as an outlet for accumulated energy and consequently confers satisfaction and a sense of well-being. All this has been proved by figures and diagrams, the results of patient experimentation, which were collected several years ago by Charles Féré in a work bearing the significant title « Work and enjoyment » and adorned with numerous illustrations. To which we may add that, for the understanding person, work is also a refuge, a moral refuge which protects him from the cares of daily life, a refuge and protection for all who feel, think and suffer. Work is one of the surest sources of consolation, distraction and oblivion, and the science of individual psychology has been making this more and more evident for some time.

This again leads us to the efficacy of work as a great mission. This is familiar enough to workers who know how to plumb the inmost depths of their being and to analyse the fons et origo of their feelings. But it is not known to those who, though instinctively seeking joy and relief in their work, do not fully realize its healing qualities. These must be taught what they do not know; they must be made to realize what they only feel dimly. The factors which give to work these qualities of comfort and peace, although they lie buried in the depths of the worker’s soul, are better perceived and understood from without, by the observing physiologist or psychologist, than by those who are themselves experiencing their effects. The latter, however, will feel, interpret, understand and appreciate them better if there is someone outside to reveal and explain them. The mechanism is complex and may seem to some incredible, but it will not surprise anyone fami-
liar with the methods of psychology, the very aim of which is to teach men to know themselves.

Graphic and numerical demonstrations of the kind we mentioned just now, suitably translated into the moving scenes which a clever technique would substitute for dry figures and lifeless diagrams might serve as a prelude to all vocational training. They would teach the lesson of encouragement so well summarized in the philosopher’s wise counsel: work, work on, even if you have no goal; it is the only way of forgetting life’s troubles (1).

Prof. Alfredo Niceforo.

(1) « travaillez... C’est le seul moyen de rendre la vie supportable »; Voltaire, conclusion to 'Candide'; Chap: XXX: Shortly before, Voltaire had made one of his characters say « Le travail éloigne de nous trois grands maux: l’ennui; le vice; le besoin »:
THE CINEMATOGRAPH AND SCIENTIFIC MANAGEMENT.

(From the French)

Scientific management can employ the cinema for three different purposes:
1. As an instrument of research and systematic analysis;
2. For educational purposes;
3. For propaganda.

I. The Cinema as an Instrument of Research and Systematic Analysis.

The cinema's most obvious power is that of combining upon a screen in any room at a fixed time the most complex, rare and inaccessible spectacles. These may be shown one after another, each detail following the other; the projection may be enlarged, retarded or accelerated, the internal mechanism made intelligible by plans and animated drawings, while it is possible to analyse at leisure events which for reasons of place or of their rapid or slow development could otherwise not be observed. This has led by a natural process to the documentary film, now so common and which in its present form only aims at supplementing the spectator's general information, and also to the technical film, of value to the engineer or scientist who wishes to study the electric spark, the explosion of a mine or the flight of birds.

Thus by examining the pictures one by one we may decompose the movements of a workman, a machine or of a whole gang of workmen in cases where the naked eye could detect nothing definite. This convenient expedient has, however, been little employed as yet and I had much trouble in collecting a few films of this kind to show at the Scientific Management Congress held in Paris in 1929.

(a) A very short film made in 1912 at the Marey Institute on metal-cutting. M. Noguez had used an ultra-rapid cinematograph allowing of very detailed analysis, but this method requires extremely strong lighting, which is difficult to obtain and expensive and which is liable to impede the worker whose activities are the subject of observation.

(b) Madame Gilbreth, pursuing the method employed by her husband, had sent a number of films illustrating such various operations as the study of a desk furnished with pneumatic tubes in the central cash office of a large store, improved manipulation of a card-index filing system, the cutting of sandwiches in a confectioner's shop, the packing of cheeses, etc.

(c) M. Hymans had supplied three films, one on the manufacture of small pieces of pottery, another, on the formation of piles of samples, led to the invention of a moving table to accelerate the work. The purpose of the third film was to determine the most economical machine for making demand notes for tax-payers.
The use of the film in this last and very instructive case was essential, for the machines, kindly lent by the makers in the fiscal service, had to be returned after twenty-four hours. There was therefore no time to do more than take the films, which could then be analysed with the necessary leisure and care.

In these films the device most generally employed was to place within the field of the objective a clock with a face 20 to 40 cm. in diameter, on which a needle marked hundredths of a second, but in some cases this accessory, which is commercially hard to obtain, may be dispensed with; it is sufficient if the pictures are taken at as regular an interval as possible and numbered successively, the time being in this way measured by the camera itself.

Jean Cocteau, with a poet's intuition, has already pointed out that, unlike the immobility of fixed projections, « the cinema, even when nothing moves, registers the passage of time ».

It was also the cinema which enabled the Michelin Company to record the mysterious phenomena manifested by the » shimmy » of the front-wheels of motor-cars, and the study of the film allowed the cause of this disturbance to be detected and removed.

The necessary apparatus only costs between 4,000 and 5,000 francs, and if we consider how much time the film saves the ordinary time-measurers, the cost of the device is remarkable. M. Hymans has presented to the French National Committee an exceedingly economical apparatus, which allows of time-measurement by the ordinary methods, and the camera need only be employed for parts of the operation where it is indispensable; this effects a saving of many yards of film.

If, however, the cinema is to be used for education and propaganda, we must look closer and arrive at a clear understanding of its other less obvious, but no less important characteristics.

II. The Cinema as a Standard Means of Education.

1. A cinema performance is normally regarded as pleasant recreation. It is readily attended and the spectators are in a state of maximum receptivity. In the course of the tours organised by the Est railway company, the railwaymen visit the « Railway Cinema » in large numbers. Among the lectures on similar subjects, those illustrated by a film are always the best attended.

2. The cinema compels attention and concentration upon the screen. The darkened hall creates a void in the mind of each spectator, who is taken out of himself and isolated from his neighbour. There is little talking in the cinema, even in boxes. The onlookers become, as it were, monks in a dark cell, the only window in which is the screen. These conditions are admirable for teaching, much better than those obtaining in the class-room or lecture-theatre.

3. The cinema offers pictures, which, especially for a more or less uncultivated public, are even more easily assimilated than words, although these are also available, if desired (recitations, professors, captions, gramophones and sound-films). It approaches the spectator through ear and eye together, it makes a call both upon
the visual and the auditory memory and simultaneously makes its impress upon the human organism through the two registering mediums which are the most sensitive and the most closely related to the springs of human action.

4. A film is not the projection of a continuous series of views, any more than a painted picture resembles a photographed view. Thanks to the process of division, which ration the length of each performance, recalls, at the desired moment and for as long as may be wished, some past vision, allows of the concentration, in, as it were, an almost simultaneous musical chord, of several images which in real life were scattered and distinct, giving to each vision the value of a crotchet, a minim or a quaver, leaving them suspended for a pause or a silence, showing close-ups which have the effect of a gong stroke or withdrawing objects to a remote distance as a note is muffled by the soft pedal — in this way the film possesses a rhythm which regulates the passing of the images. Quite by chance I was able to test this by a very simple experiment. In the course of a lecture I had occasion to show a film of some poetic value which consisted merely of scenes taken from different industries, but arranged with considerable artistic skill and taste. When rehearsing the film before the lecture in a dark and silent room, I observed that the absence of musical accompaniment almost entirely anaesthetised the spectator. Being short of time, I could only obtain a phonograph and a few records. I chose haphazard a number of strongly rhythmic fragments of Stravinski, Honegger and Prokofieff and put them on in any sequence during the performance. To my great surprise the whole public (and I myself) had the impression of a score specially composed for the film. The strong beats of the music appeared to coincide with the close-ups or emphasised parts of the film and the same melodies seemed to differ according to the scene they accompanied. A few days later I happened to be showing the film again and, in order to be sure that it was not just an extraordinary chance, I put the records on in quite a different order. The effect was exactly the same. The rhythm of the pictures impressed itself upon the spectators so strongly that they only noticed beats conveyed by the ear, when these coincided with the rhythmic beat communicated to the eye. In these psychological impressions, the predominant visual element extinguished those auditory elements that were discordant, while reinforcing the others, which alone penetrated to the conscious mind.

Nothing is more easily implanted in the memory than a rhythmic message. Philologists, among others Marcel Jousse, have recently emphasised this vital point. Before writing was known, texts could only be handed down from generation to generation by reason of their cadenced form, which we call poetry. It is a known fact that prosody was before all else a mnemonic device. The commands of all the gods, the pre-historic chronicles of all peoples have been in verse. We are in fact in the presence only of a special case of the law which tells us that every accumulator of energy — and the human organism is such an accumulator — discharges that energy through certain rhythmic oscillations.

The cinema, by the process of dividing up the film, can vary the duration and the intensity of the images that it projects; thus it has at its disposal the oldest and most effective of mnemonic devices.
5. In order to galvanise the memory after a lapse of time, nothing would be more effective than a small book containing the scenario of the film illustrated by photographs extracted from the film, like the samples issued by publishing firms to promote the sale of their books or like the notice of the recent aluminium film.

At the present stage of human knowledge, therefore, the cinema appears to be the ideal educational instrument. It has only very rarely been systematically utilised with a full sense of its valuable characteristics. The endeavour to render physics and Roman history in alexandrines was abandoned, and school text-books might have gained by the adoption of a more subtle rhythm: a balancing of events, strictness of composition, a periodical reminder of essential principles, typographical arrangement. It has been a mistake, but the effects are less in the case of a book, in which, unlike a film, passages can be skimmed through and re-read. The substance of a film must be well masticated, if it is to be assimilated by the spectator at a sitting. The report submitted to the Cinema Week by M. Jean Benoit-Lévy in April 1929 gives a list of the most important achievements so far realised.

Since the cinema allows us to determine the best method of discharging a task, the same or almost the same film will also enable us to impart this best method. This possibility has rarely been properly exploited. Most of the so-called technical education films show approximately how industry at present performs a certain task, but do not show the best way of doing it. The preparatory stage of technical research has been almost entirely neglected.

We may quote as interesting examples the films belonging to the Paris Joint Transport Company and used to examine and train tram and motor-omnibus drivers. The Est and Nord Railway Companies have also manufactured films to show the manipulation of hooks for coupling trucks, the handling of haulage cranes, the operation of shunting stations or the mechanical shifting of railway-points (J. Benoit-Lévy).

Films have also been made to show how accidents can be avoided, and I myself projected the film of the Austrian Central Office on this subject at the Paris Congress in 1929. This is conceived on the usual romantic lines and is extremely well acted by professionals. Its object is to arouse workers to the dangers which daily attend all occupations and to keep their attention alive; the great majority of accidents are due to the carelessness and indifference engendered by habit.

The plot is simple; a boy happens to witness his father's death as the result of a terrible accident. Impressed by the memory, he devotes his life to the study and prevention of occupational accidents.

The cinema's power of evoking scenes is largely resorted to and, in the course of the young man's lectures or conversations with his comrades we are shown an impressive collection of all kinds of possible accidents. These are reproduced with such fidelity that the spectator experiences on each occasion the shock of an unforeseen catastrophe. The fakes are invisible and the atmosphere of the factory or workshop is wonderfully reconstructed.
This film makes systematic and interesting use of the cinema's powers of suggestion.

Gaumont, Pathé and the Compagnie Universelle cinématographique have many catalogues of so-called educational films, but these are rather in the nature of documents and do not fully meet the requirements of, say, the commercial colleges. The latter have therefore recently combined to create a cinema library in exact conformity with their curricula. The secretary, Cantagrel, with the help of the Compagnie universelle and several industrial groups, has succeeded in collecting some really educational films, put together by a professor and containing only the essential ideas of a subject: « the captions are reduced to a minimum, are short and to the point. Actual views are in principle restricted to moving objects or are used when it is desired to reveal certain stationary objects in their moving environment or to give a general impression in a panorama. Simple animated drawings are placed over the apparatus whenever the latter conceals some moving piece of machinery which it is important to study. They also serve to synthesise a series of industrial operations ». Thus the attached plan showing the organisation of a brewery is the result of a collection of animated drawings thrown upon the screen. Each drawing precedes and explains an actual view.

In striking harmony with the opinions already expressed, we read that « in order to make this form of instruction fully effective, it has been found useful to provide the pupil with material to prepare him for the film and to enable him subsequently to reconstruct the pictures he has seen. This material consists of the following:

1. A series of views, in photogravure or better in phototype, of convenient size, reproducing the essential parts of the film and constituting, as it were, a means of recalling the original picture. Each pupil is given one copy to put in his notebook alongside his notes.

2. A short description, or summary plot in which the author inserts the most essential facts: the situation of the factory, the plan of its organisation with the sequence of manufacture if necessary, also the size and type of machines and amount of output.

The views issued to the pupils are eagerly welcomed and we base great hopes upon this method of teaching ».

**Special Teaching of Scientific Management.**

The methods of scientific management consist in applying a number of rules in order to obtain certain results. Only the results, that is, the factories at work, can be filmed. Thanks to the process of division, objects which, though very different regarded as pictures, are similar by reason of their internal structure, can be so juxtaposed and combined as, with the help of purely visual features, to suggest with irresistible force the rather abstract principles of scientific management. We may take as an example chain-work in factories organized in accordance with the rules of scientific management, but engaged in the manufacture of wi-
dely different articles (e. g. motor-cars, tyres, perfumery, paper, clothes). The chain, which is the measure of the time taken, is a visible materialisation of the voluntary and abstract coordination effected by the system of planning which governs the whole manufacture. It would also be possible to show the film of a single concern taken on Fayol’s lines, that is to say, by linking together the different branches of the business not in chronological order of manufacture, but according to the functions they fulfil: initial calculations, organisation, direction, coordination, supervision. Under the last heading we should place the testing of raw materials and of semi-finished products the flying controls on mounting chains, the control of finished products, etc. At the Paris Congress in 1929 I was able to show as a remarkable example the film prepared by the Grodzic Collieries Association (Dombrów basin) in collaboration with the Polish National Committee on Scientific Management.

This is an extremely interesting film and proves that the methods of scientific management can be successfully applied not only to a workshop, but to work subject to such variable and all-compelling external conditions as is work in coal mines. Several separate operations (transport of wood from its arrival at the mine to the shaft where it is to be used, hewing of coal by a gang, revetting of a shaft) are shown and analysed from three different points of view:

a) an ordinary picture shows the actual operations;

b) a plan shows the internal structure of these operations, their approximate topographical conditions and their relation to the rest of the work of the mine;

c) Harmonograms, thanks to Professor Adamiecki’s method, allow of an even greater degree of abstraction and a table can be thrown upon the screen to show the exact times spent in productive and non-productive work and their relations with the distances covered. Graphic symbols, particularly well-selected, also illustrate the substitution of a functional organisation for the old geographical organisation: each official, engineer or foreman, instead of being entrusted with a number of functions within a restricted area, is made responsible for one single function throughout the whole colliery. Three engineers, for instance, are kept employed, one on hewing, one on maintenance work, one on supplies, and each foreman is under a different engineer according to the work he performs. Similarly, the supervisory staff is divided up into separate functions. A table shows the distribution of orders for the day.

III. THE CINEMA AS AN INSTRUMENT OF PROPAGANDA.

The cinema’s special characteristics make it as effective for propaganda as it is in education. The screen by, as it were, fascinating the spectator empties the mind of its normal content and replaces it by the film. There is no better proof of this than the condition of a spectator left to himself during the intervals, when he suddenly falls back in to the void left in him by the interrupted performance. And when the film is followed by discussion, the latter starts very slowly, each spectator
having to rid himself of the images evoked and emotions aroused by the film before he can collect himself.

It is in obedience to an organic necessity that the cinema, alone among the arts, is compelled to remain in close touch with the masses, whether it seeks to instruct, persuade or simply to please them. The material conditions governing the manufacture of a film therefore necessarily make it an instrument of propaganda, whatever other purpose this propaganda may have. In order to create a work of art, a painter needs only a little canvas and paint, a sculptor a few hundred francs' worth of clay or plaster, a writer a few pennyworth of ink. The cinema artist needs millions, he needs aids and appurtenances, and he needs collaborators. He is the only artist whom society compels, through the factor of payment, to move the masses, who alone pay the piper. All the other arts can be produced for an impecunious and chosen few, as indeed they are. Painters, authors and composers have long been divorced from the common herd. Only the cinema artist enters into more and more intimate contact with the people and digs down deeper and deeper to reach what is common to us all. Charlie Chaplin is scrupulously at pains to continue to represent this universal man, the synthesis of every individuality; his walk and his clothes belong to no age, no class and no country; his speech cannot betray him, for he has never uttered a word and his captions reproduce only the words of his fellow-players. In the spoken film upon which he is now engaged, it is understood that his own part is silent. In face of the events which overtake him there is no characteristic reaction by which to identify him; he remains the personification of serene and resigned passivity.

Since the making of a film costs enormous sums of money, the Golden Calf must needs be left free to graze upon Parnassus. The sacrifice of the Calf being impossible, the community naturally imposes upon the art of the cinema its universal character. For while under capitalism, the cinema producer is bound to shoot films which pay, he must in a Marxian society make films which please the people or the government, that is to say, he must make commercial films or propaganda films. The latter can be of very fine quality. No one will question the aesthetic value or the revolutionary effectiveness of such films as «The Mother» and «Potemkin». According to Eisenstein, the masses themselves collaborate in the making of Soviet films; they are tried before various publics and, before being completed, are revised or touched up according to the reactions of the spectators. Moreover, not only the heads of a new social order incline to the use of this new weapon; the most hide-bound capitalist is equally capable of wielding it. Take, for example, the Citroën film on the Black Cruiser or the film by Walter Ruthman «The Melody of Life», made by order of the Hamburg-Amerika Line.

Once again, this service owed by the cinema constitutes its greatness.

For the cinema producer, as to some extent for the architect, the problem of creation is twofold; the artist in him has to solve an aesthetic, the manufacturer an industrial problem. Practitioners provide him with fully equipped studios, material and a certain organisation which disposes of some of his technical diffi-
culties; the industrialist also has the use of his engineers. None the less he has to find financial backing, select artists and technical experts, train them to every gesture or to every change of lighting. Like every head of a business, he has to collect around him various financial, technical and commercial resources before he has the apparatus for the creation of his final work. He has further to conceive the film itself — the plot, the divisions, the innumerable details connected with it, the whole of the strictly aesthetic part of his work, which is the only part to be presented to the public. And in this he has no free hand, since he must take account of his backers, his stars and his future operators.

The cinema producer must unite within himself the artist and the industrialist, must produce an article which satisfies a collective need or must create the need, if it is lacking, and cannot only satisfy his personal craving for self-expression. This duty is imposed upon him by the material conditions governing the making and showing of a film and would not be in the least affected by any social change. Under any system of government the cinema producer, who is a captain of industry as well as the successor to the priest and the poet, in order to please the people, must employ all the resources of the individual and of civilisation.

It is rare to find such diverse qualifications in one man, and it is sought to replace him by a whole team, which includes the author, producer, stage manager, etc. Nevertheless the members of this team all have frequently to wrestle with industrial problems, which are intended to prepare them for dealing with questions of this kind. On the other hand the films they make are all subject to one essential condition — they must please the multitude; that is part of the very technique of propaganda.

The talking film, which within its own sphere is even more effective than the silent film, is not, like the latter, a means of world propaganda. As Alexandre Arnoux has said: «The screen of today, let us all admit it, has lost its universality. It is becoming national, linguistically confined and is renouncing its dream of the unification of elemental ideas and sentiments. It can only claim to strengthen the ties between races which speak the same tongue and works by methods closely resembling those of the press and of literature, reinforced, however, by the power of images, which make on simple minds a stronger impression than the printed word.

«With due regard to proportions and on a more elementary plane, we are witnessing to-day what happened some three centuries ago, when Latin ceased to be the sole interpreter of scientific and metaphysical thought, and philosophies took different roads and acquired a different character, a special colour among civilised nations. Only the Catholic theology escaped this fall, this loss, if not of real greatness, at any rate of influence. The pure cinema has this resemblance, that it does not depend upon local idiom and could aspire towards creating, not of course, a system of world catholicism, but — on a lower level — a more or less universal sensibility, ideology and romance. With the advent of the talking film, we are falling back into the disintegration and dust of the nineteenth century». 
Special propaganda on behalf of scientific management.

This is a problem, not of technique, but of industrial psychology. Having explained to heads of businesses how they can organise, we must tell them why, and must arouse in themselves and in their collaborators the will to organise. We must therefore start by revealing their real motives — far more disinterested than is generally supposed — and by showing that scientific management, besides leading to pecuniary results, satisfies needs which are perhaps more vital and fundamental.

The industrialist of to-day, in his daily work, is concerned less with earning large annual dividends for himself or his shareholders (Taylor has shown the comparative futility of profits which cannot be realised within a week) than with creation, the fashioning of his enterprise according to the idea of it which he has in his mind. The real joys of creation are no longer reserved to the artists, who, deliberately denying to their work all moral, sentimental or historical significance, confine their endeavours to mere problems of form, colour or space, but to the industrialists, who, with the valuable but wayward aid of human ambitions and of material, financial and intellectual resources, are engaged in constructing organisms as impressive as they are delicate. Paul Claudel, with marvellous intuition, has realised the obscure but profound satisfaction of men who are absorbed into these organisms from the remotest countryside to work along with their equals under acknowledged leaders:

« In modern industry everything is subordinated to a definite end, everything functions with miraculous order within the framework of a single task. Workmen, engineers, accountants, draughtsmen, travellers, interpreters, the publicity staff all have their essential duties to perform, and their work reacts immediately upon the whole organisation, of which they never cease to be a vital part. Over all is the manager in the position of absolute monarch, but at all times responsible through every penny of his capital and subject to automatic removal if he is inefficient. Who will deny that a community of this kind, irrespective of the sufferings and diminished importance which it may involve for each member, is in itself admirable? Has there ever been seen so harmonious a distribution of such vast stores of knowledge and of so many human forces and activities? Here men are united no longer by mere physical proximity, but by a mutual need, an organic necessity of undreamt-of scope and complexity. And every worker is dimly aware of this. He is no longer alone; he feels himself necessary to the whole. He is making good among all his equals under competent leaders, and acts no longer in response to an arbitrary word of command, but under a direction and guidance which are indispensable. And that is why he will always choose to serve (I prefer to say « work ») a machine rather than to dig the soil.»

Towards this urge of the manager to create, and of his subordinates to assist in the creation, scientific management contributes the framework and the rules, just as prosody serves the poet’s need of expression. It is therefore important to bring
home to all what is not generally realised, namely, the inmost structure of industrial organisations, whereby the energy set loose by customers in the form of orders is gathered into a stream by the planning department, directed through channels to the different workshops and finally materialises in the form of manufactured goods.

When we seek to make this structure perceptible, we find that it consists of a pile of orders or service notes, detailed plans, customs or traditions of the staff, all elements a knowledge of which calls for considerable analytical effort and which are only known in their entirety to the head of the business, the sole onlooker. It would appear that the cinema, with its inexhaustible power of expounding, can alone communicate to others this general view from which the employer derives his supreme delight and his strongest inspiration.

The cinema can show too the change which scientific management brings about in the relations between the different factors of production; it can show us how the head of the business becomes the servant of the workman to whom he furnishes the various means of performing his task under the best possible conditions, or rather how both are the slaves of the customer, whose absolute dominion, however, fortunately tends to become constitutional through the establishment of rules limiting his caprice.

Obviously the cinema must deploy the whole of its resources in order to produce an impressive film; mere documentation, banality and tedium are dangers that must be avoided at all cost.

This is the price we pay for the cinema's marvellous powers; the spectator being taken right out of himself, boredom, if it ensues, is both appalling and incurable.

Conclusions

Scientific management has as yet claimed from the cinema hardly any of its potential gifts. It is now timidly beginning to employ the film to analyse movements. In regard to education, other than elementary, we may mention the initiative, still undeveloped, exemplified by the film library of the Commercial Colleges. As regards propaganda, nothing has been done. The catalogues, however, are full of films, either documentary or strictly technical. The French National Committee on Scientific Management has also, as the result of the 1929 Congress, set up a Committee of Cinematographic Enquiry, the main purpose of which is to prepare a number of films dealing with the subject in a worthy manner. For each film a notice will be prepared containing illustrated extracts from the film for purposes of memorisation.

As usual, the difficulties in the way are financial.

Since these films can scarcely be shown commercially, it is necessary to secure the support of industrial groups or public bodies, and this support will be the more readily forthcoming if those concerned are made aware of the importance of the question.

Jean Coutrot.
I. INTRODUCTION.

Labour problems have been the subject in recent years of intensive study in every quarter and these studies may be collectively grouped under time-studies, movement-studies, psychotechnics and rationalisation. Common to all such studies is the system of decomposing work into its constituent parts, all of which are measurable by different standards. The ultimate aim is to establish the simplest possible elements, each depending upon a few variables only, but including nevertheless all the factors which influence work.

A few examples may serve to explain this aim. In electricity all the phenomena are either electrical or magnetic and from these two fundamentals a number of subsidiary conceptions have been derived, such as electric tension, current, resistance, etc. It was only when all electrotechnical phenomena had been reduced to these few fundamental conceptions that it became possible to apply the experience gained in one field of electrotechnics to another field and methodically to seek the best solutions for certain specific problems. So it is with time-studies. It will not be possible to investigate and systematically study the various possibilities until all labour phenomena have been reduced to a limited number of fundamental notions.

The following article deals with the possibilities of the film as a means of ascertaining and studying these basic elements in work. Here the film serves a purpose similar to that of the microscope in metallography. The application of the microscope to metallography made it possible to discover and study the principles underlying the heating of metals. There is a close analogy between the two fields. Just as the microscope enables the eye to see the smallest elements in space, so the film reveals the smallest time-elements. In the same way that in metallography difficulties largely disappear as soon as the element of space under examination is reduced to a small unit viz, the size of a single crystal, so too it becomes very much easier to analyse human work when the elements to be studied have been reduced to a number of fundamental movements. Just as in metallography complications ensue if we start our analysis of conditions with the individual crystal, so also work studies are made more difficult if the fundamental movement is further broken up. Again the two branches are alike in that there will in future be no more need to place a cinematograph beside each worker than it is necessary to put a microscope by the side of every crucible, but, just as many metallographical laboratories to day are provided with abundant microscopical apparatus, so the cinematograph will be found indispensable to the study of a certain number of working processes.

It should perhaps be explained why it is that the cinema has not already been more largely employed in the study of scientific management. The reason lies in the comparatively high cost of this method. In themselves cinema technique and
film analysis are no harder to learn than the technique of the microscope and the examination of microscopic slides. On the other hand, the cost of a time-study film is very much higher than the cost of the chemicals required in microscopic work. For the individual, therefore, it is considerably more difficult to acquire the necessary practice in the use of the cinematograph. On the other hand, collaboration between the cinema expert and the scientific organiser is not altogether a simple matter, for the real advantages of the cinematograph can only be extracted by one who is to some extent versed in both branches.

The following report is based upon years of study, during which account has been taken of the published investigations of many others, especially Gilbreth’s. Gilbreth refers to the fundamental movement, but does not specially emphasise the great importance of the conception. In my opinion Gilbreth failed to realise that there is an optimum degree of movement subdivision.

My own investigations suggest that there is a very definite optimum represented by the limited number of fundamental movements common to nearly all occupations. Both above and below this optimum the results rapidly diminish. Owing to the high cost of the cinema the number of experiments carried out is small and it is to be anticipated that further research will substantially modify the statements that follow. Nevertheless, the report may furnish useful suggestions to all who are engaged in time-studies, movement-studies, psychotechnics or rationalisation.

It may also serve as a first step towards unifying all such investigations in the sense that the schedule of fundamental movements given below makes it possible to subdivide the most widely different processes of work into the same elements and thus to compare with one another results obtained in very different fields.

II. THE FUNCTION OF THE FILM IN WORK STUDIES.

Films can serve all kinds of different purposes in connection with work studies, and the same film can be used to solve more than one problem. We must, however, be clear from the outset as to the different kinds of problems which the film can solve. It will then be for the cinema technical expert to see that the same film can be used later for a different purpose, even if it was first shot for a particular reason. Frequently other considerations arise in the course of investigation and it may save a lot of money if all possibilities are taken account of at the outset.

I. DEFINITION OF FUNDAMENTAL MOVEMENTS

We said in our introduction that the present study advocates a certain optimum subdivision of times, by which all the existing factors which influence work are most easily distinguished. The elementary movements which correspond to this subdivision will hereinafter be referred to as fundamental movements and they represent standard movements, the duration and form of which vary within certain imits according to the individual worker — these limits, however, being independent
of the particular working process. The separate fundamental movements depend only upon a few variables and lend themselves to detailed investigation.

The system of fundamental movements offers the following facilities:

a) interchange of experience without sacrificing trade secrecy.

The peculiarities of the separate working processes in different businesses are not based upon different fundamental movements, but are due to the fact that different plant necessitates a smaller or larger number of such movements. Experiments, therefore, which relate to the individual movement, are not trade secrets and the results can be exchanged without risk of sacrificing any advantage in manufacture. This is a very important point, because the human factor cannot be studied without the aid of statistics and even the largest business cannot very well furnish sufficient material for any statistical conclusions. An exchange of experience in this sphere is therefore quite indispensable.

b) Rules governing fundamental movements.

The fact that in all occupations, a considerable number of fundamental movements recur enables us to establish certain normal rates for the time taken and energy consumed over each movement. These values fluctuate within certain limits, but, as stated above, these limits do not depend upon the process of work itself. These normal rates will presumably vary substantially in different areas. For instance, the times of certain fundamental movements will differ as between a northerner and a southerner. The conditions of work will also affect the factors of time and energy.

It should, however, be possible to lay down certain normal rates for individual areas. Within the area such rates may be used as a basis to determine the total times of certain tasks, the productive capacity of the individual workman, etc. Moreover, these standard rates furnish some indication of how far machinery or processes of work which have proved their worth in one area, may be suited to other areas.

c) Basis of psychological and physiological examinations.

Every psychological and physiological examination of work must be based upon a definite movement or process of work. If the latter can be divided into fundamental movements in accordance with a scheme valid for all occupations, the results of the examination can be given a much wider practical application. For example, breathing tests are carried out in connection with certain forms of work, including the lifting of weights. Hitherto, it has only been possible to apply the results of these tests in exactly similar cases, where the conditions are the same. But if the movements made are broken up into general fundamental movements and the influence of any variables ascertained, the results can be made accessible to a much wider circle.

The relative frequency of the separate fundamental movements in the diffe-
rent occupations indicates to the psychologist and physiologist the importance of the individual movements and he can then more easily organise his examination so that it may profit as wide a circle as possible.

d) Characteristics of the various trades and industries.

As has already been said, many of the same movements recur in the different trades. The differences between individual trades are largely differences in the frequency percentage of the separate movements and in the time taken by these movements expressed as a percentage of the total time required for the work. In some trades certain movements do not occur at all, for instance, among clock-makers, whose work involves no change of position.

Accordingly we may classify the different trades by the proportion of the separate movements to the total time taken over the work. The system will in this way also be of value in vocational guidance and selection and in the manufacture of educational films.

e) Determination of the factor of worker’s efficiency.

The method hitherto in use of carrying out time-studies with a stop-watch or other registering apparatus is vitiated by the varying efficiency of the worker, although the system of time-measurement itself has been developed until it has reached a high degree of accuracy. In all previous systems, however, the question of how far the speed of work is what it should be, has had to be decided subjectively. It is possible to ascertain from fluctuations of the individual times any deviations from the rate of work peculiar to each individual but there are no suitable means of comparing the rhythm of work of the different workers.

The system of fundamental movements makes it possible to ascertain these values, without necessitating new films for each particular case. For this purpose processes of work are selected in which the successive fundamental movements remain the same with each repetition of the work and in which the nature and the determining influences of the separate movements can be seen with the naked eye. Properly trained time-measurers will always be able to find processes of this kind. The times corresponding to each fundamental movement will then be determined from the table of normal times and the sum of these times compared with the total time taken over the process in question as directly observed. In this way the efficiency factor of the individual worker is ascertained much more accurately than by any procedure hitherto employed.

This method has the advantage of being cheap, since there is no need to take a special film for each case. A disadvantage is that it does not help us to recognize the characteristics of the particular worker. It furnishes a comparative figure of a man’s efficiency at the particular task performed, but it does not tell us which of the fundamental movements are carried out above, and which below the normal speed. Some idea of this can be obtained by examining in the way described several processes in which the separate movements are represented in different proportions. This gives us a system of several equations containing several unknowns,
from which we can determine the efficiency factor for the separate movements. Owing, however, to inevitable errors of measurement the result will be only relatively accurate. For this reason at least several films should be made of each worker, and these will directly furnish the values desired.

f) Aptitude tests.

The method of fundamental movements can also be used in carrying out aptitude tests, a film being taken of the subject of the test as he performs certain tasks. The times for the separate movements will then be determined and compared with the times (normal times) already ascertained from other workers. The subject may then be declared suited for those tasks in which the movements for which he obtained particularly good time marks represent a large proportion of the total time required for the work.

2. Establishment of working processes.

Hitherto working processes have mainly been determined intuitively. The experience of the factory gave some indication of where improvements might be made, but there was no means of knowing in advance and statistically how any change of method affected the working time. Accordingly, the different possibilities were tested one after another in the factory and the time required by each process registered. The element of practice was, however, a serious source of error. In order to eliminate this factor, every workman must perform the separate process over and over again until he has completely mastered it. This may take anything from a few hours to several weeks. Thus a comparison of different processes by this means may occupy a very great deal of time.

By determination of processes is now understood a procedure by which the probable times required for the different possible processes are calculated in advance, thus furnishing a certain basis of comparison before the different processes are actually put into execution. This is made possible by the system of fundamental movements. The necessary movements are written down in their various possible sequences and the times required for them are ascertained from the table of standard times. The sum of these times gives the total time required for the different processes. The percentages of the individual movements then show what type of workman is especially suited for the particular process and in what direction further improvements may be looked for.

The process thus outlined naturally requires to be tested and controlled in practice, in the same way as a new piece of machinery, but the numerical treatment of individual factors gives a much clearer picture of conditions and in most cases is much more economical of time than former systems.


Short processes of work made up of rapid movements cannot be properly investigated except by the film. Examples of such are type-writing, use of calculating
machines, small assembling processes, especially on the running band, etc. Whenever the duration of a cycle of operations is less than 0.4 minutes, any sub-division by measurement with a stop-watch becomes impossible. The different elements can only be determined statistically, unless recourse is had to the cinematograph. It is possible in the case of typing to register the separate taps by an electrical apparatus and the resulting diagrams will show certain time-differences, but it is very difficult to ascertain their causes from the diagrams.

As regards the film analysis of minute processes a different method can be adopted in each particular case. As a rule, however, it is better to use the system of fundamental movements, since it will facilitate comparison with the results of investigations by others.

4. OTHER USES OF THE FILM IN CONNECTION WITH WORK STUDIES.

The above is the most outstanding example of the use of films in work studies, but they may also serve any of the following purposes.

a) Documentary determination of working conditions.

Time-studies by cinematograph establish conditions of work in documentary form and make it possible at any time to examine factors which at first escaped notice, without repeating the time-study. This is particularly important in the case of a subsequent alteration in the working process.

b) Study material always available.

The above-mentioned documentation also enables the most detailed time-studies to be carried out in the time-study office on the films themselves without disturbing work in the factory. For comparative purposes, this is an inestimable boon since the observation of one process can be compared with that of another.

c) Movement studies.

The cinematograph further allows movements to be studied, especially if my own method is followed of projecting the separate pictures upon a drawing-board and extracting those movements which are of interest or importance.

d) Further training of time-study experts.

Time-study films, by reason of the above mentioned facilities for their examination, offer an excellent opportunity for the further training of time-study experts. Experience has shown that experts who have had an opportunity of examining films have greatly improved their powers of observation and thereby do better work in ordinary time-studies with the stop-watch.

e) Instruction of workmen.

Time-study films can also be used to instruct workers. This applies especially to the individual manipulations required for flow work, which can be shown to
workers on the film as often as may be desired. For this purpose the same films can be used as for time-studying, if this twofold purpose is taken into account at the time when the film is shot.

Detailed examples of the various applications of the cinema to work studies, together with figures, are given in Part VI, pages 875 et seq.

III. THE TECHNIQUE OF WORK-STUDY FILMS.

The following account deals with the technique of work-study films only so far as is necessary for the purpose the film is to serve. Questions of the best light and of developing and printing, on the whole, present less difficulty in cinematography than in ordinary photography, since in the case of films the time of exposure is known and the material of which the negative is made allows of fairly considerable variations of exposure.

When necessary, reference should be made to the available literature on the subject.

1. PHOTOGRAPHIC APPARATUS.

Scientific management films can be taken by almost any camera having a sufficiently large box. In order to be able to shoot fairly lengthy working processes without interruption, the box should hold at least 120 metres of film, and preferably 300 metres. The diaphragm should be adjustable. The maximum aperture should be 180°. This makes it possible to take photographs under bad conditions of light and, secondly, the longest possible exposure is often desirable in the interests of detailed study. On the other hand, short exposure is sometimes necessary, and it should therefore be possible to reduce the aperture to a small slit of 5 mm. Any further reduction is useless, since in most cameras the distance between the diaphragm and the film is about 10 mm.

If the camera has a motor drive, the latter must be specially constructed for our purpose, since in this matter it is much more important to observe a regular and constant succession of photographs. For the same reason the tachometers constructed with most cameras are useless, as they are not sufficiently accurate if the number of exposures is also to be taken as the measure of time. In this case the ordinary commercial precision tachometer is to be recommended. The lag of the speedometer should not be so great as to prevent the pointer from measuring small variations of exposure. Clockwork is not suited in most cases.

For the examination of most working processes the camera should take 1000 pictures a minute, or 16\frac{4}{3} per second. A higher rate is only necessary if very rapid human movements are to be observed, such as in typing. On the other hand, a rate of only 500 or even 200 pictures a minute is very often wanted. These low speeds are required for the analysis of very protracted processes, when it is also important to economise film. Single photographs will be taken when the camera is only required to serve, as it were, as a stop-watch. Thus a single picture will
always be taken in cases when a simple time study would be measured by a stop-watch. This method is considerably more accurate than a mere reading by the stop-watch, and the cost in film material is very small. The camera must be able to focus the view directly in the viewfinder. There is no occasion to observe the picture in the viewfinder while the film is being shot, if the finder is efficient. For purposes of scientific management films the stand required is the ordinary cinematographic stand with universal joint. In order to photograph a workman who is frequently changing his position a movable stand is an advantage. The apparatus necessary for taking dramatic films — adjustable diaphragm single-picture registering device reverse apparatus etc. — is not essential. It may be useful to be able to turn the film backwards, if in the interests of economy it is desired to take several pictures on one section of film. On the other hand, each picture is found to be so small when it comes to the examined that this drawback generally out weighs the saving in film.

The foregoing remarks apply to a cinema apparatus when used for filming the movements of workers. The filming of movements of machinery demands quite different conditions. As a rule a far higher rate of turning is needed, up to several thousand photographs a second. This necessitates a special camera, which can also be used for examining human movements, but which has no advantages over the ordinary apparatus. The quickest movement of the human hand can be satisfactorily registered by an apparatus which takes about 150 photographs a second.

2. Lighting.

Whenever possible, scientific management films should be shot by ordinary daylight. If the light is not strong enough, a minimum of artificial light should be employed so that the conditions of work at the time when the photographs are taken are as far as possible normal conditions. For this reason the camera should have a lens working at the largest possible aperture.

If artificial light is unavoidable, care must be taken that it is of the kind normally employed. If, for example, under normal conditions of work the light is indirect, that is, diffused, the same kind of lighting must be selected when taking the film. The pictures will not be so attractive as they would be under strong light thrown from one side, but, what is much more important, the movements shown will more closely approximate to the movements as actually made. The artificial light should be turned on some time before the operator starts turning in order that the worker may have time to get used to it. Incandescent lamps are to be recommended as being less liable to injure the eyes.

3. Time-measurement.

Films in scientific management are primarily useful for measuring times; this at least is one of their essential purposes. Time-measurements themselves may be made by two different methods.
a) Inclusion of a clock in the photograph.

The older of the two methods consists in photographing a clock. In this case the number of photographs need be only approximately constant, since the time corresponding to each picture will be registered by the clock itself. In order to facilitate reading, the clock must not be too small, but it must also not occupy too much space in the picture, or it will mask something else. The dial of the clock should consist of white lines on a black background and the white lines should be rather less thick than the spaces between. The hands should be white. In this way we obtain a better picture than by the use of the usual dial with black divisions on a white background.

The number of revolutions of a clock used for this purpose is determined by the following consideration: the normal number of photographs taken is $16\frac{2}{3}$ per second $= 1000$ per minute. This rate is enough to measure with sufficient accuracy processes of which each phase corresponds to about 5 pictures, that is to say, the duration of each phase must not exceed 0.005 minutes. If the beginning and end of the phase are to be ascertained with 95% accuracy, the clock must be able to register 0.95 x 0.005 = 0.00025 minutes. A substantially more accurate reading will not be obtainable even with an aperture of 120° and more, since a more quickly moving clockhand could not be photographed sufficiently clearly.

The clock best suited for the purpose is a Morse clock, but one in which the usual speed-regulator is replaced by what is known as a gramophone-regulator. A regulator of this kind gives a maximum variation 0.5% which is enough for most purposes. The clock has three hands, of which the quickest revolves 50 times a minute, the next 5 and the third 0.5. The reading accuracy varies according to the size of the clock in the photograph, from $1/100$ to $1/1000$ of the circumference of the dial ($1/8 - 1/2$ of a division), so that a reading of 0.00005 to 0.0002 can be taken by the quickest hand. I have recently used a clock whose hands only revolve at $1/2$ of that speed. This clock saves the rather troublesome multiplication of readings by 2, while the readings are sufficiently accurate for most purposes.

In practice the time of each separate picture is often not taken, but only the time at which the movement begins and ends. In such cases it must be possible to read longer times directly by the clock, so as not to have to observe and register each passage of the hand through zero. Slow-motion pictures naturally necessitate more slowly-moving hands. The clock described above with the measurements mentioned is the product of experiments in cinematographic time and movement study. It has assumed its present form as the result of numerous experiments with a wide variety of devices and hand velocities. If at any time one or another hand is not required, it is easily and best taken off before the film is shot, since unnecessary hands only make the clock difficult to read. The size of the dial must depend upon the size of the photograph. The clock is therefore best fitted with a number of alternative dials, each with its own set of hands.

For examinations extending over a considerable time, it may be useful to include in the photograph another clock recording the time of day. As a rule, howe-
ver, it is advisable not to overload the photograph, but to record such particulars as this in a special note.

It is sometimes difficult to place a clock for purposes of photography; this difficulty can be got over by affixing a clock to the camera. It can then be included in the film either by means of a special lens which reproduces the clock through a small prison or mirror or by means of the principal lens. As the clock is in this case usually on a different focal plane a lens is placed in front of it, which projects it into the focal plane. An advantage of the former procedure is that the clock's focus does not change with adjustment of the lens proper; on the other hand its presence involves considerable alteration to the camera. The use of an auxiliary lens only necessitates a few changes, but in this case the auxiliary lens will have to be moved to correspond with every movement of the main lens.

Clocks in which the hands are replaced by automatically moving figures have not been used for these purposes. The figures would have to change in a period of time very short compared with the time of exposure, that is in about $\frac{1}{100}$ of a second. Clocks of this kind have not yet been made.

b) Counting of the photographs.

Time-measurement is very much simplified if the interval of time between each successive picture is completely constant. The means required for this purpose were discussed in the chapter on cameras. It is then only necessary to count the number of photographs. If the pictures are then projected for examination the projecting apparatus need only be provided with a counting device, which counts the separate pictures and at the same time indicates the time. Another method is to pass through the apparatus a second film alongside the original, this second film being numbered serially. These numbers will then be visible on the film projected. A disadvantage of both methods is that the serial numbers are not attached to the film and, though this is of no account when the projection is for the purpose of examining a single process of work, it makes it difficult to find any given picture again. To avoid this drawback, the serial numbers can be printed on to the film; this necessitates special arrangements when developing and printing, but facilitates the examination of the films to such an extent as to outweigh this inconvenience.

4. SHOOTING TECHNIQUE.

Before each picture is shot, the prevailing conditions must be noted down, consisting of the following:

a) Name, sex, age, height and weight, health (any recent illnesses, etc.) of the workman to be photographed.

b) Time of shooting the picture.

c) Local conditions (size of room, temperature, humidity, weather).

d) Remarks.
These will include any factors which might influence efficiency, such as recent payment of wages, holidays, strikes, etc.

e) Description of the work to be performed and of the tools used. These notes must be given serial numbers and before the film is actually shot a photograph will be taken of a board containing the corresponding number.

Otherwise the technique does not greatly vary from the normal. As regards lighting, a few rules were mentioned above. The camera must be so placed and the views so chosen as to reproduce the movements without any interruption. In the case of frequently repeated movements the process will be looked at in the view-finder after focusing and any corrections will be made before shooting. The picture in the view-finder is best looked at by the person who will be analysing the film later.

The rate of turning depends upon the nature of the study. In most cases 1000 pictures a minute will be found the best rate. A higher figure is rarely necessary and a lower is only advisable for very long processes and when film must be economised.

The light should err, if anything, on the strong side so as to show details in the shaded parts. This point should be especially observed when the camera is in the hands of an operator who is accustomed to dramatic film work, in which light is mainly thrown on to the light parts, whereas for our work the dark parts are more important.

The camera should not be moved more than is necessary to follow extended movements during the process of shooting, since movements of the camera often make it more difficult to analyse the movements under observation. When a stationary clock has to be included in the picture, the necessity of keeping the clock in view sets a limit to the movement of the camera.

If the film is only intended to give the exact times of certain processes, one or more single pictures will be taken after each process. In this case the procedure is the same as for ordinary time-studies with the stop-watch. Before shooting, the work to be examined must be carefully noted and subdivided into a number of parts. The only difference from a time-study carried out with the stop-watch is that, instead of a reading of the watch and writing down the time, a single picture is taken. In this case the camera is best operated by a time-study expert. If three separate pictures are taken, one just before the first part of the work starts, one as nearly as possible at the end of the process and one just after, the accuracy is greatly enhanced. It is generally sufficient if the picture is taken from one side only although certain movements will sometimes inevitably be masked. For the most part the course of the hidden movement can be deduced from secondary signs, and this generally suffices for measurement of times. This may cause certain errors in regard to individual movements, but they are of small account in relation to the total result. If however, the proportion of masked movements is large or if a very detailed examination of movements is being carried out, the technique should be somewhat modified.

To take the simplest case, photographs of one process will be taken from
different positions so chosen that movements which are invisible from one position can be seen from the other. An objection to this method is that, if the same job is repeated several times, certain differences will appear. Still, the method serves its purpose in most cases. Since each process anyhow has to be taken several times this procedure does not involve any additional consumption of film. It is as a rule desirable to change the position of the camera when taking several pictures of the same process.

A second method is to take the photograph simultaneously with two cameras in different positions. It is convenient to synchronize the two either mechanically or electrically. This procedure necessarily involves a double expenditure of film.

Thirdly, a single camera can take a picture from two sides by an arrangement of mirrors. The pictures can be taken with an ordinary camera and without expenditure of additional film, but the field of view is diminished. Which of these three methods is to be preferred must depend upon the circumstances of each particular case.

5. Preparation of the film.

The film is developed in the usual way. If the analysis is to be made by counting the pictures, particular care must be taken that no pictures are lost in the process of perforation or at any rate that the number of pictures lost is exactly known.

The examination is best made from a printed copy. If the observer is sufficiently experienced, the negative will also serve, but the need of transposing light and shade values makes the work rather more difficult. Copies of scientific management films should in principle be printed on safety film, so that no special precautions against fire need be taken during their examination. Copies should be thin and soft. They should be as thin as possible in order that they may be projected with a weak illumination and not become too dry when lying in store. They should be as soft as possible so that detail may be distinguished in the dark as well as in the light parts of the film. If the copies are printed in a laboratory mainly occupied in printing dramatic films, special attention must be drawn to this point.

Copies are best kept in the tins in which the original films are delivered. Under these conditions they will be least liable to dry up and crack.

Any joins must be made in the usual way. If the analysis consists in counting the pictures with a counting device attached to the projection apparatus or with a counting film, care must be taken not to lose any pictures in the process of joining; if necessary, a corresponding piece of blank film must be stuck on.

IV. THE ANALYSIS OF WORK-STUDY FILMS.

In scientific management investigation the shooting of the film is only a part of the work and from the point of view of the time occupied a larger part is its subsequent analysis. Here we must distinguish between four different techniques.
1. Projection at Normal or Only Slightly Less Than Normal Speed of Turning.

If the films are projected at the same speed as shot, all the movements will be reproduced with their original velocity, and therefore no more details can be discerned than by direct observation. There is, however, something gained by repeated projection, for the film repeats the smallest details of movement in exactly the same form each time, whereas in practice a repeated movement will always vary in some of its details. The examination of the film by this technique alone will rarely yield sufficient results to justify the cost of making it. This method, therefore, should only be employed when the film must anyhow be shot for other reasons, or as a preliminary to the methods of examination mentioned below.


All detailed movement can be much better observed when the pictures are projected singly. For this purpose the best camera is a small projecting apparatus with weak illumination in order that the film may not be set on fire by the rays of light. A small handle is attached to the wheel, and a turn of the handle moves the film one picture on. The shutter is either removed or a shutter is used with one wing only. If the handle is turned by a rapid jerk, we shall obtain the impression of a very slow movement. The effect is the same as by the slow-motion process, only the slowing down here occurs during projection. The fact that the movements appear jerky is scarcely a disadvantage, since their characteristics are thereby emphasised.

This method is the best for reproducing those factors in the process under examination which are most typical. In the majority of cases, however, we must look for certain specific phenomena if really all the details are to be observed and for this purpose the best means is to determine the duration of the fundamental movements, a method we shall describe in detail further on.

3. Establishment of Movement Paths.

For the purposes of many investigations it is an advantage to be able to see the whole course of movements at a glance and they can therefore be shown in the form of a graph. The film is projected in pictures on to a drawing-board in the way already indicated. The position of important points (finger, wrist, shoulder, head, etc.) is marked on the board in each picture by a dot. If these dots are joined by lines, we get the desired movement paths. The connecting lines are best made whenever a new dot is drawn, as otherwise intersecting paths make the drawing of the lines difficult. Similarly, when drawing several paths at once, different colours should be used. If every fifth and tenth dot is specially marked, the drawing will also clearly show the duration of the movement.
These movement paths can also be obtained directly by photographing luminous dots in movement, but the method described above has the advantage of better emphasising the significance of the path, while movement paths can be drawn by means of these dots in cases when illumination presents difficulties.

This method is suitable when it is desired to study in detail the influence of existing conditions of work on short cycles of operations.

4. Direct observation of the film.

A fourth method consists in looking at the film direct with the naked eye or through a weak magnifying glass. An advantage here is that the eye can quickly pass from one picture to the next and compare them. Minor movements are often easier to see in this way than when the single pictures are projected one after the other. It is particularly agreeable to be able to carry out the work in the light of day and at a writing-desk. It is essential, however, that the time corresponding to each separate picture should be legible without effort. This kind of examination, therefore, requires film with serial numbers printed on it, as it would be impossible to read a clock included in the picture without strong magnification.

Direct observation of film is particularly indicated for determining the duration of fundamental movements, when pictures have to be looked at several times over from different points of view.

All examination of films occupies a considerable amount of time. Before starting, therefore, the nature and methods of work should be carefully thought out and suitable written forms prepared, so that during operations writing work may be reduced to the minimum and the whole attention be concentrated on the photographs. As an example of such work we shall now describe in detail the determination of the times of fundamental movements.

V. FUNDAMENTAL MOVEMENTS.

The purpose of these was dealt with at length in Part II, No. 1, pages 850 to 853. By a fundamental movement is meant the smallest factor in movement consciously induced by an impulse of the will. Modern physiology and psychology enable us to establish various systems of fundamental movements, all of approximately equal value. In the interests of exchange, however, it is desirable that, as far as possible, only one uniform system should be employed. The following is a system proposed.

All possible fundamental movements are divided into the following seven groups. Each group is indicated by a letter of the alphabet.

1. Observation — O.

This group includes all fundamental movements which denote the receiving of a sense impression.
2. Grasping — G.

All fundamental movements designed to effect a junction between or to separate some part of the body and an object.

3. Movements in space — S.

Movements of parts of the body not immediately connected with an object, except the following:
- Movements which denote the receiving of a sense impression (see Observation);
- Grasping movements (q. v.);
- Changes of position (q. v.).

4. Displacement — D.

Movements of parts of the body directly connected with or resulting in the displacement of an object, in so far as such movements are not in direct execution of work (see Handling of Tools.)

5. Rest — R.

Absence of any movement connected with work, unless they are movements of observation (q. v.).

6. Changes of Position — P.

Movements producing a change in the position of the body.

7. Handling of Tools — T.

Movements necessitated by the manipulation of a tool or machine-tool with the purpose of executing work. Movements not immediately followed by execution, but required as a preliminary thereto (e.g. the clamping of a vice, the backward movement of a file or plane) will also be included under T. In assembling work, the insertion of a screw also comes under this number.

The classification of the different fundamental movements in the above groups presents no difficulties. The movements in groups 2 to 6 are common to all occupations. One or more of the groups may be more or less in evidence; thus, work done in a sitting posture often involves no «change of position». The movements in group 1 are also common to most occupations, but in very varying degrees. Group 7 is mostly made up of movements peculiar to the different occupations. But even here there are points of similarity between the various callings. Fundamental movements which it is difficult to classify in any of the above-mentioned groups, must be placed as a general rule in the T group.

The individual groups of fundamental movements are sub-divided according to the following schedule. Another capital letter is used to indicate the sub-division. Each of these separate movements requires a certain time for its execution. The factors influencing these times can sometimes be expressed in figures, sometimes they can only be roughly arranged in smaller groups. The different factors and their weight are indicated by small letters.
a) Schedule of fundamental movements.

Group 1. Observation.

Movements which denote the receiving of a sense impression. The duration of these movements will not be separately studied if they are simultaneous with other movements under observation the time of which is determined.

1. OS = Seeing.

Observation by sight.
Beginning: (i) when preceded by a movement: End of that movement. (ii) when preceded by rest: Directing of look on to the object of observation.
End: (i) when followed by a movement: Beginning of that movement. (ii) when followed by rest: Removal of look from the object observed.

OSa = Observation with the minimum exactitude required to recognize a large object.
OSb = Observation with slight exactitude, corresponding to the recognition of a small object.
OSc = Observation with medium exactitude required to read a rough scale.
OSd = Observation with great exactitude, required to read a fine scale.
OSe = Observation with very great exactitude, required to read a Vernier scale.

2. OB = Balance.

Observation of the position of the body in space (e.g. in flying).
Beginning: first change of position in space.
End: beginning of first movements towards adjustment of body to changed position.

3. OH = Hearing.

Observation by the ear.
Beginning: first sign of the direction of the attention towards hearing (tense expression of face, turning of head in direction of sound).
End: Disappearance of every sign of attention directed towards hearing.
OHa = Observation with the minimum exactitude necessary to hear a loud bell.

OHc = Observation with medium exactitude, required to observe a perceptible change of sound, such as the knocking of an engine, loose parts of machinery etc.

OHe = Observation with very great exactitude required to observe oscillations or other scarcely perceptible changes in a noise or sound.

4. ON = Smell.

Observation by the nose.
Beginning: first sign of attention directed towards smelling.
End: Cessation of all attention directed towards smelling.

ONa = Observation with the minimum exactitude necessary for the perception of a strong smell.

ONc = Observation with medium exactitude necessary for the perception of a faint smell.

ONE = Observation with very great exactitude necessary to compare two similar smells.

5. OP = Taste.

Observation by the palate.
Beginning: first contact of tongue with the object to be tasted.
End: Cessation of all contact between tongue and object tasted; in the case of liquids, beginning of swallowing, or, in the absence of these indications, the cessation of all attention directed towards tasting.

OPa = tasting of an easily perceptible flavour.
OPc = tasting of a scarcely perceptible flavour.
OPe = comparison of two similar flavours.

6. OT = Touch.

Observation by touch.
Beginning: first contact of skin with the object to be touched.
End: Cessation of all contact between the skin and the object touched.

OTa = perception of a very uneven surface (more than 0.5 mm.) or of a large difference of temperature.

OTc = perception of a slightly uneven surface (0.05-0.5 mm.) or of a small difference of temperature.

OTE = perception of very slightly uneven surfaces (less than 0.05 mm.), or of very slight differences of temperature.

Group 2. Grasping.

Fundamental movements designed to effect a junction between or to separate some part of the body and an object.

7. GS = Seizure.

Movements designed to effect a junction between a part of the body and an object e.g. the touching of an object for the purpose of transferring force or the closing of the hand upon an object.

Beginning: first contact of part of the body concerned with the object in question.

End: 1. when the object is not moved: Cessation of any movement of the part of the body which effects closer junction; 2. when the object is moved: Beginning of the movement of the object in the direction in which it is impelled (turning the object round to obtain a better hold is part of the act of seizing)

GSa = Simply touching an object.
GSb = Seizing an object easily grasped.
GSc = Seizing a small object, an object less easily grasped, or a delicate object.
GSe = Seizing a very small object, an object lying in a very unfavourable position, or an extremely delicate object.
GSe = Seizing an object when there are several simultaneous obstacles in the way.

8. GL = Letting go.

Movements resulting in the separation of a part of the body from an object.
Beginning: (i) immediately following upon a change in the position of the object: Cessation of all movement of the object in the direction of its previous path; (ii) not immediately following upon a change in the position of the object: Moment at which the area of contact between the part of the body and the object held begins to diminish.
End: Cessation of all contact between the part of the body and the object.
GLa = Cessation of simple contact with the object.
GLb = Letting go a large and handy object.
GLc = Letting go a less handy or a delicate object.
GLd = Letting go a very delicate object.
GLe = Letting go an object, when there are several simultaneous obstacles.

9. GR = Re-grasping = GL + SH + GS.

Releasing an object and immediately grasping it again with the same or the other hand. GL is not really a fundamental movement. It is rather a combination of the three movements mentioned above. The combination, however, is a very common one and, as the three fundamental movements coalesce in the very earliest stage to form a single impulse, the classification is permissible.
Beginning: Moment when area of contact between the part of the body concerned and the object begins to diminish.
End. Cessation of all movement of the part of the body in relation to the object seized.
GRa = Re-grasping-simply touching the object for a short time.
GRb = Re-grasping of an accessible object at short distances, or by mere contact at somewhat longer distances.
GRc = Re-grasping of an accessible object at longer distances or of a less easily accessible object at short distances.
GRd = Re-grasping of delicate or very inaccessible objects.
GRe = Re-grasping, in the face of several simultaneous obstacles.

Group 3. Movements in space.

Movements of parts of the body, not in immediate connection with an object, except the following:
1. Movements which denote the receiving of a sense impression (see Observation).
   2. Grasping movements (q. v.).
   3. Changes of position (q. v.).

10. \( SH = \) Movement towards (Hin) work.

   Movements in space directed towards a piece of work or a tool and followed by grasping of same (GS).

   Beginning: (i) following release (GL): Cessation of all contact between part of the body and the object; (ii) not following release (GL): first sign of movement in direction of path which leads to the object.

   End: first contact of the part of the body effecting seizure and the object (see also GS).

\( SH_a = \) Shortest movement of wrist through space.
\( SH_b = \) Movement of elbow through space.
\( SH_c = \) Movement of shoulder through space.
\( SH_d = \) Movement through space combined with a movement of the body.
\( SH_e = \) Movement through space under especially difficult conditions.

11. \( SW = \) Waiting movements.

   Movements without other recognizable purpose than that of filling up time.

   Beginning: (i) when following a movement: End of previous movement; (ii) when following rest: first sign of movement.

   End: (i) when followed by movement: Beginning of following movement; (ii) when followed by rest: Cessation of all movement.

   The duration of waiting movements is given either by the time of some machine or some other movement. There is therefore no necessity to subdivide waiting movements.

12. \( SZ = \) Movement away (Zurück) from work.

   Movements in space away from a piece of work or a tool, after release of same (GL) but not followed by the seizure of another object. If another object is seized after the movement in space, the movement is to be regarded as a movement towards (SH) the object subsequently grasped.

   Beginning: Cessation of all contact between the object released and the releasing organ of the body.

   End: Cessation of all movement in the direction originally taken.

\( SZ_a = \) Shortest movement of wrist through space.
\( SZ_b = \) Movement of elbow through space.
\( SZ_c = \) Movement of shoulder through space.
\( SZ_d = \) Movement through space combined with a movement of the body.
\( SZ_e = \) Movement through space under especially difficult conditions.
Group 4. Displacement.

Movements of parts of the body directly connected with or resulting in the displacement of an object, in so far as such movements are not in direct execution of work (see Handling of Tools).

13. **DU = Upwards.**

The raising of an object, when the movement is not part of the process of carrying it to or from the place of work (if the latter, see under DH or DZ).

- **DUa** = Shortest movement of wrist.
- **DUb** = Raising movement of elbow.
- **DUc** = Raising movement of shoulder.
- **DUd** = Raising movement combined with movement of the body.
- **DUe** = Raising movement under especially difficult conditions.

14. **DT = Turning.**

Movements which result in turning the object held.

**Beginning:** first sign of turn. A preliminary movement of displacement of a different nature (DU, DL, DD, etc.) will be included in the movement of turning, if it is of shorter duration than 0.002 minutes.

- **DTa** = Shortest turn of wrist.
- **DTb** = Turn of elbow.
- **DTc** = Turn of shoulder.
- **DTd** = Turning movement combined with a movement of the body.
- **DTe** = Turning movement under especially difficult conditions.

15. **DI = Insertion.**

Movements to insert one object in another, e.g. insertion of a bolt in its hole.

**Beginning:** First slowing down of previous movement of displacement.

**End:** (i) when followed by release: First diminution of area of contact between the part of the body concerned and the object held.

(ii) when followed by movement of displacement: First acceleration in the direction of the movement of displacement.

- **DIA** = Insertion of a solid object in a fairly wide aperture.
- **DIC** = Insertion of a solid object in an exactly fitting aperture or insertion of a delicate object in a wider aperture.
- **DIE** = Insertion of a delicate object in an exactly fitting aperture.

16. **DH = Movement or displacement towards (Hin) place of work.**

Movement of an object towards the place where it is to be used.

**Beginning:** Initial movement in the desired direction.

**End:** Cessation of all movement in the desired direction.

- **DHA** = Shortest movement from wrist.
- **DHB** = Movement from elbow.
DHe = Movement from shoulder.
DHd = Movement involving use of whole body.
DHe = Movement under especially difficult conditions.

17 DL = Laying down.
Laying of an object upon some basis of support.
Beginning: first contact of object with its basis of support.
End: complete contact between object and basis of support.
DLa = Deposit of a solid object.
DLc = Deposit of a rather delicate object.
DLc = Deposit of a very delicate object.

18 DD = Dropping.
Every lowering of an object not forming part of the process of carrying it to or from place of work.
Beginning: first sign of lowering movement.
End: Cessation of lowering movement.
DDa = Lowering movement from wrist.
DDb = Lowering movement from elbow.
DDc = Lowering movement from shoulder.
DDd = Lowering movement accompanied by movement of the body (from the hips).
DDe = Lowering movement under especially difficult conditions.

19. DP = Displacement by pushing.
Any movement of an object which does not remove it from its basis of support, which is not part of the process of carrying it to or from the place of work and which is not a movement belonging to the technique of the process (e. g. in grinding)
Beginning: first sign of pushing movement.
End: cessation of all pushing movement.
DPa = Short movement of a light object.
DPc = Long movement of a light object or short movement of a heavy object.
DPe = Long movement of a heavy object.

20. DPR = Displacement by propulsion.
Movement of an object by imparting to it momentum.
Beginning: First movement to impart momentum.
End: Cessation of contact between the part of the body imparting momentum and the object propelled.
DPa = Movement of propulsion from wrist.
DPb = Movement of propulsion from elbow.
DPc = Movement of propulsion from shoulder.
DPd = Movement or propulsion from hip.
DPe = Movement of propulsion with whole body (combined with change of position).

21. DZ = Movement of displacement away from (Zurück) place of work.

Movement of an object away from the place where it has been used to a place where it is not used, but merely stored. If the object is worked upon in this second place, the movement is to be regarded as a movement of displacement towards (DH) that place.

Beginning: Initial movement in the desired direction.
End: Cessation of all movement in the desired direction.

DZa = Very short movement from wrist.
DZb = Movement from elbow.
DZc = Movement from shoulder.
DZd = Movement involving use of whole body.
DZe = Movement under especially difficult conditions.

Group 5. Rest.

Absence of any movement connected with work, unless it is a movement of observation (a. v.).

22. RT = Thinking (searching).

e. g. Reading of a drawing or an order, looking for an object, reflection, etc.

Beginning: End of previous movement.
End: Beginning of following movement.

N. B. This fundamental movement can be further subdivided in any particular case.

23. RR. = Recreation.

All moments of rest without recognizable motive.

Beginning: End of previous movement.
End: Beginning of following movement.

N. B. No subdivision of this fundamental movement is needed.

24. RH = Holding.

Holding of an object.

Beginning: (i) when preceded by seizure: End of act of seizure (GS); (ii) when preceded by a movement of the object: Cessation of all movement of the object.

End: (i) when followed by release: Beginning of relaxing movement (GL) (ii) when followed by movement of object: Beginning of movement of object.

N. B. The duration of the fundamental movement RH is dependent upon other simultaneous movements with the other hand or upon machine-times, and subdivision is therefore impossible.
25. RC = Change of direction.
   Interval of rest while the movement changes direction.
   Beginning: End of movement in one direction.
   End: Beginning of movement in other direction.

26. RW = Waiting periods.
   Moments of rest necessitated by the process.
   Beginning: End of previous movement.
   End: Beginning of following movement.

   Movements producing a change in the position of the body.

27. PS = Standing up.
   Movement of the recumbent body into the kneeling or sitting position, or of
   the seated body into the standing position.
   Beginning: First sign of raising of upper part of body. End: Cessation of all
   movement into new position.
   PSa = Passage from recumbent to kneeling position.
   PSb = Passage from sitting to standing position.
   PSc = Passage from kneeling to stooping position.
   PSD = Passage from kneeling to sitting position
   PSe = Passage from recumbent to standing position.

28. PB = Bending.
   Bending of body.
   Beginning: First sign of bending movement.
   End: Cessation of all bending movement.
   PBa = Slight bending of upper part of body.
   PBb = Considerable bending of upper part of body.
   PBc = Very pronounced bending of upper part of body.

29. PT = Turning.
   Turning of body.
   Beginning: First sign of turning movement.
   End: Cessation of all turning movement.
   PTa = Turning of shoulder.
   PTc = Turning of hip-joint.
   PTe = Turning of whole body (combined with change in position of feet).

30. PW = Walking movement.
   Advance of foot.
   Beginning: First lifting of foot.
End: Completion of act of placing foot on ground or, if a further step is taken, first lifting of other foot.

\[\text{PW}_a = \text{Advance of foot (half a step).}\]
\[\text{PW}_c = \text{Normal step.}\]
\[\text{PW}_e = \text{abnormally long step.}\]

31. \(\text{PL} = \) lying down.

Movement of standing body into sitting, kneeling or lying position, or of kneeling body into lying position.

- **Beginning**: first sign of change in position of body.
- **End**: Cessation of all movement into new position.

\[\text{PL}_a = \text{Passage from kneeling to recumbent position.}\]
\[\text{PL}_b = \text{Passage from stooping to kneeling position.}\]
\[\text{PL}_c = \text{Passage from standing to sitting position.}\]
\[\text{PL}_d = \text{Passage from standing to kneeling.}\]
\[\text{PL}_e = \text{Passage from standing to recumbent position.}\]

**Group 7. Handling of Tools.**

Movements necessitated by the manipulation of a tool or machine tool with the purpose of executing work. Movements not immediately followed by execution, but required as a preliminary thereto, e.g. the withdrawing movement of a file or plane, will also be included under T. In assembling work, the insertion of a screw also comes under this number.

*Note.* The following sub-division of tool movements is purely an initial proposal. Investigations in connection with activities which have not yet been subdivided according to our present method, will require to be developed and modified. On this account no attempt has been made to sub-divide the various fundamental movements.

32. \(\text{TB} = \) Drilling.

A \(90^\circ-110^\circ\) turn of the fore-arm (e.g. in drilling nails, screwdriving, fixing electric switches).

- **Beginning**: first sign of turning movement.
- **End**: Cessation of turning movement.

33. \(\text{TP} = \) Pressing and pulling.

Exercise of pressure or of pull e.g. pulling chain of hand-crane, guiding a compressed-air hammer, a hand-drill, etc.).

- **Beginning**: first sign of incipient pressure or pull.
- **End**: Cessation of pressure or pull.
34. **TI** = Insertion.

Insertion of tool in piece of work or vice-versa, e.g.: sewing, threading a needle, insertion of screw-driver or spanner into screw.

**Beginning:** First diminution in speed of previous movement of displacement.

**End:** Beginning of following movement.

35. **TG** = Guiding.

Movement of a tool in a certain direction (e.g. guiding of soldering or filing-irons, engraving, steering of bicycle, etc.).

**Beginning:** Initial movement in the desired direction.

**End:** Cessation of movement in the desired direction.

36. **TD** = Digging

  e.g. shovelling, tossing with spade.

**Beginning:** Beginning of movement in desired direction.

**End:** Cessation of movement in desired direction.

37. **TF** = Filing and planing.

  Movements to and fro in a straight line e.g. planing, filing, scraping, etc.

**Beginning:** first movement in desired direction.

**End:** end of movement in desired direction.

38. **TH** = Handle-turning.

  e.g. movements with hand-drill, winch, etc.

**Beginning:** First movement of handle.

**End:** Completed movement of handle.

39. **TA** = Affixing.

  Affixing of labels and similar work.

**Beginning:** first contact with object to be affixed.

**End:** Completed affixing of object.

40. **TC** = Changing of place.

  In adjusting processes.

**Beginning:** first sign of movement of object in question.

**End:** Cessation of movement of object.

41. **TX** = movements with brush.

  Rectilinear movement of a tool accompanied by a slight turn of the wrist.

  e.g. use of painter’s brush, mason’s trowel.

**Beginning:** First movement in desired direction.

**End:** Completion of movement in desired direction.
42. TR = Rotation (lever movements).
   Turning of lever on its fulcrum.
   (e.g. lever-press, lever-switch, lever-shears, lever drill, chisel, machine-drill and adjustable spanner).
   Beginning: First movement of lever.
   End: Completed movement of lever.

43. TS = Striking movements, accompanied by a swing.
   Turning movement of wrist, elbow or shoulder.
   (e.g. sledge hammer, pick-axe, mason's trowel, etc.).
   Beginning: Beginning of swing.
   End: Completion of swing.

44. TT = Treading.
   Treading movement by the feet to impart force to a tool (e.g. lathes, drills etc. worked by foot; pedalling in cycling, foot-brakes, action of foot on spade).
   Beginning: first movement of the object trodden.
   End: cessation of movement of object trodden.

45. TPR = Pressing.
   e.g. pressure in setting and honing.
   Beginning: First application of pressure in the desired direction.
   End: Cessation of pressure

46. TW = Wiping.
   e.g. in cleaning work.
   Beginning: Contact of wiper with object
   End: Cessation of contact between wiper and object.

47. TV = Vibrations.
   Quick short movements to and fro.
   (e.g. certain movements in engraving)
   Beginning: Commencement of movement.
   End: Cessation of movement.

The above are some suggestions for sub-dividing work into fundamental movements. It is however impossible to describe the different movements in a few words without ambiguity.

We now propose to prepare schedules for the different fundamental movements which will show in the form of illustrations the exact course of each movement. These will also indicate the important variants, such as the frequency curves of times recorded under varying conditions. They should thus afford a complete survey of human work and the laws which govern it.
VI. PROTOCOL OF WORK.

In the execution of a process of work several fundamental movements are often made simultaneously. Thus the right hand may execute one fundamental movement, while the left hand is executing another, and at the same time the body may change its position. The protocol must therefore contain a number of columns corresponding to possible fundamental movements. In the commonest cases each person participating in the work must be given the following columns:

1. Right hand.
2. Left hand.
3. Head (Observation).
4. Trunk (change of position).
5. Right leg.
6. Left leg.

Entries will be made in the columns as each case requires. For instance, Columns 4, 5 and 6 will not be needed in the case of a piece of work done sitting. If there is no observation of a kind which does not at the same time direct the hands, Column 3 may be dispensed with. If both hands work together throughout, their movements may perhaps be registered in a single column.

Each column must contain the following indications:

1) Letter denoting the fundamental movement.
2) Piece of work or tool to which the fundamental movement refers.
3) Absolute time (i.e., total time starting from the beginning of the work).
4) Individual time (i.e., duration of particular movement).

The foregoing is best explained by an example. The film upon which the following analysis is based may be obtained from the Institut für Kleinzeitforschung Berlin N. W. 7.

In this example the work to be done consists of assembling a compressed-air hammer from the separate parts placed ready to hand. The hammer consists of the cylinder in which the piston has to be inserted. The cylinder must not be locked in the vice until the holes are level. The piston must be cleaned and greased before insertion. Two gudgeon-pins are then introduced into the cylinder and also an intermediate ring. A valve is then put together from three parts and inserted in the upper part of the cylinder. The handle is then attached and screwed fast. When the hammer has thus been assembled the retaining pin is taken out. The hammer is then turned round and a safety ring attached by means of a special tool. The work ends with the removal of the hammer from the vice.

This work involves the following fundamental movements:
Fundamental movement

<table>
<thead>
<tr>
<th>Observation by touch</th>
<th>OT</th>
<th>left hand</th>
<th>right hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasping (Seizing hold of a part)</td>
<td>GS</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Grasping (letting go of a part)</td>
<td>GL</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>Grasping (re-grasping or passing into the other hand)</td>
<td>GR</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Movement in space towards piece of work</td>
<td>SH</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Movement in space away from piece of work</td>
<td>SZ</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Displacement, insertion of one piece in another</td>
<td>DI</td>
<td>5</td>
<td>11</td>
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<tr>
<td>Displacement, moving of a piece towards place of work</td>
<td>DH</td>
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<td>16</td>
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<td>Displacement, laying down of piece</td>
<td>DL</td>
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<tr>
<td>Displacement, pushing</td>
<td>DP</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Displacement, away from place of work</td>
<td>DZ</td>
<td>2</td>
<td>8</td>
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<tr>
<td>Rest, holding of a piece</td>
<td>RH</td>
<td>8</td>
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<tr>
<td>Rest, waiting</td>
<td>RW</td>
<td>16</td>
<td>12</td>
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<tr>
<td>Handling of tools, cleaning</td>
<td>TW</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Handling of tools, pressing or pulling</td>
<td>TP</td>
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<td>1</td>
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<tr>
<td>Handling of tools, handle-turning or screwing</td>
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<tr>
<td>Handling of tools, movements with brush</td>
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Total with both hands = 274

Summary showing sequence of work and number of movements:

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<td>Clamping of cylinder into vice</td>
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<td>Cleaning of piston</td>
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<td>Greasing of piston</td>
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<td>Insertion of piston in cylinder</td>
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<td>Placing of piston level with hole, and clamping</td>
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<td>Introduction of Pin N. 2</td>
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<td>Placing of intermediate ring</td>
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<td>Assembly of valve</td>
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<td>Placing of handle</td>
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<td>Screwing up of handle</td>
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<td>Locking of handle</td>
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<td>Turning hammer round</td>
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<td>Affixing safety ring</td>
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<tr>
<td>Removal of hammer from vice</td>
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Both in the above and in the following table, the times given represent thousandths of a minute.
The following schedule shows the separate fundamental movements which were observed in the course of this work as shown in the above-mentioned film. The dividing lines correspond to the sub-division of processes as given in the preceding table.

**SEQUENCE OF FUNDAMENTAL MOVEMENTS.**

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<th>Right hand</th>
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<td>Cylinder</td>
<td>9</td>
<td>RW</td>
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<tr>
<td>GS</td>
<td>» 13 »</td>
<td>4</td>
<td>S</td>
</tr>
<tr>
<td>DH</td>
<td>Cylinder and vice</td>
<td>29 » 16</td>
<td>GS »</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TH »</td>
</tr>
<tr>
<td>DP</td>
<td>Cylinder</td>
<td>37 » 8</td>
<td>RW »</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TH »</td>
</tr>
<tr>
<td>RH</td>
<td>Cylinder</td>
<td>70 » 33</td>
<td>GR »</td>
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- **SH:** Cylinder 9
- **GS:** 13 4
- **DH:** Cylinder and vice 29 16
- **DP:** Cylinder 37 8
- **RH:** Cylinder 70 33

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<td>GS</td>
<td>Vice</td>
<td>1422</td>
</tr>
<tr>
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<td>GR</td>
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<td>RH</td>
<td>Hammer</td>
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</tr>
<tr>
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<td>1505</td>
<td>SH</td>
<td>Handle of vice</td>
<td>1486</td>
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<td>GS</td>
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<td></td>
<td>1587</td>
<td>SH</td>
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<td>Ring gripped by pincers</td>
<td>1606</td>
<td>GS</td>
<td></td>
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<td>DI</td>
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</tr>
<tr>
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<td>Ring and pincers</td>
<td>1669</td>
<td>DI</td>
<td>Ring made fast to</td>
<td>1669</td>
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Note: The text appears to be a list of movements and objects with corresponding times, possibly indicating a procedural task or experiment.
Analysis of Fundamental Movements

1: Grasping.

GS Arranged according to times.

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<thead>
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<tbody>
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<td>436</td>
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<tr>
<td></td>
<td></td>
</tr>
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<td>74</td>
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</table>

Mean value $74/15 = 4.95$  Mean value $77/16 = 4.8$

excluding $1569 52/15 = 3.46$

The most frequent and the mean values are low, so that the workman may be assumed to have worked at his maximum rate. The shorter times recorded by the right hand show that he was right-handed.
2° Movements in space.

SH arranged according to times.

<table>
<thead>
<tr>
<th>Individual time</th>
<th>Left hand</th>
<th>Total time</th>
<th>Right hand</th>
<th>Total time</th>
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<td>162</td>
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Mean value 114/15 = 7.6

The SH times suggest the same conclusions as those deduced from GS.

3° Re-grasping.

GR arranged according to times.

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<th>Total time</th>
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<td>Individual time</td>
<td>Total time</td>
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Mean value $173/18 = 9.6$

Mean value $196/22 = 8.9$

This list also confirms the conclusions drawn from GS and SH times.

4° Rest times.

RW arranged according to times.

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</table>
RH arranged according to times.

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</tbody>
</table>

The considerably larger number and longer duration of RW and especially RH movements with the left hand show that the workman was right-handed. The right hand is unemployed for only 0.222 minutes out of 1.757 minutes = 12.5\% During this time the left hand is busy so that the total time includes practically no rest periods.

The foregoing table furnishes some indication of what can be deduced from the figures obtained by the analysis and we now propose to deal with a few of these points.

a) Normal speed.

The chief indication that the workman is purposely dallying over the work consists in the considerable number of small resting-times between the different movements, pauses which are hardly perceptible by direct observation. In the above table these "rest-waits" (RW) are shown according to their length. If they are compared with the whole table, it will be found that when one hand is resting, the other is generally occupied. In the above case, therefore, the total time taken was not drawn out.

A second indication of speed-rate consists in comparing individual movements with normal times. The GS and SH movements are best suited for this purpose. As far as can be judged from experiments so far made, the times in the example given coincide almost exactly with normal times.

b) Efficiency of the workman.

A numerical statement of the efficiency of the workman under observation is possible as soon as a sufficiently large number of experiments has given us normal times for the majority of fundamental movements. Let us then suppose that $ta, tb, tc =$ total times of fundamental movements $a, b, c$ in the work analysed. $pa, pb, pc =$ ratio of average times for fundamental movements to normal times. $P =$ efficiency figure of workman under observation in respect of the work analysed.
Then \( P = \frac{t_a \times p_a + t_b \times p_b + t_c \times p_c + \ldots}{t_a + t_b + t_c} \)

If normal times are lacking for certain movements, the corresponding value is \( p = 1 \).

c) Rationalisation.

The work studied can in the main be improved as follows:

a) Elimination of unnecessary movements.

In the example given above, for instance, various parts were seized in the left hand and then transferred to the right hand, which did the subsequent work of assembling. (see 223, 405, 415). The film shows that these unnecessary grasping movements of the left hand were due to the fact that the particular pieces lay on the left of the vice. If they were placed to the right of the vice, the movement of re-grasping and movement through space of the right hand would disappear. The total times of these movements give us at once the possible saving of time, and without a fresh examination of the existing material. If, for example, the placing of the parts on the right of the vice instead of on the left demands a special expenditure of time beforehand, it can at once be ascertained whether this is justified by the possible saving of time.

b) The abbreviation of long times.

It is a matter for study whether comparatively long times taken over individual movements are due to conditions of work which can be changed. For example, the GS movement of the left hand in the total times 436 and 504 and the GS movement of the right hand in the total times 673, 746 and 1569 are disproportionately long. In the first four cases the film shows that time was occupied in picking up small objects which lay flat upon a plate. If these parts had been placed in readiness on a board, the times of these fundamental movements could have been substantially reduced.

Each of these improvements is trifling in itself, but their sum may amount to a considerable fraction of the total working time.

A special advantage of the above method is that any possible improvements strike the analyst in the course of his study and he can determine numerically the amount of time saved.

R. THUN
THE CONTRIBUTION OF THE CINEMA TO TIME-STUDIES

(from the Italian)

A) IMPORTANCE OF WORKING TIMES.

The perfecting of manufacturing processes is no doubt an essential condition of all industrial development, but in the pursuit of this goal we must keep ever in mind the necessity of reducing costs of production and introducing into cycles of operations those prototypes or standards of manufacture which will alone secure the best results. The very aim and object of scientific management or — to use a more strictly correct term — the science of the rational organisation of production — is to find that ideal combination of factors which will furnish the maximum output at minimum cost after defining and analysing those elements which have a decisive influence upon this result. These factors, which are now well known to scientific management experts, are the following:

a) Time of execution;

b) material from which the finished product is derived;

c) the plant by means of which the product is prepared, whether semi-automatic machinery or simple hand-tools;

d) the workman, who is the agent of production. This is the most important factor, although the most generally overlooked;

Editorial Note = Our readers will not fail to note the analogy between Signor Grillo’s article and the preceding article by Herr Thun. More particularly in the parts demonstrating the application of the cinema to time-studies, the resemblance is too close to escape notice. When we first observed it, it seemed to us that the publication of both these articles would amount to a duplication of work. On reflection, however, we decided to publish both, the resemblances between the two having a most natural explanation.

Herr Thun, the Director of the Berlin «Fachfilm», is an expert on the subject, as we know from his published works and from the successful practical applications of the principles contained therein. We requested him to furnish the I. E. C. I. with a study to serve as a basis for the work of a committee of experts appointed to collaborate with the Institute in the question of the use of the cinematograph in connection with rationalisation.

Among these experts, Signor Grillo, whose notable studies on the same subject had attracted the Institute’s attention, shared Herr Thun’s views so closely that in the illustrative part of his article, he has openly retraced the ground covered by his German colleague. In his introduction Signor Grillo explicitly declares that Herr Thun’s work on the application of cinema technique to time-studies has supplied a long-felt need.

We may therefore cease to be surprised at the analogy between the two contributions and rejoice to find in the pages of our Review two recognized experts in absolute agreement upon the methods to be followed in employing the cinema for time study, that is, in determining the elements which constitute the very basis of rationalisation.
e) the quality of the article. Even in the simplest categories of articles there is a certain prototype or standard, whether clearly defined or not, below which the quality is declared to be inferior.

In order to show the importance of these different factors, it may be useful to say a few words about each of them. In this way the problem of production will receive an organic framework and the importance of the element of time, which in the subject of the present chapter, be more clearly perceived.

Time.

This is the universal unit of measure, the basic unit which, in the most dissimilar industries and in widely different places and milieux, remains absolutely constant and can thus be employed in the study of the duration and development of a cycle of operations. The only factor in production which is applicable to all circumstances, it is considered as the universal unit of measure.

Material.

In the manufacture of any article at all, economy of the material used is a most important consideration. Economy of material is favourably affected by the care taken of it and by the methodical preparation of his work by the worker. If the handling of material could be as scrupulously controlled as the movement of funds by a bank cashier, every factory would effect considerable savings. If an official is careless or negligent in the handling of funds, he pays for his mistake with the loss of his job, but the manipulator of material may continue to waste large sums of money every year and still be counted a good workman. In some factories, boot factories, for example, the problem of economy in materials has been studied closely and each cutter is paid a wage based not on his cutting speed but on the amount of leather he saves.

This system is possible because the cost of a pair of boots depends more upon the cost of leather than upon the price of labour. Similarly, in glove factories, and factories in general which produce articles from hides, skins and leather, the cutters could produce 20-25% more in quantity if they were not continually compelled to study the needs of economy. As, however, the price of the labour of cutting leather goods is only 10% of the price of the raw material, it will be understood that slow and careful work is all in the interests of the manufacturer.

The cost of the raw material and its influence on total cost of production are in general deserving of close attention. Often special enquiry is necessary to determine the standard quantity of material necessary for a given output or to ascertain whether the saving of time effected by rapid execution is not more than outweiged by the resultant wastage.

Plant.

The influence of plant, whether simple or complicated, on quality and quantity of output is obvious to the humblest worker. Plant adds to the worker's capacity to produce furnishes him with means of executing work with exactitude, removes the necessity for revision, supplies the means of checking and controlling work and shortens the time taken over it.
Nevertheless, improved plant, although it usually realises a substantial gain
is often very expensive and adds greatly to the cost of production. It therefore
requires to be carefully studied beforehand.

Is it always desirable to replace old plant by new? The answer to this question
must be based on consideration of two factors, the saving of time in the cycle of
operations and the quality of the article. Moreover, as a machine is often less easily
adapted to individual variations than a brain-directed hand the human factor must
also be taken into account when answering this question.

The workman.

Much has been written of late about the workman. The «psychology of
the worker» has been a subject of special study as if there were a separate psychology
for the man in overalls and another for men working, for example, in an office.
Every one who works regards the advantages to which he aspires from a particular
point of view, which is determined by his quality of official, skilled worker, artisan
or apprentice.

In planning a new organisation, in studying the development of a cycle of ope-
nations, in explaining to operatives the methods to be followed and in giving them
suitable encouragement, the technical expert should always take account of human
limitations when demanding of them a certain physical and mental effort. The que-
ston of the physical effort to be exacted is associated with the question of fatigue
which enters in greater or lesser degree into all work. In the application of the
system of standardised processes men who are found unsuited for one kind of work
are given other work, on the principle that every task demands special physical
and mental aptitudes. Suitable and reasonable standards are fixed for each opera-
tion and ensure that each workman can do his job without injury or danger. No
doubt some work is heavier than other, or demands special application, but in most
factory processes, the heaviest work is now done by machinery. The margin
allowed for fatigue may be determined by a study of the times upon which the stan-
dard times are based.

The encouragement given to workmen in work done according to standardised
times varies with the mentality of the workmen themselves and must in no case
urge them to over-exertion and fatigue. Piece-rates, bonuses and similar systems
are often expedients which are not only unsuited to modern factory conditions but
even prejudicial to efficient production. A sound principle of organisation is to
proportion wages to relative quality, i.e. to the time units which characterise a
man's work. The «time» factor is therefore a reliable element in calculating the
efficiency of the «human» factor.

The quality of the article.

In most industries the factor of «quality» is an essential condition, since every
article must have its standard quality. In actual practice, however, no manufactur-
er has an absolute standard quality; the standards vary with the caprice of customers,
the commercial traveller, even the sales agents. In any organisation study there-
fore, it is essential to establish and define the standard qualities of the article. When
this study is undertaken in a factory with the aid of a technical expert, the industrialist usually tends to urge the superior quality of his article as a reason for limiting the output. It is always to be noted that quality improves after the rationalisation of the manufacturing cycle owing to the great attention paid by the workman to his work when his wage is meticulously calculated by a study of times, and also owing to the stricter control over workmen and materials.

As a general principle, quantity may be said to be sacrificed to quality; in other words, quantity diminishes in relation to quality, not in direct ratio, but in a measure which varies with the method of production.

The essential purpose of time-studies is to lessen if not to eliminate this quantitative reduction of output by examining details which, if properly studied and exploited, should make it possible to combine high quality with maximum output.

B) Time-study with a watch.

Time-study then is the fundamental principle of scientific management. It permits a microscopic analysis of working processes and the elimination of « passive » times.

Time-study or « chronometrage » may therefore be defined as the scientific analysis of the processes and tools required for a given task — which analysis fixes to the smallest detail the best method of work and measures exactly the time needed for its execution. The first advantage of this form of investigation is that it enables the observer to mark the recurrence of many elementary movements in a number of operations. Consequently, it is possible absolutely to standardise fundamental movements, to determine their « duration » and utilise them in all other operations. Thanks to various combinations of these movements means can be found to reduce fatigue and the time required to perform the most complicated tasks.

The study of elementary times was a discovery of Taylor's, who realised that it required to be supplemented by three essential factors:

a) exact instructions to workmen;

b) a reward to workers who do more than they need;

c) the putting and keeping in perfect order of everything necessary for the execution of work in order that the latter may encounter no obstacles.

The analysis of working times when it constitutes the basis of a rational reorganisation of an industry is a very delicate operation. It is normally carried out by means of a chronometer. In order to record times, the operator chooses a skilful workman, watches his work, decomposes it into its essential phases and notes the separate elementary times which make up the total time taken over the operation. The duration of each study is a question of calculation and skill and may vary from a quarter of an hour to several days. Except for the purpose of checking conclusions already arrived at by experimenting with various movements or ascertaining the influence of some variable, studies of a quarter or half an hour are not enough to warrant any final conclusions. In so short a time the conditions of work may be exceptionally favourable or unfavourable and the workman under observation may be working with abnormal vigour or the reverse. Even when the conditions are typical, the observer cannot extract the essence of the problem of which he is
noting down the particulars, if a cycle of time elements is being executed specially. It is therefore never advisable to draw any final conclusions from standards established from a rapid study.

The recording of times sounds a simple matter, but it calls for both experience and intelligence on the part of the observer. When reading the chronometer, his mind must act instantaneously so as to register the reading at the moment when the corresponding time-element is completed. At first this duty of registration occupies the observer's whole attention, but as he gains experience his mind records the watch readings more and more unconsciously and finally the image of the reading is imprinted upon his mind for just so long as is necessary to register it. He notes and records the time element of work as mechanically as he buttons his coat. The fact that his sub-conscious mind is pre-occupied with the time-elements and seizes them just long enough to record them sets his conscious mind free to analyse continuously what is passing in front of his eyes. It is the same with the stenographer who makes mechanical signs without taking her eyes off the speaker or with the pianist who reads and interprets music while his fingers pass automatically up and down the keyboard.

Skill in simultaneously observing and recording every detail affecting times and in correctly registering the readings of the chronometer are the surest basis of a time study and therefore an effective contribution towards the definition of standard times.

**C) The aid of the cinema**

The resources of modern technique — in the form of the cinematographic camera-present the scientific organiser with a perfect instrument of investigation and one which assures him an exact measurement of times and facilitates the research work necessary to analyse a cycle of operations.

Until quite recently not much use had been made of the cinema in the technical field — due possibly to the special knowledge required and the precautions involved, but also because the fundamental principles of its technique had never been properly studied.

By his book « Der Film in der Technik », which is undoubtedly a notable contribution to this new use of the cinema, Herr Thun, the Berlin engineer, has been the first, we think, to make good this omission.

The cinema can play many most useful parts in the sphere of work studies. If this new instrument is employed with the necessary understanding and if the material to be observed is properly arranged in advance so that the film contains all the elements required for the particular study, it will always be found possible to reach some concrete result and a substantial saving will be effected in the use of this costly device, which would be quite prohibitively expensive if it were necessary to take a large number of useless photographs of the same phase of work from different points of view.

Before all else cinema technique helps to determine the movements which are characteristic of each working operation. Unlike the chronometer with its elements of uncertainty, the film furnishes an absolutely reliable record granted the operator
makes the necessary arrangements beforehand, and it indicates not only the times required by the analysis, but also the «passive» times or intermediate times between the different fundamental movements. When he comes to study the film, the organiser sees the faithful reproduction of all the phases of work as done in the factory and he has no need to draw upon his memory or refer back to hasty notes in order to recall even after the lapse of time the smallest detail of the operation analysed.

Once given the fundamental movements, which the film can reproduce indefinitely, it is possible for similar industries, without divulging trade secrets, to exchange their experience and thus facilitate the establishment of those standards which are the organiser's constant preoccupation.

The fact that many fundamental movements recur in nearly every trade, allows us to fix rules as to the employment of time and consumption of energy in respect of each fundamental movement. The values obtained vary, it is true, within certain limits, but these limits are independent of the process of work. The rules therefore will enable us to note substantial differences in processes as executed, for instance, by workers in different countries, and the rationalisation expert will be able to draw conclusions in which due account will be taken of local factors and to fix the necessary criteria for obtaining identical results in different countries.

We shall omit — as being irrelevant to our present subject — the analysis of the possible services of the cinema in connection with psychological or physiological investigations, in determining the factor of «human efficiency», in reproducing the character of the different industries and in all the other problems pertaining to human labour.

On the other hand, we must say a few words about the technique of the cinematograph in its application to the studies with which we are here concerned, at least in so far as is necessary in order to understand the rational and effective use of this new instrument.

10 The Camera.

Any camera can be used for taking scientific photographs, provided the spool is large enough. In order to secure an uninterrupted succession of fairly lengthy processes of work, the spool should be able to hold 120 metres, and preferably 300 metres of film.

The shutter must be adjustable, with a maximum aperture of 180° so as to be able to take pictures in poor light. Sometimes very short exposure is needed and it must therefore be possible to contract the diaphragm to an aperture of only 5 mm. diameter.

If the camera is actuated by a motor, the latter must guarantee absolute regularity, this kind of photography necessitating a perfectly constant rate of turning. Tachometers cannot always be used at the same time as the camera; moreover they are not always sufficiently accurate as is necessary if the film is to be used to measure times. In some cases use may be made of the ordinary commercial tachometer.

For the study of most processes a rate of 1000 pictures a minute, or 16 2/3 per second, is thought sufficient. A higher rate is only necessary in order to observe very rapid movements, as some of a typist, and it is sometimes advisable to reduce
the speed of turning to 500 or even 200 photograms a minute. Such a rate is indicated for analysis of very long processes or when film must be economised. Very short pictures are taken when it is only desired to record on the film the reading of the chronometer; in such cases the result is more accurate than is obtainable by ordinary chronometrage, and the cost of the film used is negligible. The camera must permit of the image being regulated directly by the view-finder.

For the purposes of scientific cinematography or work study photographs, use may be made of the ordinary stand with universal joint, which is found of great assistance to «shoot» a workman who is frequently changing his position. The devices required for artistic photography, the adjustable shutter, the counting device and the reversible axis, are not strictly essential in work studies, though the reversible axis may be useful for taking more than one picture on the normal field of view, in order to economise film. The advantage of saving film, however, is usually outweighed by the inconveniently small size of each picture. The above indications apply to cameras used to study human movements and, in order to examine phases of mechanical work, the technical requirements are quite different, especially as regards the choice of camera accessories. In this case the number of pictures taken per minute may be several thousands and this involves the use of devices which, though they may also serve to study times, have no advantages over the ordinary apparatus.

In order to examine even the quickest human movements a turning-speed of 150 photograms per second is sufficient, whereas for the study of the movement of machines the figure may reach 1500 pictures a second. Often use is made of the special Chanz and Rumpf cameras and of the Einemann optical devices. The light is thrown on to the object or person by a system of electric sparks of a specific duration.

2° Lighting.

As a general rule pictures should be taken by natural light. If this is insufficient, the minimum of artificial light should be employed so that the characteristic features of factory work may not be influenced or altered during the taking of the film. Accordingly, the camera should have a very strong lens.

If artificial light is absolutely necessary, it must be made to resemble natural light as closely as possible. For instance, if the light of the factory is diffused, the same effect must be given to the artificial light. The photography may suffer somewhat by a loss of light and shade, but the result will be far better, because the workman will be working under conditions as near as possible to the normal. Artificial light should be installed some time before the pictures are taken so that the workman may accustom himself to even slight changes in conditions. Incandescent lamps are preferable to arc lamps, but if the latter are unavoidable, special carbons will be used giving a yellowish colour, and the source of light can be masked, by a simple white sheet, for example.

3° Measurement of photographic time.

The film having been shot, we must be able to read the elementary times taken to perform the work which is being analysed. If the operator has been able to
secure a uniform rate of working movements, he will be able to record with sufficient accuracy the times taken from the speed with which the film has been turned. As we have already said, a rate of turning of 1000 m. a minute is equivalent to 16 3/4 pictures per second, and, to know the duration of the relative time of execution, we need therefore only count the number of photographs. If the positive is to be projected in order to ascertain these times, the projecting apparatus need only be furnished with a counting-device and the details of time are given us as it were, automatically.

It should be noted that by this system the separate photograms are not numbered, and this may be a somewhat serious inconvenience to the observer, but, to avoid this drawback, the positive need only be printed on a strip of film of which the parts corresponding to the separate photograms are all numbered. Such procedure necessitates, of course, the observance of certain precautions in developing and fixing.

Generally, however, when a process of work is filmed, the elementary times are far from uniform and the times of execution must therefore be registered by the photographs themselves. This is done by including in the field of view a watch or clock with a special dial of suitable size. The dial must be black and the divisions into hours, minutes and seconds must consist of white lines. The hands, which must be thin enough to be discernible between any two divisions on the dial, must be white also.

The hands must turn at a special speed owing to the average rate of turning the film, which may be 1000 m. a minute, or 16 3/4 pictures per second. This speed is sufficient to photograph processes of work of which each phase has a duration of not more than 5/1000 th of a minute. If the beginning and end of the phase have to be determined, the clock must record readings of 0.05 x 0.005 = 0.00025

minutes. Greater precision could not be obtained even with a shutter of 120° and more, as it would be impossible to reproduce clearly a hand moving round at that speed.

The best clock for the purpose is a Morse clock in which the speed-regulator is replaced by a gramophone-regulator. This arrangement giving an accuracy of 95%. It has three hands, of which the slowest revolves 0.5 times a minute, the second 5 times and the third thirty times. The exactitude of the reading depends upon the size of the clock in the photograph which varies from 1/100th to 1/500th of the circumference of the dial, so that the quickest hand can be read to between 0.0005 and 0.0002 minutes. Clocks have lately been made to turn at 1/3 of this speed; these avoid the trouble of multiplying the reading by 2 and they give sufficiently accurate readings for most purposes.

In most modern analysis of work it is not the custom to note the time on each photogram, but only on those which mark the beginning and end of a certain operation. In this case the clock must turn more slowly and must mark longer intervals of time, so that it is not necessary to read each passage of the hand through the zero point. All these points have been taken into account in the manufacture of special clocks, which are well suited to their purpose; hands which move too quickly or too slowly can be removed and clocks are provided with a choice of dials
of different sizes, so that the clock can be proportioned to the subject of cinematographic study.

In analysis of long duration, it may be useful to record the time by an ordinary clock, but in order not to crowd the photograph, it is advisable to record this time in the notes which accompany any cinematographic operation.

It is sometimes difficult to place a clock within the picture and, instead, a special clock can be attached to the camera and photographed by a special lens passing through a small prism; or by means of mirrors, a clock can be photographed by the main lens, the dial of the clock being arranged on a different plane from the subject of the photograph.

The disadvantage here is that the camera cannot be moved about to suit requirements and it is a complicated matter for the operator to re-arrange mirrors. Clocks with automatically moving numbers instead of hands have not as yet been used, because the numbers would have to change within the space of $\frac{1}{100}$th of a second, and no such clock has yet been made.

4° Photographical technique.

Before filming a work study, note must be made of any special peculiarities in the subject of study, the time and place of photography and any other information which may affect the circumstances in which the operator works.

As regards the person photographed, we must note the name and Christian name, age, sex, height, weight and state of health, especially whether he has had previous illnesses or met with any occupational accident.

As regards time, note must be taken of the season, date, hour of the operation and of the hours worked in the factory.

Further, mention should be made of the cubic air space, temperature and humidity of the room, as well as a detailed statement of the weather conditions prevailing.

The wages system, staff payment in general, holidays, strikes and, generally, any circumstances that may affect the relations between employer and employee, are all indications of value to the scientific organiser. In addition to these special particulars, the notebook should also include a detailed account of the work that is being studied and of the methods employed in its execution.

In «turning» the film, the camera should not be shifted beyond what is absolutely necessary to observe the most extended movements, and any changes of position must be made most carefully, so that the film may be as clear and coherent as possible when it comes to be examined later. Moreover, any special arrangements necessary and any essential changes in the position of the camera should be provided for in advance. As a rule the photograph need only be taken from one position; if some element is thereby inevitably excluded from the picture, it is generally possible to deduce its importance from secondary indications. Sometimes, however, the masking of movements may necessitate taking the photograph from several positions, which of course greatly adds to the consumption of film.

It may be found convenient to take the picture from two different points
with two cameras absolutely synchronized by mechanical or electrical means. Sometimes, in order to avoid wasting film, mirrors can be used so as to allow a single camera to take the picture from more than one angle. It is for the specialist to decide in each particular case which method to employ.

5° Preparation of the film.

The printing of the film calls for no special chemical treatment. In dividing the pictures, care must be taken not to lose any, since every one may be of value to our study. Should the sacrifice of a few photograms be unavoidable, their number should be exactly determined and they should if necessary be replaced by a piece of blank film. The positive should if possible, be of uninflammable material, so that no special precautions need be taken against fire when they are being studied. The prints should be thin and soft — thin, in order that the film may be projected with weak illumination and thus not incur the risk of rapidly cracking under excessive heat; soft, in order that detail may be picked out in the shaded as well as in the strongly illumined parts of the picture. If the printers are not specialists in scientific films, their attention must be drawn to all these points. The positives must always be kept closed in special tins, so that they do not dry up and crack.

D) Utilisation of the film.

The photography of our subject is but part of the work and must be supplemented by the analysis of the cycle of operations by the organising expert. In order to use the film for this purpose, four different methods may be employed:

1° Projection of a normal number of photograms;
2° projection of separate photograms;
3° curves indicating the successive movements;
4° direct observation of the film.

If we project the film in the normal way, the movements photographed will be reproduced at their actual speed. This will furnish us with the same details we see by direct observation with the eye, with the added advantage, however that on the screen we can repeat whatever movements interest us as often as we like, whereas in actual fact a workman would find it impossible to repeat a succession of movements in an absolutely identical manner. Thus the cinema offers an advantage which no other means could furnish.

Nevertheless, the details of a workman’s movements are of especial importance and these necessitate a projection of photograms one by one.

For this purpose a small camera is used with moderate luminosity. By means of a handle attached to the cylinder, the camera can be so regulated that each turn of the handle brings the next photogram. If the handle is turned quickly or in jerks, we get the impression of a very slow movement, comparable to that derived from the slow-motion process. The projection of the movements by jerks is not a disadvantage, since it really brings out the characteristics of such movements and helps to determine the duration of the fundamental movements we shall shortly be describing.

Certain investigations of the time-observer require a bird's eye view of the whole
succession of movements. This is obtained by graphs, the films being projected picture by picture upon a sheet of paper pinned to a drawing-board and the important positions (finger, wrist, shoulder, head, etc) being marked by dots. These dots are then joined by lines which together make up the desired graphs. In order to distinguish clearly the different curves, it will be well to use different-coloured pencils and to join up the successive dots by lines as we go along; otherwise the intersection of lines and the complicated execution of a movement may make it difficult to draw an accurate curve at the end. By this method the experienced observer will be able to obtain a graph of any movement that interests him and the results are more satisfactory than those furnished by the photography of parts of the body the movements of which are shown by small electric lamps.

As regards direct observation of the film — the fourth method of utilisation to which we referred above — this can be made either with the naked eye or through a magnifying glass.

The advantage of this method is that the succession of pictures can be regulated by hand and one photogram can be compared with another. Certain secondary characteristics of movements can sometimes best be observed by this means, while it is also a convenience to be able to make our study seated comfortably at a table in a well-lit room. In this case, however, it is essential that the photograms should be numbered, so that the observer may at any moment note the order in which movements follow each other and calculate their duration. If films are to be observed directly, it is not expedient to place a clock within the photograph, since it will either take up too much space or, if small, require a very strong magnifying-glass to read it.

**Fundamental movements.**

We may now pass on to the examination of « fundamental movements », which are the smallest elements in a movement initiated by an effort of the will.

According to a system which is now preferred by the experts in scientific management, fundamental movements are divided into the seven following groups:

1° *Observation*, which includes all fundamental movements denoting the imparting of a sensation;

2° *Grasping*, comprising the fundamental movements which establish junction or separation between a part of the body and an object;

3° *Movements in space*, i.e. movements of a part of the body which are not directly connected with the object;

4° *Displacement*, movements of the body in direct connection with the movement of an object or which result in such movement;

5° *Rest*, signifying the absence of any movement relating to the work;

6° *Change of position*, which groups together all movements which determine a fresh position of the body;

7° *Handling of tools* — movements necessary to the manipulation of tools or the handling of machine-tools.

As a rule, every fundamental movement can without any difficulty be classified in one or other of the above groups, but only an expert can say to which category certain of several similar characteristics movements should belong.
NORMAL TIMES OF FUNDAMENTAL MOVEMENTS.

<table>
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<td>15</td>
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<td></td>
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<td>Movements in space</td>
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<td>1. Towards object of work</td>
<td>ST</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>2. Waiting</td>
<td>SW</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>3. Away from object of work</td>
<td>SZ</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Displacement</td>
<td>13</td>
<td>1. Lifting</td>
<td>DL</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>2. Rotating</td>
<td>DR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>3. Inserting</td>
<td>DI</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>4. Towards place of work</td>
<td>DH</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>5. Depositing</td>
<td>DD</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>6. Lowering</td>
<td>DLO</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
<td>7. Pushing</td>
<td>DP</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>8. Throwing</td>
<td>DTH</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td>9. Away from place of work</td>
<td>DZ</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Rest</td>
<td>22</td>
<td>1. Thinking (seeking)</td>
<td>RT</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>2. Recreation</td>
<td>RR</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
<td>3. Holding</td>
<td>RH</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>4. Pause before changing direction of movement</td>
<td>RC</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>5. Waiting period</td>
<td>RW</td>
<td>x</td>
</tr>
<tr>
<td>6</td>
<td>Change of position</td>
<td>27</td>
<td>1. Standing up (from sitting posture)</td>
<td>PS</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>2. Bending (90°)</td>
<td>PB</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29</td>
<td>3. Turning</td>
<td>PT</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>4. Walking</td>
<td>PW</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td>5. Lying down</td>
<td>PL</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
<td>6. Sitting down</td>
<td>PSI</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Handling of tools</td>
<td>33</td>
<td>1. Boring and drilling</td>
<td>TB</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>2. Pushing or pulling</td>
<td>TP</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>3. Guiding</td>
<td>TG</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36</td>
<td>4. Digging</td>
<td>TD</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>5. Filing or planing</td>
<td>TF</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38</td>
<td>6. Turning a handle</td>
<td>TH</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39</td>
<td>7. Swinging</td>
<td>TS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40</td>
<td>8. Pincer action</td>
<td>TPI</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41</td>
<td>9. Rotation</td>
<td>TR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42</td>
<td>10. Striking</td>
<td>TST</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43</td>
<td>11. Pressing</td>
<td>TPR</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>44</td>
<td>12. Vibration</td>
<td>TV</td>
<td>6.5</td>
</tr>
</tbody>
</table>
In the table opposite each group has been subdivided into fundamental movements of its kind and each of these is given a symbol — ordinarily the initial letter of the group and of the individual movement. Thus Observation by the Eye is indicated by the symbol OE, which tells the expert what the movement is. These symbols are very useful in direct observation of the film, since tables of successive times can be compiled which are thus perfectly differentiated.

Alongside the column of symbols the table also gives the average duration of the movement.

Having thus distinguished and catalogued our movements, we will now give a wider, although a succinct, definition of the fundamental movements which constitute the technical basis of the study of the times of each such movement. The figures are expressed in hundredths of a minute; for some movements the figures are replaced by x, which signifies that their duration depends upon the machine by which the workman executes the movement or other concomitant movements.

DETAIL OF FIRST GROUP OF MOVEMENTS.

O — Observation.

Activity of the senses. No account need be taken of these movements if they coincide with other movements which are watched and are of a pre-established duration.

1. OE — Visual observation.

Beginning: when preceded by another movement — the conclusion of the previous movement. When preceded by a period of rest — the direction of the look towards the object of observation.

End: if followed by another movement, the end of the movement of observation coincides with the beginning of the following movement; if followed by a moment of rest, the end of the movement of observation coincides with the instant at which the look is removed from the object of observation.

This fundamental movement may be sub-divided as follows:

a) observation with the minimum exactitude necessary to discern a large object (OEa).

b) observation with limited exactitude necessary to discern a small object (OEb);

c) observation with medium exactitude necessary to read normal characters (OEc);

d) Observation with great exactitude necessary to read very small characters (OEd);

2° OB — Balancing observation.

Observation necessary to maintain the body in the proper position during work, e. g. in piloting an aircraft or steering a bicycle.

The beginning of this movement coincides with the first change in the position
abandoned and ends with the commencement of the first movements made to retain the new position.

No further sub-divisions of this movement are needed in practice.

3° OA — Auditive observation.

Beginning coincides with first direction of attention towards listening (tense expression of face, turning of head towards origin of sound).

End coincides with disappearance of every sign of attention to the act of listening.

This movement may be sub-divided as follows: Observation with the minimum attention necessary to hear a loud bell (OAA).

Observation with medium attention necessary to hear a perceptible noise without effort (such as the knocking of an engine or loose parts of machinery (OAb)

Observation with very close attention necessary to detect distant sounds or to distinguish slight differences of sound (OAc).

4° OO — Olfactory observation.

Beginning with the direction of the attention towards the perception of a smell and ending with the disappearance of every sign of such attention. The following distinctions may be made:

a) perception with minimum attention necessary to notice a strong smell (OOa)

b) perception with the attention necessary to detect a faint smell (OOb)

c) perception with the keenest attention in order to compare two different smells (OOc).

5° OP — Observation by the palate.

Begins with first contact of tongue with object to be tasted and ends on completion of all contact of tongue with object. As regards liquids, the end coincides either with swallowing or expectoration.

Sub-divisions:

a) tasting of an easily recognizable savour (OPa);

b) tasting of a savour hard to recognize (OPb);

c) distinguishing between two similar savours (wine-tasting, for example) (OPc)

6° OT — Tactile observation.

Beginning coincides with first contact between skin and object and ends with cessation of that contact.

Special distinctions:

a) observation by touching very rough surfaces or by the perception of marked differences of temperature (OTa);

b) Observation of slightly uneven surfaces or small differences of temperature (OTb).

c) Observation of very slight irregularities of surface or very small differences of temperature (OTc);
DETAIL OF SECOND GROUP OF MOVEMENTS

G — *Grasping.*

Fundamental movements which determine the seizure or release of an object.

1° GS — *Act of seizure.*

Begins with first contact of hand with object. The end of the movement varies according as the object changes its place or remains where it is; in the former case, end coincides with beginning of succeeding movements; in the latter case, with the complete removal of hand from the object.

Distinctions can be made according as the object seized is a large object easy to take hold of, a small object not so easily grasped or a very small object like a needle or pin.

2° GL — *Action of letting go.*

A separate movement which determines the release of an object previously held. Beginning: if the object changes place — corresponds to end of displacement.

If the object remains in its place, the act of letting go begins at the moment when the area of contact between hand and object starts to grow less.

The end coincides with cessation of all contact between hand and object. Distinctions as for GS.

3° GR — *Action of re-grasping.*

Consists in the release and immediate re-grasping of an object with the same or the other hand. Strictly, GR is not a fundamental movement, but a combination of three fundamentals, the release of the hand from the object, a movement in space and the resumption of contact with the object, but as the movement of re-grasping occurs very frequently during a process of work, it is here regarded as fundamental.

Its beginning coincides with the diminution in the area of contact between hand and object and ends with the cessation of all movement of any part of the body in relation to the object seized. The same distinctions may be made as for GS.

DETAIL OF THIRD GROUP OF MOVEMENTS.

S — *Movements in space.*

Movements not in direct connection with an object.

1° ST — *Movement towards object of work.*

This is a movement towards an object which is to be worked on or towards a tool used in work, and is usually followed by a grasping movement.

Begins: If movement follows release of an object — cessation of all contact
between body and object; if not preceded by release — first motion towards the object.

Ends: First contact of hand with object.

2° SW — Movement of waiting.

A movement without definite purpose, to occupy time. Beginning: if preceded by another movement, end of that movement; if preceded by a period of rest, first indication of the movement itself.

End: if succeeded by another movement, beginning of following movement; if succeeded by rest, cessation of all movement.

3° SZ — Movement of withdrawal.

Begins: with cessation of contact between workman's hand and object released.

Ends: with completion of movement in the direction taken.

DETAIL OF FOURTH GROUP OF MOVEMENTS.

D — Displacement.

Movement of parts of the body directly connected with or resulting in the movement of an object, but not movements concerned with work upon the object.

1° DL — Displacement by lifting.

The lifting of an object without affecting the place of work.

Beginning: First sign of lifting movement.

End: Cessation of all sign of lifting.

Distinctions may be made by means of special symbols to denote lifting by the hand, fore-arm or shoulder.

2° DR — Displacement by rotation.

Begins with first movement towards imparting a movement of rotation to the object.

Ends with cessation of all sign of rotation.

Here, too, we can distinguish between rotation imparted by hand, fore-arm or shoulder, or between rotation imparted by a small or a great effort.

3° DI — Displacement by insertion.

Movement to insert one object in another, e.g. insertion of a bolt in its hole.

This movement begins with the reduction in the speed with which the first object approaches the second. It ends when the area of contact between the workman's hand and the object begins to diminish.

4° DH — Displacement by movement of an object towards place of work.

This movement begins with the first commencement of the transfer of the object in the desired direction and ends with the cessation of all movement in that direction.
5° DD — Displacement by deposit.

Movement of placing an object upon its basis of support.
Beginning: first contact of object with its support.
End: complete contact between object and support.

6° DLO — Displacement by lowering.

Movement of lowering an object, but does not include its transport to or removal from place of work.
Beginning and end of this movement coincide with the beginning and end of the act of lowering.

7° DP — Displacement by pushing.

A movement of an object along its basis of support, but not including its transport to and removal from place of work.
Beginning: first pushing movement.
End: cessation of all pushing movement.

8° DTH — Displacement by throwing.

Movement of propulsion imparted to an object. Beginning and ending with commencement and completion of propelling movement.

9° DZ — Displacement away from place of work.

Movement of an object from the bench to the place where it is deposited. Beginning and end are identical with first elementary movement and final depositing of the object moved.

DETAIL OF FIFTH GROUP OF MOVEMENTS.

R — Rest.

Absence of all movement relating to work.

1° RT — Thinking (seeking).

E.g. reading of a drawing, factory notice, looking for an object, reflection.

Begins: with end of previous movement.
Ends: with beginning of following movement.
Further sub-division can be made in any particular case.

2. RR — Recreation.

Recreation includes all moments of rest having no specific reason. Beginning and end coincide with beginning and end of preceding and succeeding movements.
3° RH — *Holding.*

The holding of an object.

If preceded by a movement of grasping, the beginning coincides with the end of the grasping movement; if preceded by a movement of the object, the beginning of the act of holding coincides with the end of such movement.

4° RC — *Pause in order to change direction of a movement.*

It begins with the end of a movement in one direction and ends with the beginning of a move in another direction.

5° RW — *Waiting.*

Rest moments determined by the execution of the work. Their beginning and end coincide with the end of the previous and beginning of the subsequent movement.

**DETAIL OF SIXTH GROUP OF MOVEMENTS.**

P — *Change of position.*

Movements which determine a change in the position of the body.

1° PS — *Standing up.*

Movement of a seated person to a kneeling or standing position. This movement begins with the raising of the body and ends with the completion of the movement of the body into its new position.

This movement may be distinguished according as the body passes from the seated to the stooping or kneeling positions or vice-versa, or from the kneeling to the standing position, or from the recumbent to the standing position.

2° PB — *Bending.*

This movement is characterised by a bending from the hips to an angle of about 90°. The beginning and end coincide with the beginning and end of the displacement of the trunk.

3° PT — *Turning.*

Characterised by a turning of the body on its axis. Beginning and end coincident with beginning and end of displacement of trunk.

4° PW — *Walking.*

The movement of advancing the foot. Begins as the foot is raised and ends when the foot is in complete contact with the ground. Distinction may be made between a short step, a normal step and an exceptionally long step.
5° PL — Lying down.

This movement may be regarded as the reverse of PS and consists in changing from a standing to a sitting posture, or from a kneeling to a recumbent position. The beginning and end coincide with the beginning and end of the change in the position of the body. The movement is characterised by passage from kneeling to lying, from stooping to kneeling, from standing to sitting, from standing to kneeling and lastly from standing to lying.

6° PSI — Sitting down.

Movement of assuming a sitting posture. Begins and ends with the beginning and end of the displacement of the body with a view to taking up a seated position.

DETAIL OF SEVENTH GROUP OF MOVEMENTS.

T — Handling of Tools.

Movements necessary to the use of a tool or machine in the course of executing a specific task. These include also movements preparatory to the execution of work.

The following subdivision is neither so full nor so exact as could be wished and this group of movements is deserving of study by time-study experts, who will make the changes and additions required.

1° TB — Boring and drilling.

90°-110° turn of the hand (e.g. in manipulating a screw-driver) Begins with first sign of rotation and ends on completion of rotation.

2° TP — Pushing or pulling.

Movement exercising pressure or pull upon an object. Begins with first indication of initial pressure or pulling effort and ends with the cessation of all such effort.

3° TG — Guiding.

Moving an object in a desired direction. Begins and ends with beginning and end of the displacement of the tool in the desired direction.

4° TD — Digging.

Handling of spade, pick, etc. Begins and ends with the beginning and end of the action of the tool in the direction desired.
5° TF — Filing or planing.

Rectilinear movements to and fro for the purpose of guiding tools especially locksmiths' and carpenters' tools. Beginning and end coincide with first indication and end of such displacement.

6° TH — Turning a handle.

These movements more especially concern the manipulation of windlasses and similar tools. They begin and end with the first indication and cessation of all rotatory movement.

7° TS — Swinging.

Movement of wrist, fore-arm or shoulder to impart a rotary movement to the tool (mason’s trowel, sledge-hammer, etc.). Begins and ends with beginning and end of the change in the position of the tool.

8° TPI — Pincer action.

Rectilinear movement of the particular tool with simultaneous pressure of palm of the hand to set it in motion. Beginning and end coincide with beginning and end of the particular action of the tool itself.

9° TR — Rotation.

Movement of semi-rotation to turn the arm of a lever on its axis Particularly relates to press-levers, shears, etc. Beginning and end are easily discernible by close observation.

10° TST — Striking.

Movement of wrist, forearm or shoulder to strike an object with a heavy body. Beginning and end of movement coincide with gesture of raising the tool with force and with the end of its fall.

11° TPR — Pressing.

Movement characterised by the pressure of a part of the body upon an object. Beginning and end coincide with beginning and complete cessation of the manifestation of effort after contact with the object.

12° TV — Vibration.

Rapid and characteristic movements in certain branches of work, such as engraving. Begins and ends with beginning and end of the oscillations of the implement.
SYNTHETIC EXAMPLE OF APPLICATION OF THE CINEMA TO TIME-STUDY.

Once the cycle of operations or part of it has been cinematographed in the factory for the purpose of studying the times of execution, the expert is in possession of the elements required to analyse the process of work in detail and can deduce therefrom the average times to be selected as normal or standard times and eliminate or reduce «passive» times with a view to better organisation and speedier production.

In order to analyse the film, the expert prepares notes on the successive movements, taking separate account of movements of the right hand, left hand, head, trunk, right leg and left leg.

This subdivision will require modification according to the work that is being done (e.g., a man who is seated at his work will not move his legs, etc.) One column of the sheet will be for the symbol representing the movement, another will record its duration, and another the times of the individual movements, the sum of which will give the total duration of the operation cinematographed.

Once all the details of movements and times are recorded on the observation sheet, the specialist draws his conclusions, proceeds to eliminate unnecessary movements and useless pauses, correct irregular movements and thence calculates what saving of time and material can be effected.

We will illustrate the application of the cinema to time studies by a practical example.

Let us suppose that a film has been shot in a factory showing the assembly of a compressed-air hammer, all the parts of which have been prepared in the factory. The work consists in clamping the cylinder in a vice, inserting the piston in the cylinder after first cleaning and greasing it, putting a lid on the cylinder by means of two pins and a ring, assembling the three parts of a valve and fitting it to the upper part of the cylinder, screwing on the handle and making sure that it is fast, adding a safety ring and finally unclamping the handle from the vice.

In his office the expert will examine the film and draw up his sheet of observations after first summarily subdividing the operations needed in the performance of the work. Times are expressed in thousandths of a minute.

<table>
<thead>
<tr>
<th>Operations</th>
<th>Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>individual</td>
</tr>
<tr>
<td>Clamping cylinder in vice</td>
<td>70</td>
</tr>
<tr>
<td>Cleaning piston</td>
<td>50</td>
</tr>
<tr>
<td>Greasing piston</td>
<td>85</td>
</tr>
<tr>
<td>Fitting piston into cylinder</td>
<td>62</td>
</tr>
<tr>
<td>Arranging piston so that its hole is level with the hole in cylinder</td>
<td>149</td>
</tr>
<tr>
<td>Application of Pin N. 1</td>
<td>71</td>
</tr>
<tr>
<td>Application of Pin N. 2</td>
<td>70</td>
</tr>
</tbody>
</table>
Operations | Times
---|---
Application of intermediary ring | 69 626
Assembly of valve | 281 907
Fixing of handle | 134 1041
Screwing on of handle | 175 1216
Making sure it is fast | 196 1412
Turning of hammer in vice | 105 1517
Application of safety-ring | 177 1694
Removal of hammer from vice | 63 1757

After this first subdivision the observer will make a note of all the fundamental movements involved in this operation, distinguishing each by its symbol, will mention the part of the body by which the movement was executed, and the operation in the foregoing list to which it referred, and he will add the individual and cumulative times.

He will then proceed to draw his conclusions, grouping in separate tables certain elements which attract his particular attention.

He will tabulate all the fundamental movements of the second group under GS and enumerate them according to their duration, without repeating the symbol each time, as follows:

<table>
<thead>
<tr>
<th>Left hand</th>
<th>Right hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual time</td>
<td>Cumulative time</td>
</tr>
<tr>
<td>1</td>
<td>122</td>
</tr>
<tr>
<td>1</td>
<td>1265</td>
</tr>
<tr>
<td>1</td>
<td>1329</td>
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<td>1423</td>
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<td>6</td>
<td>1532</td>
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<tr>
<td>7</td>
<td>570</td>
</tr>
<tr>
<td>7</td>
<td>920</td>
</tr>
<tr>
<td>8</td>
<td>640</td>
</tr>
<tr>
<td>12</td>
<td>504</td>
</tr>
<tr>
<td>13</td>
<td>436</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>15</td>
</tr>
</tbody>
</table>

Mean value $\frac{74 \times 15}{15} = 4.93$

Mean value $\frac{77 \times 16}{16} = 4.8$
If we exclude, in the case of the right hand, the time 1562, the result is 3.46.

It will be noticed that the most frequent and the mean values are low, from which it may be gathered that the workman has worked at his maximum speed. The lower values for the right than for the left hand show that the worker is right-handed.

Another group to which the observer's attention is drawn is the group of movements in space, and he compiles the following table:

Movements in space (3rd group).

<table>
<thead>
<tr>
<th></th>
<th>Left hand</th>
<th>Right hand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual times</td>
<td>Cumulative times</td>
</tr>
<tr>
<td>5</td>
<td>492</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>1328</td>
<td>3</td>
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<tr>
<td>6</td>
<td>76</td>
<td>4</td>
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<tr>
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<td>5</td>
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<tr>
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<tr>
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<td>7</td>
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<tr>
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<td>1422</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>1526</td>
<td>6</td>
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<tr>
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<td>15</td>
<td>—</td>
</tr>
<tr>
<td>162</td>
<td>22</td>
<td>—</td>
</tr>
</tbody>
</table>

Mean value 114 : 15 — 7.6
Mean value 162 : 22 — 7.36

This group suggests the same conclusions as the second group (GS).

A third group of importance is the rest-pauses, catalogued likewise according to their duration. The table obtained is as follows:
The above figures show that the right hand only remains idle for 0.222 minutes out of a total of 1.757 minutes taken over the whole work. This is equal to 12% and as the left hand is active during that time, the total time taken includes no pauses.

The deductions made by the observer are the following:

a) no time was really lost, as one of the two hands was always busy and, if we compare the time taken by the workman with the standard time for the process of assembly in question, we shall find that they are almost identical.

b) certain parts concerned in the assembly are taken in the left hand and passed to the right. The photograms show that this unnecessary movement is due to the fact that, in preparing for the work, the parts were placed on the left of the vice instead of on the right. The observer deduces that these movements of passage from one hand to the other could be eliminated by an arrangement of the parts in such a way that they can be picked up direct by the right hand.

c) the picking up of small objects from a metal bench demands a certain amount of time, which could be saved by putting these object in a vertical position or, better, on a special tray with holes for them. This is a small point in itself, but the sum of small details of this kind amounts to a valuable saving of time over the whole operation. The analysis of the film allows other details to be observed, and especially the observer can estimate a worker’s efficiency by comparing his methods of work with those of others more skilled.

Whatever conclusions the expert may reach as regards rationalisation, the film, which faithfully reproduces all the details of the work analysed, will be of undoubted use to him.

Grillo.
SOME RECENT AMERICAN STUDIES OF THE PSYCHOLOGY OF THE WORKER IN ITS RELATION TO SCIENTIFIC MANAGEMENT, SUBMITTED TO THE EIGHTH ANNUAL CONFERENCE OF THE PERSONNEL RESEARCH FEDERATION HELD IN NEW YORK ON NOVEMBER 15-16, 1929.

A notable advance towards the scientific solution of problems of occupational adjustment was strikingly exemplified in the series of papers and addresses presented November 15 and 16 at the Eighth Annual Fall Conference of the Personnel Research Federation in New York. Several of these contributions will appear in the Personnel Journal for February, 1930.

Of outstanding interest to business executives, psychologists and students of industrial relations was a series of papers based upon investigation in progress for the past two and a half years in the Hawthorne works of the Western Electric Company.

The first of these, by Mr. G. A. Pennock, reports an experimental investigation of individual variations of output as related to such variables as mental attitude and physiological conditions, rest periods, length of working day, method of wage payment and character of supervision. Since early in 1927, constant observation and experimentation has been made with a group of five women workers engaged in repetitive assembly work in an effort to determine the answer to such questions as the following:

Are rest periods desirable?
Is a shorter working day desirable?

What effect do wrong or right methods of supervision have on a worker's efficiency and morale?
What are some of the factors that determine an employee's mental attitude?

A second test group consisting of five mica splitters was also studied.

The method consisted in maintaining all conditions as nearly constant as possible, with introduction from time to time of a single variable, such as a different method of payment; rest periods; mid-morning lunches; shorter or longer working day. Information as to amount of sleep, recreation, home conditions and other outside influences, as well as personal influences within the factory such as relation with supervisor, were secured through informal interview. Pulse rate, blood pressure, blood condition readings, vascular skin reactions and other physical examination data were obtained from time to time. Diet and health practices were recorded.

The most surprising outcome was, the output of this test group tended in general to increase no matter what changes in working conditions were introduced. Fatigue was found not to be a controlling factor. Amount of sleep had a slight but significant effect on individual performance. Total daily output was increased by rest
periods. Home conditions and other outside influences tended to create either a buoyant or a depressed spirit which modified production. Emotional status was reflected in performance; and the major component of this emotional condition was attitude toward supervision. The inference from these studies was inescapable that the dominant factor in the performance of these workers is their mental attitude.

Consideration of the sensitiveness of the operators to the way in which they are treated led to studies of emotional status and attitudes of other workers. All operators in the inspection organization were interviewed, to secure a picture of their problems, worries, likes and dislikes, in relation to working conditions and supervision. This program is spreading to other departments, and is greatly modifying supervisory training procedures. Rest periods have also been introduced into several operation departments, affecting 5,000 employees, with indications of increases of production paralleling somewhat those of the test group.

The results of these studies have been rather startling, and are deemed of such importance that a larger program of employee relations research has been launched. The present as well as the future findings of these experimental studies will undoubtedly form a valuable contribution to the science and art of human management.

Such scientific study of human behavior in an industrial environment has its difficulties. Emotions and personal reactions are less readily subject to experimental control than are microbes and molecules. The apparent difficulty of bringing this field of exploration clearly within the range of laboratory methods has retarded the growth of exact knowledge. Yet some such approach is indispensable if there is to be a science of industrial relations. The Hawthorne studies illustrate the search for experimental methods adequate to this complicated task. They have been perhaps unexpectedly rewarding in their practical outcome. Indeed, the by-products of this research far outweighed the direct returns, which were, nevertheless, considerable.

One of these practically significant off-shoots of the original investigation is « A Plan for Improving Employee Relations on the Basis of Data Obtained from Employees ». This plan, described by Mr. M. L. Putnam, begins with the training of selected workers to interview other workers, thus enabling the employees readily to communicate to the management whatever they may want to say. Information is then obtained as to what the workers like or dislike about their conditions of work and their personal relations. This information, disguised to preserve anonymity, supplies concrete material for discussion in bi-weekly conferences of supervisors. It is also used in improving working conditions. The vitality which this procedure has brought into the supervisory training program is reflected in the workers' response to the greater personal interest and consideration they are receiving.

The significance of the newer ideals of control illustrated in these Western Electric investigations, was vividly presented by Professor Elton Mayo in a paper on « Changing Methods in Industry ».

Professor John Dewey, speaking on « Psychology and Work », gave the emphasis of his ripe wisdom to the value, both industrial and social, of securing for the worker, as the Western Electric plan does, personal recognition, with opportunity to
realise that he individually counts in the enterprise, and that thé way is open for him to make his intellectual as well as manual contribution to its success.

« Fatigue, Morale and Output » was the theme of an address by Mr. Stuart Chase, student of the machine age and of its effects, good and bad, on men.

Ways of anticipating, in advance of training, the likelihood of a young man's success in an occupation were illustrated by Dr. Don S. Taylor, in his report of progress on a three-year investigation of « Abilities of Young Printers ». The first stage of this research was described in the Personnel Journal for June 1929.

« What Preachers Do : A Time Analysis of Activities of Ministers and Church Staffs », by Dr. H. Paul Douglass, of the Institute of Social and Religious Research, illustrated the extension of techniques of occupational study into professional fields and furnished a basis for conclusions regarding organization of work as well as selection and training of personnel to do it.

Mr. Owen E. Pence and Dr. Lester W. Bartlett described three years of notable progress of The Young Men's Christian Association five-year program of personnel research. This extensive and thoroughly fundamental cooperative inquiry was outlined in its many aspects. Special emphasis was placed on the methods used in the studies of the selection and training of Physical Directors and of YMCA Secretaries, recently published by the University of Chicago Press.

The New York State Industrial Commissioner, Miss Frances Perkins, spoke brilliantly on « Government's Part in Solving Modern Work Problems ». Government has three chief duties : to enforce minimum standards of decency in the treatment of men and women in industry; to furnish a soil favorable to the development of experiments and inventions of better techniques in all matters having to do with the improvement of human relationship to industrial life; and to serve as an educational influence, to spread among all employers the knowledge of these better techniques that cut down costs of production and improve conditions for the workers. Some problems at present calling for research are, how best to train employees in safe work habits; how to make industrial life for individuals an educational experience; how to remove the fear of old-age dependency through insurance and pension plans without at the same time hampering older workers in search of employment; and how to determine optimum length of working day in different industries.

These are some of the points in which the cinematograph, whether used as a means of propaganda or as an instrument of research and demonstration, may prove of the greatest assistance.

V. W. Bingham.
THE CINEMA AND THE STUDY OF FATIGUE

(From the Italian)

If the educational function of the cinematograph and of luminous projections in general is restricted exclusively to the reproduction of movements, places, objects or acts, we must frankly admit that the study of fatigue considered by itself does not come within the scope of this purpose. Although the problem is essentially part of scientific management (the aim of which is to rationalise work with a view to increasing total and individual output and to avoiding all waste of human effort), it is very difficult to reproduce in material form the elements of which fatigue is in the last analysis composed.

Essentially, fatigue is a disease or rather a pathological condition which is not only unaccompanied by any definite symptoms or obvious and constant anatomical features, but which only rarely assumes visible forms. Consequently, it has no characteristics which can be readily transferred to the screen. A diminution in the functional powers of the organs of movement, an altered heart-beat or breathing and, occasionally, facial expression are the only outward and visible signs of fatigue. This is not very much to offer to a public desirous of ascertaining its nosology, nature and effects.

On the other hand, manifestations of effort, which is frequently one of the causative agents of fatigue, and which the layman even confuses with it, lend themselves much better to cinematographic reproduction. Effort, as we all know, has often been represented by painters and sculptors, for the reason that, whether dynamic or static, it takes the forms of exceedingly characteristic attitudes of the human body, visible muscular contractions and expansions, significant facial expression which is easily reproduced. Moreover, it is nearly always associated with the accomplishment of acts or movements, which are essentially subjects for the cinema. As regards a detailed study of the various elements which constitute fatigue and especially a study of its causes and effects and of its association with movements relevant to the teaching of working technique and scientific management, we find several points which lend themselves to visual instruction and therefore to illustration by pictures, whether stationary or moving. Here, however, the idea of fatigue is more or less subsidiary to the methods of revealing its existence; the many elements of which it is composed furnish such a bewildering variety of material for the film that it is impossible to establish a series of pictures sufficiently coordinated to be intelligible without oral explanations. The film will nearly always have to serve therefore to illustrate some lecture or lesson. In this capacity, however, it is an almost indispensable aid, since not only can it depict significant gestures and movements, but it can repeat them as often as is desired and thus create conditions particularly favourable to scientific research and experiment.

From this point of view, pictures both fixed and moving can be usefully em-
ployed to explain and illustrate phenomena peculiar to the study of fatigue, which we may place under the three following headings:

- a) diagnosis;
- b) pathological manifestations;
- c) hygiene or prevention.

Scenes which would seen particularly adapted for screen projection are the following.

1. Methods of investigation to discover or measure fatigue.

   a) Comparative ergographical curves of different individuals, and curves of the same individual before and after work, before and after meals, in a cold and a warm atmosphere, etc;
   b) dynamometry and dynamography, ditto, ditto;
   c) frequency and rhythm of the breathing before and after expenditure of effort, or before and after work which is fatiguing by reason either of intensity or duration;
   d) frequency, rhythm and pressure of pulse, ditto, ditto;
   e) graph of effort spent on work of varying degrees of difficulty;
   f) measurement of time reactions (tactile, visual, auditive);
   g) examination of defects in execution of certain standard tasks (reading, writing, etc.);
   h) examination of reflex action of tendons and muscles;
   i) measurement of organic consumption by analysis of air exhaled;
   j) taking of temperature before and after work.

2. Pathological manifestations of fatigue.

   a) Muscular weakness after heavy work (shown by inability to lift a certain weight, by a dragging gait, etc.);
   b) unsteadiness in the execution of certain delicate tasks and in the handwriting (graphic projections);
   c) occupational cramp;
   d) diminished output;
   e) position and attitudes of lively and of tired animals, or of animals inoculated with the blood or urine of a tired animal.

3. Means of preventing or removing fatigue.

   In my opinion this chapter is better suited than the others for visual and hence cinematographic representation, since the prophylaxis of fatigue offers a much wider field of action than it is possible to fix for diagnostic research or pathological manifestations.
Fatigue can be prevented by: a) improving the conditions of the physical environment; b) studying the duration and rhythm of work; c) diminishing the effort. Obviously, the third of these methods is the most easily illustrated by visual means.

The rooms or plant upon which conditions of wellbeing (and consequently conditions conducive of fatigue) are dependent can be shown in relation to cubic air space, lighting, ventilation, heating, inhalation of dust and gases, cleanliness; interesting pictures can be shown of rest-rooms, refectories, shower-baths, wash houses, changing-rooms, etc.

It will, however, in every case be difficult to show the relation between these different factors and fatigue by visual means alone, and without the aid of oral explanations.

Similarly, it would, I think, be useless to attempt to show visually the relation between fatigue and the duration and rhythm of work.

On the other hand, the translation into moving pictures of the methods suggested by scientific management to reduce effort offers boundless possibilities.

This aspect of prophylaxis is of especial importance. Its aim, namely to avoid fatigue, is to a large extent identical with that of scientific management itself (i.e. the rationalisation of the material elements in production) and with that of developing the output capacity of the human worker. The attainment of this purpose presupposes a knowledge of the methods of work most economical from the point of view of the human organism. For this reason vocational instruction, which seeks to increase the productive capacity of workers is bound to take into account the conservation of human energy.

Implementation — that is, the preparation of the best means of executing work — and the study of the positions and movements of the body which physiology shows to be the most economical from the point of view of energy consumption, are in our opinion inexhaustible sources of cinematographic inspiration.

As regards the former, the influence upon fatigue of what may be called generally «plant» conditions is apparent in many trades. These conditions include:

1° The quality of raw materials and methods of treating them;
2° the properties of working tools (dimensions, weight, hardness, convenience in handling, etc.);
3° use of machinery and of mechanical means of transporting materials;
4° arrangement of premises and installation of the different workshops;
5° height of bench, work done standing or seated, form of seat, position of light, etc.

The study and subsequent teaching of the movements best designed to obtain a maximum quantitative and qualitative output in the shortest time and with least fatigue is an even richer field for cinematographic experimentation, covering, as it does, movements and attitudes of the body and the various shapes and positions of objects to be handled.

Thus a wide variety of film pictures could illustrate:
a) Methods of walking, of carrying loads in the hand or on the back, drawing or pushing them, or carrying them on wheeled vehicles.

b) methods of erecting scaffolding, ladders; of arranging pullies and cords; of raising and lowering, of employing hoisting apparatus, etc.;

c) methods of filing, planing, hammering, cutting, crushing, etc.

In short, any work necessitating muscular exertion affords abundant material for studying working technique and the method of performing that work with the minimum of effort. Sedentary work, such as writing, typing, printing, etc., is also adapted for cinematographic demonstration. Although offering little material for the study of movement, it can teach us much regarding the best positions to be adopted in order to avoid fatigue.

In both cases the problem is identical with that of teaching the best technique for the different processes and it therefore applies to any and every kind of work.

G. Loriga.
W O R K  A N D  F A T I G U E

(From the Italian)

Note: The author does not claim to have written a scenario; he is simply offering the outline of such a scenario or rather is indicating certain scenes which might illustrate on the screen the main physiological data of work and fatigue. If this outline meets with approval, he will be pleased to develop it and describe the different scenes in detail.

PART I.

THE PHYSIOLOGICAL LAWS OF WORK.

Scene 1.

Degree of resistance to work varies with each individual.

a) A railway station. Arrival of a train. Two porters each take in each hand a suit-case of the same size and weight (e.g., 30 kgs) or two small boxes with handles and proceed in the same direction. Arriving at a certain point, one places his load on the ground to recover his breath, while the other continues his way.

The former takes up his cases, proceeds another hundred yards or so and is then obliged to put them down again. The other goes on without stopping until he reaches a house at the end of the street.

b) Five or six men of the same age wearing sports vests and each with a number on his chest are running along a track.

Their order is noted at the end of the first lap. 5 or 10 minutes later the order is registered in which they complete the second lap. The classification for the first lap indicates the order of runners according to their effort capacity, that for the second lap the order according to resistance capacity.

In all probability the man who finished the first lap first and who thus showed the greatest capacity for effort, will show less resistance capacity than another and will come in second or third at the end of the race.

c) Shows on Treves’ ergograph (better than Mosso’s) two curves of work by two men of the same age and apparently equal strength. If their degrees of resistance are different (they must be selected before the test), we shall get two different curves very like those known as the Aducco and Maggiora curves. In other words, the line of one will be high and even for some minutes and then slowly fall, while the other’s will fall more quickly, if not quite suddenly.

These curves can easily be shown on the screen magnified.

If desired a third person can be selected with a curve similar to that of Patrizi, that is, a curve falling more quickly than the Aducco, but less quickly than the Maggiora curve.
Scene 2.

A) Resistance to work increases with training.

A man mounts the Amar ergographical cycle. After a time (an hour or two) a reading is taken of the number of revolutions. As soon as the man dismounts he is tested with Patrizi’s teleoptical sphysmometer (which shows pulsations by an electric lamp which goes on and off) and with the same author’s pneumoarythmometer (registering number of breaths).

The test is repeated the next day and the day after; the same readings are taken and it is found that (1) the number of cycle revolutions per hour has gradually increased from the first to the third day; (2) the number of pulsations and breaths has diminished. Accordingly, as the man gets into training, he does more work with less fatigue.

B) Resumption of daily work is preceded by a few moments of training.

Show several complete curves of work, announcing that they have been obtained from measurements taken in workshops of different kinds each hour for four consecutive hours. We may take as types of workshop:

1° An office for copying on the type-writer (number of lines copied per hour);
2° A button factory (number of dozens or gross of buttons manufactured per hour);
3° A cigarette factory (number of cigarettes made or packed per hour).

Show a) that the production for the first hour, and especially first half-hour, is below that of second and third, because during the first hour or half-hour the organism is “getting into its stride”; b) that after the third hour output rapidly decreases as the result of fatigue.

Scene 3.

Effort fatigues more than work. Or rather, fatigue increases proportionately to effort expended.

a) Two men meet on a road at the bottom of a long hill. One is carrying a knapsack; the other is free. They walk on together, but after a time the man with the bag on his back begins to fall behind, then stops, puts down his knapsack, sits down and wipes the perspiration from his face. The other man goes on walking and we see him plodding steadily on, while the man with the bag is still resting.

b) Two men are carrying bags of flour from one floor to another; the first carries bags of 100 kgs, the second bags of 50 kgs; both are loaded by other men or take their bags direct from two lorries. After twenty journeys, both have to take bags of 50 kgs from the ground and hoist them on to their own shoulders to carry them upstairs. The man who has been carrying bags of 50 kgs can manage this; the other can’t, being more tired than his mate.
Scene 4.

A rapid rhythm fatigues more quickly.

a) Two men are each pushing a hand-cart of identical weight and shape up an incline. One of them starts at a quick pace and gets far ahead of the other, but then slows down and at last stops in a stream of perspiration. The other, who has been going along at a steady rate, catches up his mate, passes him without stopping and we see him in the distance, quietly pushing his cart while the other is still resting.

b) A dynamometer measures the strength of two men five or ten times in succession. They are then taken to a running-track, where one runs, the other walks. After half-an-hour their strength is again measured five or ten times by the dynamometer and the first is found to have lost more strength than the second.

Scene 5.

Work done without breaks fatigues more quickly and is less efficient.

a) A workman is told to cut up small planks to make boxes. He works uninteruptedly. After three hours, he can do no more, stops and sits down. An inspector comes in and tells him to get on with his work. The man, who is exhausted, refuses. The planks are counted; he has cut up ten.

b) The next day the inspector gives him the same work, but tells him to take five minutes rest after every half-hour of work. He comes back after three hours and finds the man still working with zest. He checks the work and notes that the output is larger than that of the day before.

Scene 6.

Airlessness, and excessive heat and cold accelerate fatigue.

We are shown a blacksmith's forge. The forge is lit. Two workmen are hammering a piece of red-hot iron with alternate blows. After a while they stop out of breath and remove coat and waistcoat. Then they start again. They stop a second time, however, sit down and mop their brows. At last, one gets up and opens all the windows. After a moment's rest, they resume work.

PART II.

Some manifestations of fatigue.

Scene 1.

Fatigue reduces muscular strength.

The muscular strength of two men is measured by a dynamometer or dynamograph, or else the curve of work is taken by means of the Treves ergograph. The
men are then sent to saw tree-trunks with orders to return after three hours. The same measurements are then repeated and show how muscular strength has diminished (contracting force) With the use of the ergograph we can also show the loss of resisting force, which is indicated by the rapid fall of the curve.

**Scene 2.**

*Muscular strength of men diminishes even in respect of muscles not employed on the work.*

The right hands of four soldiers are measured dynamometrically before a march (here, too, the Treves ergograph can be used). On their return the same measurements are taken, and the figures (or graphs) will record a loss of strength in the arms as well as in the legs.

**Scene 3.**

*Mental work also impairs muscular strength.*

Measurements are taken as above of three or four secondary schoolboys, before and after a class, and we observe the differences.

**Scene 4.**

*Fatigue also causes muscular incoordination (unsteadiness).*

a) Make a number of men sign their names before and after performing heavy manual work (e.g. breaking stones with a hammer, sawing wood, carrying heavy weights in the hand, etc.).

b) The subject of the test holds in his hand a long rod with the end of which he has to follow a complicated and twisted groove in a board. The edges of the groove are of metal and connected with an electric lamp. At each contact of the pointer with the edge of the groove, the lamp is lit, carry out this experiment before and after heavy manual work and count how many times the lamp is lit.

**Scene 5.**

*Fatigue leads to loss of attention and thus causes many mistakes.*

At 8 a.m. two youths (a student and a workman) are given a printed text; they are told to count the letters or one single letter (the s's, for instance) within a certain time (two or three minutes). Then they are sent, one to school and the other to the workshop, and are asked to return at midday. The experiment is then repeated. A note is taken of the number of mistakes made and the time taken before and after physical or mental work.
Scene 6.

Fatigue disturbs the psycho-muscular reactions; in other words, reaction is slower.

We see a workman at 8 a.m. before he goes to work. He is told to carry out ten tests by the stopping of the lancet of the Arsonval chronoscope. Note is made of positive and negative values round N. 100. The operation is repeated at midday and the differences shown.

Scene 7.

Fatigue poisons the blood.

We are shown two rabbits, equally strong and vigorous. One is made to run for a certain time in a revolving wheel. It is taken out when it drops from fatigue. It is found to be shaking and exhausted; it can’t stand up and its fur is all ruffled. A few drops of blood are taken from the auricular vein with a syringe and injected into the same vein of another rabbit. After a few minutes the latter also collapses in a state of prostration, and lies inert with ruffled fur.

PART III.

HOW TO AVOID THE ILL-EFFECTS OF FATIGUE.

Scene 1.

Choose the trade best suited to your strength and aptitudes. Go to a psychotechnical institute and have your capacity tested.

A picture is shown of which the foreground is a waiting-room and the background a psycho-technical laboratory, with the door wide open. In the waiting-room is a group of young men and in the other room doctors are subjecting other young men to various tests. From time to time, a youth comes out from the inner room and another is told to enter. At the conclusion of the examination the doctor comes out and nails up on the wall the following table of classification:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>Nos. 1, 10, 19, 20</td>
</tr>
<tr>
<td>Healthy and robust</td>
<td>Nos. 3, 7, 8, 18</td>
</tr>
<tr>
<td>Healthy and nimble</td>
<td>Nos. 5, 6, 15</td>
</tr>
<tr>
<td>Healthy but soft</td>
<td>Nos 2, 4, 12, 14</td>
</tr>
<tr>
<td>Healthy, but delicate</td>
<td>Nos. 9, 11, 13, 17</td>
</tr>
<tr>
<td>Weak</td>
<td>Nos 14, 16</td>
</tr>
<tr>
<td>Normal senses (hearing and sight)</td>
<td>Nos. 10, 7, 19, 20, 3, 6, 4, 11, 12, 15, 9, 13, 17</td>
</tr>
<tr>
<td>Senses affected (hearing or sight)</td>
<td>Nos. 1, 16, 8, 18, 5, 2, 14</td>
</tr>
</tbody>
</table>

The young men take note of the references to themselves:

in.
b) They are then seen consulting tables on another wall indicating:

1° Muscular work suited to the healthy and robust type: porters, woodcutters, agricultural labourers, pit-sawyers, etc.;
2° Work demanding endurance suited to the healthy and healthy-soft types: locksmiths, carpenters, masons, saddlers, postmen and itinerant trades in general, etc.;
3° Work demanding agility suited to the nimble type: engine-drivers, chauffeurs, motor-boat chauffeurs, etc.
4° Work not requiring any great strength and sedentary work, suited to the healthy but delicate type: barbers, domestic servants, shop assistants, etc.
5° Work demanding keen sight; watch-making, precision instrument making, driving of engines and rapid vehicles.

Note. It is of course easy to draw up further tables and many other groups of capacities, while the list of trades and professions can be extended indefinitely.

Scene 2.

Don't over-exert yourself, especially if you have to repeat the effort many times in succession.

Two rows of trucks which two workmen have to load with blocks of stone or metal weighing about 15 kgs. They approach the truck by an inclined way. The first man carries his blocks one by one; at first, his mate does the same, but soon tries to carry two together. While the first workman continues steadily at his job, the second begins to wait longer between his separate journeys to and fro, then sits down exhausted and out of breath and mops his face.

(By way of variation, the first workman can be shown from the beginning carrying his blocks one by one, the other two at a time).

The first man takes 10 minutes to load his first truck, the second man only 6 minutes; the former also takes 10 minutes to load his second truck, the other takes 8. But whereas the first man still requires 10 minutes to load his third and fourth trucks, the second takes 12 and 15 minutes respectively.

Scene 3.

Always find out whether there are tools or other means by which you may economise effort.

a) A porter is carrying in his hands two heavy and bulky portmanteaux which hamper his movement. He stops, puts one portmanteau on his shoulder and proceeds with the other in his hand. He still finds it difficult to walk. He stops again, removes his belt, attaches the ends to the handle of each portmanteau and passes the belt over his shoulder so that one portmanteau is across his chest, the other on his back. He now finds it easier to walk, but is still not satisfied. He
reaches a shed goes in and comes out again with a hand-cart, upon which he places both portmanteaux. This time he appears perfectly content and goes quickly on his way.

b) A workman has to pull a heavy box of bricks by a rope up to the first floor of a house that is being built. The work is heavy but the man notices a small windlass not far off; he fixes the end of the rope to the windlass and goes on with his work, pleased at his inventiveness.

c) A man is standing in front of a low table making cardboard boxes. Every now and then he shows obvious signs of fatigue; we can see that his back is aching and he sits down on the table to rest. Finally, he goes in to an adjoining room and brings back a chair in which he seats himself with visible satisfaction before going on with his work.

N. B. Many other examples of this kind could be given.

Scene 4.

Do not adopt too quick a rhythm of work.

a) A man is working the Treves ergograph furnished with a weight of 10 kgs. A metronome marks the contractions of the arm and a chymograph records them. The graph is withdrawn when the curve begins to fall and is shown magnified on the screen with the time occupied.

b) The experiment is repeated, the rate of contraction of the arm being doubled. The new line will show a more rapidly falling curve and a speedier consumption of strength.

Scene 5.

Learn how to combine speed with effort so as to be able to work several hours at a stretch without undue fatigue.

a) The experiment with the Treves ergograph weighted with 10 kgs., is repeated. Rate of arm contraction: 1 per second. After a few moments, it is noted that the arm can only register 45 contractions a minute. The weight is then reduced to 6 kgs. and the movements of the arm maintain the rhythm of the metronome (60 beats a minute) without any sign of fatigue.

b) A workman is putting little nails into a beam with a small hammer which he applies by a series of rapid blows. He is then given larger nails. He selects a heavier hammer and tries to keep up the same rhythm, but stops after a moment, is dissatisfied and decides to reduce the rate of his blows. A third time, still larger nails are brought and this time he does not hesitate, chooses a still heavier hammer, but strikes the nails at a slower rate.

c) A workman is shovelling earth or gravel on to a tip-cart. It takes him twenty minutes to fill the cart. An inspector comes along and hands him a larger spade. The workman resumes the job, but has to reduce his rate of shovelling, with the result that he takes just as long to load the cart.
Scene 6.

Break off work for frequent short pauses so as to produce more with less fatigue.

a) Two companies of soldiers have to march from a place A to a place B (10 km. distant). The first company commander makes the men march without any stops; the second orders a three minutes rest after every kilometer. On arriving at B, the men of the first company are seen lying tired out on their bunks while the men of the second company leave barracks fresh and spruce, mingle with the local population and are seen dancing with girls of the village.

a) A typist arrives at her office in the morning and begins to type without interruption. After three hours she counts the pages — ten. She goes out to lunch, comes back and starts again. Every half-hour she gets up, goes to the window and walks up and down for about five minutes. After three hours, she counts her pages and finds that she has copied twelve.

Scene 7.

Dont work in an enclosed and badly ventilated room, but keep out draughts and avoid excessive heat or cold, dust and gases

a) An office showing a number of employees at work. The windows are shut. After a minute or so, one of the employees yawns, another stretches himself, a third leans his head on his hands as if he felt ill, while another fans himself with papers. One after the other they cease working and all look tired. At last one of them rises and opens the window. They all show obvious signs of satisfaction and resume their work.

b) A school class. The teacher starts the lesson. After a few minutes, the pupils begin to become inattentive, they tuck their hands under the arms and cease to listen. The teacher notices this and asks what is the matter. They are cold. The teacher then turns on the radiator and tells the boys they may get up and move about. Shortly afterwards, the lessons is resumed, the class following attentively.

c) A large dressmaker’s workroom lit by a big glass window. The girls are at work and the sun pours in by the window to their visible discomfort. One gets up and draws the blind.

d) A master locksmith is employing a new man and takes him into his workshop, a dark and grimy room, half underground and without a window. The workman refuses to go in. His employer then shows him a bench and an anvil beneath a small shed near the door of his shop. The man accepts this, puts on his overalls and starts work — files something and occasionally works the bellows.

Another locksmith passes by and asks the workman if he will work in his shop near by. They go and visit this shop, which is large, well-lit, and ventilated with a window and cowls over each forge and near to the filing and polishing bench. The workman is delighted, leaves his former employer and takes his place in the new shop.
Scene 8.

*Take up most comfortable position, try not to move more than is necessary; imitate the best workers.*

*a) Two workmen are pushing barrows filled with stones. One bends the elbows, the other lets his arms hang down. The first has a label on his chest inscribed "Wrong position"; the other a label inscribed "Correct position."*

*b) Three men are hoisting weights with windlasses; the first of these is on a level with the stomach and compels the workman to bend down all the time; this is labelled "wrong position." The second windlass is level with the chest and is marked "Excellent position"; the third is level with the elbows and is labelled "Fairly good position".*

*c) Two workmen are filing iron in a standing position. The first worker's vice is on a level with his elbow, the man stands upright, the feet almost together: *good position.*

The second man's vice is much lower and the worker has to bend his back and separate the legs: *bad position."

*d) At a railway station: three small four-wheeled hand-propelled vans for carrying mail. The first is only about 50 cm. high, the second 1 metre and the third 1 m. 50. They are pushed by three men of the same height, who lean their hands on the upper edge of the van. The position of the first man is *wrong*, that of the second is *excellent*, that of the third *fairly good*. Another case: the three men are of different height; in this case the shortest will push the first van, the next shortest the second, and the tallest the third van.*

*e) Gilbreth's famous experiment with the builder may be repeated. A mason is building a brick wall. He has to stoop down for each brick and for each trowel-full of mortar. At first he is almost continually stooping; then, as the wall rises, he has to stretch upwards and stand almost on tip-toe to place the last bricks. At the end of the day the bricks are counted and the man is found to have laid a hundred.*

The next day, the foreman arrives on the scene an hour in advance of the workman. He places two trestles, one to the right and the other to the left of the workman. On the first trestle he puts bricks and on the other mortar. As the wall gets higher, the trestles are raised and the mason himself mounts upon a third trestle to work more comfortably.

When the day's work is finished, the bricks are counted and the man is found to have laid five hundred.

N.B. Many other similar examples can be shown.

G. Loriga.
CINEMATOGRAPHY AND THE PREVENTION OF ACCIDENTS

The use of the cinematograph in the campaign against occupational accidents is a matter of some importance, because:

1° The campaign to prevent accidents has enormously developed in every civilised country during the past twenty years;

2° As will be seen from what follows, propaganda is not easy, the environment and mental habits of the working classes are difficult to change, the available means are few and their relative value much discussed. For the rest, the cinema would appear to be an instrument of propaganda of undoubted value, which, if it cannot replace other methods, can very usefully supplement them. The mode of its use must be carefully studied and adapted to the mentality of those whom it is desired to persuade and instruct and to the special purpose which it is sought to attain.

The few propaganda films on accident prevention made during the last ten years are only of value as examples of what it has been found possible to do in this field, for the technical conditions for the production of effective films are not yet stabilised and we are far from possessing any exact idea of what constitutes a good propaganda film. It is not enough to propose the making of such film. A subject must be selected, an effective scenario designed to interest the public; it must be suitably acted by actors who can arouse sympathy and lastly it must be exhibited under conditions which will attract the working man or the peasant whom it is desired to impress.

Here more than elsewhere we should remember the old maxim «Castigat ridendo mores». The propaganda film must not be a mere technical demonstration of the operation of machinery and apparatus, of the dangers attending their use and of the best methods of avoiding those dangers. A demonstration of this kind would merely bore the spectators, who are already familiar with machinery. What they need is to be interested and impressed by dramatic incidents arising naturally out of some occupational accident.

Accordingly the propaganda film must be played by professional actors, produced by intelligent cinema experts who understand the purpose of the film and the special mentality which it is sought to impress, but they must be assisted by technical experts who are capable of weaving into the plot the technical points which it is desired to bring home to the spectator.

These few remarks are enough to show that it is by no means easy to make a good propaganda film, which may explain the very small number of such films in existence although the cinematograph with its living pictures would naturally seem the most effective aid to the fixed image and the spoken word.
I.

Occupational accidents are among the most terrible scourges of the working classes. Every year thousands of workmen lose their lives in the practice of their trade, hundreds of thousands of others are temporarily or permanently disabled. The economic loss resulting from so much waste of active energy is incalculable. Those who die cease to perform services before they have compensated the community for the cost of training them for their work; the permanently disabled render less service than the able-bodied, but their requirements as consumers are not only no smaller but are often larger, while workers temporarily disabled render no service during the period of invalidity.

It is impossible therefore to exaggerate the loss to production from occupational accidents. Much more serious still, however, are the direct effects upon the victims themselves. Occupational accidents involve physical and mental suffering, impoverishment and privation for the family, loss of economic and social status. No doubt these hardships are to some extent set off by the system of compensation, but in the last resort compensation is only a re-distribution of the cost of the accident, the total loss to the community remaining the same.

In these circumstances it would seem natural that everyone concerned should of their own accord seek by all the means at their disposal to combat the risks of occupational accidents. It is a regrettable fact, however, that the attitude of those concerned is only too often marked by a kind of fatalism. Accidents are usually regarded as an inevitable accompaniment of industrial activity; each of the interested parties is much too prone to look to the other to adopt any possible measures of prevention. Many workmen believe that the duty of preventing accidents rests exclusively with the employer, while the latter complain that, through indifference or carelessness, their workmen often expose themselves to dangers which they could easily avoid.

It is now generally admitted that both these views are one-sided and mistaken. Industrialists can do a great deal to diminish the risk of accidents, even without the collaboration of the workers. By organisation they can arouse the attention and interest of their workmen and prevail upon them to exercise care. The latter in their turn should not neglect the means of protection offered them or be indifferent to considerations of health and fitness. Lastly, the State, as representing the community and as the guardian of labour, can enact laws and organise a system of labour inspection so as to ensure that the practical measures taken to safeguard workers are carefully studied and strictly observed within the different undertakings.

Thus nothing can be done to prevent accidents without the active and voluntary cooperation of all concerned.

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For a long time it was thought — and the belief still persists in certain quarters — that occupational accidents were caused by machinery alone and it was
therefore imagined that the work of prevention consisted mainly in protecting workmen from more or less direct and dangerous contact with machines. Statistics of occupational accidents, however, have revealed the fallacy of this view and show that a comparatively small percentage of accidents is due to machinery.

According to the statistics published by the United Steel Corporation in 1921, 200,000 accidents were classified, of which only 8.83% were due to machinery. It is true that this gigantic organisation represents a rather special case, since it has its own mines and railways, which together were responsible for 19.02% of the accidents. Nevertheless, other published statistics point to the same conclusion. The North Dakota Workman's Compensation Bureau, in its report for 1923, examines the causes of 4969 accidents occurring between 1919 and 1923 and found that only 12.6% could be attributed to machinery. It appears from this report that, although accidents from machinery are few in number, they are relatively of a very serious nature. For example, 37.9% of accidents which resulted in permanent disablement and which further represent 19.9% of the total compensation paid by the Office in respect of accidents, were due to machinery. The same figures, however, emphasize the relatively considerable importance of accidents due to other causes.

The same conclusions are suggested by the statistics of the German Accident Insurance Institutions (Berufsgenossenschaften). Of the 53,476 accidents which resulted in either permanent disablement or disablement for at least 13 weeks and which on that account first became entitled to compensation in 1921, 27.1% were caused by machinery (Amtliche Nachrichten des Reichsversicherungs Amtes 1922).

Experience shows that precautions and measures of a purely technical kind cannot avail to prevent all accidents from machinery. Even if we grant that certain expedients, such as good lighting, upkeep of stairways and floors etc, might avoid a number of accidents, it would still appear that 70% to 75% cannot be averted by technical means, because they are due to human nature.

By way of illustration we may quote here the arguments contained in a recent number of an agricultural paper in an article entitled: «The prevention of accidents in agriculture — Two-edged tools»: «We mean by this expression the twofold effects of the machinery or edged tools employed in agriculture. Useful and indeed indispensable as these instruments are to the farmer, they may be excedingly dangerous both during work and in the course of transport and also owing to the places in which they may be left lying about.

«This explains the frequency of accidents due to this cause. As a matter of fact some 25% of agricultural accidents may be said to be injuries inflicted by sharp-edged tools or blades.»

«Agricultural labourers are being taught by hard facts to reflect and to ask themselves whether nothing can be done to avoid such extensive injury and loss. A study of a few of the commonest cases should convince us that something can be done.

«A peasant is returning from work with a scythe on his shoulder, of which
the blade is pointing downwards; he stumbles, falls backwards and the scythe enters some inches into his back.

«A farm-lad runs up to the hay-loft, bare-footed, to fetch some fodder. Left buried in the hay is a fork, one of the prongs of which strikes the boy's foot, its sharpened steel point inflicting a severe wound.

«It may be said that these are examples of bad luck — risks inherent in the occupation, but has the misfortune really this fatalistic origin? If a woman, while busy sewing, allows her little girl to get hold of the scissors and hurt herself with them, she may first scold the child, but she should end by acknowledging that the fault was hers for leaving the scissors about in easy reach of the child.

«Why should not the conscience be similarly examined in the two cases described above? It would then be seen that if the scythe had been held with the blade pointing upwards, or, better still, if it had been sheathed, the peasant's fall would not have had the same serious consequences. Again, if the boy had not been bare-foot, he would have been adequately protected by his boots. Or if the fork had been left in a safer position or at any rate plunged into a bundle of hay, it would not have been a source of danger.»

We may supplement the two cases of agricultural accidents reported by this paper with a personal recollection of one of those accidents which are of daily occurrence in the country and which are often due to mere imprudence or inattention combined with the state of excitement induced by work performed under a hot sun by men and women thinly clad. These conditions are effectively represented in the first act of Gabriele d'Annunzio's «The Daughter of Jorio». During the mechanical threshing of corn, the leader of the team, mounted upon the platform of the threshing-machine between two or three women, who hand him the sheaves, was passing the latter into the mouth of the thresher. Normally, there is no danger at all, but the man, during his rhythmic movement towards the mouth of the thresher extended his arm farther than was necessary and his right hand was caught between the cylinders. I remember as if it were yesterday the deep impression dug by the teeth of the cylinders in the fingers, exposing the bone. The imminent danger of tetanus was averted by immediate medical treatment, but the man was unable to do his work for several months.

There is no doubt that men are often prompted to acts of recklessness either by youthful exuberance or when working in company with women. All this proves the part played in occupational accidents by the human factor, and it is a factor more complex than the foregoing considerations make it appear, since other elements also enter into its constitution.

In a note headed «The prevention of accidents and scientific management» published under the signature of M. Frois, Inspector of Labour in the April 1929 number of the Review «Protection, Sécurité, Hygiène», the writer seeks to show the economic importance of accidents and to devise means of avoiding their very serious social consequences. On the basis of statistics and an estimate of the losses sustained by industry, apart from compensation proper, he arrives at the conclusion that accidents cost France 27 million working days a year. From the point of
view of the victims, insurance and production, the total corresponding cost exceeds 4 milliards of francs in the year.

The variation in the number of accidents in the course of the month, week and day leads the writer to study the influence of fatigue as a factor in accidents. On the strength of detailed considerations of a physiological character he concludes that uncoordinated movements and reduced muscular elasticity are definite causes of certain specific accidents.

An enquiry into the real causes of fatal accidents in the first area of inspection in France shows that out of 100 cases 25 are due to chance mishaps which it is difficult or impossible to foresee, 32 to inadequate protection during work and 43 to deficient protection aggravated by the imperfect adaptation of the workman to his task.

Of these 43 ten were ascertained to be unskilled workmen (of whom 5 met with, their accident through some faulty movement); 15 were men physiologically unsuited to their work, while in the remaining 18 victims the psychical faculties were unequal to the demands made by the occupation (lack of attention, insufficient sang-froid, errors of judgment, etc.).

Summing up, 80% of accidents in France are due to the absence of preventive measures, which have not been sufficiently studied, and the consequences of these accidents are aggravated by the physiological or mental defects of the workmen.

In this study it would seem important to emphasize the factor of fatigue, which appreciably reduces the attention necessary to avoid accidents thus resulting in uncoordinated movements, which lead inevitably to accidents. In this, connection some authorities recommend physical exercise and sport, which keep the worker physically fit and healthy — thus ensuring self-control and steadiness — and develop his faculties of attention.

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Accordingly, human nature with its vices and defects is an important factor in determining the number of occupational accidents and, however complex a factor it may be, it is certainly open to the corrective action of those industrial organs which are concerned to reduce as far as possible the number and gravity of accidents.

This has long been recognized, and highly industrialised countries have sought a remedy in the establishment of regulations providing for the supervision of men while at work. Generally speaking, however, it has been deemed impossible to change human nature and the high percentage of accidents which has often — sometimes wrongly — been attributed to the faults of the workman, has been regarded as inevitable.

The Americans were the first to adopt new and extraordinarily successful methods, which have permanently benefited both the workers and the whole country.

Until the beginning of the twentieth century, compensation and the prevention of accidents were practically unknown in the United States. In each case
the victim had to claim damages from his employer under the common law on civil responsibility. Labour inspection, which enables the State to adopt effective measures to prevent accidents, did not exist. The Americans themselves admit that the campaign against accidents dates from 1908. The question was first forced upon public opinion in all its magnitude by the shock of two unprecedented mining disasters in which 600 miners lost their lives. The practical-minded American, looking at the accident statistics with an impartial eye, quickly realised that the technical measures of protection were inadequate and immediately set to work to reduce the number of occupational accidents, which accounted, as above-mentioned, for 75% of all accidents, by teaching workmen to work carefully.

For this purpose the National Safety Council was created and by the end of 1921 comprised 8,000 undertakings employing between six and seven million workers, the State administrations responsible for the compensation and prevention of occupational accidents and a large number of communes and insurance companies.

The Council succeeded in convincing a large section of public opinion of the necessity of preventive action and within a short time its characteristically American watchword «Safety first» became a popular slogan.

From the outset the Council concerned itself with technical measures but at the same time strove energetically and successfully to educate the workers on the basis of the following principle: «The great majority of accidents can only be avoided by the aid of educative propaganda in which every worker, every foreman and every member of the managerial staff cooperates».

The Council thus appeals for the whole-hearted support of the management and is further responsible for two characteristic institutions — «the Prevention Engineer» and «the Factory Safety Committee», relying finally upon the effective collaboration of the foreman. These four essential elements constitute the basis of accident prevention, the methods of which we would emphasise briefly in order to show how the cinematograph may find in them its natural place and an outlet for useful service.

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Propaganda for the prevention of accidents aims at removing all dangers which threaten workmen in the course of their work, and to this end men must be taught where danger lies and how it may be avoided. The most difficult and important part consists in stimulating and maintaining the will to avoid accidents and in inculcating in the individual habits of prudence and care which take root and become second nature. For this purpose the posting up of notices and the distribution of printed rules, instructions and warnings have been found, according to the experience of Europe, to be of little effect. It is essential that the appeal should be made not only to the reasoning faculties, but also to the imagination which must receive a lasting impression.

For the training of new and, specially, foreign workmen Mr. T. Fonda (National Safety News, October 1920) recommends the establishment of regular courses
in accident prevention. For the lower grades the methods in general use are very varied: lectures, if possible with lantern slides, cinema performances, posting up of notices, and competitions. The numerous staff magazines published by industrial undertakings are often used to disseminate the best means of avoiding accidents. As a rule, these do not describe new technical measures of protection, but tell the reader, in the light of experience, how men have behaved in cases of accidents which have actually occurred. The method of presenting these facts is characteristically American in its directness and every care is taken to avoid boring the reader.

The lectures frequently open with a few anecdotes — amusing rather than distressing — so as to arouse the interest of the audience quickly. It is a mistake too for lecturers to assume that their listeners are slow of understanding. At the same time an appeal to reason alone is wholly insufficient; it must also be addressed to the imagination and to the feelings. Lantern-slides are found very useful for the purpose. In the United States slides are apparently shown with great rapidity — as many as 60 in half an hour. The relative value of lantern-slides and the cinematograph is a subject of much discussion.

As regards the points to emphasize, it has been noticed that the mere exhibition of protective devices and apparatus does not give satisfactory results. It is usually better to show the consequences of accidents and how they originated. Here, too however, account must be taken of the mentality of the audience. A mere reconstruction of an accident is of little use in the case, for example, of skilled workmen of average intelligence, sufficiently well aware of the dangers they incur, but who fail to avoid them from the sheer pleasure of running risks or from fear of being accused of cowardice. In every case it must be fully explained why workmen ought to avoid the risks of accidents, a special appeal being made to the call of family affection. The interesting proposal has been made that workmen should be attracted to lectures by means of printed invitations, which flatter them and persuade them to attend and bring their families.

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It will be seen from the foregoing that propaganda for the prevention of occupational accidents, conducted with such fervour and energy in America for the last thirty years and now being followed by a similar movement in Europe, employs organs specially created for the purpose — such as the technical expert for the prevention of accidents and the Safety Committee — and that the material means used to spread rules of safety and especially a knowledge of the necessity of using the utmost care during work, are the following:

posting up and distribution of printed rules and instructions;
notice-boards;
lectures, accompanied whenever possible by lantern-slides;
cinema performances.

We propose to consider later on the very special value of the cinema as an instrument of publicity and shall now give a few particulars of the work of propa-
ganda carried out in various countries. This will show how fully the experience of the last thirty years confirms the great value derived from the education of the working classes by the above-mentioned means, with the object of reducing the danger of accidents to a minimum.

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Mr. I. Roach, Director of Hygiene and Public Health in the Ministry of Labour of New Jersey, in a report published in 1921 in the «Proceedings of the 8th annual meeting of the International Association of Industrial Accident Boards and Commissions», writes as follows:

«For ten years the Ministry of Labour of New Jersey has been conducting an educational campaign among the representatives of various industries and has sought to secure their effective cooperation in propaganda work to prevent accidents. Each undertaking was asked to appoint a person with the title of «workshop boss»; this functionary was invested by the Commissioner of Labour with official status and with certain powers in matters relating to the prevention of accidents. These officials met at intervals for lectures and readings and to study and discuss industrial reports, draft laws, etc. This educational campaign was most effective in popularising the work of prevention and facilitated the promulgation and application of new laws. Further, industrialists became more favourable towards labour inspectors, themselves requesting and welcoming the advice of representatives of the Ministry of Labour. This educational work was extended by the formation of local preventive organisations in various parts of the country under the direction and guidance of the Ministry of Labour. These organisations meet monthly for eight months in the year and hold conferences on the prevention of accidents, treatment, medical supervision, etc. Films are also manufactured dealing with the prevention of accidents and a determined effort is made to direct the attention not only of industrialists, but of the public towards this problem.»

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In the 1918 Proceedings Mr. G. H. Hambrecht, of the Industrial Commission of Wisconsin, in a report on the prevention of industrial accidents in Wisconsin wrote as follows:

«This Commission was set up seven years ago, and from the first has sought to serve industrialists and workmen by furnishing them with all possible information on the means of preventing accidents. The members of the Commission, without neglecting devices by which to protect workmen from accidents, have devoted much time during their inspection of factories to helping employers and stimulating the interest of engineers, foreman and workers by practical talks on prevention. Special meetings have been held at which lectures were given on certain dangerous methods, while use has also been made of lantern-slides and the cinema.
On the the same occasion Mr. John B. Brownell of the Californian Industrial Accidents Commission read a report on the campaign for the prevention of accidents in California, which included the following passage:

"This Commission established an office for the prevention of accidents in 1924. With the financial aid of the Redwood Association eight films were prepared showing certain typical dangers to be avoided. Mr. J. C. Bennett, an engineer attached to the office had prepared the scenarios and the actors were all workmen whose work and actions were performed in such a way as to show how the necessary precautions were observed. Each of these eight films demonstrated a complete working process. The films were shot at the end of 1917 and were loaned to various saw-mills on the circulating library system.

To these same proceedings Mr. Robert D. Yonny, technical engineer for the prevention of accidents at the Ministry of Labour and Industry of Pennsylvania, contributed the following:

"In the course of our educational work we first approach industrialists and heads of businesses. We try to persuade them of the importance of preserving their human capital intact. After arousing the employer's interest in propaganda work, we help him, if requested, to conduct a campaign against accidents and furnish gratis a number of films which constitute an effective means of keeping the best workmen interested in their work. These films, prepared by the Ministry of Labour, have already been shown to thousands of workmen and their families and have no doubt had very substantial results."

"* * *"

An article entitled "Safety first; what it has done and is doing" in "The Monthly Herald and Industrial Record," Johannesburg, June 1926, gives a brief account of work done in the South African mines towards preventing accidents, bearing in mind the large number of illiterate natives included among the workers. The Committee for the prevention of accidents has employed the following methods: propaganda by means of printed illustrations, cinema films, encouragement of new suggestions for the avoidance of accidents and the organisation of first-aid competitions.

The article attributes to this active propaganda the diminution shown by official statistics in the number of fatal accidents occurring in the Witwatersrand mines during the past twelve years. The percentage, which from 1913-1916 varied between 3.16 and 3.81 per thousand, lay between 1.92 and 2.63 per thousand during the period 1922-1925. It should also be noted that 40% of fatal accidents were caused by falling rock or by explosions. The Committee is now engaged in making a film to show the right and wrong ways of handling explosives.

"* * *"

In the annual report of the German professional Associations for 1925 on the question of accident prevention we find the following:
"Every modern means of propaganda is employed to bring about an improvement through cooperation between workmen and employers. Endeavours are made to influence all concerned by means of lectures, courses, lantern-slides and films. Some Associations have made collections of photographs and slides which they place at the disposal of anyone interested. Others have published, or have assisted in the manufacture of films. Propaganda through pictures has been persistently maintained and great success has been obtained by the printing of small and suitably chosen pictures on pay-envelopes. This form of propaganda promises well, since the pictures find their way into the workmans family and thus enjoy a wide circulation."

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A few years ago the Secretariat of Young Christian Workers in Belgium took up propaganda work for the prevention of accidents and in particular organised exhibitions in various industrial centres. The third of these exhibitions was held at Charleroi from February 18th to 21st 1928. The Institute « Aumoniers du Travail » housed a collection of posters, protective apparatus and machines not provided with safety devices. The exhibition was afterwards to be shown at Brussels and Namur. The organisers intended to arrange for lantern-lectures and cinema performances to be held by schools, business firms and local branches of the Secretariat.

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On page 320 of « Sparwirtschaft » for 1928, we read as follows:

« The Austrian Central Office for protection against accidents, to which are affiliated the Workmen's Accident Insurance Organisations, the Central Inspectorate of Industry and the Employer's and Workmen's Associations, recently exhibited to an invited audience the first Austrian propaganda film on the prevention of accidents.

« The film was shown at the Technical Museum of Industry and Commerce where the Central Office has its premises.

« The Central Office aims in the first place at propaganda on psychological lines, not only because statistics show a large increase of accidents in recent years, but also because accidents due to ordinary causes are three times as many as those due to machinery. The film prepared by the Central Office therefore seeks to demonstrate to the workman how often accidents are caused by sheer carelessness.

« Since it is well-known that purely instructive films arouse only moderate interest and easily bore the spectator, an attempt has been made for the first time to interpolate the representation of an industrial accident in a dramatic film adopted to the mentality of the Austrian people. This film, which consists of a prologue and three acts, has been so prepared that it can either be shown in its entirety, or one act at a time as part of an ordinary cinema performance. It is hoped in this way to reach a far wider public, and, by introducing the idea, as it were, inadvertently, in such a way as to seem natural, to make people more alive to the necessity of avoiding accidents."
The film referred to in the preceding paragraph was lent by the Austrian Central Office to the Italian National Association for the prevention of accidents. Divided into three parts, each occupying a quarter of an hour, it is intended for cinematographs in factories and is a romantic drama into the plot of which are woven pictures of work in various industries and of various interesting examples of industrial accidents. It thus reproduces passages from industrial life directed by a sound artistic sense and having a definitely educational purpose.

This film was shown on the evenings of January 4th, 8th, 9th, 10th and 11th, 1929 at the works of the Milan General Electric Company, at the Lombardy Iron and Steel Works the Sesto San Giovanni works, the Togni Works at Brescia and at the Breda Factory at Sesto San Giovanni (1).

For several years now school authorities in America and in Europe have sought to introduce teaching on the prevention of accidents, especially in connection with street accidents. This teaching for the most part takes the form of special lectures and games specially designed to inculcate in small boys elementary rules of safety in the streets. In Italy the Cassa Nazionale Assicurazioni contro gli Infortuni, has shown in a number of elementary schools a film on the prevention of accidents. The Minerva Institute has aimed at popularising the question by the same means.

From all that has been said above, therefore, it would appear:
That propaganda work on accident prevention has during the last thirty years developed enormously in all civilised countries;
That statistics show how the great majority of occupational accidents have psychological causes and are not attributable to machinery;
That past experience shows the value of propaganda and the need of appealing to the imagination and the feelings as well as to reason;
That the means of propaganda are few. Propaganda is oral or written. The latter consists largely in the distribution of printed rules for the avoidance of accidents. In view of what we have said above concerning agricultural accidents and of the environment of the industrial and still more the agricultural worker, these printed instructions are of very doubtful efficacy. Oral propaganda, on the other hand, is difficult, since workmen have to be invited and coaxed to attend meetings and lectures. The aid of pictures in the form of notices, photographs, lantern-slides and cinema films is a recognized necessity. Films have only been employed within recent years and in a few cases;
The use of the cinematograph for propaganda has led to a discussion of the

(1) Below will be found a summary of plot and the chief captions of this film.
greater or smaller relative value of notices and films and of the preference to be given to the one or the other.

Dr. Kurt Seemann, in a systematic study of propaganda for the preventive of occupational accidents — a study which the author has tried to make strictly scientific — describes a series of notices which he caused to be prepared with the help of an artist, and he furnishes us with his observations on the impression made upon the workmen by these notices — impressions collected without the worker’s being aware of the presence of any observer.

The article concludes that these notices have no propaganda value unless they are really such as to arouse attention and also that propaganda by this means alone is not enough. The writer does not mention films, but says that the notices may be effectively supplemented by lantern-slides.

Supporters of the cinema base their preference upon the fact that films hold the attention and also instruct in a fraction of the time necessary for oral teaching. (David S. Bayer. « Safety education through motion pictures » National Safety News, November 1921). The National Safety News quotes the opinion of five experts on accident prevention as to the kind of film best suited for propaganda (« What safety means in an industrial film », National Safety News, January 1924). Their opinions are not unanimous but are interesting for all that. H. C. Thomson, for instance, believes in the representation of the various processes in a cycle of operations; in other words, he does not believe that the question of safety proper should be treated separately, ex professo. The devices and methods of protection are a part of the whole process of production. Representations of accidents make little impression, because the workman quickly notices that the scene has been reconstructed for the purpose and he thinks that it is exaggerated. Similarly, pictures of family life intended to add a human interest to descriptions of accidents and thus to gild the pill do not move the spectator.

W. T. Boyd, on the other hand, favours the interpolation of such scenes and thinks that persons known to the spectators should be put on the screen as often as possible. A W. Rohweder maintains that, in order to effect its purpose, the film should show life as it is, with the special risks attending factory work, and should emphasise the importance of the supervision of work by the managing staff and the Safety Committee. The other two experts, J. A. Northwood and C. A. Ralston, while disapproving of pathetic scenes, think it of great importance to arouse interest in the spectator by showing the effects of accidents upon the family, and perhaps by inserting within an ordinary plot episodes throwing light upon conditions of work.

Some large American firms do wide propaganda by means of cinema performances. Thus the Pullmann Company presents a different programme every day, with pianola accompaniment, in a huge restaurant. On Monday a comedy is given, on Tuesday the weekly review published by the Ford works, on Wednesday an industrial film, on Thursday a drama, on Friday the Hearst-Pathé News. Such firms, however, are the exception. As a rule, performances are governed by the desire not to take up too many of the workmen’s leisure-hours.
* * *

In 1926 the Munich Museum for the Protection of Workmen, in conjunction with the Bavarian Builders and Timber-workers Associations, prepared a film on the prevention of accidents in the timber industry. This film was entitled « Look out! Danger! » and was written in a prologue and three parts. The first two parts were of a general character, the third related mainly to the professional associations.

This film, together with another called « Imminent danger », prepared by the Austrian Central Office for the prevention of accidents (see above) was criticised from the worker’s point of view by H. Sachs in an article headed « The film and its services to accident prevention », which appeared in the Reichsarbeitsblatt, No. 35, December 15th, 1928.

The writer objects in particular to the unduly brutal representation of the facts and considers that too large a share of the responsibility for the accidents shown is attributed to the workmen. Analysing the various accidents depicted in the film, he points out that many of them could have been avoided if the employer had taken the necessary steps to remove certain abuses. He is of opinion that the contents and form of propaganda films for the prevention of accidents ought before all things to amuse the spectators, although the real purpose must not be lost sight of. They must make the spectator think without upsetting or irritating him; they must win his sympathy for the cause of accident prevention and make him cooperate in this splendid work.

The following reply appeared in the Review of the Italian Association for the Prevention of Accidents:

« H. Sachs’ article concludes that preventive films must be of such content and form that their effect is left to chance, so to speak, the facts not being driven finally home. The film must make the spectator think without annoying or offending him and it must fill him with the desire to assist in solving this important problem ».

« This conclusion further illustrates the truth of the saying that criticism is easy but art difficult. In comparing the two films « Look out! Danger! » and « An imminent danger », M. Sachs makes an analysis of the two cases which is to our mind altogether too crude.

In the first film the accident is represented in all its tragic cruelty and in its sad consequences: mutilation, blindness, artificial limbs, crutches — all of which is bound to make an impression. In a word, we see the accident as it happened. In the second, on the other hand, the accident is represented as an imminent danger, a menace which is only fulfilled so far as is necessary to arouse in the spectator a sense of disaster.

« M. Sachs mentions all this, but he comes to no conclusion. The first film is addressed to workmen who are so habituated to their work as to be part of the machinery; the second as is stated in the notice accompanying the explanations, is intended for the young, boys and girls under 16, and for women.

« Which is the better of these two methods? We might as well ask which is
preferable, the warning notices issued by the Americans — cool, sometimes puerile, if not grotesque — or the blood-curdling notice as conceived by the Germans, or a mixture of the two; or should the warning have a somewhat emotional character like some of our own? The answer depends entirely upon the public addressed.

« For instance, in the first of the two films we are speaking of, M. Sachs thinks it an unnecessary risk to entrust the part of the workman caught in the machine to a real person; a dummy would have served as well. Even apart, however, from the fact that marionettes can never achieve the palpitating reality of human beings—any more than a musical box or a gramophone can reproduce the voice of human passion and the pulsations of the human heart — the American films, with their exhilarating élan, leave no doubt at all of the overwhelming superiority of flesh-and-blood actors. In the second case, M. Sachs emphasises the necessity of impressing women, so as to win them over to assist in the spiritual and emotional aspects of preventive work, and here we are with him. A great deal may be expected from family feeling, by which the worker continues to be moved during his hard struggle to earn the daily bread and to do his job as best he can. It is on this account that the representation of tragic events and distressing consequences should be tempered by the inclusion of gentle and kindly sentiments, so that the film may interest, move and persuade all classes of the public, the worker male and female, wives and mothers, and also children, who are the workers of the future. There is thus no doubt at all of the efficacy of the cinema, which as a means of conveying the necessary warning, far surpasses the spoken, written or printed word, through its stronger appeal to the worker's soul. For this reason it offers immense possibilities for the future ».

III.

This summarised criticism shows that the technique of propaganda films on the prevention of accidents is still in its infancy. Very few films of the kind have as yet been made and these must be regarded as more or less experimental. It is worthy of note, however, that all critics recognize the potential value of a well-constructed film.


This article, as its title implies, only deals incidentally with preventive propaganda, treating in the main of the various uses that can be made of the cinema in industry, as for example: technical studies, vocational teaching, application to scientific management, commercial and financial propaganda.

The writer points out that the film's universally recognized power of fixing attention and imprinting a recollection of what is shown, makes it particularly valuable for purposes of vocational teaching. A good film, in fact, gives a clearer impression than a visit to a factory. General views reproduce the atmosphere and environment of a business and show operations in all their reality. The development of the film in accordance with a definite didactic scheme, the choice of incidents
and the captions correspond to a guide’s explanations and draw attention to matters of special interest. Of inestimable value is the employment of close-ups, which illustrate points of interest that it is often difficult for visitors to observe at close quarters. The ability to show, under a favourable light and in logical sequence, only what is essential — and to emphasise such points by showing them for a longer or shorter time — confers upon the film a very special didactic value. The result is more than a rough reproduction of reality, it is a real illustration of facts.

The author then proceeds to give a few practical examples. The Paris Joint Transport Company is obliged to train quickly a very large staff and needs some guarantee that this staff will be in a position to avoid every kind of accident and incident that may occur in the course of work. For this purpose the Company has established excellent vocational courses and a well-organised laboratory of psychotechnical tests. The use of the cinema in these courses has substantially reduced the number of hours of teaching — a priceless boon, and one which confirms what was said above concerning cinematographic propaganda to prevent accidents.

Again, it was of importance to the Company that it should be able to test scientifically the efficiency of the vocational training given to omnibus and tramway drivers before allowing them to start practising. To this end it rigged up in the laboratory tramway platforms and autobus driving-seats. The pupil driver takes his place in front of the controls, and on a screen fixed in front of him a film is shown representing street traffic with the various incidents that may occur, a traffic block-imprudent crossing of road by pedestrians, etc. The driver has to manipulate his controls just as if he were on a moving car. A special apparatus registers the street incidents thrown on the screen simultaneously with the driver’s reactions. The graph thus obtained supplies a picture of the time taken to react, inattention, faulty manipulation and shows how the candidate has solved the various traffic problems set him.

The creation of the psycho-technical laboratory and the use of psycho-technical tests in the enlistment of staff coincided with the new use of films for vocational teaching, and the Company has therefore been unable to estimate separately the influence of the two factors. It has however been able to record a notable reduction in the hours of instruction (about 15%), while the number of accidents per kilometer diminished by 11% in 1926 and 11% in 1927. This is further proof of the advantages of the cinema from the point of view of the prevention of accidents.

Klimovicz also quotes certain films prepared by industrial undertakings for purposes of vocational teaching, among others, a film by M. Dalimer, Chief Engineer of the Nord Railway Company, which represents «the repair of the railway».

The staff employed to lay down new sleepers and rails usually belong to private concerns and work under the orders of agents of the Company. Since replacement work must be done fairly rapidly so as not unduly to delay traffic, and because certain safety precautions have to be taken, the Company has resorted to a practical method of training this constantly changing staff. The film made
for this purpose is about 2000 metres long and shows very ingeniously, first, the principle governing operations and then the various details of execution. M. Dalimier has also sought to illustrate what should not be done in certain circumstances. For instance, a man is shown continuing at his job when a train is about to start (this is forbidden). The movement of the carriage knocks him down and the picture of this will certainly remain in the spectator's mind much longer than mere words of warning.

Lastly, the writer mentions an actual film on the prevention of accidents shown recently at the Cologne Press Exhibition. The workers in a printing and paper factory have decided upon a very special strike, consisting in a refusal to observe the measures of protection, which they consider to be absolutely unnecessary. The film then shows the various accidents which result from their imprudence. The pictures are admirably calculated to arrest the men's imagination, but particularly admirable is the way in which the matter is approached. If it had been introduced while the accidents were being shown, it would have put the spectators off, since no one is fond of lessons thrust down the throat. The story, however, entertained them and made them more accessible to the instruction it was desired to convey.

Klimowicz has himself prepared and shown industrial films and is therefore in a position to support his belief in the suggestive power of the cinema. On the other hand, aware of the difficulty of producing good technical films, he writes as follows: "The preparation of films must be entrusted to technical experts, that is to say, engineers, who are in close contact with industrial facts and who are at the same time cinematographic experts, since the film is a means of expression, a language which needs to be studied from the roots if it is to be employed to advantage."

IV.

The foregoing observations justify the conclusion that the cinematograph, which has as yet been only tentatively employed in the propaganda campaign against occupational accidents, is destined within the near future to outstrip all other methods of such propaganda.

The essential advantages of the cinematograph may be summarised as follows: Propaganda must not take the form of a mere statement of rules and suggestions for the avoidance of accidents. It must appeal to the imagination and feelings of listeners, awake in them a sense of responsibility to their families, cure them of a certain quixotry and rashness which often cause them to run unnecessary risks, and must encourage them to exercise the necessary caution. The cinema would appear to be of all methods the best adapted for such propaganda.

The cinema makes it possible to show the spectator pictures of machinery in operation, with its attendant risks to workers, better and more easily and conveniently than oral teaching and lectures, even when these are accompanied by lantern-slides. The details can be shown by means of close-ups and observed much more closely than in the factory itself.
The cinema fixes the spectator's attention and imparts its lessons in a small fraction of the time required for oral teaching.

Once a good film is manufactured, it can be reproduced in hundreds of copies and shown anywhere, while it would take a large number of lectures to attain the same purpose.

The cinematograph is patronised by millions of people. A film on the prevention of accidents can be included as part of an ordinary cinema performance and its teaching therefore conveyed to the audience naturally and without previous announcement, whereas people have to be invited and encouraged to attend lectures.

The living pictures of the cinematograph are more effective than words, which often bore; besides good lecturers are very scarce. Again pictures are far more effective than writings, since, although nearly all workers can read, few enjoy doing so.

These advantages are enhanced by the sound film, which adds to the virtues of the cinematograph that of a clear and convincing interpretation by chosen persons with a gift for explanation.

If on the other hand the cinematograph has not yet been largely employed as propaganda for the prevention of accidents, this is due mainly to technical difficulties. The preparation of a good film for vocational instruction only needs a good technician who has a camera and knows how to use it. A good propaganda film requires more than the photographer. It requires an author who knows how to write an interesting plot suited to the worker's mentality, it needs a producer to stage it and actors to play it, and also the collaboration of the business expert, who has to insert in the plot the pictures of industrial work and of some possible or actual accident. All the films we have considered above fail through the absence of one or other of these elements of collaboration. It would seem, however, that large industrial concerns with manifold resources and the means of uniting these different elements, should easily be able to overcome the difficulty.

V.

The great potential importance of the cinema as an instrument of propaganda for the prevention of occupational accidents is in its turn the result of the great importance which this propaganda has acquired, calculated as it is to save tens of thousands of human lives and an untold amount of suffering every year. It should be noted in this connection that although American propaganda has always been inspired by humanitarian motives and the moral obligation to avoid unnecessary suffering in any form, the promoters of the movement in America nevertheless admit that these moral and social considerations do not suffice to persuade the circles concerned to pass from theoretical approval to practical action. For this reason the National Safety Council emphasises that a systematic campaign against accidents has notable economic advantages and in support of this argument quotes the figures furnished by a number of business enterprises. Unfortunately, these
figures do not represent the general situation. It cannot be denied that many businesses are inclined to question whether it is worth while incurring quite considerable expense on propaganda and wonder whether it would not be cheaper to pay compensation for accidents. Anything which serves to reduce the cost of propaganda counteracts this unhumanitarian tendency and at the same time contributes towards improved labour conditions by diminishing the risks and sufferings involved.

It would seem that here again the cinematograph might reveal one of its essential advantages. A single well-conceived film, prepared in hundreds of copies and projected in public cinemas as part of an ordinary performance is better than dozens of lecturers, who have to speak in special lecture-theatres, dozens of lanternshows and hundreds of printed notices and recommendations.

Mario Levi-Malvano.
IMMINENT DANGER

Prepared by the Industrial Films Company, Reich Janisch and Co. of Vienna for the Vienna Central Office for Accident Prevention, by Victor Hendryck, Engineer Under the direction of Robert Reich.

Operators: Karl Hurtz Mayrer and Anton Pudler.
Characters: Binder, a foreman.
His wife.
His son Frank.
The manager of the factory.
His daughter.

Prologue.

Mrs. Binder and her little boy pay a visit to Binder at the works and on the way witness a collision between a motorcar and a cart. She has a presentiment of impending misfortune as she approaches the factory. There she meets her husband in the yard and, as they stand talking, Binder notices a workman in danger of being struck by iron suspended from an electric crane. He is in time to rescue the workman but himself falls under the wheels of a passing locomotive. Mrs. Binder who has seen the accident, faints at the sight of her husband being carried off on a stretcher.

The poor woman is overwhelmed with grief. In a delirious fever she lives the whole catastrophe over again.

She gradually recovers.

Captions.

1. «Come along, Frankie, let’s go and see daddy at the works; he’ll be pleased when you show him your school prize.»
2. «Keep close to me, dear.»
3. «Walk on the right side of the pavement.»
4. «I don’t know why, dear, but I have a presentiment.»
5. «Please, porter, will you make an exception and let me see my husband?»
6. Dear Madame, I entrust the child to your care.
7. Some days later, the poor woman’s sufferings reach a climax.
8. The crisis passes. She is saved!

Synopsis of Act I.

Several years have passed. Young Binder — an intelligent lad — has been made foreman. He is seen on several occasions warning the workmen to exercise all possible care in their work. He has set himself the task of protecting his fellow-workers from accidents.
Captions.

10. Years have passed and young Binder by dint of hard work and intelligence has been made foreman.
11. Don't work beneath a weight, it's dangerous.
12. «Well, that's the limit!»
13. That's what the trolley's for.
14. You are making two mistakes at once. Punching while the machine is in motion is forbidden and so is unloading.
14a. With the handles loose like that, look out.
15. What a fool you are to throw peel in the middle of the path where anyone may fall and break his leg!
16. The day's work is finished.
17. What are you doing? Don't you know the rules?
18. Tincture of iodine.
19. Here's another fellow who's always throwing his weight about.
20. You call that throwing weight about? Have you forgotten what carelessness led to?
21. You've less reason still to laugh. Don't you remember?
22. On the way home Binder helps a blind man across the road.
23. Thank you, Sir I'll stop a moment here.
24. Did you lose your sight in the war?
25. No, it happened in the factory.
26. If only I'd been careful—they'd shown me often enough how to handle sulphuric acid.
26a. Why are you always so sad, mum?
27. Tomorrow is the anniversary of your father's death.
28. Yes, mother and I've made up my mind to do everything I can to protect my fellow-workers against accidents.

Summary of Act II.

The act opens with an appeal to the workmen to exercise care when at work. To illustrate the necessity, a number of accidents are shown, in which Frank Binder, appointed in charge of accident prevention has occasion to intervene. Owing to some act of carelessness a fire breaks out and Margaret, the managers daughter, is in danger of being burnt. She is saved by Binder. The manager sends for him to thank him. Binder explains that he is making it his business to prevent accidents. The manager promises his support. On reaching home Frank Binder shows his mother, with the aid of statistics, how important it is to drive home the idea of prevention among his comrades.
Captions.

1. Take care! Your attention is liable to be distracted at any moment. So look out!
2. Not a day passes at the factory on which inattention does not threaten danger.
3. Do it like this. Then you'll have more room.
4. Can you obey the rules? I lost my father through carelessness like that.
5. Margaret, the managers' daughter, comes to fetch her father.
5a. The midday pause is over. Work starts again.
6. Fire!
7. Margaret faints from fear. The car goes on uncontrolled.
8. «Fortunately, Sir, hardly any harm was done. The workmen extinguished the fire almost as soon as it broke out».
8b. «My darling, are you hurt?».
9. «No, papa its allright now. I was only frightened».
10. «Engineer, bring me the man who saved my daughter».
11. «Tell me, Binder, how did the fire break out?»
11a. «Its the old story, Sir, carelessness...
12...the consequences of which it is often impossible to foresee».
13. I see that you are interested in preventive work. Have you any ideas on the question?
14. «Yes, Sir, I am now making an appliance with which it will be possible to observe work and its dangers.
15. With this apparatus I shall be able to show the men the risks of carelessness during work».
16. «You have my full support. We cannot do too much to prevent accidents».
17. «You've again forgotten your food, my boy».
18. «Look at these mother».
19. Statistics of industrial and commercial accidents in Austria.
21. Number of accidents (1922-1926).
22. Cost per 1000 workmen (1922-1926).
23. «Isn't it terrible, mother, the increasing number of fatal accidents and permanent injuries each year?»
24. And how does it come about? These figures will tell you».
25. Accidents in 1926. Table 1. Accidents caused by machinery.
26. «I myself recently saw a serious accident caused by a circular saw».
27. Table 2. General accidents caused by electric current, explosions, dangerous substances, hand-tools, edged tools, by false movements, loading and unloading, dropping and knocking against material-personal and other-total.
28. «A short time ago I witnessed two accidents during building operations.
29. The carpenter had been too lazy to replace a missing plank.
30. And the second time the workmen had forgotten to prop up the scaffolding.
31. **Table 3.** Statistics of accidents in 1926. Machinery 8171, general 23668. Number of general accidents is thus three times the number of accidents due to machinery.

32. And now I will show you what I am working at.

33. With this appliance I am hoping to show the workmen the risks they run of injuring themselves by carelessness.

34. When I have done that my life's aim will be fulfilled and I shall then be ready to...

35. Don't say that!

**Summary of Act 3.**

Frank Binder is working at his invention, a magnifying apparatus. His first tests are successful; beaming with pleasure, he shows them to his mother. He then gives a lecture to the workmen and engineers of different factories, showing by means of the apparatus the causes of a number of accidents. Margaret, the daughter of his employer, whom he had saved from danger, is present at the lecture and at the end she joins in the applause, grips his hand and says, «I am proud of you».

**Captions.**

1. Frank Binder, a skilled foreman, busy on preventive work.
2. His method consists in showing his colleagues how often accidents are caused by inattention. His discovery is successful.
3. «Mother, it's a great success»!
4. «Gentlemen, I present to you our foreman Binder who is going to show you a remarkable invention».
5. Margaret, the manager's daughter, feels strongly drawn towards young Binder.
6. Gentlemen, statistics show a constant increase in the number of accidents.

**Table 2.**

Total accidents to workers in 1922-1926.
Number of accidents per thousand workers.

**Table 3.**

Analysis of accidents in 1926
Accidents due to machinery . . . . 8171
Accidents due to general cause . . . . 23668

Thus the number of general accidents was three times the number of accidents due to machinery.

7. It is high time to take the necessary measures.

8. My apparatus makes it possible to look closely at the representation of what was happening at the moment when the picture was taken.

9. By this means I can show you actual pictures of work in the different industries.

10. ...and point out to you how the least inattention may have serious consequences.
11. Steel works.
12. Each operation demands attention. When the steel is still red hot from the rolling-mill, particular care must be taken.
13. Accidents often happen in pushing trucks, and yet men don't realise.
14. ...but disregard the instructions.
   They stand between the buffers instead of on one side.
15. A stone quarry.
17. The alarm signal before the mine blows up.
18. A cool customer!
19. I think these few pictures will have shown you that accidents are very often due to carelessness.
20. You will notice the same thing when we pass on to other industries.
22. Workmen are often absent-minded, and this is just as dangerous as a wrong movement.
23. On the second truck the load was not fastened and it is a miracle that no accident occurred.
24. A heavy load is easily set in motion and requires, as you see, special care.
25. An untied boot-lace can easily drag a man into a piece of moving machinery.
26. A notice which can be blown away by a draught is not a sufficient warning.
27. Work should not begin until the current is switched off.
28. Loading coal.
29. The big crane.
30. In this case a momentary inattention and carelessness cost a man's life.
31. Gentlemen, this is the end of to-day's lecture. The pictures will have shown you how necessary it is for both employer and worker, both industrialist and operative
32. ...to take every care to avoid all possible accidents...
33. ...by means of persuasion and warning.
34. TAKE CARE!!
35. « I am proud of you ».

END.
FILM PROPAGANDA IN FAVOUR OF PROTECTION AGAINST ACCIDENTS

(From the German)

The term «protection against accidents» may be given a very wide interpretation and extended to include life-saving in the water, rescue parties organised in the event of accidents in mines and other similar operations. As a rule, the expression «protection against accidents» is understood to mean the preventive measures taken to avoid accidents occurring suddenly in daily life or in the course of work which directly involve physical harm and even injuries endangering the life of the injured person. For our present purpose we must make certain distinctions and consider separately the following categories:

1. Occupational accidents occurring in industry and agriculture, factories, etc.
2. Traffic accidents in the street or on the railways, motor accidents etc. etc.
3. General preventive measures which have to be taken in daily life, and especially in the home-more particularly protection against fire.

To which we may add certain measures closely allied to protection against accidents which are taken in order that a person’s injuries may not be aggravated, viz.

4. First-aid, transport of injured persons, etc.

If we now consider what persons or organisations are likely to be interested in films coming within these four categories we arrive, as regards Germany, at the following conclusions:

Ad 1. The measures taken to avoid and prevent «occupational accidents» affect first and foremost employers. Hence a high percentage of this class of films has been manufactured by large industrial concerns which use them for the instruction of their own workmen especially apprentices. It is, however, the «professional associations» which in Germany are more particularly concerned to propagate the idea of protection against accidents. These associations, which date from about 1880, originated in Bismarck’s fertile brain. Bismarck combined all employers engaged in a single branch of industry within a compulsory insurance scheme under which they assumed a joint responsibility towards all employees and workers in the undertakings concerned (e. g. mines, chemical industry, textile industry, breweries, flour-mills, building enterprises, etc.). The employers further bore all the expenses including not only the cost of treatment but all allowances, annuities and pensions paid to surviving relatives. The most important duty however entrusted to the professional associations by Bismarck’s law was protection against accidents. Since every accident is a source of expense to all employers and, owing to the distribution of the burden, to each individual employer, the application of the best preventive measures against accidents and active propaganda to encourage protection against accidents are obviously matters which closely affect employers, if only for purely pecuniary reasons. In this way an appeal has been deli-
berately and strictly logically made to motives of self-interest as a means towards an unselfish end. At the same time the organisation of professional associations according to industries and specialised occupations necessarily implies a technical specialisation — not otherwise obtainable — of the associations' officials who deal particularly with protection against accidents, that is to say, the «technical inspectors».

The sixty-nine existing professional associations (the seventieth is about to be created) are grouped within a Federation of German professional associations, whose work on behalf of protection against accidents is coordinated by a central service. This service is in the charge of Herr Michels, formerly Gewerbeassessor.

As regards protection against industrial accidents, the following distinctions may be made:

a) Technical measures of protection against machinery, that is, the installation on all machines and plant of devices to prevent accidents.

b) Campaign against the risks of accidents inherent not in machinery, but in men (untidiness, inattention, inurement to danger, absent — mindedness, carelessness etc, etc.). Experts have publicly stated that 75% of all accidents are due to human beings and their defects. This alone shows the vital need of propaganda against accidents, to be addressed to each worker directly and in accordance with the dictates of psychology. This necessity has been fully recognized; hence the establishment — alongside the Federation of German professional associations — of the «Unfallverhütungs-Bild G. m. b. H.» which is also in the charge of Herr Michels and has long been successfully engaged in public propaganda on behalf of protection against accidents, issuing posters and pamphlets, organising lectures, exhibitions, etc. This company is also responsible for the making and showing of films on the subject and offers suggestions as to their mode of preparation.

In addition to the professional associations of industries referred to above, there are also in Germany professional agricultural associations, organised territorially according to the administrative division of the country, and these, too, have their central organ in the Federation of professional agricultural associations. Their competence and methods of work, particularly in the matter of protection against accidents, are exactly the same as those of the associations mentioned above.

Ad. 2. In Germany the duty of warning the public against traffic accidents lies mainly with the Administration. The Reich Ministry of Transport and the police are responsible for maintaining the safety of traffic along public ways. The communal administrations, within their sphere of jurisdiction, also take steps to prevent traffic accidents. Other organisations which have a direct interest in educating the public to avoid unnecessary accidents include the Reich railways and postal administration, the motor industry and the big Automobile Clubs.

These last organisations are united in a Federation known as the «Verkehrswacht», and a sub-division of this federation, the «Schulverkehrswacht» devotes special efforts towards the instruction of schoolchildren in methods of increasing the safety of traffic. Finally, the professional associations, of whose activities we have already spoken, are also interested in the steps taken to prevent traffic acci-
Ad. 3. Propaganda on behalf of protection against accidents in general, excluding occupational or traffic accidents, is rather neglected in Germany, despite its great importance. As a matter of fact, propaganda to prevent accidents in general ought to be part of the work of all authorities, organisations, associations and companies whose concern it is to safeguard public health. Unfortunately, the «Reichsausschuss für hygienische Volksbelehrung» is so far the only body which deals with this question. Films on protection against and prevention of fire, which are to some extent connected with protection against accidents, form a separate group. The firms concerned, namely, firms manufacturing material, etc., directed against fire, the electrical and other industries, continue to interest themselves in these matters. It is a strange thing that the big public and private insurance organisations take no part in the propaganda campaign to prevent accidents in general, or indeed in any general health relief work. These institutions ought to be interested in measures of protection against accidents and fire and in the steps taken to improve the general standard of public health; in many countries they are specially entrusted with the application of such measures. The organisations in question even abstained from practically all participation in the big German propaganda campaigns such as the «Reichs-Gesundheitswoche» of 1926 and the «Reichsunfallverhütungswwoche» of 1929.

Ad. 4. With regard to first-aid and kindred work, the big charity organisations, and especially the Red Cross, have established model institutions and once again we must mention the work of the professional associations. These questions, unlike those of which we have been speaking, are of such general interest that a number of cinematograph firms have directed their attention towards them spontaneously.

We may now mention the films which belong to each of the four categories referred to above and it is our intention to enumerate only films which were actually at the disposal of the «Reichsunfallverhütungswwoche» held in the spring of this year. It would be easy enough to give a long list of films shot in the course of past years, but in many cases both negatives and copies have disappeared leaving only the title in the catalogue. On the other hand, the thirty films taken from the archives during the «Reichsunfallverhütungswwoche», in some cases with a great deal of trouble, are available at any time. The great majority of these films were, of course, shot at the suggestion of professional associations; some were manufactured by industrial concerns and therefore come under Category 1:

«Help us to avoid accidents», length about 100 metres; Erich Stöcker
Land und Industrie Film A. G., Berlin, Federation of German professional associations.


«Protection against agricultural accidents», length 569 metres; Erich Stöcker, Berlin, Federation of German professional agricultural associations, Cassel.


«First-aid organised by the professional associations», length 600 metres, Fuhrmann-Film Produktion, Berlin.

«Such is life», length 550 metres, Federation of Reich insurance institutions, Berlin.

«Take care! Danger!», length 810 metres Dix-Film, Munich, professional association of iron and steel industries.

«Protection against accidents in the stone-working industry» length 115 metres; Industrie- und Kulturfilm Körösi, Munich Bavarian Builders Association.

«Accidents through the handling of trucks on the railways of industrial undertakings», length 132 metres, Friedrich Krupp A. G., Essen.

«First-aid in surface-work in mines» length 789 metres, Friedrich Krupp A. G., Essen.

«Rescue of a workman asphyxiated by the poisonous fumes of a blast-furnace» length 248 metres, Friedrich Krupp A. G., Essen.

«Protection against accidents in technical undertakings» length 197 metres Friedrich Krupp A. G., Essen.

«The campaign against accidents», length 848 metres, Association of Printers, Leipzig.

«Protection against accidents in work involving the use of multiple ladders», length 200 metres, Industrie- und Kulturfilm Körösi, Munich, Bavarian Builders’ Association.


«The danger of accidents during roofing operations and work on roofs; preventive measures», length 300 metres, Bavarian Builders’ Association.


«Safety measures on board German steamers and merchant vessels», Marine Association, Hamburg.

«Protection against accidents in the sugar industry», Sugar-manufacturers’ Association.


«Safety first!» Association of Saxon textile manufacturers.

Further, the professional associations representing tile-works, precision instrument makers and the electrical industry, together with the Miners’ Association,
are now engaged in shooting a number of films and have recently completed certain other joint films.

*Ad Category 2:*

«Take care! Look out!», length 681 metres, Bergische Film-Industrie, Elberfeld.

«Rules for pedestrian traffic», length 223 metres, Excentric-Film Berlin, Berlin Traffic Department.

«Educational film on traffic police», length 670 metres, Police Headquarters, Munich.


It should be added that a few years back the «Universum-Film A. G.», in cooperation with the Berlin police, prepared a traffic film, part of which was of a comic nature; this was a big film occupying the whole evening.

*Ad Category 3:*

We need only mention «The present age», a film in colours (Sirius-Farbenfilm G. m. b. H. Stegltiz and Reichsausschuss für hygienische Volksbelehrung). This film deals especially with accidents in the home. Reference may also be made to «Small things lead to big», a film 120 metres long made by the Berlin Federation of Electric Works and drawing special attention to short circuits as a cause of fire. There is also an Ufa film with the name of «Fire». Finally the Minimax Company (manufacturers of fire-extinguishing apparatus) supplied the Reichs-Unfallverhütungs-Woche with a series of short propaganda films.

*Ad Category 4:*

«First-aid» length 600 metres, Erich Stöcker, Land- und Industrie-Film A. G., Berlin, Federation of German professional associations.

«First-aid», length 1000 metres, Gervid-Film, Berlin-Steglitz, German Red Cross.

«First-aid stations», length 2619 metres, Gervid-Film, Berlin-Steglitz, German Red Cross.

«Help in case of accidents», length 450 metres, Bergische Film-Industrie, German State Railways.

«Beware of the red lamp!», length about 500 metres, Bundesfilm A. G. Berlin.

Lastly, the film «Human lives in danger» (see above), length 1200 metres, falls largely within Category 4.

If we now consider for whom these films are intended, it will be seen that those mentioned under 1 have little or no interest for the general public. They are mainly exhibited before factory staffs, technical associations, members of trade unions and, sometimes, Sick Funds. For the most part, they provide illustrative material for the use of the technical staff of the professional associations when giving lectures to workmen in the course of their inspections. It would be well to use these in.
films more freely in vocational schools, technical schools and for continuation classes. The films mentioned under 2, 3 and 4, on the other hand, could be used on a much larger scale, anyhow in the form of extracts, at ordinary cinema performances, at club meetings and, more particularly, in the public schools.

The films mentioned do not, of course, cover by any means the whole of the enormous field opened up by the question of protection against accidents; much still remains to be done. For example, a film on protection against motor accidents is gradually becoming an absolute necessity. There would seem to be no insuperable obstacle in the way of the international use of the above-named films, especially as the manufacturing processes and methods of work in the specialised industries and various industrial branches are largely the same, while films of this kind are nearly always shown by lecturers who are in a position to furnish any necessary explanations.

We must, however, have our eyes open to certain difficulties which seriously hamper the sale and therefore the use and dissemination of this kind of film. Health propaganda among the masses is now conducted in nearly all countries. Governments, public utility organisations of every kind, technical and professional associations and the schools regard it as their duty to cooperate in safeguarding public health and in spreading the necessary doctrines throughout the length and breadth of the land. The same, however, does not apply to the prevention of accidents. The mass of the people are unfamiliar even with the use of the term; it has no exact meaning for them. Thus propaganda against accidents, interest in which was first aroused among the German people by the energetic activities of the «Reichs-Unfallverhütungs-Woche», is only gradually finding an echo in the press and is only slowly gaining ground among the masses.

If this propaganda is to spread, it is essential that all classes of the population should grasp the fact that the totality of accidents claim more victims and result in a larger number of deaths than the gravest epidemics. The propaganda films in the first category, on occupational accidents and especially films which only affect certain branches of industry are almost entirely disregarded by the big organisations, which otherwise make extensive use of the cinema as an educational instrument. Those concerned often argue that they cannot be expected to incur the expense of purchasing or hiring these films or, if the film is lent free of charge, the cost of organising performances, etc.

It is claimed that this propaganda against accidents is a source of saving to employers owing to the very avoidance of such accidents and that therefore the whole cost of it and not only the cost of making the films, should be borne by employers. On the same grounds it might be argued that the purchase, sale and projection of films on public health and social hygiene are exclusively matters for the Sick Funds, district insurance institutions and other organs of German social insurance, which in the end «gain» or at any rate save money whenever accidents are avoided, in just the same way as the professional associations. As I have already said, it must be much more generally realised that propaganda to prevent accidents is, from both the human and economic standpoints, a matter of public interest, if
films on preventive measures against these accidents are to reach any but the special groups to which they are at present exclusively addressed.

It is becoming an unavoidable necessity for schools of all grades to carry out propaganda work against accidents, similar to that which is already undertaken in regard to public health. In Germany, as in all countries, science plays a more and more important part in the national life. Artisans in their shops, agriculture, the home and all public institutions make increasing use of gas, electricity, new machinery and new apparatus which is being daily discovered and the employment of which in economic life is becoming more and more general.

We cannot therefore hope to return to the peace and quiet of the «good old days» and we complain in vain of modern life and its perpetual restlessness. Instead we must adjust our ideas of the age and realise the ever-present danger of accidents to each one of us. The mentality of the whole nation and of all nations must completely change. Granted that old people will never come to see this and that the adults of to-day must for the most part learn from their own experience, it is in any case the obvious duty of those now in active harness to see that their children are brought up to quite different ideas concerning the risks of accidents and are fully imbued with this new mentality by the time they grow up.

Let us take a typical example.

In our day the motor-car inspires in all adults who do not happen to possess one, a profound and scarcely concealed dislike finding vent in a more or less impotent rage. Young people, on the other hand, realise far more clearly the necessity of modern science and therefore also the dangers of motor vehicles. Undoubtedly, the lessons given in many schools on traffic accidents have largely contributed in this matter. It is however no less important to provide for the teaching of accident prevention in elementary schools and, later, in the secondary schools and especially in continuation classes, technical and vocational schools. Just as a man who from earliest childhood has been accustomed to observe the rules of cleanliness and elementary principles of hygiene is far less likely than others to contract disease, so the apprentice, the young workman, the student or the young mechanic will generally and individually obey the rules of protection against accidents much more readily if he has been familiar with these more elementary notions since early youth.

In view of the difficulties to which we have referred — difficulties which still exist — it is essential that the large central organisations dealing with protection against accidents should constantly impress upon all the competent ministries, national and communal administrations and public and private institutions of all kinds the fact that protection against accidents is an exceedingly important branch of public health in general and that public funds should be devoted to this purpose, such as are already set aside for anti-tuberculosis campaigns, child welfare and other work. Above all, active propaganda must be conducted in the schools, if the number of accidents is to be reduced. This number at present runs into several millions a year (in Germany it is estimated that there were in 1927 about
3 million accidents involving about 24,000 deaths) and, in view of the increasing employment of technical material, it may be expected to increase in terrifying proportions, unless the necessary action is taken. If we further consider the economic cost, we shall readily understand that general propaganda in favour of accident prevention must be intensified so as to reach a much wider circle than the small groups most immediately concerned.

We need not emphasise the fact that the film, which vividly illustrates the dramatic features of an accident, thereby creating a deep and lasting impression, is the ideal instrument with which to penetrate and instruct the masses of the people and children in schools. And if we are agreed that accident propaganda must be intensified and that administrations and schools must concern themselves much more closely with the matter than hitherto, we must further urge that the existing films on accidents in general and on certain special kinds of accident, as well as the new films which are being produced every day should, if they are to be of real value, be shown not only to the restricted groups of persons especially interested, but to the public at large and to the young.

Dr. Curt Thomalla.
THE USES OF THE CINEMA IN THE EDUCATION OF CHILDREN AND YOUTH

(NORMAL AND ABNORMAL - PSYCHIC AND SENSORIAL-ABNORMAL)

I am convinced that the cinema will be useful above all for technical instruction. It is true that, according to Aristotle, hearing was the *sensus disciplinæ*; but in his time optics were hardly known. The *sensus disciplinæ* would certainly have been the eye also, if only spectacles, the telescope, and the microscope had been known in his time. The cinema proclaims the superiority of the visual sense also for the purposes of culture, considering the help that movement — that is to say the animated vision — affords to the understanding and the memorization of technical knowledge. It is highly significant that at the present time the most efficacious instrument for the «rationalization» of labour is to be found in the cinematograph, rather than in reading or oral instruction. The business man, according to Urwick, doesn’t want to listen; he wants to see. This pronouncement is particularly applicable to experimental biological sciences. The development of experimental methods, to which we owe the greater part of our present knowledge of natural sciences, rests on the sight and the touch, rather than on hearing; culture also has become a cheaper commodity and is offered through the animated vision and to the visual-kinetic sense of pleasure. Thus technical instruction by means of the cinema responds to the 1st *desideratum* of the World Economic Conference of 1927.

Instruction in economy of movement by the film is a benefit to workers and a help in their training. According to Urwick the cinema has been instrumental in effecting a 10% increment in production.

There is in fact a great future for cinematographic teaching. The Cinema is a help in vocational orientation. Vocational advisers can learn from it strictly scientific methods of orientation. Laboratory psycho-technics, which is regarded at present with so much suspicion, will certainly gain by being made known through the cinema. Since the *ascertainment of aptitude*, that is to say of a *vocation*, is the most delicate and the most contested, but also the most specific, point in vocational orientation, the cinema may be the means of securing it the general consensus that it lacks or else the definite opposition that many hope for. In any case, we need evidence first of all. When we have slowed-down films to demonstrate psycho-technic methods, we may then ask for an extensive referendum.

We should like to begin by giving workers and scholars an idea of the means of ascertaining the general vocation of industrial workers. A work-test lends itself readily to be cinematographed. This has a double object: to make the technique of the work known and to afford practice to persons of limited aptitude in a manner to enable them to achieve perfection. It is generally acknowledged at the present time that aptitude is perfected by practice.
Practice as a factor of development is demonstrated in many ways by experience. Practice not only fixes, refines, and trains motor ability, but it is capable of developing a number of latent abilities. At one time exercise was considered capable of developing even general intelligence. It is this principle of practice that justifies the « mental orthopedic » exercises, that were so much in use and so highly recommended some 30 to 20 years ago. At the present time we no longer believe in the miracles of exercise for the development of general intelligence or the general factor (Spearman); but we do believe in the development of special abilities and intellectual adaptation, which depend in fact on practice. It is therefore no mistake to say that the cinema can teach both the technique for ascertaining vocation (apprenticeship necessary for vocational advisers), and the technique for affording practice to persons who have no particular aptitude or those with mono- or oligo-aptitudes, in order to increase the number and quality of their abilities. A successful experiment in scholastic cinematography was made by the Eastman Kodak Company with the National Educational Association. The experiment, as described by T. E. Finegan, was comparative, that is to say it was carried out in respect of two groups of pupils entirely homogeneous in race, intelligence family, social environment, etc. The success was markedly greater in the case of the group taught by film. G. Santini wrote a striking article on this subject in the International Review of July 1929. Both associations and private persons, moreover, make considerable use of the cinema for scholastic purposes all over the world. The following words are psychologically correct: »Shadows that are nothing but shadows to us, continue a long time after the projection as living things in the souls of children«. (Jean Renouard).

Urged by the above reasons and by the example of many psychotechnicians I tried three years ago to think out experiments (capable of being exhibited by the film cinematograph) for the experimental testing of general intelligence and technical intelligence in children and adolescents who were weak-minded or of unbalanced character. These were to serve the purposes of scholastic selection. My programme was not carried out because I was taken up with other studies. I have taken this opportunity to look over the tests I had already prepared; I have corrected them, as best I could, and to-day I submit them to the consideration of my colleagues.

My attempt has been enriched by films relating to the vocational orientation of boys of post-elementary school age, pupils in Italian preparatory vocational classes. I therefore suggest certain tests that lend themselves to projection: for motor ability, for technical intelligence and attention applicable to boys aged between 12 and 15 years; tests that aim at evincing the abilities required for any industrial, scientific, or school work.

If they serve no other purpose, these films that I suggest should raise the question of the methods of « generic » vocational orientation of young people. If my suggestion is accepted, the films would enrich the school collections.

To sum up, I suggest:

1st) films for estimating the general intelligence of boys of 7 years, so as to
measure any mental deficiency. These would be very useful to scholastic "selectors".

2nd) Films for instruction in the technique of the ascertainment of working ability. These would be very useful to vocational advisers.

3rd) Films for teaching school pupils, selected for stammerers, lispers, and the totally deaf. Highly useful for the teachers of the abnormal-sensorial.

Estimating general intelligence

Test of Logical Memory completed by Action. An account of this test may be read in S. De Sanctis's Neuropsichatria infantile, page 204 et seq. Two seven-year old pupils, who were slightly weak-minded (abnormal or weak intelligence); and one up to the mark (normal).

Technique:
A) «The teacher wants to know your name».
   «Sit down».
   2° «Ask for an exercise book and a pencil».
   3° «Write your name in the book».
   (The child obeys).
   «And now what will you do?»

Estimating the difference: Success (the task is performed). The normal child does it well and quickly.

B) «The teacher is thirsty».
   1° «Fetch the bottle of water from the cupboard».
   2° «Take that glass from the table».
   3° «Pour the water into the glass».
   (The child obeys).
   «And now what will you do?»

The normal child does it all well and quickly.

Measurement of intellectual deficiency (De Sanctis tests)

These tests have been used in a number of institutes for the past 25 or 30 years; thus a considerable volume of literature has grown up around them and we know the average results of their application to weak-minded persons and idiots (Cf. S. De Sanctis, Neuropsichatria infantile, 1925, page 211 et seq.).

Technique: Experiment on three seven-year-old children: one mentally deficient in a marked degree; one deficient in a minor degree; one not at all deficient, i.e. normal. (Mental age - chronological age). Measurement of time by stopwatch. The 6 tests of which this process consists are described further in the Scheme of Films.
a) We start by applying the test to the child who is deficient in an advanced degree, who at the best may get through the first two tests, but stops at the third.

b) We pass straight on to the weak-minded child (commencing afresh with the first test); he is likely to get through the first 5 but does not succeed in getting completely through the 6th.

c) We go on to the normal child (always starting anew with the first test); he gets correctly through all six.

Estimation of the difference: Last test got through (1st, 2nd, or 6th?) Time

**Technical teaching**

Test of the aptitude of pupils in vocational training and pre-apprenticeship classes (*Pre-vocational Schools* and post-elementary schools); age from 12 to 15 years

**Ascertaining strength and manual skill**

*A*) Measurement of the strength and resistance of both hands.
Lehmann's aerial transmission ergograph.
Fixed time.

*Technique:* 20 maximum pressures, one at 3" distance from the other, first with the right hand and then with the left.

*Estimation:* Total number of kilograms moved by the right and by the left hand.

*B*) Measurement of *Speed* and *Precision* of the movements of both hands. Walther's discs.

*Technique:* 41 discs 2 cm. in diameter are cut out of a large thick sheet of pasteboard. These discs are distributed over another sheet of paste-board identical with the first one in the same positions as the holes left by the cut-out discs. The subject must take the discs up one by one and place them in the holes of the pasteboard from which they have been cut out. (The experiment should be made first with the right hand; then with the left, and lastly with both hands at once).

*Estimation:* Time - Errors.

*C*) Measurement of the *co-ordination* of movements of both hands Montessori type puzzle-pieces (the operation is more difficult than with the Walther discs, because all the pieces differ from one another in shape and size).
Fixed maximum time.

*Estimation:* Time - Errors - Success: to get it out in the time allowed.
Specific ascertainment of attention

A) Test of the Constancy of visual and kinetic attention.

Making a banner with coloured beads (Test of the Rome Laboratory).

Technique: A sheet of paste-board one millimetre thick has 16 lines, each of 36 circular holes of the diameter of 2 mm., at 2 mm. distance one from the other, both in the longitudinal and the vertical direction. 800 little Venetian beads are mixed up in a box, each of the diameter of 2 mm., 200 green, 200 blue, 200 red, and 200 white; they are mixed up with other beads of the same size, but of different colours, or of different sizes but the same colours.

The subject is handed a pair of tweezers to pick the beads up with and is set to make the banner, by placing in the little holes in the paste-board the beads of corresponding size (fixed time). (Variation of material: Instead of beads make use of mosaic pieces, in which case the Technique consists in forming a design with the fragments of mosaic (for instance a head) which the pupil has in front of him).

Estimation: Time - Errors. Success: to do the job in the time allowed.

B) Test of the Constancy and tenacity (in spite of distracting stimuli) of visual attention.

To draw, according to a prescribed order, 4 geometrical figures in 99 out of the 100 little squares into which school slates are divided, while a gramophone is playing (Test of the Rome Laboratory).

Technique: A slate is divided into one hundred little squares, set out ten by ten along ten lines. The first little square is blacked out so as to avoid the pupil copying the line above as he proceeds. The pupil must draw with the greatest speed he can and always in the same order in each of the little squares one of the following four geometrical figures: a point, a quadrangle, a triangle, and a circle, using his right hand. A gramophone plays.

Estimation: Time - Errors (correct or incorrect).

C) Test of distributed attention (or "diffused" attention) Copy on the slate, first with the right hand and then with the left according to a pre-established order 4 geometrical figures (deciding quickly which hand to use). Modified Rossolimo Test.

Technique: On the upper half of the slate along 5 lines, 4 geometrical figures are drawn: a vertical line, a horizontal line, a circle, a quadrangle, following one another in ever varying order and frequency. The subject must copy all the figures on the lower half of the slate, taking care to trace with his right hand all the horizontal lines and quadrangles, and the vertical lines and circles with his left.

Estimation: Time- Errors (of the hand ; of the figure).
D) Another test of distributed attention. Clasp an electric circuit in the left hand, each three beats being recorded by a metronome, while drawing with the right hand on a sheet of paper first a circle and then a quadrangle, one after the other. (De Sanctis Test 1893 emended).

*Technique*: Same arrangement as the Tapping Test. The metronome works at the speed of 120 beats a minute. The subject clasps the circuit with his left hand (tapping the stylus on the copper sheet) every three beats of the metronome while with his right hand he draws as rapidly as he can first circles and then quadrangles on a sheet of paper in front of him on the table.

Fixed time (3 minutes).

**Estimation**: Errors - Number of geometrical figures drawn during the three minutes.

**SPECIFIC TEST OF TECHNICAL INTELLIGENCE**

A) *Executing orders by completing the action* (Test of the Rome Laboratory)

*Technique*: The orders are given in a work room.

"Look at that bottomless box and those instruments (rough and heavy) which are close to you on the table. Carry the box with the instruments in it as quickly as you can into the next room."

**Estimation**: Efficient carrying out of the job. Skilful completion of the action (low figure — 10).

B) *Experiment with Piorkovski and Homburger's Angular Apparatus for testing Mechanical Ability.*

*Technique*: The subject, while manipulating the several screws of the apparatus, must arrange the leather belt so that, while turning the wheel, the upper disc situated in a horizontal position, shall also revolve. Fixed maximum time.

**Estimation**: Time - Errors. Success (gradation according to Piorkovski and Homburger’s table).

C) *Experiment with Piorkovski and Homburger’s Apparatus for testing ambidextrous precision and the co-ordination of movements.*

*Technique*: The subject, manipulating the two handles with both hands, at the same time, must so manage that the point of the pencil shall pass exactly over the drawing placed on the flat surface of the apparatus.

**Estimation**: Time - Errors. (deviation of the pencil). Success?

**Exercises for stammerers and lispers aged from 10-12 years**

1st. Taking a pneumogram of a stammerer aged from 10-12 years.

*Technique*: Chauveau’s pneumograph: length of the pen: 20 cm. Chymograph of the speed of 90” per revolution. The time line in seconds already marked on the smoked cylinder.
Marking of three lines:
   a) while the subject is breathing normally and placidly without carrying out any task;
   b) while executing the task of reciting mentally the Pater noster.
   c) while answering a question by a sentence.

Estimation of the triple Pneumographic Curve of Departure

2nd. Vital Capacity:
   a) Breathe in deeply; then blow out a candle placed successively at a distance of 30 cm., 50 cm., 75 cm., etc., from the mouth.
   Distance attained (basic figure).
   b) Breathe in deeply; then with the breath keep the flame of a candle placed at a distance of 30 cm. from the mouth in a deflected position.
   Maximum time (basic figure).

3 Breathing Exercises: Collective exercise. Group of 4-5 stammering pupils aged from 10-12 years. Carrying out 4 exercises:
   a) Raise the shoulders, hands on hips;
      1. Raise the shoulders smartly and breathe in; 2. a short pause; 3. return slowly to original position and breathe out.
   b) Flank movement of stretched-out arms.
      Close fists, stretch arms out in front at a horizontal level.
      1. Drop hands at sides and breathe inward; 2. pause; 3. return slowly to the original position, breathing out.
   c) Drop arms at sides.
      Hold arms straight down at side in position of attention.
      1. Raise arms (palm downward) from sides to horizontal position, breathing inward; 2. pause; 3. slow return to original position, breathing out.
   d) Hold stick behind back, lying in the fold of the elbows. Hands on chest.
      Breathe rhythmically to time beaten by metronome.

4° Lip-reading for lispers.
   Position of the lips and tongue first in uttering the vowels and then different words with a group of lispers. Analysis of the sounds of the words.

5° Lip-reading for the partially deaf.
   The partially deaf subject must carry out the orders imparted to him by the teacher, who speaks to him without uttering the sounds, solely by the movement of the lips: imitating — as directed — the said lip movements.
Scheme of films (Dr. Adolfo Fantini’s Scenario)

First Film

1st Picture.

Estimating «General Intelligence»

Tests of Logical Memory by the Completion of Actions

In the middle of the room a square table is placed with inkstand, pens, pencils, exercise-books, and a glass. Against the wall is a glass cupboard with various objects inside it, a bottle of water among others. In addition to the experimenter a school-mistress and a maid are present in the room.

The experimenter directs the servant to let in the first of the two pupils to be examined — a boy of seven with slight mental deficiency (abnormal or weak intelligence). The boy enters and is told to walk up to the table in front of which the experimenter is seated. The latter says to him:

«The mistress wants to know your name.»

«Take a chair, ask for an exercise-book and pencil; write your name on the book». 

The boy sits down and having got an exercise-book from the mistress, slowly writes down his name.

When he has done, the experimenter asks him:

«Now what will you do?»

The boy is at a loss to answer, fidgets with the book, not quite knowing what to do.

The experimenter insists: «What will you do now?» and the boy answers: «I don’t know».

«Pay attention» says the experimenter «to what I am about to tell you».

«The mistress is thirsty. Take that bottle of water from the cupboard; take the glass from the table, and pour some water into it». 

When the boy has carried out the three orders fairly rapidly, the experimenter says to him: «Now, what will you do?».

The boy, who still holds the glass in his hand, places it on the table and stands still.

The maid shows the boy out and introduces another, likewise aged seven, but not mentally deficient (normal).

The experimenter says to him, as he did to the other boy: «The mistress wants to know your name», and repeats the three orders which the boy carries out quickly and neatly. Then, in answer to the question «What will you do now» he gets up from his chair and hands to the mistress the copy-book in which he has written his name.
Then the experimenter passes on to the second test and says:
«The mistress is thirsty» and repeats the three orders he gave the first boy.
The boy gets up from the chair, goes to the cupboard, and takes out the bottle of water, returns to the table, pours some out, and without waiting to be told «Now what will you do?» he hands the glass to the mistress.
The normal child executes and completes the orders given him rapidly and well.

2nd Picture.

Measurement of mental deficiency

(De Sanctis Test).

In the middle of the room stands a table bearing a box that contains the material requisite for the tests, namely: A moveable wooden screen 2. Five differently coloured balls (white, yellow, red, green, and blue); 3. Twelve wooden cubes coloured alike, of graduated sizes, each one a bit bigger than the last; 4. Three wooden cones of the same wood and the same colour as the cubes; 5° Two parallelepipeds of the same wood and colour as the cubes and cones; 6° a sheet of white paste-board, upon which 36 black triangles are drawn, 49 squares and 55 rectangles. The sheet measures 40 x 30 cm. and is divided into ten lines, each of which contains 14 figures. 7. A stop-watch registering fifths of a second.

A maid shows in a first boy aged 7 years, mentally deficient in a marked degree. The experimenter makes him sit down opposite him at the table; at another end of the table an assistant is seated holding the stop-watch in his hand with which he registers the time taken by the boys in answering.

The experimenter places the screen on the table between himself and the boy, and places the five coloured balls behind it.

He then says to the boy: «Pay attention» and removes the screen. «Give me a ball». The boy hesitates, then picks up the ball nearest to himself (the red one).

The experimenter again places the screen between the boy and the balls, mixes the latter up, and says to the boy «Pay careful attention», and removes the screen. «Which ball did you give me?».

The boy gazes at the balls and doesn't move. The experimenter encourages him: «Now, be a good boy! which ball did you give me?»

The boy then points to the ball that is nearest to him (the green one). Given the result of the second test, it is useless to pursue the experiment. The first boy is shown out and a second boy shown in, likewise aged seven.
This boy is slightly mentally deficient (abnormal or weak intelligence). This boy responds rapidly to the first test by picking up the yellow ball, which he recognizes promptly at the second test.

Then the experimenter, having again placed the screen between himself and the boy, lays down pell-mell behind it 5 cubes, 3 cones, and 2 parallelepipeds
He removes the screen and, handing a cube to the boy, asks him «You see this piece of wood? Now pick out all the pieces like it that you see here.

The boy looks carefully at the piece of wood in the experimenter's hand, and then picks up, one after the other, the five cubes from the table and places them aside (the boy has got through the 3rd test).

The experimenter places the screen back in its place, takes the pieces of wood up from the table, and lays in front of the boy the sheet of paste-board on which the triangles, squares and rectangles have been drawn. He hands a little rod to the boy and and shows him one of the wooden cubes «You see this piece of wood» he says «point out on the sheet the figure that is most like it».

The boy looks alternately at the piece of wood and the sheet and then with the rod points to one of the black squares drawn on the sheet.

Then the experimenter lays down the cube he was holding in his hand and says. «Pay great attention. Point out all the little squares on the sheet, working line by line, from left to right, as quickly as you can, and not missing any of them».

The boy carries out the task while the experimenter watches and notes mistakes. As soon as he has finished, the screen is put back in its place and it is noted that he has committed only 7 mistakes (4 omissions and three blunders). Thus he has got also through the 4th test.

The experimenter places the twelve cubes pell-mell on the table behind the screen in such a way, however, that the distance between the furthest-off cube and the one nearest to it is not more than 2 cm. Thus the biggest cube exceeds the one next it in volume by half a centimetre per side.

The experimenter removes the board and says: «Here again are a lot of pieces of wood of the same shape as those that you pointed out just now on the sheet of paste-board. Look at them carefully, and then tell me how many there are».

The boy counts the cubes, touching them with the fore-finger of his right hand, then answers: «Twelve» (correct).

«Which is the biggest of the lot?».

After a little hesitation the boy points to the biggest.
This time again the boy has given a correct answer; thus he has got through the 5th test.

The experimenter removes the cubes and the board from the table, then turning to the boy, he asks: «Does the sound of a distant bell seem louder or fainter than that of a near one?»

The boy reflects a moment, and then answers «Fainter».

«Is the sound of a distant bell really fainter, or does it only seem to be so?»

The boy is silent, and although the experimenter repeats the question, he is unable to answer.

Then the experimenter asks «Do distant objects look bigger or smaller than near ones?»

Answer: «Smaller».

Question: «Are they really smaller, or do they only seem to be so?»
The boy reflects a little, and then answers, «They seem so».
The experimenter passes on to the second group of questions:
«Is a thing done yesterday further off than a thing done this morning?»
Answer: «A thing done yesterday».
Question: «Must you do first a thing that has to be done in a few days or one that has to be done in a good many days' time?»
The boy reflects at length, but is incapable of giving an answer.
Question: «Do big things weigh more or less than small things?»
Answer: «Big things weigh more».
Question: «Why is it that sometimes small things weigh more than big ones?»
Answer: «Big things weigh more».
The slightly defective boy gets successfully though the first 5 tests, and incompletely through the 6th.
The boy is shown out and another seven-year old boy of normal intelligence is introduced.
The experimenter repeats with him the first 5 tests tried on the other boys.
The subject answers the first by picking up the red ball. He readily recognizes it at the second test.
At the 3rd test he quickly arranges the 5 cubes without any hesitation.
He performs the fourth task rapidly and correctly, with only two faults of omission, which he promptly corrects.
At the 5th, he answers the first question «twelve» without touching the cubes; he answers the second and third rapidly and without hesitation.
At the 6th, to the first question: «Does the sound of a distant bell seem louder or fainter than that of a near one?» he answers, «fainter».
Question: «Is the sound of a distant bell really fainter, or does it only seem to be so?»
Prompt answer: «It sounds fainter because it's further off».
Question: «Do distant objects look bigger or smaller than near ones?»
Answer: «Smaller».
Question: «Do they seem smaller or are they so really?»
Answer: «They look smaller».
Question: Is a thing done yesterday further off than a thing done this morning?
Prompt answer: «A thing done yesterday».
Question: «Should you do first a thing that has to be done in a few days' time or one that has to be done in a good many days' time?»
Answer: «The thing that has to be done in a few days' time».
Question: «Do big things weigh more or less than small ones?»
Answer: «Big things weigh heavier».
Question: «Why is it that sometimes small things weigh more than big ones?»
Here the boy hesitates a moment. He evidently has an idea of the right answer, but doesn't know how to put it. Then he answers: «Because they have more inside them».
Thus the boy of normal intelligence has got correctly and promptly through the 6 tests.

SECOND FILM

TECHNICAL INSTRUCTION.

Ascertaining the aptitudes of pupils in preparatory Vocational Orientation classes or Pre-Apprenticeship Classes (Pre-vocational or Post-elementary Schools). Ages 12-15.

PART I.

ASCERTAINING STRENGTH AND MANUAL ABILITY.

1st Picture

Measuring the Strength and Resistance of both hands.

Lehmann’s aerial transmission ergograph (hand-grip machine) is seen on the table. The pen is in contact with the smoked cylinder of a chymograph set to the speed of three minutes per revolution. Likewise on the table, to the left, is a metronome regulated to one beat per second, the bell of which rings at every three beats. A seat is placed in front of the table just opposite the handle of the grip-machine. A sheet of paper and a pencil are placed on the table. The experimenter and an assistant are present.

A 12-year old boy is shown in, a pupil in the 2nd preparatory vocational orientation class and he is shown a seat.

The experimenter explains to him: «Take a firm hold of this handle» and shows him how by gripping it himself. He then puts the metronome in motion: «Pay careful attention: each time you hear the bell ring, you must clench your fist with all the strength you have; then relax your hold and tighten again when the bell next rings. Keep on doing this till I say «Stop». Have you understood clearly? » The boy answers in the affirmative. He is then told to grasp the handle with his right hand; the assistant sets the chymograph in motion, and the experimenter says, «Start to grip!» The boy waits a moment, and as soon as the bell strikes he grips the handle with force, pauses a minute, then relaxes; repeats the process at the second strike of the bell, and so on, until, after 10 grips, the experimenter calls out: «Stop!».

At each grip, the assistant notes on a sheet of paper the value marked by the hand on the metal disc. The ten values obtained are: 18; 18; 18; 18; 18; 18; 19; 19; 20; 19, corresponding to the number of kilograms compressed. Mean value kg. 18.5. On the smoked paper of the cylinder these values are noted as raisings of weights, the first six of which are equal, the 7th and 8th higher, the 9th higher still, and the 10th equal to the 8th and 9th.

After being given a short pause for rest, the boy is made to execute the same test with his left hand. The results are as follows: 16; 16; 16; 15; 15; 16; 17; 15; 16; 15. Mean value: kg. 15.7.
2nd Picture.

Measuring the speed and precision of movements of both hands.
(Walther Discs)

On the table is placed a big sheet of paste-board out of which have been cut 41 discs 2 cm. in diameter, which are distributed over a similar sheet of paste-board lying close to the first, in the same position as the holes left by the cut-out discs. The experimenter and an assistant are present as usual.

The same subject who appeared in the previous picture is shown in and the experimenter explains to him: «You see this sheet of paste-board with all the holes in it? And close to it is another sheet of paste-board on which a lot of little discs have been laid? The number of discs is equal to the number of holes. Using your right hand only, you must pick up the discs one by one and lay them in the holes of the paste-board from which they have been cut. Do you understand clearly?» «Yes.» «Then get on with it».

The boy sets to work and does the job rapidly and neatly, while the assistant marks time by a second-counting stop-watch.

The boy is allowed to rest during the time that the discs are being removed from the holes and placed back on the other sheet of cardboard: he is then told to do the job with his left hand, and lastly with both hands together.

3rd Picture.

Measuring coordination of movements of both hands—Montessori puzzle-pieces

The sheets with the Walther discs are removed and after 4-5 minutes' rest, a box of Montessori puzzle-pieces is placed in front of the boy, from which certain pieces have been removed. These are handed to him apart.

«Do you see all these pieces of wood differing in form and size? Each of them corresponds to a space in the box into which it can be correctly placed. Please put them in as quickly as possible, using both your hands».

The boy places the pieces side by side on the table in front of him; he observes them attentively, notes the spaces in the box; seizes a triangle and at once sets it in its proper space, and thus, one by one, puts all the pieces in their places. He makes only three mistakes, which he at once sets right.

PART II

Specific ascertainment of attention

4th Picture.

Test of the Constancy of Visual and Kinetic Attention. Forming the Flag with Coloured Beads (Test of the Rome Laboratory).

On the table is placed a sheet of paste-board one millimetre in thickness, marked with four lines, each consisting of 36 circular holes 2 mm. in diameter, at 2 mm.
distance one from another, in both the horizontal and vertical direction. Beside the paste-board is a box in which are mixed up 800 Venetian beads, each of the diameter of 2 mm.; of which 200 are green, 200 blue, 200 red, and 200 white. Mixed up with these are a number of beads of the same sizes but different in colour, or of the same colours but different in size. The experimenter and an assistant are present as usual.

The subject is shown in, a boy of 13, a pupil in the 2nd preparatory vocational orientation class, and he is asked to come up to the table. The experimenter shows him the aforesaid objects and hands to him a small pair of tweezers. He then says: «Take good note of this sheet of paste-board. In the box you will find a number of little beads of different colours of the same diameter as the little holes punched in this paste-board. Make use of the tweezers I have given you, and pick up the beads, one by one; introduce them into the holes so as to fill them all in such a way as to form the flag. Please do this as quickly as you can».

The boy counts with his finger the number of lines marked on the paste-board and the number of holes of which each line consists, makes a rapid mental calculation, and then picks out a green bead, which seems to him of the proper size, from the box. He tries to introduce it into the first hole of the first line, and seeing that it fits, he picks up a second, then a third, and so on up to 12, which he fits into the first 12 holes of the first line. He then passes to the second line, into the first 12 holes of which he fits 12 green beads, and repeats the operation along the other 14 lines. He then returns to the first line, and fits in white beads from the 13th to the 24th hole, and repeats the process over the other 15 lines. He next fills in all the remaining holes with red beads and presents the sheet thus completed to the experimenter. The card is thus seen to be divided into three equal rectangles, the first green, the second white, and the third red, representing the Italian flag. The boy has carried out the task rapidly and surely; on a few occasions only he got hold of beads of the wrong size and let go of them at once; he never made a mistake in regard to colour.

5th Picture.

Test of Constancy and Tenacity (against counter stimuli) of the Visual Attention.

(Test of the Rome Laboratory).

On the wall at the back of the room is a common school black-board, divided into 100 little squares, arranged 10 by 10 along 10 lines. The first little square is cancelled. A gramophone stands on a little table to the left.

The same boy who fulfilled the previous test is shown in. He comes up near the black-board and the experimenter, handing him a bit of chalk, says: «You see all the little squares into which the blackboard has been divided? Now with the chalk I have just handed you and beginning from the second little square (for, as you see, the first has been cancelled), you must write as rapidly as possible and always in the same order in each of the little squares one of the following...»
4 geometrical figures: point, square, triangle, circle; using your right hand: «Now start!».

The assistant sets the gramophone going and it plays a Suppé Overture.

The pupil rapidly draws the figures on the first line; then at the second he hesitates a moment and does not fill in the first square; at the fourth line he draws in succession two squares instead of a square and a triangle, and then proceeds rapidly to the end, taking in all one minute and 52 seconds and making one mistake and one omission.

6th Picture.

Test of Distributed («diffused») Attention
(Modified Rossolimo Test)

Five lines and one geometrical figure are traced on the upper half of the slate: a vertical line, a horizontal line, a circle, a square, which follow one another in ever-varying order and frequency.

The subject is introduced (the same as in the previous experiments) and he walks up to the slate. The experimenter hands him two bits of chalk and says to him: Look carefully at the figures drawn on the slate. Take a piece of chalk in your right hand and another one in your left.

On the lower half of the slate you must copy the figures in the same order in which they are drawn above. But please be very careful of one thing: draw the horizontal lines and the squares with your right hand, and use your left hand to draw the vertical lines and circles. Please be as quick as you can and try to make as few mistakes as possible ».

The pupil starts the task at first a bit slowly, then as he proceeds he gains in speed and sureness. He gets through the task in 3 minutes and 12 seconds, making three mistakes in the use of his hand and two in the figures.

7th Picture.

Another Test of Distributed Attention.
(De Sanctis's Modified 1893 Test).

A device similar to that used for the Tapping Test is on the table, a stylus with a metallic point which closes an electric circuit each time it taps on a copper plate. A Depretz signal is fixed to the circuit; this registers the taps made on the smoked paper of the revolving cylinder of a chymograph. Close to it on the table are also a metronome, set to the speed of 120 beats per minute, a big sheet of white paper and a pencil.

The same boy as in the preceding picture is introduced and is told to sit down at the table. The copper plate and the stylus are placed in front of him to his left, and in front of him, to the right, the sheet of paper and the pencil. The experimenter makes him take the pencil in his right hand, and the stylus in his left
and sets the metronome going. He then says «Pay good attention! You hear the beats of the metronome? Now at each third beat of the metronome you must tap on the copper plate with the stylus, while with your right hand you draw as quickly as you can circles and little squares on the sheet of paper in front of you. Start!»

The assistant sets the chymograph in movement while the boy draws rapidly with his right hand and endeavours to tap the copper plate with the stylus exactly at each third beat of the metronome. During the first minute he does not succeed in following the rhythm of the metronome correctly, and commits nine mistakes with his hand; gradually, however, he gains confidence as he gets into practice, and makes only two mistakes during the last two minutes. At the close of the fixed three minutes allowed, he has drawn 237 figures, and made 3 mistakes with his right hand and 11 with his left.

PART III

Specific test of technical intelligence

8th Picture

Executing Orders by completing Actions

(Test of the Rome Laboratory).

A work-room. On a table, among other objects used for work, there are a bottomless box and a little heap of scrap iron (rough and pretty heavy). Saws, hammers, nails and other carpentry material are lying about on other tables. There are some bits of wooden plank on the floor.

The subject, a 14-year old pupil in the 3rd preparatory vocational orientation class is shown in. He is told to approach the central table and the experimenter says to him: «You see this heap of scrap iron. Please clear the table quickly by carrying it into the next room. Use for the purpose the box that’s lying on the table (pointing to the bottomless box). Place the scrap iron inside it, and carry it into the next room, taking care not to let the iron fall».

The boy at once takes hold of the box, but just as he is about to put the iron inside it he notices that it hasn’t got a bottom. He then reflects a moment; looks about him; takes a piece of wood and cuts it with the saw to the size of the box; he seizes a hammer and some nails and makes a new bottom to the box. Having done this, he placed the pieces of iron inside it, and carries it into the adjoining room.

9th Picture.

Piorkowski and Homburger’s Angular Apparatus Test of Mechanical Ability.

The apparatus is fixed to a table by three screws loosely fixed, in such a way that the upper disc is in an oblique position and the belt is outside the groove of the wheels.
The subject is shown in; he is a 14-year old boy, pupil in a 3rd preparatory vocational orientation course. The experimenter points to the apparatus, points out its component parts to the boy, and says to him: «Do you see this leather belt? You must arrange the different parts of the apparatus, turn the screws, and fix the belt in such a way that, when the handle is turned, the upper disc placed in a horizontal position shall turn also».

The boy looks attentively at the apparatus, makes sundry ineffectual attempts by turning the screws; but at last manages to fix it in such a way that the upper disc revolves without the belt getting loose when the handle is turned. He takes 1 minute 10 seconds in his various attempts.

10th Picture.

Piorkowski and Homburger's Test of the Precision and Co-ordination of Movements by the ambi-dextrous Apparatus.

The apparatus is on the table, a sheet of white paper with a drawing on it is lying on the surface of the apparatus. The two handles are displaced in such a way that the point of the pencil is at a certain distance from the drawing.

The same boy who went through the two previous tests is shown in and walks up to the table. The experimenter shows him the apparatus and points out that the point of the pencil wobbles in different directions according to the movements imparted to it by the simultaneous turning of the two handles. He then says: «Grip both handles, one with your right hand the other with your left; then manipulate them so that the point of the pencil passes exactly over the drawing placed on the surface of the apparatus».

The boy grips the two handles and carefully manoeuvres them so that, by the end of the experiment, the drawing traced by the point of the pencil coincides almost exactly with the drawing that was on the surface of the apparatus. At two points only a slight outward deviation can be noted. He takes one minute and 3 seconds to carry out the experiment.

THIRD FILM.

PART I.

Exercise for stammerers of 10-12 years

1st Picture

Obtaining a pneumogram of a stammerer of 12 years

A chymograph regulated to the speed of 90 seconds per revolution is placed on the table. On the lower part of the smoked paper of the cylinder the timeline is marked in seconds. A metal stand supports a Marey drum with a 20 cm. long pen. On the table there is also a Chauveau pneumograph with a long rubber tube attached.
The subject — a boy stammerer aged 12 — is shown in and made to divest himself of his jacket and shirt; the assistant then applies the pneumograph to his epigastrum and fixes it by a ribbon tied behind his back. He then makes the boy sit down with his back towards the chymograph and by means of the rubber tube places the chymograph in communication with the little Marey drum. The experimenter, making use of the special micrometric screw fixed to the stand, approaches the point of the pen to the smoked cylinder, and then says to the boy: «Try to keep as calm and still as you can.». He then sets the chymograph in motion, and the pen starts to record the boy’s breathing on the smoked cylinder. At the end of 90 seconds the cylinder stops and the respiratory curve can be observed; this shows irregularity in the rhythm, different heights for the several breaths taken, oscillations, and tremor; the pauses are sometimes lengthened and sometimes absent.

The Marey drum is then lowered to obtain a new curve of the breaths taken. The experimenter says: «Begin to recite the Pater noster mentally and without articulating the words. When you have finished, gently raise your right hand». The chymograph is set in motion and at the end of fifteen seconds the experimenter says: «Begin to recite the Pater». After a little while the boy raises his hand. At the close of the 90 seconds, the chymograph is stopped and note is taken of the new curve obtained. It is at once seen that the defects of the first curve persist during the first part of it, while the rhythm is somewhat quicker. During the time the boy was reciting the Pater Noster mentally the breathing grew more regular; the height of the several breaths are more uniform, the tremors have almost completely disappeared, the rhythm is more regular.

We then proceed to the taking of a third curve, lower down than the second one. After about ten seconds the experimenter says: «Tell me what you did at school this morning» The boy hesitates a moment, makes an effort to speak, but at first is unable to emit any sound, he then starts to speak, halting, and repeating syllables. At a certain point, the experimenter says «That will do».

An observation of the curve shows that the boy in his first effort to speak stopped breathing during about 3 seconds; he then spoke sometimes while breathing in, and sometimes during the pause; sometimes, after breathing in, instead of at once beginning to speak, he exhaled a certain amount of breath.

2nd Picture.

Measurement of Vital Capacity.

The same boy as in the previous picture. A candle is held up to him at a distance of about 30 cm. from his mouth. He is asked to breathe in deeply and then to blow out the candle with his breath. The boy obeys easily. The experiment is repeated at a distance of 50 cm. with the same successful result. The candle is then removed to a distance of 75 cm. At this distance the boy is no longer able to blow it out, notwithstanding repeated efforts. The candle is
then brought nearer, to a distance of 60 cm., and the boy at the third attempt manages to blow it out.

3rd Picture.

Another measurement of Vital Capacity.

The lighted candle is again held up to the boy and the experimenter says to him: «Breathe in deeply; then hold the flame deflected with your breath as long as possible»; and he approaches the candle to within 30 cm. of the subject's mouth. The boy blows towards the candle and at the first attempt he succeeds in holding the flame deflected during 7 seconds, at the second attempt he holds it deflected 10 seconds, and 9 seconds at a third attempt.

4th Picture.

Respiratory Gymnastics. Collective Exercise

A group of five stammering boys aged between 10 and 12 years are shown in. They are lined up in two rows at the back of the room; the first row of two boys and the second of three, at a distance of about a metre and half from one another.

The experimenter stands in front of the boys and says: «Pay careful attention. You must now do the gymnastic exercises I show you: 1st) Place your hands on your hips, thumbs back just as I am doing (he shows). Raise your shoulders smartly and breathe in. Stay in this position for a second, then return slowly to the first position and breathe out».

This exercise is repeated ten times; then, after a minute's rest, we go on to the second exercise:

Throwing Forward and Dropping the arms.

«Stretch arms forward at horizontal level: with closed fists. Drop arms smartly to sides, and breathe in; short pause; return slowly to original position and breathe out».

This exercise is repeated 10 times, the directions always being accompanied by the example; we then pass on to the third exercise:

Arms dropped to Sides.

«Hold arms to sides at attention. Raise arms smartly with the palms downward from sides to horizontal position; short pause; return slowly to original position, breathing out».

This exercise is repeated 10 times over; each boy is then handed a stick and directed (the word being accompanied by the action):

«Place the stick behind your back, resting in the fold of the elbows. Hands
on chest. Breathe in rapidly and deeply. Now hold your breath until I tell you to breathe. After 3-5 seconds, he says «Breathe out slowly».
This exercise is repeated 10 times over.

5th Picture.
*Rhythmical Breathing.*

The same five boys as in the preceding picture. The experimenter places on the table a metronome set to the speed of 40 beats per minute. The bell rings every two beats. He then says:
«Place your hands behind your backs with fingers interlaced. Listen to the beats of the metronome. Now, each time you hear it beat accompanied by the bell, you must breathe in; and each time you hear it beat without the bell ringing, breathe out.
He carries out each experiment together with the boys. The experiment lasts 3 minutes.

PART II.

6th Picture.
*Lip-Reading for lispers.*

A group of 3 lisping pupils aged from 10-12 years.
The experimenter stands in front of the pupils and demonstrates to them the position of the lips and tongue when uttering vowels. He then invites them to repeat the exercise one at a time. He then shows the position of the lips and tongue for the different consonants and makes each boy repeat the exercise.

7th Picture.
*Lip-reading for the partially Deaf.*

A deaf boy of 12 already versed in lipreading.
The experimenter speaks to him without uttering a sound, merely moving the lips, and directs him to open the door. The subject obeys. He then directs him to close his eyes and open his mouth, to raise his right hand, clap his hands, etc. (still without uttering a sound), and the subject obeys the orders easily.
Lastly, he directs him to repeat certain phrases (still using his lips only): «What's your name?» «What is your father's name?» «To-day is Thursday» etc.
The subject obeys, moving his lips only, without uttering the sounds.

Prof. Sante De Sanctis.
The excellent account given by M. Jean Coutrot shows us how the cinema can help in spreading ideas of scientific management, in teaching its methods and rules and in systematically investigating the best conditions of work.

His account shows clearly that in this field the cinema can give valuable aid both to the investigator and to the propagandist. Few films have been made with the sole purpose of spreading ideas of management or imparting its methods and, although many touch upon these matters, they lack what is essential, the main idea. Ten years of experience have taught us that there are many ways of treating the same subject in a film and that we must first have a definite aim in view.

The fixing of this aim likewise determines the nature of the pictures themselves and the order in which they will follow one another on the screen. The film need not be a good one even if the end in view is clearly fixed, since a special technique is required, but it will certainly be a bad one unless the end to be attained is fully assimilated.

As soon as it is decided to produce an educational or propaganda film on a given subject, the maker must start with a definite conception and apply a special technique to whatever end is to be pursued.

For an educational film, the pictures will consist of a number of plans of different value intended to emphasise the essential points to be illustrated and which when combined will constitute the rhythm, movement and drive of the film.

For a propaganda film, on the other hand, which is intended for a large public, the action must have an emotional basis and consist of pre-eminently human features, which in our opinion can alone grip the masses through their appeal to the heart and feelings.

When the problem of scientific management was put before us by the French National Committee, we found after considerable thought that, in order to disseminate and inculcate the fundamental ideas, both the kinds of film we have referred to were needed. Accordingly, we drew up the following scheme of production:

1. A big propaganda film for the purpose of making known the principles of scientific management, showing particularly how the results are felt in the social sphere and in improved conditions of human life;
2. Two educational films showing in detail the application of methods of scientific management and the results:
   a) in a factory;
   b) in an agricultural enterprise.

THE PROPAGANDA FILM.

Our first task was to investigate the rules of scientific management as found in the writings of the men who promoted the idea. While paying our tribute to the
works of our distinguished compatriots, MM. Fayol and Le Chatelier, it seemed to, us beyond all doubt that the principles underlying scientific management are the same as those expounded by Taylor. The development of scientific management since Taylor's death shows, I think, that the principles he advocated still hold good and constitute the basis of this development.

We might have made a collection of principles and have furnished certain universally accepted examples of their practical application. These examples would have had to be selected from very different fields, comparisons would have had to be made, and parallels drawn, it being all the while remembered that the film was to be a propaganda film emphasising the spirit of scientific management.

If we had pursued this course, we should simply have constructed a documentary film in which the human aspects would have been entirely lacking. On the other hand, we found in the life of Taylor himself all the material required to show the results of his investigations and to emphasise the splendid example to humanity furnished by such a life.

In collaboration with M. Ponthiere we have prepared a scenario, of which the following are the main features.

PART I.

Genesis of his teaching.

1. Young Taylor's eyes hurt him. The doctor forbids him to continue his studies. Shows bourgeois and puritan environment and atmosphere of rigid honesty.

2. Employment of Taylor by William Sellers, a friend of the family. Taylor in the workshop and at games. His energy.

3. Taylor as foreman. His wish to make his gang work. The struggle. The men don't want to work harder. Why? The daily wage — level of the lowest paid. Piece-rate cut down by the employer.

4. Taylor thinks. What is at the root of the matter? What is a good day's work? The task must be fixed. Analysis.

5. Attempt to fix the task. Failure owing to the work not having been prepared in advance; each man works as he pleases. Necessary first to consider best way of doing work.

6. Lack of organisation. Indefinite instructions; delays in supply of raw materials; defective tools; operation of the machinery. Circulation of material

7. Interview with William Sellers.

8. Distribution of work. The management leaves to the workmen a great deal of work which it should do itself. Share of the management. Laboratory «study of tools and machinery». The planning department: delivery orders to the raw material shops. Delivery orders to the tools shops. Movement study.

9. The working chart. The standard is established and operates. Materials in the hands of the workman, etc. The process is standardised. It becomes possible to determine tasks quantitatively.
10. Time measurement.
11. The bonus wage system.
12. The maintenance of the «standard». Functional efficiency.
14. William Sellers is dismissed and replaced by Harrah, a financier. The latter only cares about profits, scorns Taylor's methods, but accepts them, because they pay.

PART II.

The efficiency expert.

He establishes the profession of consulting engineer.
Some of his clients.
At Bethlehem; study of methods of shovelling material.
Discovery of rapid steel.

PART III.

The apostle.

Taylor decides to accept no more fees and to become an apostle of scientific management.
At Boxly. Family life.
The Tabor and Belt Companies. Administration, army and navy. The railways.
President of the American Association of Mechanical Engineers.
His lectures throughout the country and in the colleges.
Pilgrims at Boxly.
Parliamentary enquiry.
Fatigue and dreams. Application of his principles to all activities.
Every man justifies his wage.
The end.

EDUCATIONAL FILMS.

a) On the organisation of work in a large factory.
A film will be made in accordance with an admirable scheme prepared by M. Marcel Bloch, Chief Engineer of the Material and Workshops Department of the Orleans Company, which we annex to the present article.

b) On the organisation of work in an agricultural enterprise.
This is a new subject. Few of us have so far been seriously concerned to apply the principles of scientific management systematically to agriculture. The conditions of application are quite different from those relating to industry.

All agricultural work is of a variable character which distinguishes it clearly from industrial work.
Nevertheless, the same spirit of organisation may have beneficial results in this vast field of activity.

First of all we examined the conditions peculiar to agriculture. A study of many farms convinced us of the possibility of producing a film which would illustrate the application of the principles of scientific management in many directions, both outside the farm and inside. Action in these various fields may succeed in creating an attitude of mind.

Care must be taken, however. No section of the community is more critical than agriculturists. None is more individualist, and our examples will be so selected as to give rise to no objections or criticism in any quarter. Our comparisons will be beyond challenge; our conclusions sufficiently elastic and varied to admit of individual interpretation.

This film is now under consideration. The first draft of it is divided into two parts:

1. Organisation of work outside the farm.

The waste of time and money will be shown due to the distances between fields. How land, if not crops, might be exchanged.

The disadvantages of « enclaves » and the remedy.

The advantages of having land concentrated around the farm.

Passing next to the organisation of agricultural work, we shall endeavour to show that all the activities of the farm must be organised in order to get the maximum yield from the land:

(a) by the selection of implements, motive power and human material;
(b) by exact orders;
(c) by the organisation of bonuses to stimulate the farm hands;
(d) by a systematic campaign against waste of time in general;
(e) by the organisation of work necessitating a yard or workshop;

2. Organisation of work inside the farm.

It will be shown how work is facilitated:

(a) by a wise arrangement of buildings (repair workshops close to the shed where the damaged tools are kept. Fodder-preparing room near to the byres; food-storage premises connected with the preparing-room. Quick and easy communication. Toolshed close to the foreman’s office, etc.);
(b) by a judicious use of ground conformations (how to make use of falls in level);
(c) by general or special installations (supply and distribution of water by pressure, production and distribution of power. Substitution of mechanical pumping for the carrying of water on the back);
(d) by the organisation of internal work (cowherds, stable-boys, etc.).

This part of the film will create an attitude of mind hostile to routine, *laisser-aller* and careless work and will correct the tendency of farm-hands to work as the spirit moves them.
The three films of which I have described the main features were decided upon and ready to be shot when I heard of the impending appointment by the League of Nations International Educational Cinematographic Institute of a Committee of Experts on Scientific Management. True to the ideal of international discipline which I have always preached and which the international Institute is now to put into practice, I feel it my duty to submit these drafts for the examination of the assembled experts and to wait — not long, I hope — until their manufacture can be proceeded with.

I do not think I can give any better proof than this of my devotion to and confidence in the Rome Institute, from which we are all expecting such great benefits.

JEAN Benoit-Levy.

Secretary-General of the French Committee of the League of Nations International Educational Cinematographic Institute.
INQUIRY INTO THE PROGRESS AND USE OF THE CINEMA THROUGHOUT THE WORLD AS AN INSTRUMENT OF SCIENTIFIC MANAGEMENT

Before deciding to appoint a Committee of Experts to study the application of the cinema to the rational organization of production and to labour problems generally, the Direction of the International Educational Cinematographic Institute worked out a plan for an extensive inquiry throughout the world to ascertain the progress made by the cinema towards the solution of labour problems.

Within a few months of its formation, the Institute, having a clear conception of the task before it and the determination to render its efforts effective, succeeded in gathering together the strands of all the sources of information necessary for keeping track of the rapid advance of the film, among all civilised nations, as a means of propaganda and education. By a systematic study of the hundreds of reviews that reach the office from all parts of the world, and an efficient and elastic organization that is materially aided by numerous correspondents, the Institute was soon in a position to carry out its important task as a centre for the collection, study and supply of information.

Thanks to its very complete collection of newspapers and carefully compiled index, this League of Nations institution has acquired the authority of a first-class cultural centre, to which every student of problems connected with the various applications of the cinema may apply with the certainty of receiving valuable advice and assistance.

The inquiry undertaken in all countries for the purpose of ascertaining the progress made by the cinema in the realm of labour organization has yielded an enormous documentation, in five languages. Further documents continue to arrive, but we give below the conclusions reached after a careful examination of those to hand.

During the second half of last year, the Direction of the Institute sent out synthetic questionnaires dealing with these subjects. One of these questionnaires was sent to each Government, and another to institutions and organisations dealing with labour problems in each country. Experts and scientists, special reviewers and newspapers in every country were likewise asked for information and their opinions.

Note. — The information supplied by our contributor refers exclusively to the use of the cinema in rationalisation and similar questions, but not to the general development of cinematography in the different countries. On this subject the Int. Rev. of the Educ. Cin. has published articles by expert authorities of various nationalities. As regards France, in particular, we would remind our readers that the August and December numbers contained a very full account of the progress of educational cinematography in France by M. Michel Coissac.
The questionnaire to Governments was drawn up in the following form:

a) Has your Government concerned itself with the possibilities of the cinematograph in connection with vocational guidance or in obtaining better results from human labour and from production?
b) Are there any «Official Sections» in your Ministry in charge of scientific management propaganda by means of the cinematograph?
c) Have you any laws regulating this propaganda?
d) In the above fields are there any schools, institutions, clubs or universities for the working classes etc., which make use of the film for the purposes mentioned?
e) Are there any publications, writings, books, etc., in use in your schools which deal with these problems? If so, please state where such publications, etc., may be found.
f) What systems, if any, are used in your schools for vocational guidance and industrial or vocational teaching? Are there specialised workshops for this purpose? Where they exist, is the instruction theoretical only, or on what system is it based?
g) Who decides the subjects of films for vocational teaching and guidance?
h) What organizations, institutions and associations in your country deal with these problems, and are any of them subsidized or officially recognised by the State?
i) Who are the persons who deal with these specific technical problems, and further, do any of your propagandists make use of the cinematograph in the fields above-mentioned? If so, could you let us have their names and addresses?
j) Are there in your country any firms producing films dealing with the above-mentioned subjects?
k) Is there a censorship of such films?
l) Are there any archives or catalogues of these films?
m) If these films are accepted, what aid do they give in teaching, and in what direction do they influence students' minds in regard to various trades?
n) Is the cost of educational cinematography in your schools included in your Budget, and if so, to what amount each year?

This questionnaire was accompanied by the following letter:

«The International Educational Cinematographic Institute, an organ of the League of Nations formed for the purpose of coordinating the progress and production of educational and cultural films throughout the world, has undertaken a vast programme of research work, documentation and inquiry.

Among the subjects studied by our Institute, special attention is given to labour, and to the means offered by the cinema for the organic and systematic development of vocational guidance and teaching and for the scientific organization of labour.

In order that trustworthy and definite conclusions may be drawn, we must know exactly what has been done, the experiments that have been made, the types of film that have been used and the results obtained.»
«The cinematograph, applied to the choice and teaching of trades and, generally speaking, to the scientific organization of labour, may constitute a most valuable aid, as is proved by the decidedly beneficial influence which the cinematograph has had in the propaganda campaign for the prevention of occupational accidents.

«It is therefore essential that our Institute should know in what countries and in what way this collaboration of the cinematograph has been utilised. To this end, we have pleasure in sending your Ministry a general questionnaire summarising the fundamental points on which our international inquiry is based.

«Our Institute, which publishes a monthly review on the problems of the educational cinematograph, in five editions, one for each of the official languages of the Institute, would be very grateful if your Ministry would send us any official publications that it may have issued on the subject of labour problems. We might be able to get useful information out of them for our review, which we would gladly send to you in exchange.

«In the hope of receiving the desired information, for which we thank you in advance, we are your obedient servants».

The questionnaire sent to the institutions of the various countries, was as follows:

a) Has your Institute, in the normal course of its affairs, concerned itself up to the present with the possibilities of the cinematograph in connection with the problems of vocational guidance and training and the scientific organization of labour and, generally speaking, in obtaining better results from human labour and from production?

b) Has your Institute ever had the opportunity of examining films intended to be used in vocational guidance and training or for problems connected with scientific management?

c) What defects did you find in those films? Were they of an eminently technical, scientific and educational character, or were they rather in the nature of advertisements failing to give a true picture of whatever it was desired to present?

d) Who sent these films to your Institute? Do you know any film-producing firms of the above-mentioned type? Do you know any private persons or firms who work on similar lines?

e) Do you know whether, in the above-mentioned field, there are any schools, institutions, clubs, universities for the working classes etc., which make use of cinematograph films for the above-mentioned purposes?

f) Do you know whether reports, pamphlets, books, etc., dealing with these problems have been published? If so, could you give us information about them, or at least tell us from what source we could get such information?

g) Would you be kind enough to tell us what systems of vocational guidance and industrial and vocational training are used in your schools; and, if there are any publications on the subject, send them to us or have them sent to us by the Ministry concerned? What results have been obtained? Have you specialised workshops? Are there many of them? If you have none, is the teaching purely theoretical, or on what system is it based?

h) Has your Government already concerned itself with the cinematograph as
applied to the teaching and choice of trades or, generally speaking, to the improvement of production and the better selection of persons engaged in manual labour?

i) Have the big unions, whether workers' or employers', so far concerned themselves with this problem?

j) What measures should be adopted, in your opinion, to attain this end as quickly as possible?

k) Do you think that this type of film should be shown also to workmen, or do you think it would tire them?

l) Does your Institute consider that these films should be of an essentially technical character, or — especially in the case of films dealing with «industrial knowledge» in general — that they would be more likely to interest if they were of a varied and more or less dramatic character?

m) Has considerable progress been made in your country as regards vocational guidance and training? Are there any legislative measures of a general order dealing with the subject?

The following «Communiqué» was sent to all foreign periodicals specially interested in labour problems, with the object of completing the collection of information received in answer to the above-mentioned questionnaires:

«After the formation of the International Institute of Agriculture and of the Institute for the Unification of Private Law, the Educational Cinematograph Institute was created in Rome at the initiative of the head of the Italian Government. At its Council Meeting of August 30th 1928, the League of Nations accepted H. E. Signor Mussolini's proposal and offer, and decided that the Institute should be its official organ, with headquarters in the Eternal City.

«To this end the Italian Government offered the historic Villa Falconieri, at Frascati, as the seat of the Institute, and also put the Villa Torlonia at its disposal; it is in the latter building that the Institute now has its general offices. The Government also granted the sum necessary to put the two villas in order and to pay the working expenses of the Institute during its initial stages.

«The International Educational Cinematographic Institute is now, thanks to the generous contributions of the Italian Government, in a position to carry out its vast programme.

«The Institute is a great instrument of education and international collaboration in one of the most important branches of our social, educational, intellectual and economic life.

«The cinematograph is undoubtedly destined to exercise strong influence on the education of the peoples of the world, and much has already been done in this direction; there is no doubt that its mission will become daily wider in its scope.

«One of the subjects in which the Institute is most interested, and which it has studied with special attention, is labour, and the means offered by the cinema to assist the organic and systematic development of vocational guidance, vocational training and scientific management.

«The Institute also deals with: the improvement of the efficiency of the human
factor, which in spite of the enormous progress in machinery, still remains the central factor in all work; the physiology of labour; the study of fatigue and automatism; industrial psychology and individual and collective psycho-technique; production and the prevention of occupational accidents.

"The cinema undoubtedly offers enormously valuable assistance in all the above mentioned fields, and might have a decidedly beneficial influence on the improvement of modern working conditions.

"The International Institute for the Cinematograph works in perfect accord with the International Labour Office, with which it came to a special working agreement that was approved by M. Albert Thomas and Dr. Luciano De Feo, directors of the Geneva and Rome organisations. The International Management Institute also decided at the May meeting of its Governing Body, to entrust the Rome Institute with the task of collecting and sifting all the material to be found throughout the world on the application of the cinema to methods of scientific management.

"But in order to arrive at concrete results in this documentary investigation, the Rome organ of the League desires to have the opinion of the big manufacturer and of all those who are interested in labour problems, on this collaboration of the cinematograph.

"There are many big manufacturers and sociologists in your country who are interested in the complex questions connected with the scientific organization of labour. We are glad to collaborate in such important humanitarian work, and to invite these gentlemen to express their opinion, with the certainty that they will thereby be contributing towards the realisation of notable benefits to labour and the working man ».

RESULTS OF THE INQUIRY.

As will be seen from the table we give below, 52 different countries were interested in the inquiry as well as numerous individuals, organizations and reviews in each country. The answers cannot, for obvious reasons, be considered entirely exhaustive; but it is important to note the number of new correspondents, and the exchange of information, in some cases only just beginning, with such far-off countries as South Africa, China Japan, Australia, Canada, etc.

One fundamental point stands out from the examination of the voluminous correspondence to hand, viz., that the possibilities of the cinema, with its multiple manifestations, are everywhere appreciated; and that the proposal of the Institute has been received with sympathy and approval. There is no doubt, therefore, that if a judicious exchange of correspondence and news and collaboration with individuals and organizations in far-off countries are maintained, the Institute will be able to keep watch over and guide the progress of the educational cinema throughout the world. This is a task of the highest moral and human value, and is of such delicacy and importance that the competent authorities should be convinced of the necessity of assisting the Institute by all the means in their power.

The two figures under each of the headings: Persons, Organizations, Reviews indicate, the one to the left of the reader, the number of circulars sent, and the one to the right, the number of answers received:
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Considering the time required fully to develop so vast an enquiry, the results so far obtained may be considered decidedly satisfactory.

Although not always very exhaustive, the answers show on the whole a clear understanding of the Institute's high aims, and hold out prospects of coordinated and continuous action to assist the local efforts of governments and scientific organizations. We give below a summary of the answers received from the various States, so that a fairly clear picture may be had of the progress made by the educational cinema. The subject is one for an international Committee, which should work out the broad lines of the programme to be carried out by the Institute.

**Australia**

The Secretariat of the Prime Minister arranged for the Board of Education to study and answer the questionnaire sent from Rome. Up to the present, there has been no practical application of the educational cinema, but its possibilities are fully appreciated, and it is felt that it should be employed on a large scale.

The Rector of the University of Adelaide and the Director of the Mining and Industrial School are interested in the problem.

The Board of Education of Sydney instructed its Special Office of Vocational Education, which concerns itself with the use of films for purposes of demonstration, to answer the questionnaire. It appears that this Office has arranged an extensive programme making use of the cinema, which will be carried out as far as the means at its disposal permit. The Sydney Office informs us that the Board of Public Health is also seriously considering the use of educational films. Meanwhile, the Rotary Committees are making propaganda by means of the cinema, and are opening elementary courses in the various trades. Up to the present, there are no local firms capable of producing technical films, and the government offices concerned are therefore proposing to produce such films themselves, and then to issue a catalogue of their productions.
The Premier of Melbourne replied that the cinema has not yet come within his jurisdiction as a means of education and instruction, and that he is therefore not in a position to give any information on the subject; but he states that, considerable screen activity for propaganda and educational purposes may shortly be expected.

Austria.

The Ministry of National Education gave the questionnaire serious consideration, and after discussing it with the Ministry of Social Welfare and the Ministry of Industry and Commerce, sent in the conclusions of the three ministries. They are all disposed to support to the utmost the use of the educational film, which has not hitherto been made the subject of special study by the Austrian Government. There is therefore no legislation on the subject, nor any programme for the application of the cinema. The competent authorities have had occasion to observe the interest displayed by young people in educational films, and are disposed to make use of them on a large scale. One of the main reasons why the educational film has not yet been used to any extent is the lack of funds for the purpose, the Government being disinclined to assign the necessary sums in view of the extreme costliness of the new method.

The Arbeitsgemeinschaft für Psychotechnik, of Vienna, states that it makes use of educational films for theoretical instruction, and that these films are prepared by special firms. There are schools in Austria for vocational training and guidance and the film is beginning to be used in these schools, although it is rather a costly method of instruction. The Institute considers that films for workers should be prepared by men who have made a study of the psychology of the worker. or such men should at any rate have an active part in the preparation of the films.

The Technical Section of the Austrian Industrial Union informs us that it has not yet made any use of educational films, but is disposed to do so.

Belgium.

The Université Cinematographique, of Brussels, sends information in regard to its activities, stating that every year it calls twenty meetings together, at which 7 instructive films are projected before being seen by the thousands of men working in the coal mines, tanneries, glassworks, electrical works and spinning mills. Intense interest is taken by the workers in these projections, and the Belgian Cinematographic University therefore proposes to increase the production of instructional films dealing with widely differing subjects.

The University has prepared special films for the Solvay Works in France, for the State Mines, the Philips’ Works and the Brickmakers’ Corporation in Holland, producing altogether, in the four years of its existence, 560 films, most of them for manufacturing and affiliated companies.

The Fédération des Charbonnages of Belgium is preparing an historical docu-
mentary film on the coal-mining industry, which will be projected during the forthcoming exhibition at Liége.

Altogether, the use of the educational film has made considerable progress in Belgium.

CZECHOSLOVAKIA.

The Institute of the Economy of Labour in Agriculture informs us that for some time past it has made wide use of the film for propaganda purposes in the scientific organization of agricultural labour, and for the instruction of students in the Agricultural Institute, which is one of the faculties of the Polytechnic of Prague. The Institute does not concern itself with vocational training, but there is a central consulting office in the Capital for this purpose, which is extremely well-equipped.

The experience gained in the field of agricultural propaganda by means of the film has induced the Institute to advise the production of short carefully studied and worked out films, and the Institute is of the opinion that, if it adheres to these requirements, the film may attain unlooked-for results.

The National Czechoslovak Committee on scientific management states that it has not yet concerned itself with the use of the educational film, but intends to do so shortly. The commercial and vocational schools have used the cinema for some time past to show the work being carried on in workshops, while the Masaryk Academy uses propaganda films illustrating American systems of scientific management. There is no national production of educational films in Czechoslovakia as yet, and the institutions and organizations making use of these films therefore get them from abroad. It is hoped and expected that there will shortly be an exchange of films between the various nations; and the institutions, etc. are of opinion that the films should be short (projections lasting from 10 to 15 minutes) and should be based on genuinely technical subjects, so that they may interest the special public to which they will be presented.

The Institute for Economising Fuel also replied to the questionnaire, stating that so far it has not considered the possibility of using the cinema for vocational training and labour organisation, mainly because special organizations like the Masaryk Academy make a point of dealing with this branch.

DANZIG.

The Psychological Institute of the Polytechnic states that the educational film is considered a very efficient means of instruction, and that its wide use should be carefully studied and supported. Some films have already been adopted for teaching purposes in the Free City and lantern slides are widely used for that purpose. All the Universities and secondary schools have their own projecting apparatus, and some professors illustrate their lectures with films.

The educational cinema is making considerable progress in the Free City of Danzig, but is not proceeding as rapidly as it might, for lack of means. Professor Henning who answers the questionnaire says frankly that the advance of the educational film is entirely a question of "money".
DENMARK.

The Danish Government has not up to the present given any special attention to the possibilities of the educational cinema, but this branch of cinematography has been introduced into Denmark and has made considerable progress. It is used more especially by certain technical schools and polytechnics, the Technological Institute, and the Royal Veterinary and Agricultural Institutes, which make use mainly of foreign films, mostly German, there being no national production. Professors and students are all hoping for a wide use of educational films in schools, considering them of great utility in the teaching of children.

ESTONIA.

The Ministry of Education replied to the questionnaire, stating that the Government has not yet definitely concerned itself with the use of the educational film, and that there are therefore no special laws or regulations dealing with the subject.

Enquiries have shown that certain teaching or cultural organisations make use of the film, while the schools generally are introducing the educational cinema as a regular and valuable aid to teacher and pupil. To this end a Committee has been appointed to study the question, the majority of its members being drawn from the teaching profession. There is already a catalogue of educational films in Estonia, compiled under the direction of the Curator of the Museum at Tartu.

FINLAND.

The Government replied to the questionnaire through the Sozial Ministerium of Helsingfors, informing us that the use of the educational film in the State schools has been the subject of study by a Higher Educational Committee since 1928. The Committee drew up a programme which has been submitted to the superior authorities.

The Organisation for the Protection of Workers has decided to make use of films in vocational training and has bought some films of this type from abroad; and the Head Manager of the Knoppamaeki Domestic Industry published a book entitled The Educational Film as a Means of Culture as long ago as 1926.

The Government has granted a subsidy for the preparation of an anti-alcohol film and the drawing up of a national list of instructional films.

On the whole, the Government of Helsingfors considers the use of the film in scholastic and vocational teaching of great utility and advantage and is disposed to give every support and encouragement to the spread of this means of instruction.

FRANCE.

The Government does not appear to have considered the regular use of the educational film so far but there are special institutions which deal with the question.

The International Committee of Scientific Management mentions certain educa-
tional and propaganda films that have been produced in France and that mark the beginning of a wider use of the cinema for technical and scientific purposes.

The *Messagerie Hachette* has prepared a special propaganda film demonstrating the detailed organisation for the collection, despatch and sale of newspapers and reviews. The film shows the loss to the seller from the defective sales organisation in kiosks, whereas a rational organisation would lead to a rapid disposal of copies in hand.

The firm of *Robert Bastardie*, of Paris, has prepared a film with the title: «Rationalisation applied to a Banking System». This film proved to be of great utility in helping to spread modern methods of organisation in banks.

The *International Vocational Institute* introduced the regular use of special films this year, to be projected during vocational classes; the trial has given excellent results.

The *Standardisation Office for Motor Cars* replied to the questionnaire, stating that so far it had not had an opportunity of making use of educational films. On the whole, the situation throughout France is favourable to the spread of the educational film, which has probably not been able to take firm hold yet on account of the lack of an organised national production.

GERMANY.

The use of the educational film in all its branches has made enormous strides in Germany, being supported by the Government and by a number of different institutions. Germany is undoubtedly at the head of all the nations in Europe in the utilisation of the screen for instructional educational and propaganda purposes.

Particular attention has been paid to special applications of the film in scientific management; and a number of firms have been constituted in Berlin, Frankfort and other principal towns, which specialise in the production of these films.

The *Deutsche Institut für wirtschaftliche Arbeit in der öffentlichen Verwaltung* (DIWIV), replying to the questionnaire, states that the educational film has long been the subject of serious consideration by the Institute, which has also made considerable use of it. The films used are not produced by the Institute, but by special firms which show great ability in working out themes and manufacturing the films.

The *Deutscher Handwerks-u. Gewerbekammertag*, of Hanover, states that there is a very extensive use of films among its associated firms, which have the films produced in accordance with their requirements by special firms. The advantages of the cinema in the organisation of labour and the problems connected with it are by now generally admitted by all manufacturers and they make considerable use of it.

The *Arbeitsgemeinschaft für Industriereform*, replying to the questionnaire, observes, that, although recognising the value of the film for educational and instructional purposes, it is compelled to make but small use of it on account of the high
cost. There is no doubt, however that the educational cinema has gained the attention of the ruling classes and of the education authorities, so that its prompt adoption is assured.

The Deutsche Gesellschaft für rationelle Malverfahren admits the great utility of the educational film, and states that circumstances have hitherto prevented the use of such films within its field of activities, but that these circumstances will be overcome.

The Ausschuss für wirtschaftliche Fertigung beim Reichskuratorium für Wirtschaftlichkeit states that for some time past it has been making use of instructional films specially intended for the scientific organisation of labour, in which field it is very widely used.

The Institut für forstliche Arbeitwissenschaft, of Eberswalde, says, in answer to the questionnaire, that the film has been of valuable aid to it for some time past, both for instructional and propaganda purposes. The Institute recently had a special film made on the systems of timber transport in the mountains.

The Disconto Gesellschaft had a film produced towards the end of 1927, under the title: «The Modern Management of a Bank» which has proved of great use and advantage to young persons newly employed by the Institute, because by its means they are enabled to follow the working of the complicated and delicate services of the different offices, and so learn to collaborate with the mass of employees.

The Mercedes Werke, which produces office machines on a large scale, especially calculating machines, has produced a film on the «Thinking Machine» which gives a detailed picture of the various parts of the machine, their operation and the rational manipulation of the machine by the employee.

The Psychologisches Institut, of Munich states that it has already made use of the film with considerable benefit.

The Reichsanstalt für Arbeitvermittlung und Arbeitslosenversicherung strongly favours the use of the educational cinema and describes a film it has had produced, under the title: «From School-bench to Workshop». This film is of great educational value and may be included in the category of vocational films.

The Psychotechnical Institute of the Dresden Polytechnic sends information of some scientific films produced by special firms and regularly used by the Institute in its instructional courses.

The Taylorix Gesellschaft, of Berlin, informs us of the use on a large scale of films dealing with scientific management and is of opinion that such films, when properly prepared are a really efficient means of instruction and propaganda.

The Verein Deutscher Ingenieure, the representative association of German engineers, expresses itself decidedly in favour of the use of the film for educational purposes, and especially of its application to scientific management. Many of its members recognise the value of such films and make wide use of them.

The Verband Sozialer Baubetriebe, to which belong 140 building firms, giving employment to about 20,000 workers, states that it has created a section of its own dealing exclusively with the scientific organization of building yards, and that it uses special films for purposes of propaganda among its members, which have been
found very useful for the instruction of both masters (engineers and foremen etc.) and workmen. This is a typical example, which should be particularly noted.

The Vereinigte Stahlwerke Aktiengesellschaft, of Düsseldorf, declares that it highly appreciates the utility of films for propaganda and vocational teaching and that it is at present promoting the production of special films dealing with the prevention of occupational accidents.

We could continue to add to this list of documents, but those that we have mentioned sufficiently demonstrate the manifold applications of the film in German industry and technical schools, and the fact that the educational film is being continually improved and more widely used. Germany undoubtedly offers a vast field of observation and study for the International Educational Cinematographic Institute to the eventual benefit of those countries which are still behind in the use of the film for purposes of instruction and the organisation of labour.

**India**

The Director of Public Education of the Board of Education of Bombay made a careful study of the questionnaire and informs us that the possibilities of the educational film in vocational training are well known, but the Government has done no practical work in this field up to the present.

An attempt to promote the use of the cinema in this way would, however, find the Government favourably disposed.

**Irish Free State.**

In the Irish Free State, as in South Africa, Czechoslovakia and Germany, considerable progress has been made in the use of films for agricultural propaganda. The Irish Ministry for Agriculture, in its answer to the questionnaire, deals with the many advantages conferred on various branches of activity by the educational cinema, and the special support given to it by the Government.

**Italy**

The National Government, which was determined to reserve to Italy the honour and the burden of entertaining the International Educational Cinematographic Institute has clearly shown how much importance it places on the film as a means of instruction, education, propaganda and assistance in everything connected with the organisation of labour. There is no doubt that within a short time Italy will rank with the United States and Germany in making the widest use of the educational cinema in school, workshop, and before the general public. Work has already been done in many important branches, although there is not yet a regular national production of educational films.

The LUCE Institute, which was formed by the Fascist Government for the purpose of undertaking the production of national films of the kind, will certainly be able to make a valuable contribution to this collection.

The National Institute of Scientific Management, constituted by the General
Confederation of Industry, proposes to prepare and collect technical films for use in its own sphere of activities.

JAPAN.

The Japanese Government took the questionnaire into serious consideration, and states in its answer that excellent use has been made of the educational cinema in the Far East. Through its embassy at Rome, the Government sent the Institute some publications issued by the Committee of Studies of the Ministry of Education which is responsible for the teaching of arts and crafts. The following are the titles of these publications: «Consideration of the character of a scholar and his preparation for a trade »; «History and meaning of vocational training »

The Ministry publishes a monthly review: «Vocational training».

The educational and instructional film is therefore the subject of special care and consideration on the part of the Japanese Government, while private institutions highly appreciate the cinema’s aid in the field of labour.

NEW ZEALAND.

The Board of Education informs us that for the present the Government Publicity Office is preparing films for foreign propaganda. No regular attempt has been made to use the cinema in connection with vocational training and scientific management.

This omission, however, is due to no lack of appreciation of the film’s utility, which is indeed acknowledged, but rather to the fact that large funds are necessary to the carrying out of such experiments. The financial question is one for the consideration of the competent authorities; but the way is open for the development of the cinema in the technical and cultural fields and there is no doubt that the Rome Institute will be able to give efficient aid.

POLAND.

The Polish Institute of Scientific Management states that the ground is already prepared for the introduction of the film as an aid to teaching and organisation, especially in factories. The Institute has had opportunities of realising the advantages offered by such films, but their widespread use depends on the possibility of obtaining suitable films at a reasonable cost.

ROUMANIA.

This Balkan nation, also, attaches great importance to the use of films in agricultural propaganda, in which branch the Ministry of Agriculture is particularly interested. On this point the Government will send detailed information to the Rome Institute.

The Psychological Institute of the University of Cluj has seriously considered the questionnaire sent to it, and states that no practical use has yet been made of the film in vocational training or scientific management, although the value of the film for
these purposes is not disputed. The above Institute has two psycho-technical sections, one at the University of Bucharest and one at the University of Jassy, and an office for vocational guidance in the big industrial and metallurgical centre of Resitza; but the film has not yet been employed. The Direction of the Institute, however, hopes shortly to be able to arrange for its use as a means of propaganda, in the work of vocational guidance, and to aid in psychological aptitude and intelligence tests.

The Roumanian Institute of Scientific Management, in its answers to the questionnaire, states that it has not had occasion to make use of the cinema in carrying out its aims, but keeps in contact with various organizations abroad in order to study the progress made in the use of the film. The Institute mentions the following difficulties: a) lack of information in regard to developments abroad in connection with the educational cinema; b) high cost of other than commercial films.

The Institute is in favour of active propaganda in Roumania in school and working circles for the use of the film in its various instructional and educational aspects.

Russia

We know, through information from various authoritative sources, that the Russian Government makes widespread use of the cinematograph as a means of propaganda and instruction. The Central Labour Institute of Moscow answered the questionnaire, and states that one of its tasks is the use of the educational cinema in vocational teaching and scientific management. For its own educational needs, it has prepared some films dealing especially with mechanical labour and the rationalisation of movements.

The workmen's organisations have considered very seriously the use of films within their own branches of activity, appreciating the cinema's advantages and encouraging its widespread use. The value of the film, according to the Moscow Institute, depends on its character and the lines on which it has been prepared. The Institute is of opinion that films for teaching purposes are of great use when they are of a lively, amusing and dramatic character. This secures the attention of the public and thereby helps to attain the end in view.

It is pointed out that vocational teaching has progressed very far in Russia, which is natural enough in a country where work is the sovereign factor of life.

South Africa (Pretoria)

The Chief of the Central Board of Education replied to the questionnaire. As soon as he received the document from the Institute, he sent out a circular on the subject to the competent institutions and organisations of the South African Union, and received 25 replies. His answer therefore represents the results of an inquiry made in his country, and is thus of special importance. The Government of Pretoria is fully aware of the great potential value of the educational cinema, but the work in South Africa is still in its initial stages. The chief use of it is made by the Ministry of Agriculture, which has several propaganda films, with explanations and instruction in the local language and in English.
The psycho-technical laboratories make use of the film for a variety of experiments, and also in certain tests for air pilots.

Professor Powell, a specialist in horticulture at the Transvaal University College took sixteen films, of the total length of 3500 feet, during a long study-tour; one of the films, dealing with the lemon and citric acid industry, is especially interesting. The Government has arranged for a regular use of the educational cinema both for propaganda and in schools and proposes to have studies made of the most suitable type of film that can be adapted to local school requirements.

Switzerland

The Federal Ministry of Public Economy, Commercial Division, sent answers to the questionnaire, stating that the film has not yet been adopted in Switzerland for vocational training and that there are no organisations or institutions which produce such films.

Certain private firms have had films produced for propaganda purposes and for certain branches of industry. No catalogue of instructional films has yet been prepared, and none of the technical schools possess even a projecting apparatus.

The Psycho-technical Institute of Zurich states, on the other hand, that in its own sphere it is very much interested in the use of the film and has had several prepared by special firms.

There is a more or less pronounced tendency in the different cantons to make use of the educational cinema, and also to employ it in connection with scientific management. At Zurich, especially, the ground is well prepared.

United States

The United States Government replied to the questionnaire through the Education Office of the Home Department, to the effect that the various States of the Confederation exercise direct control over the working of their respective schools and that the Central Government does not directly interest itself in these affairs. The film is widely used in schools for teaching and educational purposes, the selection of films being made by the teaching staff.

The Ministry of Agriculture also answered the questionnaire, stating that it concerns itself with the production of propaganda films with the object of arousing interest in every form of agricultural activity and stimulating collaboration among farmers in selecting systems of cultivation, developing forests, building roads, etc.

The purpose of the film is to attract the attention of that part of the farming population which is engaged in special branches of production.

The special aim of the United States Government in connection with agricultural labour problems is to secure the maximum output from each labourer rather than a greater yield per unit of the area cultivated; to that end, it encourages the maximum employment of men and animals on the land, with all the aid that can be given by apparatus and machinery to save fatigue. In the development of this propaganda, the Department of Agriculture has had occasion to appreciate the inestimable advantages of the film.
The Office of Domestic Economy of the Department of Agriculture, which is chiefly concerned with problems connected with the domestic side of farm life, states that it attaches great importance to the use of instructional and educational films. These films, however, must be rationally conceived and must not be of too theatrical a nature, if they are to please the public. Hitherto, films of this type have as a rule been prepared only by those interested in offering their own products and making commercial propaganda.

The American Home Economics Association states that, up to the present, it has not decided on a regular use of educational films. The Y. M. C. A. and the Washington Federal Board for Vocational Education are more especially concerned with this branch. The Eastman Kodak Co., of New York, makes a speciality of the production of educational films.

The Industrial Relations Counsellors, of New York, tell us that in the course of their activities they frequently make use of the film for instructional and propaganda purposes, having a high opinion of the value of the educational cinema. The association sends, together with its answer to the questionnaire, a list of associations and libraries which are in a position to give information concerning the American production of educational films.

The film has been employed in many useful and interesting ways in industry. The Detroit Edison Co. states that it has realised the necessity of having a film prepared showing the dangers of high tension electric wires, and that this film has been shown broadcast in schools and to the general public. It is a typical example of a propaganda film for the prevention of occupational accidents.

The Lidgerwood Manufacturing Co., of Elizabeth, states that it makes regular use of films reproducing all the details of the machinery used in its work, their rational use, the working methods to be followed and the results obtained. These films are projected before the trade corporations and especially before new workmen, so that they may understand the tasks that will be allotted to them before they enter the factory and may also realise the working of the factory and thus be able to fit into the part assigned to them. A knowledge of the machinery and its working, and a knowledge of the accidents that are liable to occur and how to prevent them, serve as a good preparation to the worker before entering the organisation.

Conclusions

One of the most important results of the inquiry is that we have ascertained that there is a widespread realisation in the more advanced countries, of the possibilities of the cinema as a means of instruction, education, propaganda and assistance in the rationalisation of labour, while it is universally agreed that the film constitutes an effective means of education and instruction.

The necessity of organising agriculture, which was impressed on several Governments in Europe and America immediately after the termination of war revealed the great value of the cinema as a means of propaganda and instruction. It is highly advisable, therefore, that other countries which are equally interested in the rational development of their agricultural resources but which make little or no use of the
screen for the instruction of their rural populations, should at once set to work to utilise this asset.

The International Educational Cinematographic Institute undertakes to assist governments and organizations, encourage initiative, coordinate the efforts of the various countries and instruct committees of enquiry in what has been done and what is being projected elsewhere.

The organisation of industry is likewise proceeding, but this branch requires much more detailed and exact study than that of agriculture, since it encroaches upon the psycho-technical field: choice of vocation, preparation for a trade, improvement of guilds and corporations, cycles of operations, fatigue, prevention of accidents, etc.

The inquiry has shown that very few nations utilise even a part of the numerous possibilities of the film in studying the problems connected with the organisation of labour, while only two or three make use of these possibilities to the utmost. One main reason for this failure to benefit by the screen in this connection is the excessive cost of films. The industrial conditions of the present time make it possible for only a few privileged nations to incur the necessary outlay.

In the face of these financial difficulties, to which may be added other difficulties of technique and organisation, such as the production and exchange of films, the International Institute has a number of varied and complicated tasks to carry out which cannot be entrusted to other institutions. In order that these tasks may be carefully studied and defined, and the criteria and methods of carrying them out drawn up, it will be necessary to appoint an international committee of experts to plan and direct the work of assistance which the Direction of the Institute is called upon to undertake.

Lastly the inquiry has shown that the possibilities of the educational cinema throughout the civilised world are numberless, and that it may develop into a highly important source of instruction, education, prevention and protection.

The important work to be carried out and developed by means of this instrument that science has put in our hands necessitates such an immense and regulated output of energy that the men who are called upon to accept the responsibility ask the League of Nations to give its serious attention to the matter.

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« Photo und Schule » (Photo and School);
« Bildgebrauch » (Film Uses);
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This Review is recommended by the German Educational Authorities Specimen Copy sent free of charge on application
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According to the census of 1921 the Red Indians in Canada number only 106,000 out of a total population of 8,778,483 distributed over a vast area of 9,543,000 square kilometres.

These Indian tribes in the extreme north of Canada, who live by hunting and fishing, lead a nomadic and adventurous existence of their own which recalls that of the Lapplanders and, just as the reindeer is the latter's chief means of subsistence, so is the cariboo for the Red Indians of Canada.

The cariboo (Cariboo rangifer) is larger than the reindeer, with smaller horns and darker hair; it leads a solitary life and its native habitat is the forest.

Brehm in his book on « Animal Life » says that « The Red Indians derive enormous profit from the cariboo. With the horns and bones they make fish-hooks and other fishing articles, with the skin bone they remove the flesh, fat and hair; with the brain they rub the skin to make it flexible. They hang the hides on tent-poles after dressing it with the smoke of fresh timber; the undressed skins furnish nets of various kinds and strings for their bows; the tendons of the back, cut in a particular way, yield a fine thread; the soft and woolly coats of the young animals are made into winter clothing. The Red Indians wrap themselves in cariboo skins from head to foot, throw over them in the snow another very soft and well-dressed skin, then a third and thus clad they are able to support the severest cold. Some use is found for every part of the cariboo; even the contents of the stomach are subjected to a long process of fermentation and are then eaten as a special delicacy. The blood is boiled to make soup, the bones are pounded and cooked and the marrow mixed with the fat and dried flesh or used as an unguent for the head and face ».

Thus it is seen that the cariboo is the sole means of subsistence for the Red Indians of Northern Canada, and its migrations determine the movements of their tents and families. On this account the migratory season of the cariboo is the most important season in the year. Brehm goes on as follows:

«In the course of their regular migrations the cariboes go down to the river and, as they swim across, they are attacked by the Indians, who dart out in their canoes from the bushes and rocks where they lie hidden. They surround the herd and try to occupy it, while two or three of the most agile rush into the midst of
the animals armed with short spears and kill or seriously wound as many as they can in an incredibly short time. Those animals which reach the opposite bank are instantly caught by a crowd of women and children. This method of chase is not without danger. Amidst the crowd of swimming cariboes the canoe may at any moment overturn. Moreover, when hunted, the cariboo defends itself in every imaginable way; the males with their antlers and teeth, the females with their front legs, by which they cling to the side of the canoe, inevitably upsetting it. If a Red Indian falls into the water, he is done for, as it is practically impossible to get clear of the swarm of cariboes around him.

The Red Indians pursue other forms of hunting, but the methods are all primitive and, although they may demand courage and agility, are mainly based on a cool nerve and endless physical endurance.

The hunt proper is supplemented by the pursuit of more savage and economically useless animals. Of these the first and most dangerous not counting the bear is the wolf. Wolves, — during the long winters when hunger makes them extremely bold and more dangerous than ever — become the curse of the boundless regions of Northern Canada. At these times both Cariboes and Red Indians live beneath the menace of howling and starving packs of wolves. Terrible fights take place on the endless stretches of hard ice.

Thus the Red Indian has neither rest nor peace. Beset with hunger, cold and danger he accomplishes miracles. The struggle for bare existence — an existence tragic in its rude squalor — is of an intensity which would seem to exceed the limits of human endurance.

This life of struggle and hardship, in a climate which is in itself deadly (35° below zero) means that the Red Indians in these parts are doomed to extinction. Lung diseases among the adults and other serious maladies among children are fatal scourges which take their regular toll of life.

... 

This short account will show the immediate and tragic interest of the existence of these last Red Indians in Canada. All credit, therefore, to the Paramount Company, which, in the laudable pursuit of knowledge and human advancement, about a year ago sent operators to visit the Ojibwa tribe, one of the most warlike in the district. These operators took photographs of the customs, clothing, hunts and migrations of the inhabitants together with pictures of the animals that are at the same time the means and the menace of their existence.

Ten years or so ago this collection of film material would have been unobtainable. 8000 metres of film were printed of which not more than about 2500 metres were used for the film « Cariboo ».

In order to make the film more attractive to the cinema public in all countries, a love interest has been woven into the plot and the different scenes thus combined to form a homogeneous whole. But the great beauty and the incomparable interest of this cinematographic achievement are, we repeat, the striking and palpitating pictures of savage life amid scenes of absolutely unknown natural beauty.

« Cariboo », a film which is bound to arouse admiration, surprise and discussion, will be presented in Italy by the Paramount Company during the coming season.
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EDUCATIONAL CINEMATOGRAPHY
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The Cinema and Scientific Management.
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Le cinéma au service de l'organisation scientifique du travail.
Organizzazione scientifica del lavoro e cinematografo.
Das Kino im Dienste der wissenschaftlichen Arbeitsorganisation.
This delicate and highly controversial question is of importance from the point of view of the right of ownership (droits patrimoniaux) and from the point of view of protection from mutilation, etc. (droit au respect).

Who is really entitled to call himself the author of a film? According to the usual view, the author is the inventor of the story staged, the person, that is, who in a book, play, novel or simple sketch has conceived the plot, the characters, the incidents and the setting. This definition will suffice to indicate the author of the novel, but, as we shall see, it fails when applied to the cinematograph.

A screened work is inevitably very different from a written work. Before it can be transferred to the screen, a novel has to undergo radical alteration. Who suggests and instigates these modifications and who decides upon them? Obviously not the author, who in the large majority of cases will not be competent to do so. It is the producer who intervenes as an expert, deletes and inserts matter, shapes the original content and thus becomes co-author of the film. The work in its re-fashioned form is the product of collaboration.

Even the leading actress may play so important a part in the creation of the film as to be regarded as one of the collaborators. Or the impresario who first contemplated its production, collected or contributed the necessary capital and recruited...

(EDITORIAL NOTE). The interesting article by our distinguished collaborator M. Destrée, raises the thorny question of film copyright. We hope that this article may lead to a discussion of a problem which is of very great importance.

M. Destrée's argument may be summed up in the following sentence: "If in the course of production the author's ideas are mutilated in a manner that he cannot accept, he can withdraw his permission for performance and forbid the use of his name... In this case, however, he must return any money paid him and he cannot object to the performance of the film... That is to say, he cannot at the same time deny the film and claim to be the author of it."

Does not this view place the writer, the author of the work filmed, at the mercy of unscrupulous producers? Let us suppose, for instance, that an author has written a novel which has met with a popular success. That success is due to the subject, the action, the atmosphere, a new way of approaching a situation or a character. Let us then suppose that a film company offers the author a sum of money in return for permission to make a film out of his book. The author is busy, possibly engaged on his next novel, and cannot collaborate with the producer closely enough to exercise influence over the filming of his work — this is after all not his job. He therefore relies wholly on the producer. The latter follows the manuscript fairly closely but at a vital place alters the spirit, e.g. he gives the story a happy ending (was not an epilogue writ-
the cast, may be, as it were, one of the authors or at any rate have proprietary rights to the film, just as the publisher may have the proprietary rights to a literary or musical composition.

The mutual rights of each of these interested parties will be regulated by agreements and the clearer and more precise these are, the better. In practice, such matters as the author’s permission for production and the engagement of assistants and of the cast will be settled by payments in advance and any subsequent difficulties will thus be excluded.

As regards proprietary rights, therefore, disputes will be of rare occurrence and easily settled.

The situation is different, however, as regards the right of a work to protection from piracy, mutilation, etc. (droit au respect), which is an inalienable right unaffected by any conflicting contract or agreement. A few words of definition and explanation may help to avoid confusion.

Unquestionably, the original author of the film, the writer of the story, is entitled to have his work respected. If in the course of production his ideas are mutilated in a manner that he cannot accept, so that he must disown the work, he can withdraw his permission for performance and forbid the use of his name. In this case, however, he must return any money paid him and he cannot object to the performance of the film, since he has denied authorship of it. That is to say, he cannot at the same time deny the film and claim to be the author of it.

I had an experience of this kind in Italy during the war. I had written a little play about Belgium for the delightful Piccoli theatre. Signor Podrecca found the

ten to Ibsen’s Doll’s House which made the whole play utter nonsense? The author in this case is faced with a fait accompli. What is he to do?

The producer will have obtained for the company to which he belongs a free plot. For if the author acts in accordance with the principle here set forth, he has no choice but to return the money paid him by the company, which will then make a change in the title of the film and present it without the original author’s name underneath it.

It is true that the company will then not officially have filmed the author’s novel, but it will have obtained at no expense a practically complete plot close enough to the original to win the public’s approval and possibly altered in some way which may make it an even greater success.

In fact, not only would the author’s moral rights be infringed by the vulgarising of his original work, but also his material rights would be completely set aside. His only choice would lie between sacrificing his rights and accepting a travesty of his work.

Legislation might perhaps intervene by insisting upon more detailed and precise contracts between authors and film companies, such as are no doubt frequently concluded.

In any case the question is an exceedingly complex one. The definition of property, difficult enough in respect of material objects, becomes almost impossible when we are dealing with the abstract ideas of the artist and scientist.
subject too tragic for his purposes, but a cinema company asked my permission to make it into a film. I accepted gladly, particularly as I was promised royalties most tempting at that time of exile.

When I saw the result on the screen, I found to my amazement that the period had been transposed from the year 1914 to the Middle Ages. There were dungeons, captive princesses, hermits in mountain caves, and every imaginable romantic cliché except my own! I have never yet been able to understand how such a result was ever obtained from my original material. I could not discover the faintest trace of my own work. The Company attached great importance to the use of my name, which at that time was fairly well-known in Italy, but I was compelled to refuse. I asked them to consider the contract as cancelled and to replace my name by that of the real inventor of this fantastic nonsense.

Take the case of the author of a serious play. In the event of further editions the «droit au respect» entitles him, despite any authorisation to the contrary, to see that his ideas are not mutilated or travestied in such a way as to injure his reputation. Any complaint or protest he may make must be based upon serious grounds and not upon some unimportant point of punctuation or spelling.

Let us next suppose that our author is asked his permission for a screen version of his play. This authorisation he grants, on business terms. He will then do one of two things. Either he will follow — as he has the right to do — the different stages in the production of the film and indicate the features to which he attaches especial importance, thereby effectively collaborating with the producer. Or he will hand the work over and agree to its being altered to suit the special requirements of the screen. Whether his collaboration is active or passive, he will be co-author of a new work, distinct from the original play. He can only exercise his moral right (droit au respect) in respect of this new work, and then only if that work in which he has collaborated is subsequently mutilated or travestied, for example, by making cuts in it which reduce it to absurdity. This right also belongs to the producer and even to the leading lady, for a joint production, once it has been offered to the public, is the work of all its collaborators and cannot be reproduced or altered without the consent of each of them.

I would add that, as before, complaints must be based on serious grounds and evidence must be produced to show that there has been some actual or possible moral damage.

I have been told, although I can hardly credit it, that one author, after agreeing to the whole of a film costing millions, withdrew his consent, pleading his «droit au respect», because the heroine, who in his book was made a brunette, appeared on the screen as a blonde.

If this is true, it is a gross case of abuse, and to draw from the right such absurd consequences as this is to compromise a principle which is in itself of great value to artists.

If this author really attached importance to the colour of the hair, his right was confined to denying his authorship. But, as I have shown, his claim rested upon a confusion of thought. He was assuming in respect of work No. 2 (the film) rights
which he only possessed in respect of work No. 1 (the play). The two works are distinct and the rules, although the same for both, must be applied separately and successively.

An example will make my meaning clearer. Let us take the case of a gifted author who has used the same situation, the same characters and the same incidents to write in succession a drama, a comedy, an epic poem and a novel, with or without collaborators. He may cede his rights of ownership to one or more publishers; he will retain the "droit au respect" in regard to each of his works, but he cannot claim this right against any collaborator on the grounds that the play is different from the poem.

Jules Destée.
Vice-President of the I. C. I. C.
Member of the Governing Body of the E. C. I.
The following scenario has been composed from an old Brabançon legend and contains all the elements which simple minds, and especially children, demand of poetic fiction.

Handed down by learned historians and included among the Acta Sanctorum related in the « Légende Dorée de Jacques de Voragine », the story has in undoubted historical origin.

Some writers place the incidents in Germany during the eighth century, others, following an ancient tradition, attribute the legend to the twelfth century and localise it in the neighbourhood of Louvain, the cradle of the dynasty of the Dukes of Brabant, and in the Forest of Soignes.

The latter, which even to-day covers an area of 4000 hectares, was formerly six or seven times as large as the whole of Southern Brabant. Beneath the thick foliage of its oaks and beeches it hid mysterious valleys and unexplored streams and served to shelter the wolf, the boar, the stag and other wild animals.

The authors of this scenario have selected this latter version. The character of Godfrey, Geneviève's husband, is known to history as Godfrey the First, called the Bearded, Duke of Lothier, Count of Louvain, Marquis of Antwerp and Duke of Brabant. He ruled from 1105 to 1140.

The legend has inspired many authors. In his « Tales of Yesterday and To-day » (Le Herte - Courtin et fils, Renaix, 1923) Baron Camille Buffin gives a very full account of it. It has been used as the libretto of an operetta, for which Offenbach wrote the score, and Berquin has made it the subject of a novel. Its success is explained by its wealth of charming, touching and dramatic incidents, and Geneviève's two children have something of the delightful charm of Peter Pan.
The castle grounds at the close of a fine day in May. Leafy foliage. An avenue of beeches cuts its way through the thick undergrowth. The road winds up the mound upon which the castle stands, overlooking the town of Louvain below, and, passing under a postern-gate of brick, reaches the Court of Honour in the castle of Godfrey, Duke of Brabant.

A room in the castle. Ceiling of massive gilt beams. Tapestried walls, hangings in the windows. Oak benches with big cushions. The furniture shows the influence of the crusades and contrasts with the simplicity of costume. Geneviève, Duchess of Brabant, is at her spinning-wheel, clothed in a long dress of pale blue flax. A white veil is made fast to her head by a copper band. She has very long, fair hair. At her feet is a greyhound. It is the golden age of chivalry. Women are in attendance upon her engaged in making clothes for the poor. A woman in rags with her little boy is shown in by Drogant, the chaplain. Geneviève and her women gather round the poor woman and give her clothing. There is a sound of horns and the women run to the window, Geneviève following.

The return of the huntsmen. The cavalcade is seen afar and then mounting towards the postern gate.

From the terrace Geneviève watches the men as they march into the court of honour. We see the beaters, the grooms holding dogs in leash, knights carrying falcons, the hounds, men carrying game, a wild boar and a stag attached to stakes borne on the shoulders, birds and hares on spits. The cook looks on in admiration and the chaplain appraises with the eye of a connoisseur. Godfrey jumps from his horse and amid applause from the women quaffs the cup of welcome which Geneviève offers him.

Godfrey and Geneviève walk arm in arm in the gardens and he tells her of the days doings. The greyhound follows at their heels, the emblem of fidelity. They pass along alleys bordered with box. We see a profusion of old-fashioned flowers, peonies, lilies, asters, roses; also vines.

From behind some bushes a little girl of six advances to meet them. This is their little daughter, Gudule, who is dressed like her mother, but without a veil; she has a chaplet of daisies on her head. Affectionate greetings.
Godfrey shows her live animals — a wolf, a bear and an eagle — caught in the forest and kept in cages. After receiving her father's blessing the child returns to her games.

Godfrey and Geneviève reach the top of the tower. Godfrey points out away in the forest the Abbey of Parc, which he has just founded and where the monks are seen engaged in cultivating the ground. In another direction he indicates the Abbey of Vlierbeek. At this moment the angelus rings from the chapel. The castle-gates are closed and night falls. A crescent moon rises behind the cross on the chapel. To Godfrey this symbolises the struggle between Cross and Crescent, the Crusades, which haunt the mind of every knight.

Evening in the castle hall. In the presence of the duke, the duchess and their household, a troubadour plays on his guitar and stirs the company with the tale of the first crusade and the exploits of Godfrey de Bouillon, who died in Jerusalem some years before.

The troubadour's lay strikes an echo in Godfrey's soul. Heroic and inspiring visions of the first crusade pass rapidly before him.

The superposing of the Crescent upon the Cross repeats its mute and symbolic message. Mohammed's standard is shown flying over Jerusalem. Completing his song the troubadour is served with drink and given a purse of money. Geneviève and her women withdraw.

Drogant exhorts Godfrey to depart on the crusade. Hitherto he has been kept at home by his love of Geneviève, but he suddenly realises his mission and swears to Drogant on his sword that he will set out for the Holy Land the very next day.

The castle chapel. According to custom, Godfrey, fully armed, passes the night in prayer. He is clothed from head to foot in a coat of fine mail. He is about to be consecrated a knight of Christ. Drogant after celebrating the Sacrifice clothes him in the white cloak with the red cross.

Godfrey appears at the chapel door. His subjects proclaim their readiness to follow him. His squire puts a round cap and pointed helmet on his head and a visor
over his face. He hands him his shield embossed on which is a golden lion with red tongue and claws on a black background.

14. His horse is brought to him. He sends for his steward, Golo, to whom he entrusts his wife and child. Golo makes profuse obeisance and hypocritical protestations and hastens the departure.

15. Godfrey's departure. He takes a long farewell of wife and child. The cavalcade starts. Men on foot, horsemen and heavy carts. Godfrey moves off, followed by his standard-bearer on a white horse.

16. The castle bell tolls.

17. Godfrey arrives at the postern-gate. He reaches up and kisses Geneviève and his daughter for the last time. Geneviève smiles through her tears, like Hector's wife beneath the walls of Troy.

18. After Godfrey's departure Geneviève is overwhelmed with grief, but seeks comfort in her little girl and her kindly chaplain.

19. Accompanied by Gudule, she visits the sick and poor around the castle and teaches her little daughter the joys and nobility of charity. She goes into the house of one of her retainers whose child is sick. She takes with her medicine, milk and fruit and comforts the mother.


21. A small room in the castle. A sculptor is putting the finishing touches to a marble representation of the duchess. She asks Golo for his opinion of it. Golo,
who has long sought an opportunity of declaring his passion for Geneviève, says «If this statue were alive, I should like it for my own». Geneviève reproaches Golo for his guilty passion. Golo feigns repentance and throws himself at her feet, imploring forgiveness.

22.

Enter Drogant, bringing news from Godfrey. Geneviève begs the chaplain to break the seal and read her the letter. Godfrey describes the sufferings of the crusade, but expresses their strong hope of conquering the infidel. Scenes illustrating Godfrey’s letter.

23.

Golo’s apartments: a kind of study, grim and austere, full of rolled parchments with hanging seals. On the table a pile of money and a big inkstand with a quill stuck in it. Golo contemplates the money and the pen as the symbols of his power; he is planning how they may serve his base designs.

24.

Golo, with his hands folded in his wide sleeves, his back bent, and simulating deep grief, announces to Geneviève her husband’s death and, to convince her, hands her a forged message.

25.

Geneviève’s distress. Drogant tries in vain to soothe her and warns her against Golo.

26.

Golo, by means of paid minions, spreads the news of Godfrey’s death. Grief of the population.

27.

Drogant, on orders from Golo, is thrown into prison.

28.

Golo profits by Geneviève’s grief to offer her his protection. He will replace her dead husband and help her to bring up the young prince and administer the duchy. Did he not enjoy the full confidence of the late duke?
Geneviève repulses him.

29.

Golo is furious and has her locked up in a dungeon cell.
In Palestine. The Crusaders are raising their camp. Preparations for departure. The column starts on its march through the desert. It passes through villages, mountain-passes and along the sea-shore.

Godfrey enters Strasbourg. Rejoicings in the city.

An inn outside the town. Godfrey, worn out by the fatigues of the journey and illness, rests a while. A messenger sent to meet him by Golo brings him a false report that Geneviève has been untrue to him. Godfrey refuses to believe the story and the messenger advises him to consult a celebrated sorceress if he wishes to learn the truth.

The witch’s cave. A large room containing an assortment of retorts, stuffed animals, etc. Owls and crocodiles are suspended from the ceiling. The sorceress leads her visitors into a cave. She inscribes a magic circle around them, throws a mirror into a basin of water and invites Godfrey to look. The vision in the mirror confirms the messenger’s words and Godfrey in an access of rage cries out: «Tell Golo to kill her and her child. Let me not find her alive, when I reach home».

Golo is anxiously awaiting the messenger’s return. The latter arrives exhausted bearing the fatal order. The steward straightway summons the executioner and his assistant. They are given orders to take Geneviève into the depths of the forest, where they will kill her and cut off her hair, which they will bring back to Golo as proof that his instructions have been carried out.

Geneviève is told that she is to be released and an excursion into the forest is proposed.

Rejoicing in her liberty, she mounts the coach with her children. The horses stamp their feet and move off.

The equipage passes over the sunny countryside, at an increasing speed. The peasants look up from their work in the fields surprised at the strange spectacle.
38.

The executioner and his assistant go ahead into the forest by short cuts.

39.

A glade. The coach stops. Gudule leads her mother into the forest, Geneviève carrying the baby in her arms. The little girl runs about picking anemones and primroses. They disappear among the trees.

40.

Two men emerge threateningly from behind trees. Geneviève recognizes the hangman and his associate and divines Golo’s treachery. Exhausted and terrified, she makes no effort to escape. With a cry, she sinks on her knees and begs for mercy. One of the men recalls Geneviève’s goodness and the acts of kindness she has shown in.
him. Out of pity for her innocence, youth and beauty, they agree to leave the mother and her children in this lonely place, where they must in any case die of cold and starvation. At the men’s request Geneviève cuts off her own and her little girl’s hair and hands it to the executioner with a little gold chain from her son’s neck.

The men move quickly away. Nightfall. Wild beasts are heard and their eyes are seen gleaming in the darkness.

The men find their horses attached to a tree on the edge of the forest.
Golo receives them at the castle. A short interview. They show him the evidence. Golo gives them refreshment and money. The hired assassins are afraid of their ill-gotten gains, and go out and throw the money into a stream near the castle.

The forest. Couchè upon moss beneath a tree and clasping the boy to her breast, Geneviève bemoans her sad fate and prays to God for help. The last glimmerings of day disappear. It is night. Suddenly she sees two shining pin-points — it must be a wolf. She closes her eyes. She feels its breath upon her face and its tongue licks her hand. Opening her eyes she sees before her a red
doe with large brown eyes accompanied by her fawn. A touching parallel of the two mothers alone in an indifferent world.

45.

The doe tugs at the hem of her mantle, as a sign to her to follow. Geneviève rises. The pretty creature skips along in front, looking round now and then with an intelligent look.

46.

They reach a green and wooded valley. The doe halts beside a clear brook, the water of which forms a little lake at the bottom of the valley — a silvery mirror framed in reeds.

47.

The entry to a grotto, a sort of cave hollowed out beneath the intertwining roots of the oak trees. The doe goes in; it is her home.

48.

Inside the grotto. Protected by their hostess, Geneviève and her children lie down on a bed of fern, sheltered from wind and rain, from cold and from the perils of the forest.

49.

The doe mounts guard at the entrance of the cave.

50.

Godfrey’s return to the castle. Sick and sad he receives from Golo, in a cold, bleak room, the fair tresses of Geneviève and little Gudule. He longs to be alone. Sitting before the hearth, his feet upon the fire-irons and his greyhound as his companion, Godfrey muses sadly upon his vanished happiness.

51.

The sun rises on the little lake. Swallows dart from bank to bank. Carp rise. Squirrels hop among the trees. The flowers and the beauty of the forest pay their homage to Geneviève. Their welcome consoles her for man’s unkindness and injustice. Nature proclaims her queen of the Forest of Soignes.

52.

Geneviève and her children organise their life. Geneviève fits up the cave into a home. Stakes and palissades keep out wild beasts. Under the guidance of the doe, these Robinson Crusoes find their drinking water in the spring. Branches of fo-
liage, and the fleece of dead animals serve them for clothing. Roots, mushrooms, berries, myrtle, wild raspberry, beech-nuts, acorns, a little game and fish roast upon the spit or cooked on ashes keep them from starvation.

53.

The doe suckles the infant boy with her milk.

54.

Years have passed. Henry has grown into a healthy lad. The simple life of struggle and danger, with nature as his playmate and teacher, has developed his muscles, nerve and native wit. He smears the branches with birdlime to catch birds, makes his own traps, fishing tackle and bow and arrows.
55.

Gudule, accompanied by her inseparable friend, the doe, goes out every day and picks fruit carrying on her arm a little basket which her mother has plaited for her.

56.

A day in autumn. Gudule and the doe have wandered far. The forest seems unwontedly disturbed. Hunted animals run by. Horns are heard in the distance. A wild boar passes by and vanishes in the thicket. Godfrey appears on horseback. He sees the doe ahead and spurs on his horse. The child mounts the doe's back and both hasten towards the cave, pursued by Godfrey.

57.

Geneviève, who is occupied in the house, hears noises in the distance which presage the presence of hunters in the forest. Then she hears the barking of dogs, the sound of horns and the shouts of men. She listens, half eager and half frightened. The doe darts in, with Gudule round her neck, followed immediately by Godfrey, who stops in amazement at the sight which meets his eye. He sees a poor woman clutching a little girl to her. A boy has run up, thinking his mother in danger and turns to face the huntsman with his drawn knife. He draws his bow, but his mother has recognized Godfrey and stays his hand.

58.

Godfrey replaces his knife in the sheath. He has seen his own likeness in the boy's face. Moreover, he has had repeated proofs of Geneviève's innocence and in a flash he understands. His wife, whom he had believed guilty and condemned unheard he finds alive and more lovely in abandonment than in all her court splendour. He finds his son, whom he has never seen, a lusty and valiant boy. Thereupon he holds out his arms, enfolds Geneviève in his cloak, covers her with tears and kisses and implores her forgiveness.

59.

In front of the assembled lords and pages the duke pays homage to Geneviève's virtue.

60.

Geneviève, her children and the doe are brought back to the castle amid the rapturous welcomings of the crowd.

61.

Golo is hung.
THE CINEMA AND ADOLESCENCE WITH SPECIAL
REFERENCE TO NEURVOUS AND MENTAL DISEASES.

(from the Italian)

We must keep a vigilant eye
on the future of the race.
Mussolini.

Of recent times more especially, the most serious attention has been paid
to the extraordinary influence which the cinematograph is liable to exert over its
young devotees. Everyone is aware of the ill-effects that the so-called seventh art
produces on physical health and on the mind during the stages of development.
Its consequences are manifold reacting on criminal propensities, nervous and
mental diseases, and in general on mental pathology, not only of the young,
but adults.

In the examination of a number of neuro-and psychopathic cases among
the young that have come under my observation I too have found the action of
the cinema to be a more or less direct factor of influence, and have noted that
psycho-sensorial disturbances and extravagant ideas, that manifest themselves in
certain morbid conditions, derive substance and colour from the animated images
of the screen.

This part of the Review includes two articles of special interest not only
to our work as a whole, but on account of the important arguments contained
in them.

The Institute has purposely placed them side by side. The enquiries in question
extend beyond the realm of pure theory into the more concrete sphere of daily life. An
Italian psychiatrist, Dr. Fabio Pennacchi, of the Perugia Asylum, and a Hungarian
headmistress at Budapest, Madame Hoffmann, have given us the fruits of their first-
hand experience of the influence, direct and indirect, of the cinema on the minds of chil-
dren and young people.

The former approaches the problem from the purely psychiatric point of view, while
Madame Hoffmann discusses the relations between the cinema and crime. Both studies
are well illustrated by examples and on that account alone occupy a place apart from the
articles that follow.

Without entering into the merits of the two cases, since we would leave our readers
free to agree or disagree, while it is also the practice of the Institute to adopt a strictly
objective attitude in its work of collecting information, we may be allowed to repeat
an observation often made in the columns of the Review:

Have the facts in themselves and as such any absolute and relative value for
the statement and solution of a problem?

Or should the facts or combination of facts be examined in association with and on
After a brief survey of the relations between the cinema and adolescence, I propose to record here some of my observations, which claim merely to be a modest contribution to the solution of a problem that is rousing attention in all countries, and especially in Italy.

The prompt and truly far-seeing initiative of the Italian Government, which aims ever more vigilantly at the physical and spiritual improvement of the race, has done not a little to solve this problem in its diverse serious social aspects.

But a great deal still remains to be done, to make sure that the grave injury which the cinema has caused to youth up to the present shall not be repeated with future generations.

Cinematography, the creation some thirty years ago of Edison’s brilliant intellect, was evidently, right from the start, one of the most interesting and important inventions, destined rapidly to conquer the whole civilized world. Addressing all peoples in a language that was not hampered by the difficulty of foreign tongues, a universal language spoken by things themselves. It gave us the animated image, life, the whole of life in its innumerable aspects. Here was an amusement that gave pleasure without demanding effort or deep attention, reaching the senses by a rapid and easy route, without fatigue.

It enabled the onlooker to pass with amazing facility from the realms of reality to the kingdom of fancy, to escape from the humdrum world of fact into another life of mystery and imagination.

Little wonder that men sought to multiply so delicious an instrument of pleasure. It was only too well fitted to the tenor of the age which urged men to enjoy

the basis of a series of statistical enquiries which confirm and contradict the conclusions which the facts themselves may suggest?

It is pointed out elsewhere, for the information of those who are interested in this question, that the cinema is not the only or even the chief source of immorality and crime in modern life. It has been said that an infinite variety of forms of amusement, of more or less recent creation and more or less suited to the young, has contributed to bring about a state of affairs for which the film industry alone is commonly held responsible.

And not only amusements. Reading itself, the newspapers, books, social contacts and the psychological conditions peculiar to the post-war world are all factors which have no doubt contributed to give a different meaning to life, to give it an appearance of unreality, and to make children and adolescents — who are physically and morally least able to resist such influences — see life as it were through a distorting prism.

For this important reason the facts, we repeat, have an undoubted value for the research student. But their chief if not their sole value will be as part of the fuller and more useful enquiry which the Rome Institute is now carrying out in all countries, namely, a purely statistical enquiry into the various causes of immorality and crime.

These two articles represent different but convergent aspects of what we call truth. We shall not know the whole truth until these enquiries, by confirming, refuting and supplementing the facts, have enabled us to form final conclusions.
themselves with the least possible expenditure of time and effort: quickly and ever more quickly.

Thus the cinema was assured a post of honour in the accelerated rhythm of modern life. At the present time, its powers are unlimited, its economic and social importance so remarkable that those who used to look upon it merely as a passing fashion may well stand amazed. It has built for itself entire cities where thousands of workers labour to increase its range and its sway; it inspires fervent hosts of artists. It ignores distances and the narrow frontiers that divide men of different nationality. The halls that harbour the magic luminous screen are by now spread broadcast over the globe, and new ones are springing up on all hands—in every town and every village—for the daily delight of men of all races and all ages.

Of all ages, I have just said. But the biggest crowd of devotees consists unquestionably of the young. The cinema plays a leading rôle in their lives; there are very few young people who do not love it; the mass of them throng its halls with astounding assiduity.

How many children frequent the cinema and how often do they go there? Many persons have asked this question and many others have examined it with the greatest care. The statistics on the subject are extremely striking.

For example, the enquiries carried out at the instance of the Faculty of Psychology of Columbia University resulted in the following report by Dr. Woodworth. For the purposes of the enquiry the pupils of the poorest districts of New York were selected. The teachers were asked how often, as a rule, their pupils went to the pictures and the answer came pat that they went almost daily. In the City of New York alone more than one hundred thousand children go to the cinema every day.

In Australia an enquiry carried out by 40 school teachers gives a percentage of 54% of children under 15 years of age. In British India the percentage is 79% and it is 74% in Japan.

But do not let us assume that such percentages are to be found outside Europe only. An examination, for instance, of Dr. Bogdanovicz's statistics shows us that in Poland—notwithstanding a partial censorship applying to young persons under 17—a very high percentage of children attend the cinemas. 94% of the boys attending secondary schools and 89% of the girls go there. Among the students of continuation courses—all young people belonging to the working classes aged between 13 and 18—we reach the figure of 80%. Figures of much the same compass are to be found in other countries, where enquiries have been conducted mostly among schoolchildren, as being those most easily checked. This is true of Germany, Belgium, and Switzerland.

At Geneva, an enquiry that embraced about 5000 children attending elementary schools, intermediate schools, and vocational training schools, furnished the figure of 78%, 73% for girls and 82% for boys. Dr. Elkin gives us an enormous percentage for Russia (98%), referring for the most part to the unfortunate Besprisorny—little vagabonds without fixed abode. The percentage is lower in France, being in the neighbourhood of 87%; it is lower still in England.
The incomplete statistical returns for Italy of ten years ago showed enormous figures for our principal towns, with respect both to numbers and frequency, a fact partly explained by the unsettled life of the immediate post-war period. Later on, especially following on recent government measures, a certain decrease both in numbers and frequency has been noted, but the latest enquiries made in elementary and intermediate schools, vocational training courses, and sundry public institutes in Rome, Milan, Naples, Palermo, and a few other provincial towns, still show very considerable percentages.

We cannot give exact figures for the whole country because enquiries are still being pursued, and up to the present precise data are lacking; the percentage, however, seems in a general way to oscillate between 65 and 80 %, with a frequency varying between 0.7 and 0.8 times per week. Special questionnaires have, very opportunely, been compiled, containing a number of questions, among others bearing on frequency, age, sex, preferences as regards type of film, the reasons for such preferences, etc.

A number of reports show that the proportion of children and youths to adults in cinema audiences is considerable. This preponderance is more accentuated in the small centres than in the big towns, and is still more pronounced on Saturdays and holidays, when the proportion is apparently 90 % of the audience.

As regards the age of greatest frequency, checked on the basis of different age categories, nearly all the returns agree that 13 years is the age par excellence of «screen fans» 14 years, 12 years, 11 years, and 15 years come next. In some centres 12 was found to be the age at which the greatest number of children went to the cinema.

As regards sex, boys are very clearly the most assiduous, probably because boys find it easier to obtain the means to go to the pictures; the time they spend there is everywhere strikingly greater than that spent at other spectacles or entertainments.

If we seek the many and various causes that urge youth to the cinema halls, and explain the effects produced by these causes, we must refer, however succinctly and briefly, to the phases of the psychical life during the period of development.

First we must recall the scarcely more than vertebrate being that reacts to the stimuli it receives by defensive movements - the reflexes; a centre of energy originating from the very springs of life; an automaton that eats, breathes, and cries: a baby.

The most varied sensations reach it from all that takes place in the environment around it, as also the from depths of its own organism, through the nervous system - that marvellous transmission apparatus. It is aware of these whenever they overstep those minimum limits of intensity and duration that represent the threshold of sensibility, and answers by instinctive reactions and simple automatic reflex manifestations. Then the functions aroused by each new stimulus combine and co-penetrate with the preceding functions, that had their beginning in the pre-natal period, by virtue of the laws of heredity. But, in the sequel, the acts go on multiplying and grow more and more complicated under the influence of other reflex
actions. A great part of the sensations does not remain mere sensation, but is enriched by new elements and becomes a conscious impression; namely perception.

Thus the developing child, just as it converts into perceptions, a part of the innumerable sensations it experiences, likewise co-ordinates little by little a part of its reaction movements for its own purposes.

«By degrees, as it evolves, its activity - which in the first place seemed determined solely by heredity and biological instinct-tends steadily in a personal direction, by the influence of its personal experience, of primitive tendencies, and, lastly of affections and sentiments that we define as higher and intellectual» (S. de Sanctis).

The development of the nervous centres proceeds in correlation with psychic development. The brain grows in weight and volume, the cells mature and multiply in marvellous progression, the nerve fibres are enriched with myelin, firstly the less important and later the higher centres; the area of the cortex doubles and trebles.

And in this marvellous laboratory of vitality, within which of old Greek wisdom placed the soul, separate centres preside over the most varied functions. Some of these attend to the movements of the different parts of the body, the diverse sensations are localized in others, and special areas are established for memory, for language, for the specific functions of the senses.

The nervous channels that ascend to these centres carry sensorial stimuli that are here transformed into perceptions and new stimuli proceed hence by centrifugal channels to produce the desired reactions.

Thus a stimulus, passing through the psycho-sensory channel, reaches the centres where it is elaborated automatically and, descending by the psycho-motorial channels, is translated into action.

Psychologists are wont to represent this process in the guise of an arc: the elementary reflex arc. The ascending line is represented by the impression of the various stimuli; the apex by the internal elaboration of these; the descending line by the reactions they have stirred.

All the activities of the organism are nothing but reflexes: simple, composite, external, internal, instinctive, inhibitory, etc. The whole of existence - especially in so far as it consists of sentiment and emotion - is dominated by these.

Not only in the domain of sentiment, but in that of the will also, we can note how more or less complicated reflex action is exteriorised.

Intelligence, will, feeling - these are the three fundamental factors that go gradually and progressively to form what later on constitutes character.

But children, in whom the faculty of control derived from experience and a certain autonomy of the critical powers, is weak, are highly suggestible.

What is more credulous than a child? Mosse found that children of three years are already suggestible, that 86% of healthy and normal school children are prone to suggestion, the younger ones in a greater degree than older children.

As children grow older, the will-power increases together with the intelligence,
and the subjectivity of the youth tends to assert itself step by step over the credulity of the child.

With his aspiration towards what he knows of boldness and independence, there arises in him a desire for strong and unknown emotions, a vague yearning towards all that is distant and unknown. Indefinite sensations arise, as in a dream, and the first feelings of religion and of love appear in his soul.

From all the various tendencies and instincts favoured or repressed by the elaboration of the diverse biological factors, the development of the affective higher life and of ethical social tendencies commences.

This is the critical hour: egotism and kindness, the predatory instinct and ideal love, will and suggestion, turbid desires and mysticism, all struggle together in a tumultuous chaos before settling down to the final adjustment. All this is going on while bodily growth leads to the characteristic changes of puberty and while the several parts of the organism are suddenly called upon to perform an intenser function and the ferments of the various glands invade the vital plasm to excite or moderate the nervous system of vegetative life linked to the central nervous system.

It is during this crisis of adolescence, while so many somatic and psychic changes are going on that pathological manifestations — the product of hereditary defects or of imperfect evolution — appear and assert themselves.

They sometimes appear as slight neuro-psychic changes that are hardly noticed, at other times as graver deficiencies or anomalies in the field of intelligence, sensibility or the affections.

Sometimes we have to do with youths of exaggerated imagination and emotivity or weak will, who are liable to be enormously influenced by whatever strikes them, who easily repeat, by word or attitude, the words or gestures that have struck their fancy. Voluble to a degree, credulous and capricious, they lie with the utmost unconcern, and confuse their imagination with reality. They have precocious and strong sexual stimuli and diverse disturbances of the nervous system that belong to the vast and complex domain of hysteria.

Others, who are likewise distinctly emotional, react in an exaggerated degree to their environment, at one moment gay and excited, at another depressed without reason — we can trace in these the germs of morbid hypochondria.

Some suffer from childhood from aversions (phobia), scruples and doubts that torment them, obsessions that urge them towards wrong-doing, however anxiously their lucid conscience may revolt; these are cases of psychoastheny.

Others tend to self-absorption, the hypertrophy of the ego, diffidence and recalcitrancy towards their environment, which appears to them hostile. Retiring, suspicious and often neurotic, they reveal a paranoiac temperament that urges them — if timid — to regard themselves as the victims of persecution, or if of an ambitious and aggressive temperament, themselves to take the offensive.

Then we have the whole host of those in whom instinctive tendencies are ill-governed by self-control. Impulsive hypocritical bullies, they rebel against discipline at home and at school. Liars and not infrequently cruel and vindictive, they
explode in groundless fits of rage or abandon themselves to idleness and sexual abuse; these are the epileptoids or born criminals.

Sometimes, although lazy, violent and dishonest, these youths are pseudo-epileptoids, hyper-suggestible and hystero-psychopathic subjects, biologically normal au fond; in other cases, on the contrary, latent criminal propensities may come to the surface and manifest themselves in the most diverse ways under favourable conditions.

Those in whom ethical social sentiments are undeveloped, who are lacking in moral sense, are in some respects akin to the latter.

Cold, calculating, egotistical, often rather stupid, but not infrequently above the average in intelligence, entirely self-centred, when grown men they will live on the border-line of the penal code, silent but most dangerous criminals.

Lastly, there are certain youths who, at this period, begin to reveal a striking change of conduct, which grows wild and extravagant. There is a lack of coordination between thought and action, a steady weakening of will-power, a notable decline of the affective life: this is a symptom of precocious dementia leading to complete and irreparable psychic dissolution; it is the threshold of madness.

There is no really distinct division between all these main types I have alluded to, because frequently the pathological signs are mixed up with one another. Also they often escape the observation of teachers, superiors and even the family, who regard them merely as slight and negligible accentuations of normal temperament and confound them with such. It is moreover very difficult to define the boundaries, all the more so, as Bianchi points out, because the perfectly normal type is rare, especially in childhood and adolescence.

This critical period of development, in which so subtle a metamorphosis is taking place in boys, manifests itself yet more intensely in the whole female organism. This is explained by the importance of the maternal function then developing.

Owing to the intimate reflex between the mind and sex, new stimuli and new sensations reach the nervous centres from the developing organs of reproduction. The predominating note of the change thus operating in girls is an exuberance of feeling « which, as though through some dim vision of the sacrifice to which she is pre-destined, urges her to pour forth the flood of her affections on her companions or in religious fervour ».

Some girls become excitable and eccentric, rebellious to discipline and neglectful of their normal occupations; others show a melancholy disposition or a romantic tendency, a desire for solitude and sweet imaginings that often end in unprovoked tears. Meanwhile the growth of the body causes physical discomfort, quick exhaustibility, functional weakness of the organs, palpitation of the heart, and vaso-motor phenomena; a variety of disturbances of the sexual apparatus that react on the whole organism.

Owing to this deep-seated crisis that takes place in both boys and girls, under the influence of various biological factors, common experience, not without reason, has come to regard the age extending from the pre-puberty period to the complete formation of personality, as the most important age of life.
The soul of the adolescent, eager for all that is remote and unknown, rapid and big, for all that is complicated and mysterious, feels these aspirations — which originate mainly from sexual motives — perfectly satisfied by the film. The cinema answers closely enough to the intellectual mechanism of children, who are ignorant of the processes of abstract logic and think by association of ideas that are for the most part visual.

This amusement is provided through the sight, that is to say the sense that serves children best in the development of their psychic life and that procures them all the more pleasure from the fact that it demands no mental fatigue. The child interprets as he wants, according to this temperament and his intelligence, all the facts that unfold themselves before him on the screen. He sees action in its dynamic aspect, and he can colour it with all the hues of his imagination and enjoy the double illusion of dreaming and acting rapidly at once.

This is not true of other spectacles, the theatre for instance, where speech and other conditions are an obstacle to that special appeal that the cinema provides.

Nor is it true of books.

Books, which can certainly exercise a powerful fascination, can never equal the extraordinary eloquence of the film. However vividly a boy may conjure up in his mind's eye the happenings of which he reads, he can never derive from this mental vision the same emotion that the screen inspires. Not to mention that books, like newspapers, demand a certain degree of culture and understanding, and therefore exclude a large class of illiterates or persons of very poor education.

No such selection is demanded by the cinematograph, which easily overrides such difficulties, the visual story is perfectly simple and clear, even when the onlooker is unable to read or properly to understand the accompanying text.

There is another reason for the preference accorded to the cinema: cerebral fatigue is caused much more readily by reading or listening than by watching a film. Fatigue leads to boredom; but this is precluded or at least considerably retarded by the continuous variety of the visual entertainment, which gives pleasure by distracting the mind. Even when a long meterage film gives rise to mental fatigue, this does not manifest itself as an immediate result, because the impression of pleasure annuls or attenuates it and keeps it at bay.

But the factor that contributes more than any other to increase the agreeable excitement of the senses is music. Its rhythm accompanies the progress of the scene and still further postpones all sensation of fatigue or boredom. The image is rendered more vivid and more moving by the strains of the violin or the notes of the piano; the voices of the many passions displayed on the screen are heard through their harmony.

A little ten-year-old blind boy, who assiduously attended the cinema, explained his love for it by the fact of the music. « I can tell quite easily when there's a row on, » he said « when soldiers are marching past, when somebody is dying, when the actors are kissing one another, and other things are happening. »

The suggestive action of the show and the music is still further and very efficaciously strengthened by the darkness of the surroundings. The small luminous
screen draws the whole attention of the onlooker; the surrounding shadow enhances the fascination of the figures and of the fantastic scenery projected; the melody of the invisible orchestra is heard in the dark; the whole thing takes on the semblance of a dream.

To these circumstances of a psychological order that explain the passion of the young for the cinema, other reasons of a material kind must be added.

Young people can go to the cinema without any fuss or preparation; the charges for admission are lower than for other entertainments. As a rule half prices are charged for young children; the elder ones can easily procure the modest sums required. They come out of school, workshop, or factory, and hurry off to fill the picture palaces. Holidays and days preceding holidays are still more propitious; we know that the cinemas draw their biggest audiences of young people on Saturdays and Sundays. Not infrequently children dodge their families to go there, but often the parents themselves send them, because they feel that they are safe at the cinema; they look upon it as a refuge for the youngsters from the dangers of the street.

More frequently still we find the parents, anxious for diversion, and unwilling to leave their children alone at home, take them there themselves. This is specially the case in populous quarters, where the people are unable to afford more costly entertainments, and seek relief from the drab day spent in shop or factory in this attractive amusement.

The central question in all the enquiries that are being pursued at the present time in the domain of the cinematograph touches on the influence the screen can exercise on the minds and education of the young.

«Is the cinema a boon or an evil?»

«Is it true that it can produce on the exquisite sensibility of children effects of physiological emotivity that go beyond the normal reflexes of sensation?»

The majority of those who have gone into this problem answer in the affirmative, and maintain that the manifold damage done by the cinema is not compensated by its possible advantages.

Some persons define the cinema as the modern school of immorality; others go so far as to regard it as the quickest means of degeneration of the human soul.

These are no doubt exaggerations, but it cannot be denied that, while the cinema is not to blame for all that is wrong with its young devotees, it is undoubtedly the more or less direct cause of a great deal of harm.

Having premised this much, let us now point out the principal consequences that the action of the film produces on the physical and mental health of children.

One of the less important, but not the least frequent of these, is the injury to eyesight. Specialists aver that a great number of young people have to blame their constant visits to the pictures for the deterioration of their sight, and this is especially true of the working classes, who, being compelled to occupy the cheaper seats, have to sit close to the screen, to the obvious and serious injury of their eyes. It is true that in her writings, Dr. Hein, a Danish lady oculist, inclines rather to blame the stress of school work, for poor sight among children, but it cannot be denied that the
speed of the impressions on the retina is a cause of marked ocular tension, complicated by difficulties of adjustment, especially with regard to the distance of the eye from the screen. Headache often ensues, sometimes giddiness; and, in the long run, the organ itself is weakened.

Yet more serious are the consequences, deplored by doctors, of the unhealthy milieu, which is liable to propagate the commoner forms of illness, owing to the smoky and germ-laden atmosphere which cannot be changed as rapidly as the thronged halls would require. Tuberculosis finds a happy hunting-ground here, especially in the damp and cramped halls of the poorer quarters, where ventilators renew the vitiated air only partially and inadequately.

There is no occasion to speak here of other dangers, the possible and not infrequent accidents, such as fires, caused by the inflammable material of the films; the largest contingents of victims of such disasters are always to be found among the children.

Of far greater importance than any of the above is the damage with which we have now to deal: that done to the nervous system.

We know what a complex rôle, in the age of development, is played by the nervous factor with its receiving and transmission apparatus, its reflexes, its whole activity. The cinema, which absorbs so great a part of this energy, has an incalculable effect on the general nervous condition, and on all the organic functions which this regulates and directs.

Under the form of nervous impulse the visual sensation travels from the strata of the retina to the primary optic centres through the optic nerve; it then reaches the occipital lobe of the cortex which is its home; having reached the higher centres it evolves and changes into the conscious act of perception. Then it re-descends, by the centrifugal channels and is instrumental in provoking those particular emotive states which, being reflexes like the others, respond to the impressions received.

Children, spell-bound by the fascination of the cinematic vision, quiver and respond with all their nerves to the many sensations that reach their brain. Their attention, which is usually so quickly wearied and seeks relief in movement, is here chained for hours to the screen, while brain fatigue is disguised by the excitement of pleasure. When it is all over, symptoms of weariness begin to be felt, and these are more or less serious according to the temperament and constitution of the young onlookers, who have suffered a loss of nervous force out of all proportion to the strength of the organism.

In this regard the experiments made by the psychologist, Dr. Rouvroy, to which he refers in his admirable study on this question, are of the greatest importance.

Tested by the dynamometer, physical strength at the end of a spectacle has been found to have diminished by one-fifth. Attention to cutaneous sensations, measured by the pointed aesthesiometer, likewise, is found to have diminished.

Tremors and cardiac palpitations are commoner; nervous excitability is in every case intensified and is accompanied by accentuated reflexes. The head weighs like a helmet, with pains at the back of the neck and sometimes giddiness. Weak cases show muscular contraction and paresthesia, often, too, prostration and general
lassitude due to the fact that, without their realising it, the nerves and limbs have for long hours been subjected to exertion.

I have observed symptoms of this kind in most children from elementary and intermediate schools — more or less diffused trembling and heart palpitation are common; still commoner is a state of excessive nervous excitability sometimes continuing until the next day and often taking the form of outbursts of temper for little or no reason; commonest of all are nightmare, sleepwalking and insomnia. Moreover, cases of real neurosis are not infrequent, the following being an example of more than usual interest:

A year ago I examined a boy of 13 at my hospital dispensary.

The parents were living and healthy; and there were no neuro-psychopathic signs in the family's medical history. The child's physical and moral development had been normal and he had always been gentle and tractable. No previous symptoms of epilepsy or tetanus; no signs of congenital syphilis. Strong and healthy, he had up to that time had no illnesses worth mentioning.

After coming to town for his education, he became a regular visitor to the cinema. For the previous three months or so his parents had noticed an extraordinary nervous excitability, laziness at his school-work, sleeplessness, muscular convulsions, affecting the head, face, body, or limbs. These convulsions increased in frequency and affected the boy's health. He acknowledged that the symptoms were more acute and frequent after he had experienced some emotion and especially after a visit to the cinema, where he used to go nearly every evening to distract his mind. He said that the first manifestations of these disturbances occurred after he had seen a particularly exciting film.

An objective examination revealed organic deterioration and anaemia, but nothing worthy of note in the internal organs. Muscular strength was well maintained; the tendon reflexes were exaggerated; accentuation of the slight and superficial unsteadiness of the hands when held out in front of him. The contractions of the muscles were rather violent and jerky, and affected the shoulders, head, face and at times other parts of the body. The boy made some effort to control them but was not successful.

The nature of these convulsive movements, most of which reproduced automatic gestures or habitual reflexes, suggested tic.

Mentally, no pathological symptoms were apparent and there was nothing to indicate an hysterical basis, which in such cases is always possible.

Under appropriate treatment, absolute rest and the removal of all cause of emotion and nervous excitement, the boy rapidly recovered and is now perfectly cured.

There is no difficulty in this case in tracing the neuropathic symptoms to the repeated effect of the cinema, though we must allow for the influence of a morbid pre-disposition latent in the organism. This is not to say that all nervous or mental disturbances are to be attributed exclusively to this predisposition, but it becomes of some importance — particularly if the child inherits some defect — when the development of the nervous system is disturbed.

A child, even if his nerves are strong, can scarcely fail to react, however slightly, in.
to stimuli like those of the cinema, which repeatedly attack the nervous centres — to use Abattucci's expression — much as a boxer rains blows upon his adversary before delivering the knock-out.

In response to these reiterated appeals, which reach it though the eyes, the nervous system, still in course of formation, reacts in ways that vary according to its degree of development and that sometimes, as in the case we have just quoted, manifest themselves as genuine neuroses.

I do not say that the strong impressions left by the cinema on children always take the form of a neurosis or mental affection for, if it were so, half the world would have to be locked up, but as Monoio puts it, the number of young people who owe a neuropathic condition to the cinema is legion.

Nervous disorders lead insensibly towards mental affections, the two phenomena being closely allied. As we have seen, psychological development and the development of the nervous system go side by side and are inseparable. We have described the crisis of puberty, that crisis, which, as De Sanctis wrote in his masterly work of infant psychiatry, "occurs amid the tumult of physical growth, desire and feverish imagination". We know that at this period the influence of the various biological factors which affect individual growth is more powerful than at any other.

Two of these factors are of considerable importance — heredity and environment.

The former by its immutable laws shapes life at the outset, the latter determines habits and reflexes. The great importance of heredity is beyond question but the influence of environment on a child's mental development is not less significant. In obedience to the law of imitation environment is continually "suggesting" and sometimes makes deeper impressions upon the growing mind than heredity. It determines the currents of new ideas and new sentiments, stirs up tendencies, prompts impulses and inspires wishes; it moulds the character of the child by its good and bad examples, its striking manifestations, by all that it embodies, in fact.

Adolescents, who find in the cinema the complete satisfaction of their aspirations, derive from it their future character, which is guided towards the facile form of life they see depicted on the screen. They take no thought, they do not trouble to distinguish what is possible from what is absurd, to reflect upon cause and effect or to criticise. Their critical faculties are still weak and the cinema does nothing to strengthen them, since it allows no time for reasoning or judging the logic of what is shown. It carries the spectator into an improbable world in which everything is faked, pre-ordained and in which event follows event with bewildering rapidity.

The idea of time disappears in this artificial and standardised world of illusion.

The conception of life which a child forms from what it sees on the screen is wholly false. The result is an enervating phantasmagoria which — more particularly in those who are predisposed — develops a special mentality, which later on finds itself in open conflict with the realities of a life that will be still harder and more hostile unless education can at least partly undo the harm and prevent a collection of artificial and false ideas from taking complete possession of the mind.

In only too many cases the adolescent who accepts the illusion of the screen
for a slice of real life becomes under the cinema’s influence an anti-social being, an exalted and the victim of hallucinations.

While, as we have seen, the effects of the screen on the physical health and nervous system of the adolescent are serious, the psychic influence is much stronger and more important still. It varies with the individual. Sometimes it is so slight as to pass unnoticed, sometimes it is enough to claim serious attention and sometimes the effects are so powerful as to lead to the threshold of madness.

Professor Mondio, in an important book on the subject, notes that, whereas nervous symptoms, neuroses and neuropathic states are innumerable and often escape the specialist’s observation, the psychical manifestations and psychopathic conditions more easily claim the psychiatrist’s attention.

The impressions made by the cinematographic picture strike the child’s mind directly and deeply; the various characters on the screen express some particular emotion which is carried to the point of paroxysm and which echoes profoundly in the minds of young people.

In adults the effect is more short-lived, since their knowledge of life and habits of joy and sadness prevent the emotional reaction from lasting very long. Such effect therefore cannot be very harmful, except to particularly highly-strung persons, whose conscious minds may be disturbed for some considerable time.

But what constitutes the exception in adults is the rule with children. The child’s reaction is all the greater on account of its suggestibility, and the cinema feeds this element. This emotional mimicry, by which the good film actor or actress tries to convey the strongest feelings of the human heart, those same exaggerated gestures are the means by which the cinema acts so powerfully upon the psychoreflexes. The frequent repetition of these gestures and simulated emotions sets the child’s mind in a whirl, which often continues long after the end of the performance. These shadows of the screen live in his mind for a long while; they become obsessions and figure in the child’s dreams. They are, as it were, dream fantasies, but fantasies which have entered his being because he was introduced to them with the consent of those whose duty it is to look after him. He gives himself up wholly to these mysterious images, intangible but ever present; their hold is infinite, if we consider that impressions and experiences do not all remain in the conscious mind, but for the most part lie hidden in the vast realm of the sub-conscious.

Within this important and mysterious realm the cinematograph exercises an influence and creates ideas beyond our understanding. It leaves in the substrata of a child’s mind indelible traces which later on in life take form and shape reacting automatically to some quite unexpected word or gesture.

This suggestion — « postponed » suggestion, we may call it — on the part of the cinema is naturally much stronger in undeveloped children and constitutes a serious danger.

Freud’s modern and much-disputed theories of psycho-analysis teach us the great importance of the sub-conscious mind even in the very earliest days. This is not the place to enter into the details of this doctrine, which, although it attaches undue importance to « ideo — affective-motor complexes » in children and is not
without many exaggerations, contains a large element of truth. For it shows the
value, in determining the future character, of the sexual instinct — the «libido»
as Freud calls it — which emanates from the child's subconscious mind accompa-
nied by a special complex of experiences, sensations and images.

During this period of incomplete psycho-sexual development the reiterated
stimuli of the cinema are very harmful both before and after the age of puberty.

In quite young children, with whom instinct has not yet developed into con-
sciousness, erotic visions cannot produce any emotive reaction, but the impression
aroused takes root in the subconscious mind to reappear later as a confused and dis-
turbing recollection.

To the adolescent, who is attracted to the cinema by its sexual appeal, the harm
is more immediate. The sensation conveyed to the nervous centres by the sight,
arouses erotic feelings which are enhanced by the darkness of the room, the com-
mingling of the sexes and by music, which increases the suggestive force of the scenes
of passion projected on the screen.

This premature excitement of the senses, which the cinema provokes more often
than any other source of entertainment, is very bad for adolescents. The mind
becomes pre-occupied with sex, the spirits suffer and attention is distracted from or-
dinary occupations. Study becomes a burden and every-day work is performed with
indifference or distaste. On the other hand, sexual desire is increased and urges
the adolescent to seek fresh stimuli and new emotions. Education cannot always
repair the harm that has been done.

The intense and profound effect of all this upon the psychology of adolescents
explains the position occupied by the cinema among the causes of nervous and mental
diseases.

As long ago as 1911 D'Abundo and, four years later, Masini and Vidoni noted
the influence of the screen on the psychical life especially of the young, while Hoven
drew attention to the influence of the cinematograph on the etiology of mental diseases.

Guadagnini, Belotti, Pesce Maineri and many others have insistently reverted
to the problem, which even to-day has found no solution. Dr. Mondio in his study
Il Cinematografo nell'etioologia di malattie nervose e mentali soprattutto nell'età giova-
nile, supports his arguments by a description of several cases of «cinema psychosis». By
this he means a mental syndrome nearly always acute and accompanied by a varied
and imposing array of symptoms, among which predominate numerous psycho-
sensorial and especially visual disturbances arising from cinema spectacles, fantastic
and especially erotic ideas, fears and phobias, more or less violent psycho-motorial
agitation, an inclination towards violent rage, or catatonic or convulsive states. The
prognosis of these forms of mental derangement is mild and they are of short dura-
tion. The consequences may, however, be very much more serious when the scenes
are repeated continually, sometimes shifting and varied, sometimes fixed and obses-
sive, and when these wild fancies take firm root in the mind.

In a constitution with a psychopathic tendency the harmful effect of the cinema
may be a determining cause of a mental disease which will last far longer than could
at first have been supposed.
In September 1929 a certain Tullio At., of Terni, was admitted to my hospital. He was 16 years of age and, by occupation, a clerk. His father told us that the boy's physical and psychical development had been normal, that he had had pneumonia at the age of 12, but no serious illness since and had never shown signs of serious nervous disorders; at times he had been irritable and sulky and, as a child, he had suffered from nightmares; but not to an excessive extent. On leaving school he had joined a commercial firm as clerk and had always led a regular life.

He was, however, passionately fond of the cinema and used to go there every evening, especially during the months preceding the outbreak of his disease. This appears to have started at the beginning of August with aural and visual hallucinations. On coming home from the cinema, the boy would fancy he saw on the walls of his room the characters in the film and sometimes he could hear their voices. At first these hallucinations were rare, but they became more and more frequent until they seriously upset At and affected his whole life and conduct. His work began to fall off, he became silent and self-absorbed; at times he would get angry for some trifling reason, his actions and language were often extravagantly exaggerated. At night he slept very little and gave himself up to frantic sexual abuse. His physique began to deteriorate. He continued to visit the cinema, his parents being unable to prevent him. The hallucinations became stronger still and left him no peace. According to the boy, voices ordered him to perform the acts that he saw depicted on the walls of his room and twice he tried to commit suicide, crying out that he had been commanded to do so.

The father assured me that no one in the family had ever suffered from nervous or mental disease, except the child's maternal grandfather, who had been epileptic; there was no trace of syphilitic infection or alcoholism in the family.

I extract from the clinical dossier the notes made on September 25th:

In reply to questions, the boy gave his name, Christian names, age and occupation correctly. He is slightly vague as to time and place, but realises that he is in hospital, where his father has left him for special treatment. As regards the causes of the disease, he says that for several months he has been tormented by constant visions and voices. At first he saw only vague more or less veiled faces, particularly at night on his return from the cinema, where he went every evening. He says that at the end of the performance his head felt heavy, he had buzzings in the ears and continued to feel unwell all night. On waking up in the morning he felt too tired to go to work. His sleep was always broken and he would often wake with a start at the sound of his own name.

The visions then became more frequent and he describes them very well:

"Scarcely had I returned to my room and put on the light when I saw the wall lit up in some unknown way. On it appeared the persons I had seen in a film that evening or a few evenings before. Sometimes they would remain motionless, looking at me fixedly; on other occasions they would move about as in the film; most often of all, they acted love-scenes. During the last few days they have never given me a moment's rest, but call out my name and command me to repeat their gestures. Once they told me to open the window and throw myself out, but just
as I was about to do so, one of them ordered me to stay where I was. I tried sleeping in another room, but they followed me everywhere. Sometimes they smile, start singing and I hear the orchestra; they don’t frighten me then. Father says that I suffer from hallucinations and that, if I go on visiting the cinema, he will have me put in an asylum. But I’m not mad. I don’t, of course, understand where the machinery is hidden; perhaps it is an apparatus with radiocinetic waves ».

He went on to recount many of the episodes of these «free cinema performances» They are varied and consist mostly of love-scenes, which greatly disturb him. Sometimes they are scenes of brigandage and often they relate to quite trivial incidents. The boy names some of the actors who appear in these scenes and describes very well his agitation and internal struggles when the voices order him to commit acts of which he realises the serious nature: «Sometimes they tell me to kill my relatives, but I don’t do it, because I love my family. One night I seized the hammer and struck at a man who had told me to kill my brother Aldo with it ».

At. says that he is still obsessed by the visions and voices even in hospital and, although he has not been to the cinema for several days, he still frequently «sees» the actors in films he knows.

At. declares that he drinks in moderation — at most a quarter of a litre of wine a day — and has never been drunk; he smokes a packet of Macedonias (ten light cigarettes) each day, rarely more. He says he has never had any venereal trouble, but admits to being a constant masturbator, especially since he started visiting the cinema.

During his examinations At. is fairly quiet. He answers nearly all my questions, but often interrupts the conversation by looking up at the wall or ceiling and strains his ear as if to catch some voice.

He grimaces a good deal; at times the pectoral muscles contract, at times he opens his mouth and eyes wide or raises his eyebrows and frowns.

Neurological examination reveals accentuated reflexes, especially tendon reactions; otherwise, nothing particular.

There are no special traces of anthropological degeneration.

The Wassermann test was negative both for liquid and for the blood serum.

Physical deterioration rather marked.

During the first few days in hospital the patient’s behaviour showed little change. Although less frequent, the hallucinations have recurred, making the patient excited and impulsive.

At present he spends his days doing nothing. He is often visited by crazy fancies, for example, that he is under the influence of radiocinetic waves along which the actors in his scenes transmit him his thoughts. At such times he becomes uneasy, and obstinate, rebels against the nurses, refuses to eat his food or to go to bed. In his quiet moments he draws or plays with pebbles; he asks for books, but only turns over the first few pages in an uninterested way. Occasionally he asks us when we are going to send him home, but when his parents visit him, he appears absolutely indifferent.

By reason of the combination of symptoms, this case appears to me interesting.
It began with fairly serious psycho-sensorial disturbances accompanied by psychomotorial agitation, mental disorder and wild ideas; other phenomena then ensued, such as catatonic symptoms characterised by immobility and negativism, mannerisms, stereotyped acts, impulsive movements, symptoms of puerility, affective obtension.

During his months in hospital, At’s condition shows no improvement. On the contrary, the acute hallucinatory form in which the trouble began has taken on more and more the aspect of that syndrome which modern writers call «schizophrenia» and which Kraepelin describes under the name of dementia praecox.

Less serious but no less interesting is the case of Mario T., a workman, of Perugia.

His parents are alive and well and have never suffered from any nervous or mental diseases; a brother of his father was neurasthenic and committed suicide.

T. was born in the country and lived there until he was 13; he had had no serious illnesses; he was inclined to violence, impulsive, untruthful and often cruel, especially to animals. In 1924 he went to France with his parents and two years later found work in a cinema at Villerupt. Until then he had never seen a film. His new employment allowed him to watch films every evening and he became a great enthusiast. He fell more and under its fascination until he could think and talk of nothing else. For nearly a year he spent all his evenings in the cinema. It was in the summer of 1927 that his parents noted an extraordinary change in their son’s character. From being a good, quiet boy — his elder brother relates — he became more and more peculiar, lazy and often violent and ill-tempered towards his family. He would abuse them, telling them that they were just common people, whereas he felt himself a «gentleman»; he said that he believed he was the son of a nobleman, who would one day recognize him and leave him his name and his money as he had often seen happen in films.

He also began to drink, to smoke excessively and masturbate frequently. His parents tried to show him the error of his ways and insisted upon his giving up his work and resting. Mario continued to visit the cinema and expressed a wish to go to Paris, where, he said, he had found an occupation worthy of him. Towards the end of November he stole two hundred francs and left home, but, a week later, the family was informed by the police that the boy, after showing evident signs of mental derangement, had been placed in an asylum.

In February 1928 T. was transferred to my Psychiatric Hospital as a case of hallucinatory paranoidal delirium. On entry his looks were strange and suspicious; he was taciturn and morose, but perfectly conscious of his surroundings. His brother, who accompanied him, gave the particulars related above and added that he had meant to take him back to Italy in the hope of his recovering.

I quote part of the interrogation of Mario T. made on February 20th.

With regard to the causes of his internment, T. could only suppose that it was due to the envy of certain ill-disposed persons who knew that he was marked out for a big career on the screen. He also reproached his family with thwarting his plans, but took comfort in the thought that many famous actors had suffered the same
fate. He remembered quite well that he had run away from Villerupt to Paris, but he was uncertain of what he had intended to do. The police, however, likewise jealous of his future fame, had arrested him. His memory of those days was very confused. He said that he suffered constantly from headache, heard unintelligible voices and often saw phantom figures. He had had visions of this kind before, especially when at home, and they were always visions of characters and episodes he had seen at the cinema. He had not mentioned them to any one, because people might then have been still more opposed to his plans. Recently, however, these hallucinations appeared to have become much rarer. The boy said he felt better and that we should send him away and leave him free to lead his own life.

Throughout the examination he was restless and looked about him suspiciously; sometimes he would refuse to answer a question and at other times would reply with an obvious cinema cliché. There were signs of slight mental deficiency, but no manneristic or stereotyped symptoms. The emotive reaction is occasionally somewhat violent.

The neurological examination reveals slight general tremblings, which are more in evidence at the extremities of the arms. Slight anthropological degeneration was noted; the skull is slightly plagiocephalic and the upper limbs rather long.

Physically, T’s general condition is good.

During the first months in hospital no change was seen. T. spent the evenings brooding and taciturn, but often asked for books which he eagerly devoured. He would revert from time to time to his former ideas, but less and less insistently. The psycho-sensorial disturbances became much less frequent and finally ceased. By May 1928 T’s state had notably improved; he now recognized his visions as illusions, became sociable and quiet and asked to return to his family.

At the latter’s request he left the hospital in June 1928 in a good state of mental health. He went back to France and I do not know whether there has been any further trouble.

Was this one of those paranoidal forms which appear cured and then break out again later or was it some other milder form which is now really cured? It is also possible, in view of certain physical anamnestic signs, that the case belonged to the neighbouring realm of crime and not to that of insanity.

In a work of this kind, however, it is not desirable to enter into discussions concerning differences of diagnosis. We will revert on another occasion to these two psychoses, which I only mention here to show the important part in them played by the cinematograph.

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Another case that came under my notice was a schoolboy of 14, Gustavo B., of Foligno.

Gustavo’s father was a heavy drinker; his mother was strong and healthy; a brother of the father was an alcoholic victim and is a patient in my hospital. The child had developed normally and had had no serious illnesses. He is intelligent and very hard-working. Rather melancholy by disposition, he takes no share
in the amusements of children of his age, spending most of his time alone. At ten he was put to school where he remained until he got his leaving certificate. On returning to his family in July 1929 the boy began to pay frequent visits to the cinema; but, as he himself says, the effect was from the first peculiar; he enjoyed going very much, but the shows disturbed him and increased his depression.

«When I was a little boy and went with my mother to the cinema, it used to have an indefinably unpleasant effect upon me. For the most part I understood nothing of the story, but the different scenes remained fixed in my mind and I thought about them for hours and days at a time. A face or a curious scene would remain in my mind persistently. When I was 6 or 7, I saw a film which showed how a dead child was restored to life and I conceived the idea of killing a little cousin of mine to see if he came back to life. I struck him with a carving-knife, but at the sight of the blood flowing from a small cut I made, I ran away. I must have been eight when I and a little girl cousin decided to commit suicide by throwing ourselves under a train, as we had seen done in a film, but we gave up this idea. Until I was ten, I could never sleep after going to the pictures, but would lie in a kind of uneasy doze imagining that these mysterious figures of the screen were all around me. I even saw them as shadows in the room, but said nothing as I was afraid of being scolded. During my four years at boarding-school I saw hardly any films except patriotic or instructional films and I had no further disturbances».

When he again began to visit the ordinary cinema, he once more experienced the strange feelings he had had as a small boy, which he had never quite forgotten.

«It was a feeling of fear, which I partly disliked as unpleasant, but which also had an irresistible attraction for me. I began to be afraid of ghosts, I could no longer sleep at night and had dreadful dreams. I suffered a great deal, but didn’t want to tell anyone».

This lasted nearly a month and then the boy began to have aural and visual hallucinations due probably to his state of nervous anxiety.

Towards the end of September, his mother says, B’s state got much worse; an intense general «malaise» kept him in bed and for several days he was the victim of frequent hallucinations, psycho-motorial disturbances, sleeplessness and sitophobia and he lost the sense of his surroundings. He became violently excited, shouting out, breaking things and trying to do himself an injury.

After three or four days, he gradually calmed down; the psycho-sensorial disturbances disappeared and he completely recovered. Since then he has never been to the cinema, which he now hates the thought of.

In the child who thus exactly describes the symptoms of his past complaint, we can clearly discern the psycho-asthenic basis accompanied by a lack of that synthesis of the organic sensations in which all the emotions have their seat. Familiar, too, are the troubles of the general digestive system, the sympathico-endocrinal system; anamnesis resulting from disturbances in the sphere of volition, impulses, episodic phobias, extreme suggestibility, but, together with all that, a very lively intelligence, which quite excludes any form of mental deficiency.
Certain symptoms too would suggest that hysteria, which is not uncommon in these forms of psycho-asthenia, constituted a complicating element in this case.

The relation between the cinema and hysteria — the commonest and most disagreeable of the functional psycho-neuroses — has so far been very little studied. Its importance, however — greater than is supposed — should be fully appreciated. Nor ought we to forget that not only heredity but education and environment contribute etiologically towards the formation of hysterical characters.

Like everything else which tends to loosen the hold on real life, to exalt the senses and the imagination and to encourage a weak and unresisting mental structure, the cinema, too, helps to breed hysteria. Imaginative and dreamy natures, with their love of violent contrast and paradox feed upon emotions and end by being no longer able to adapt themselves to realities of life and are more especially prone to hysteria. Their psychical evolution is incomplete; on the other hand, suggestibility, impressionability and histrionic tendencies are unduly pronounced; the sexual sense is affected and the emotional faculties are hypertrophied.

This foundation, the first stones of which are laid by heredity, seems to me more susceptible than any other to the cinema’s influence, which largely aggravates the tendency of hysterical natures to exaggerate the normal psycho-physiological reactions dependent upon emotivity (Blum).

The hysterical factor is a contributory cause of most cinema psychoses and neuroses, more especially, of course, in women. In the few cases I have mentioned and in many other less important cases I have almost always encountered this element, which it is more or less easy to detect among the clinical symptoms and in the family or individual anamnesis.

The case of one S. E. is a particularly obvious example. In addition to hysterical tendencies — the substratum, as it were, of a genuine hysterical psychosis, — this case presented hysterico-psychopathic complications.

Although it did not come to my notice until later, it seems to me an interesting case and I will give a brief account of it as related to me by the girl’s parents and confirmed by the doctor in attendance.

S. E. is the daughter of a man who died of pulmonary tuberculosis at the age of 45 and is herself very delicate. Since earliest youth she has been timid and suggestible, highly emotional and inclined towards envy, overweening ambition and jealousy. Her development was normal and interrupted by no serious diseases. At the age of puberty, however, she began to become much more nervous, variable and peculiar. Every year her character grew weaker and yet more imperious, so that she imposed her will upon her family; she also developed small phobias, especially towards domestic animals, certain obsessions and a marked tendency towards untruthfulness.

Her mother paid no great attention to these manifestations. She took her daughter with her to all places of amusement, including the cinema, of which the girl became more and more fond, until she preferred it to anything else. It was at the time when tragedy queens were the vogue; S. E. modelled herself upon them and passed hours in front of the looking-glass practising their gestures. Meanwhile
she fell enormously under the influence of the films she saw and often leapt out of bed during the night imagining herself in various mysterious places that she had seen on the screen.

At one time she was so upset by a film on the French revolution that she used to shut the windows and lock the door every night for fear of some imaginary revolution.

She suffered constant headache, frequent insomnia, nervous troubles, such as cardiac palpitations and paresthesia, which disturbed her whole organism, and also elementary hallucinations; she still continued, however, her frequent visits to the cinema.

In March 1925 S. E., at that time 16, consulted an oculist, because, as she said, she «saw double» and people often looked to her more than the normal size. The examination of the back of the eye was negative, but the field of vision was found to be considerably restricted. These disturbances quickly receded but appeared some months later in accentuated form and accompanied by general indisposition and rather frequent convulsions. During the latter the girl never quite lost consciousness, which was merely obscured; after each attack she said that she had been living another, and her true, life. She would remain for hours in strange ecstatic poses saying that she heard divine music; she would speak with invisible persons, assuming a mysterious look and uttering love-paragraphs which were nearly always phrases she had read as captions in films.

Sometimes she said that she had been allotted a part in a play and on these occasions would perform the strangest antics and even attempt to walk about perfectly naked, because, as she said, the scene required it. The hallucinations were often very powerful and accompanied by confusional excitement and delirious fancies of an erotic character. These ideas invariably originated in cinematographic scenes, not only scenes that she had witnessed recently but scenes from films she had watched as a child and which her mother had totally forgotten.

Her psychical exaltation took various forms. Sometimes she would shout with joy, sometimes cry bitterly for hours; on other occasions she would break out into acts of violence against her family. The latter at last put her into a home where all her symptoms continued for about a month and then rapidly disappeared under suitable suggestive treatment.

S. E. married at the age of 19 and had a child, who is healthy and robust. Although she has shown obvious but not grave psychopathic symptoms, there has been no further repetition of the manifestations described above. She only goes very rarely to the cinema and says that films no longer arouse in her the same emotions that they did.

This is a case in which, in spite of the existence of a hysterico-psychopathic foundation, we may speak of a real cure, a result not uncommon among polymorphous manifestations of hysterical psychoses.

* * *

The five cases described above furnish us with the following collection of manifestations: nervous disturbances, extending from palpitations of the heart and a hardly
premature state of nervousness to muscular spasms, tremblings and convulsions; alteration of character and conduct, excessive emotionalism, suggestibility, histrionics; premature awakening of sexual instinct, abuses of all kinds, impulsive tendencies, criminal acts; many and important psycho-sensorial disturbances; serious and polymorphous delirious fancies, states of nervous anxiety, mental confusion and agitation. I have had occasion to observe or to report upon these symptoms, if in less pronounced form, in many other cases during the last few years — in the children of elementary, intermediate and secondary schools, young artisans, shopgirls, factory girls, employees, — all of them young people with weak and not yet fully developed nervous systems, upon which the cinema acted as a constantly repeated psychic trauma resulting in neurotic or psychopathic crises.

I may add to the cases described by others these "cinema psychoses" of my own, some of which, in addition to the usual symptoms, show a special course and exceptional features.

Let us take, for instance, the second case, that of At., whose morbid symptoms have continued for several months and are drifting more and more towards a schizophrenic syndrome.

Would this case have become evident without the aid of the external factor? Or apart from this provocation at the most critical moment, would the young man's psychical life have developed peacefully and undisturbed? It is impossible to give a definite answer either way, but we may believe that, to borrow Bleuler's phraseology, the subject's schizoid temperament would have remained as it was and not have degenerated into the schizophrenic form, but for the intervening causes we have related.

In Gustavo T's case there is no clear boundary between paranoia and criminality and his morbid pre-disposition is emphasized by the family and personal anamnesis.

Here, too, however, the predisposition would not alone have been enough, for we often find that in the absence of an exogenous coefficient, such forms remain latent for a long time and assume the aspect of a generic and benign anomaly. It was undoubtedly the external incident which determined the special symptoms of this case. The same is true of all the other and especially of the two last cases, in which hysteria and psychoasthenia supplied an excellent morbid basis.

As in nearly all cases of nervous or mental disease certain internal pre-disposing factors played a part here too, along with external factors represented in the case in point by the undeniable influence of the cinema.

The patients themselves and their relatives attribute the trouble to emotions roused by the cinematograph and sure enough we see that the hallucinations and fantasies of unbalanced people derive sustenance from films they have seen at some recent or long distant date.

The images are so powerfully recalled that they appear as real visions, as something actually seen. Frequently, too, these hallucinations are aural olfactory or tactile; mostly, however visual and aural since the cinema appeals above all to the senses of hearing and sight. The properties of these centres for the formation and retention of images support the theory that they are the birthplace of halluci-
nations induced by abnormal and prolonged stimulation of the surrounding nervous mechanism.

The polymorphous and sometimes systematised fancies which originate in these psycho-sensorial disturbances and even take their colour therefrom, are derived from a selection of motives and ideas lying hid in the vast realm of the sub-conscious mind. When the mental faculties are weakened, these fancies return and invade the conscious mind with their strong suggestive force. The result is a profound disorganisation, transformation or even dissolution of the whole personality.

The patient's reaction varies. Sometimes he falls into a state of agitation more or less violent according to the intensity and nature of the hallucinations; sometimes he becomes a prey to anxiety and impulses, or again he remains for a long while in a disturbed condition, the victim of his impressions.

In the cases with which we are concerned the hallucinations and fantasies are mainly erotic, which proves the strong influence of the sex element over these psychoses. The psycho-sexual reaction, in fact, is one of the most frequent manifestations. In the early stages, as for example in our second case, we note excessive, even frenzied masturbation. This deplorable habit, due to sexual excitement caused by the cinema, itself bequeaths to the disordered and weakened system a desire for fresh sexual excitement, and thus a vicious circle is created in which excitement is constantly stimulated, causing mental and physical ravages that greatly encourage morbid manifestations.

The sensual side of life, which is the central subject of all films and is presented as the only possible conception of life, is the side which most strongly seizes the imagination, and we find that the words and foolish phrases of the victims of hallucination are most often inspired by love-scenes.

The frequent repetition of phrases borrowed from film captions, love-phrases, mostly, is a common phenomenon; surprising even the victims themselves, who no longer remember when or where they read them.

The facts reported in the last case are very familiar and I have met them in another highly hysterical girl. At times her mind becomes confused and she talks of herself in the third person, as if she were someone else. The phrases she employs are nearly always taken from some film. When she returns to her normal mind, she cannot accurately recall what she has said, because she «felt asleep». This girl has suffered from no psycho-sensorial disturbances.

Among the cases observed, however, words or phrases are not nearly so often repeated as acts and gestures. These phenomena occur especially when will-power and self-control have been undermined by the disturbances in the conscious mind or when they have not fully developed in the individual, who succumbs to the force of suggestion to the point of becoming, as it were, an automaton.

I have noted this in cases which have come under my own observation and have heard of it in many others, by whom the gesture is first made at some critical moment of unconsciousness, is retained and then repeated in the form of an obsession.

We meet with attempts at suicide occurring some of them under the impres-
sion of a moving scene others under the impulse of a powerful hallucination; we also meet with hysterical postures derived from scenes of passion in films or complicated acts reproducing scenes of flight, theft or violence. The gesture imposes itself upon the morbid subject, who so transforms it that he ends by speaking of himself as of someone else whom he sees acting in his place.

This force of suggestion, acting upon the adolescent mind and thence reflected in his life, is most strong in the sphere of crime. Here, by awakening latent instincts, it sometimes leads to a weakening of the moral sense and thus creates a favourable soil for crime, if it does not directly result in the commission of criminal acts.

It is not, however, my intention to emphasize the influence of the cinematograph on juvenile crime. During the last thirty years the work of such men as Massini and Vidoni and, more recently, Wets, Rouvroy, Holmes and Hoffmann, as well as the reports by Martin and de Feo submitted to Geneva, form a substantial contribution to the study of criminal anthropology, psychology, educational psychiatry and forensic medicine.

The facts are presented somewhat as follows: The cinema, by falsifying life, arousing particular sensations and revealing new and artificial horizons destroys in the youthful mind the moral sense implanted in it by early education.

The frequency of cinematographic visions encourages the development of a special attitude of mind and the desire to emulate the false values and pseudo-heroes of the screen.

The principle of authority, hierarchical order and subordination disappears or is presented in a ridiculous aspect. The idea of patriotism finds expression in a few films only, and those not always the best.

Through imitation of the speech, actions, manners and customs of other countries and continents, nationality suffers and the young tend to become «denationalised». The new ideology supplants family feeling and love of home.

Amid the confusion between morality and amorality, evil is made to look attractive in its twofold aspects of immorality and crime. Criminal acts are committed either instinctively, by force of suggestion, or provoked by a pathological condition which leads to forms of conscious reflection or to subconscious action.

Statistics showing the growth of juvenile delinquency place the cinema among the chief causes of this phenomenon. According to the reports of the juvenile courts a large number of the crimes committed by children and young people have their origin in films. The juvenile offender acts under their influence and, as it were, mechanically imitates the example set him.

A German neurologist supplies the following particulars concerning the contents of films; of 250 films examined, he noted 97 murders, 60 acts of adultery, about 50 thefts and 50 suicides. The heroes of these films were most of them murderers, thieves or prostitutes.

To describe a crime is, of course, to suggest it and it is but a short step from suggestion to commission.

We could quote many impressive facts, but, to mention a few only of the more recent, I would recall the case of the thirteen children in Rome who, caught in the
act of stealing, confessed that they had been led to it by the cinema. Then there are the girl of 15 who threw herself under a train «like Anna Karenina in the film» and the two Mantuan boys who murdered a local tradesman, in circumstances identical with those staged in the film «The Adventures of a Convict».

Abroad, and especially in America, a far larger number of the most varied crimes are attributed to the influence of the pictures. Mr. Gilmer states that 80-90% of crimes committed in America are due to impressions brought away from cinema performances.

M. Wets, president of the Brussels Juvenile Court, points out that the widespread growth of the cinema coincides with an increase of juvenile crime.

Mr. Babson, a member of his Government, maintains that the whole of the moral benefit derived from school and family life is undone by the harmful effect of films. Mr. Babson circulated a questionnaire to headmasters and psychiatrists asking them whether the family or the school exercised the greater influence over the formation of character. 70% of the persons questioned struck out both family and school and substituted the cinematograph.

Many others of equal authority have reacted against the obviously exaggerated tendency to attribute all evil in the world to the cinema. These maintain that many other factors are responsible for the increase of juvenile crime. An impartial analysis conducted with the firm determination to reveal their proportionate influence would not necessarily put the cinema in the front row. The question is an open one. The extensive enquiry whereby the I. E. C. I. seeks contradictory opinions with a view to an objective and scientific discussion, is a valuable contribution to the study of this important problem.

It has been proposed — in the interests of preventing nervous or mental diseases and juvenile crime — that a selection should be made among children so as to remove abnormal subjects from all contact with the screen, but such a proposal appears to me not only quite inadequate, but also impracticable. Besides, what criterion is to be employed? How is it to be decided whether a child is normal or not? Pathological signs, as we have shown, sometimes escape the attention even of parents, who mistake them for one of the many variations in the normal temperament. On the other hand, normal beings are often deemed impulsive, eccentric, of mediocre or inferior intelligence when they are nothing of the kind.

Psychical abnormals, real and pseudo-abnormals — these are the terms used by de Sanctis to distinguish cases more or less biologically recognizable and belonging to the neutral zone between sane and insane from cases whose irregularity of temper or conduct is neither constant nor lasting and may easily be cured.

By what means shall they be protected from harmful influences during the long crisis of their development? Certainly not by an invidious and necessarily imperfect system of selection, nor in my opinion by censorship in the form in which we know it. Film censorship is a difficult and controversial problem and it is doubtful whether its great importance has as yet been properly appreciated.

At the same time we must all admit that the programme laid down in 1925 at Geneva by the International Child Welfare Committee and the legislative provi-
sions of the different countries for the control of films have been inspired by the best intentions.

Only a very few countries altogether forbid children under a certain age to attend cinema performances, and even this total prohibition applies only to very small children. With a few exceptions other countries limit admission to the extent that children under a certain age may only see certain films. This age-limit varies from country to country. Thus, in Germany, children under 18 are subject to partial prohibition; in Austria, Denmark, Norway, Belgium and in most of the Swiss cantons the limit is 16 years of age.

Other countries have special provisions of their own. Children may only attend cinematographic performances — including films suited to their age — in the company of their parents or other proper person; they may not go to the cinema at certain hours — generally, after 8 p.m. — or during school hours. In other countries children and young people may only see special films. In Roumania, for example, children in secondary schools, that is, boys and girls up to the ages of 18 and 19 may only attend the projection of educational or instructional films. A special official is detailed to judge the age of young people either by outward appearance or by their school caps and badges, etc.

Italy is one of the countries which impose a partial prohibition. According to the Law of December 10th, 1925 on measures for the protection and welfare of mothers and children, « The Committee competent to authorise cinema performances shall decide which are suited for children and young people of either sex ». The Royal Decree of April 15th, 1926 lays down that this exclusion relates to children under 15.

In countries where there are no special laws governing the admission of minors to the cinema a special system of control operates to safeguard the minds and morals of the young.

All these different censorship systems in force or not in the different countries have been freely criticised, particularly in respect of the criteria employed to determine the age of admission, hours, etc. Why 15? Why 16? Boys and girls of these ages are still children. Many of those who are allowed to go to the cinema have the physique and mentality of children of 10 and 12. And how about the weak, the simple-minded, the vast army of the « suggestiable », the mentally infirm of all ages? And what about the imaginative, the illusion-fed, the neurotics and latent criminals?

« The censorship is a snare », says Rouvroy, who maintains that no films are good for children. A snare that deceives parents and causes them to take their children to see films which are called harmless. Most of these films, however, only seem innocuous and actually contain much that is definitely injurious.

Very often even this semblance of harmlessness is lacking, and a film which ought to be absolutely forbidden to children and young people, passes the censor intact. Then again, is not the prohibition of a film the best advertisement to attract those above the age-limit? But it is highly probable that what is bad for children of 15 or 16 is also bad for young people of 17 or 18.

In the report he submitted at Geneva last year, Dr. de Feo, who has great ex-
perience in this matter, pointed to three defects marking the present system of censor- 
sorship from the point of view of authorising films for representation before children, 
These defects are psychiatric, pediatric and paedagogic. « The Censorship Com-
mittees are mainly composed of persons who are no doubt exemplary citizens, ex-
cellent mothers of families and most respectable officials, but they include very few 
psychologists, teachers or medical specialists ».

These persons, as they quietly contemplate the projection of a film in a silent 
and empty room (thereby missing the psychically important factor of musical ac-
companiment) are little accustomed to the psychological subtleties of the cinema story 
and fail to observe in it the various elements that may prove injurious to a child’s 
mind.

Such in substance are the main criticisms levelled against the present censorship 
systems by persons who are dealing with a very ill-defined and equivocal situation.

Certain it is that, in spite of all measures of censorship and control, the cinema 
continues to be an evil which — as we have seen from the cases quoted above and 
many others reported elsewhere during the past few years — entails most un-
fortunate consequences. To avoid them, many urge the absolute prohibition of the 
cinema to young people.

* * *

It is doubtful whether such a provision could be enforced, as it would certainly 
be strongly opposed by the public and by the trade. We ought therefore to seek 
to extract from the cinema whatever good it can offer. Its influence should be con-
structive and not purely protective, especially in view of the large part it can play 
in children’s education.

« Compared with newspapers and books the cinematograph, which is still in its 
first stage of evolution, has the great advantage of addressing the eyes, that is, of 
speaking a language that can be understood by all the peoples of the earth. Hence 
its universality and hence the innumerable prospects which it offers of international 
cooperation in the sphere of education ».

These are the words of Benito Mussolini, who was the first head of a govern-
ment to realise the cinema’s full value as an instrument for the moral and social im-
provement of the people. It was on this account that in 1925 he established the Na-
tional Institute L. U. C. E., independently of the Ente Nazionale per la Cinematogra-
gia. In Italy the cinema may be said to occupy one of the most important places 
among State activities for the development of physical and intellectual cultivation.

Further, do we not owe to the initiative of the Italian Government the creation 
of the International Educational Cinematographic Institute, which, under the super-
vision of the League of Nations, has found a worthy seat in Rome?

To encourage the production and circulation of educational films dealing with 
science, art, industry, agriculture, health and the various aspects of social life — 
such is the work of the I. E. C. I. — work which it pursues with determination and 
method and without any pre-conceptions or interested motives. These activities
might be supplemented by an effort to create special public cinemas for children and to increase the circulation, under State supervision, of educational and instructional films in schools and institutions of every kind.

Only a few years ago Edison, foretelling the day when teachers and lecturers would employ the film rather than text-books, «because cinematographic pictures are the ideal means of spreading knowledge», said in speaking to film manufacturers:

«It rests with you to develop the cinematograph as an instrument in the service of art and education. Remember that you are the servants of the public and do not allow commercial motives and considerations of profit to prevent you from doing the best of which you are capable».

To utilise all the resources of the world in which we live — in the interests of sound prophylaxis — to fight the elements of degeneration and create characters in accordance with a true and not a false conception of life — that is a duty calling for the whole-hearted collaboration of those to whom are entrusted the protection and training of the next generation.

Dr. Fabio Pennacchi
Medical Officer of the Umbrian Psychiatric Hospital,
Assistant to the Institute of Forensic Medicine
of the University of Perugia
The advent of the cinematograph has had an important effect upon the national life of all countries. In spite of the limitations of technique and subject-matter which marked the early days of the cinema, it at once produced an immense impression both on grown-ups and on children, on simple, primitive minds as well as on those more highly developed.

The popularity of the film is due to the combination of picture and movement into a truthful and convincing representation. A modern film reproduces for us the thousand beauties and mysteries of the world with marvellous fidelity and it is not surprising that it casts a spell over children.

With the spread of cinematography enquiries have been pursued to ascertain the relation between the film and juvenile crime, and the influence of the one upon the other is confirmed by the statements of parents, magistrates and teachers alike.

Official control over films followed a prolonged struggle of more than ten years, but there is now a censorship in every civilised country, and it is the censorship which decides whether children under sixteen shall be allowed to see a particular film.

The experience of schools teaches us that stories of crime are not the only subjects which are harmful to a child's mind, but any film which unduly stimulates and excites the imagination, transporting the child away from real life or presenting to it aspects or details of life which it should not know.

It is not easy to decide what every child can see without harm. Up to the age of sixteen children develop very differently; what is injurious to one, may be harmless to another. This is especially true of children in large towns, who live under the shadow of the hardships and poverty of their parents. In the absence of education and as the result of privation, such children have a pre-disposition towards depravity, which may easily develop if they see films that they ought not to see.

Films are frequently the origin of crime. In winter the cinema is almost the only place of amusement for the youth of our big cities. During the summer they lose the habit of going to the pictures and seek diversion in the streets, but as soon as ever rainy weather sets in, their hungry eyes turn to the crude and sensational cinema posters and they flock to the picture palace. There children of all ages sit along with grown-up people in a dark and stuffy hall. Such amusement is undoubtedly bad for the lungs, bad for the nerves and bad for the morals.

Children react to the cinema in three different directions; it influences the intellect, the emotions and the will. Intellectually, the film enriches a child's mind with a wealth of new facts. This is strikingly confirmed by comparing two children of the same age one brought up in the town and a frequent visitor to the cinema, the other country-bred to whom this form of recreation is unknown. Their minds, it will be found, are worlds apart.
Once it is agreed that not only educational but all films should serve at any rate some instructional purpose, the cinema will be incomparably the finest instrument for increasing knowledge, communicating ideas and widening the mental horizon.

The film has the great advantage of making its impression more vividly and more vividly than a book. Illiterate children imbibe many of their ideas from the cinema. It is my experience that children who frequent the cinema develop a special film sense. Boys and girls in court who could hardly utter a word about their home or school life have waxed quite eloquent when they began to talk of a film they had seen, and were found to give a perfectly clear account of what had been shown them. Films teach children careful observation. Recently a young locksmith was tried by the juvenile courts for attempted housebreaking. He had wished to practise with tools of his own making, the models for which he had seen in a film.

Many people blame the cinema for destroying a child's natural imagination, which asks for fairy stories; but the mother of city children has no time to tell fairy-tales and the child will not have read any stories upon which to nourish its fancy.

For the town child the cinema is the substitute for fireside stories and old wives' tales. Children and even adolescents long for stories; they need some other world less grey than the one they live in. They hunger after the unusual, the marvellous palaces, brightly-lit rooms monarchs and heroes and the cinema satisfies this craving.

The normal child knows that the "movie" world is not the real world. It can distinguish between real life and life on the screen. Some children, however, lack this elasticity of mind and remain under the impression received from this dream-world. They confuse it with reality and identify their lives with the life of the screen. This is especially the case with girls, who often end by inhabiting this world of fancy, cease to care for anything else and only live for their passion. A young girl who was sent to a reformatory wrote as follows:

"I used to go to the pictures with my sister or a friend, often three or four times a week. Until I was thirteen my parents wouldn't let me go and up to that time I was a good girl. It was the cinema that corrupted me. I loved to see fine clothes and beautiful actors and actresses, but what I enjoyed most of all were fine ladies and gentlemen amusing themselves amid luxurious surroundings with champagne and music. I used to go over and over again to see films of that kind. I longed unspeakably to enjoy such pleasures myself and I sought ways of gratifying my desire. That's how I found my way to the reformatory."

Adolescents who frequent the cinema become such adept observers that they can often tell you in advance what is going to happen.

A striking example of film mentality or acclimatisation was afforded by a small burglar of 11, who spoke of himself as the hero of a film. In telling the story of his unsuccessful attempt at burglary, he never used his own name, but, throughout, referred to himself by the name of the film actor.

As the result of constant visits to the pictures, the nervous system of the urban child, already overtaxed, is easily weakened still further and becomes a prey to illusions. Girls of the working class often fall victims to a heated imagination.
I received the following letter from a girl who had been placed in a reformatory school:

«My favourite amusement was the pictures. As I had no father or mother or relations and as my employer didn’t mind my going out in the evening, I went nearly every night to the cinema. Love-stories were what I liked. I didn’t care for funny films or adventure stories — only love interested me. What I enjoyed most were the scenes in which the actors and actresses kissed. After every love film I used to walk about until I found some man with whom I could act the film I had been watching.»

In contradistinction to the above it should be mentioned that the film very often serves as an instrument of moral education. Very many films have spoken to our children of obedience, love of truth and fear of God.

Strong and permanent emotional impressions are tiring to a young mind. More simple things, the beauty of nature or a good book cease to have any effect upon children whose nerves have been unduly excited by a surfeit of pictures. Pictures which are not sensational no longer interest a child who has enjoyed a great deal of amusement.

One day the head of a reformatory institute took the girls to see an educational film. They looked forward to it eagerly, but the beautiful scenes from history and geography were no substitute for love-stories and the girls complained that it wasn’t their idea of the cinema. «You can’t get any excitement», they said.

The craving for the excitement of the cinema is often so great that it will drive children to crime simply to get money to pay for their amusement. Many a young apprentice has stolen his master’s money to buy a ticket for the «movies». Children will also work for the sake of the cinema. Many cases are known of messenger-boys working hard all day and then selling drinks at the cinema at night just to gain admission to the films. A. B., a student, after being placed in a reformatory school, wrote the following letter:

«I have frequented the cinema in Budapest since I was eight. At the age of twelve I started selling refreshments at the Baross Cinema simply in order to be able to see the show. Later on I worked in the same capacity at the Bodograph Cinema, also so that I might gain free admission. I have often slipped away from home and gone off to the cinema till late at night. My favourite films were comic ones, «Pat and Patachon», American burlesques and love-stories. I never liked horrors, they frightened me. I used to go to the pictures for a good laugh; I love laughter. Film actors didn’t interest me, but I liked fine dresses and above all beautiful women. I should have loved to be beautiful and I hated my grandmother, because it was her fault that I was crippled at the age of two and so could never hope to become a film star.»

As the result of overstrong dramatic fare, the emotions are often numbed and there is a risk lest what is seen on the screen should stimulate bad instincts hitherto dormant. Films depicting the ill-treatment of animals and children’s tragedies often develop tendencies towards cruelty. A wrong training of the mind and the emotions hinders normal moral and intellectual development and deprives the child of the power to resist bad influences without and bad instincts within.
Further, the cinematograph may be the immediate cause of juvenile crime for the reason that the effect of a film upon the spectator is so strong that a child with little power of resistance will commit a crime by sheer force of example.

A month ago a case was heard in the juvenile courts, in which boys of between 10 and 12 were tried on a charge of breaking the window of a pastry-cook’s shop in broad daylight and while the owner was in the shop. When asked how they could have imagined that the owner would not see them, they replied that «it was like that in the film».

A girl in a reformatory stated that the proprietor of a cinema used to advertise the programme in her father’s shop, which entitled the family to a free ticket at every performance. The girl used therefore to go to the pictures every evening. She didn’t care for the theatre. She only liked love-scenes, fine clothes good-looking actors and her greatest enjoyment was to watch a good-looking couple kissing. According to her own admission, the cinema taught her how to kiss, she would attentively watch and enjoy each characteristic attitude. Her only wish was to be rich. Her parents used to give her pocket-money, but she wanted more. It was for money that she went to the bad. She loved films depicting the lives of the rich and would never go to see pieces in which the milieu was poor or humble. At last she appropriated and spent a sum of 5000 pengos belonging to one of her father’s customers, and it was for this that she was sent to a reformatory school.

The following case occurred in another reformatory institute. One Sunday afternoon two village girls in the institute danced some apache dances. Their dancing was extraordinarily true to life; the play of the eyes and the movements of the body were absolutely true to life. I knew that the two girls had never been in a big city, where they might have seen dances of the sort at some cabaret, and when I asked them, they told me that each had seen the dance at the cinema in their respective country towns. They had related their experiences to each other in the institute and practised the dance together. Many professional actresses might have envied the perfection attained by these two young girls under the suggestive influence of the film.

I will quote another case which proves this suggestive power of the cinema.

A girl escaped from a reformatory through an open window in the matron’s room. She was not a normal girl, is easily influenced and open to suggestion. She escaped one afternoon. She spent the night in the neighbourhood of the institute. The next day she got in by the same window, took the matron’s clothes out of a cupboard and put them on. She then left again by the window. After parading the neighbouring streets for some hours, she came to the front door of the institute and was seen by the porter, who brought her in. When we asked her why she had done this, she said that she had seen it happen in a film. Later we used often to talk to her about this film which had excited her imagination.

Among girls the case of E. V., aged 16, is a common one.

She says that she has been a frequent visitor to the cinema from the age of 12. As long as her parents were alive, her conduct gave no cause for complaint. At 12 she began going to the pictures with her sister. She liked theatres too. She
had learnt dancing, but didn't care for it. Her favourite amusement was the cinema. She hated going to bed early, had full control over her earnings and, accompanied by her sister, went nearly every day to the pictures. She was especially fond of dramas, love-stories, in which a rich man is in love with a poor girl and gives her money and enjoyment. It was what she herself hoped for, and her wish was granted. The son of her employer paid her attentions and seduced her.

The effect of films on young boys is naturally not the same as on girls, since the interests of girls differ from those of boys of the same age.

Girls who appear before the juvenile courts tell us what they have learnt from the cinema. The pictures have taught them how to bow gracefully, how to smile and how to make up. « Its the pictures have shown us what having a good time means ».

Silk stockings in films have been the cause of many a girl's downfall. Her desire for what she has seen is so strong that she minds little who gives it to her or at what price; the great thing is to get it. The danger to poor girls is immense and the struggle to resist is a hard one. The love of luxury which is gaining a hold upon the working classes in our towns starts at the pictures. The sensual film, even if not pornographic, poisons the moral sense of young girls. By awaking their sensual instincts it is, as it were, a training-ground for the streets. The seductive power of lovely clothes, high-power motorcars and rich admirers is enormous.

The effect of films upon hysterical persons is a matter for separate mention. The craving of young girls for the cinema is often so intense as to be overpowering and leads to acts of blind instinct at variance with the penal law.

I know of a country girl of 15, who gave every satisfaction to her employers; she was not stupid and had passed through the six forms in the village school. Her favourite amusement was the cinema in the town where she was in service and she used to go there every Sunday out. She once asked to go on a Monday evening, but her mistress refused, as she was going herself. The servant was therefore left at home to mind the baby, but her desire was so strong that it overcame every other impulse and she ended by strangling the child and rushing off to the cinema.

To sum up, commercial films frequently have a disturbing effect upon the minds and emotions of young people. They confuse the judgment, dull the moral sense and by the power of suggestion lead to acts of crime.

Nevertheless, children cannot and should not be prevented from seeing pictures, which can be of very great educative value. Cinema performances in schools should include the projection of amusing and entertaining films. The ideal would be that children under 18 should only be allowed to attend performances organised in schools but for material reasons this is impracticable at present. May it become possible in the future!

Mariana Hoffmann.
More than twenty years ago, M. Charles Pathé, who has the merit and honour of being the first to have organised, developed and popularised all over the world the wonderful invention of Lumière Brothers, realised the manifold uses to which cinematography could be set. To his at the time very modest studio at Vincennes, he added a small scientific laboratory in which educational films were made. Thus we were able to see on the screen the germination of a walnut, with its various phases of growth. We followed its development from the birth of the germ, to a young tree one foot high. Then, the formation of a geranium umbel. The growth of this umbel or floral stem is another interesting curiosity. One can see it grow, and spread out its many stems, crowned by 30 to 40 buds, which flower, fade and die one after the other, according to the evolutions of their cycle.

Thanks to the kindness of M. Henri Chauvaux, who was then directing the new department, we were able to visit and examine every detail of the laboratory and the working of the instruments. I mentioned these facts in a review, I was editing at the time. It was the first to publish articles on motion pictures.

At the same period, I reported on a session which took place at the Academy of Science, on October 26th, 1909, at which Prof. M. Dastre presented a memorandum written by a young scholar, Dr. Jean Comandon, describing his method of photographing pictures with the help of the ultra-microscope. Further I related how the members of the Academy viewed in a dark-room attached to their Assembly Hall, all kinds of moving pictures thrown on the screen in a magnified size. A privilege, which as a rule is reserved to the most experienced microscopists. The trypanosomes of sleeping sickness, of the size of an eel, were seen circulating with rapidity amongst the red cells; red corpuscles were forcing their way through the fine network of the capillaries of a frog's foot; the white corpuscles, those blood-thirsty little cells, circulated in the vessels, agglomerating round the red corpuscles and encompassing them entirely. Other films showed the coagulation of the blood, deformation of the white corpuscles and the evolutions of the minutest micro-organisms.

Already it was possible to perceive by means of these new data, what advantages for the development of the study of biology and medicine, could be derived therefrom. I therefore expressed the opinion that the inventions of the young expert, whose family I had met when I started my journalistic career at Cognac, would be of great help to science and open up new vistas.

Later, I reported a masterly lecture given by Dr. Comandon at the Lycée of Toulouse, on «The Cinematography of Microbes», and soon after, I had the pleasure of receiving a letter dated from Jarnac (Charente) October 19th, 1910 which I will
quote here in order to show one of the most interesting incidents in the history of the scientific cinema.

« I have received your October number, in which the name of my son Dr. Jean Comandon is mentioned; I should be greatly obliged to you, if you would kindly send him a copy to his laboratory c/o Pathé Brothers, 24 rue des Vignerons, Vincennes.

« According to my plans, my son was to succeed me as head of my commercial firm. But science had an irresistible attraction for him and he has devoted his life to it. I do not complain. Yours faithfully, Signed : Louis Comandon.

Destiny and vocation had planned differently for the son of this wise father, who did not thwart the plans of his son, but trusted him completely. His faith in his son’s ability was well rewarded, for nobody better than Dr. Comandon was able to justify his expectations. His knowledge and integrity, his useful and manifold researches in the scientific world, everything contributed to enhance the renown of his family. At that time, it was considered very meritorious to work for the furtherance of the scientific film. True, there had already appeared some very special films by Dr. Doyen, dealing with surgical operations; they were, however, like all innovations, unfavourably received by the medical world. Later, these prejudices were overcome, but, as Dr. Comandon rightly said in a letter to me : « I had to conquer many difficulties in the new path I had chosen ».

How did he keep his bearings notwithstanding all these obstacles and the uncertainty of success, when at that time he was only recompensed by the satisfaction these researches gave him? I have often quoted my eminent friend in my publications and in articles written for reviews (1).

« The way was shown to me », he said, « by my teacher and friend, Victor Henri, who himself had made use of the cinematograph in the laboratory of François Frank, to decompose and observe the Brownian movements. But the plant of a laboratory of a medical school or hospital was entirely inadequate for these researches. It was then that I came into touch with M. Charles Pathé, to whom I explained my schemes.

« He kindly put at my disposal the considerable resources of his important firm. This enabled me to realise my plans and to fit up, with the help of capable collaborators, the apparatus for the combination of the ultra-microscope with the cinematograph. By means of this apparatus, I was able to take those cinematographic films, which I hope will be useful for the teaching and popularisation of science ».

I will not neglect to mention that the work of the great physiologist, Prof. Jules Marey who, as is well known, consecrated part of his life to the observation of the movements of living beings, as well as that of his faithful disciples, such as François Frank his successor at the Collège de France, deeply impressed our young doctor. He greatly admired the contribution to science,— which very few realized at the

time — made by the laboratories of the Parc des Princes at Boulogne-sur-Seine, which later became the International Institute Marey.

After the chrono-photographs which brought immortal fame to Marey, he was deeply impressed by those of Doctors Longe and Meijie, dealing specially with pathological subjects. He thought that the bioscope, as the cinematograph was called in those early days, was capable of revealing more than movement, which is only the external manifestation of life and that it could and should penetrate life itself analyse it, explain some of its problems, and thus disclose new prospects to the scientific world.

The first film he produced represented the circulation of the blood in a small vein, in the tail of a tadpole. One could see the red corpuscles rolling like pebbles in a stream which in reality measures only 1/100 of a millimetre in width. This film had been taken with an ordinary microscope, the red corpuscles looked, therefore, like dark specks on a light ground.

The following films were taken with the help of the ultra-microscope, and the red corpuscles showed like brilliant rings on a dark ground. With this method, Dr. Comandon displayed the normal blood of a human being, a bird and a salamander. It was an event; or more correctly speaking, the revelation of micro-cinematography. We must remember that in a cubic millimetre of human blood, there are 6000 white corpuscles and about 5000.000 red corpuscles.

The enlarged projection thrown on the screen, was approximately of 30,000 diameters. According to that scale, one cubic millimetre, (the size of a pin’s head), would appear like a cube 30 metres side. A six-story house is about 20 metres high.

Besides the various blood corpuscles, Dr. Comandon showed in some of his projections, the hemoconies or small particles of about 1 μ, which are very numerous in the serum during the process of digestion of fats (1). These particles are animated by rapid Brownian movements. He also showed how, by means of the cinematograph, it is possible to count these particles and thus study their variations in the blood.

One could also see the white corpuscles of a salamander developing pseudopodes, by means of which these elements creep along and capture their prey, which is particularly the microbes attacking our system. It is, in fact, the function of the white corpuscles in the blood, to fight the enemies of our organism, either directly, by attacking them with their pseudopodes, encircling and digesting them, which is the phenomenon of phagocytosis, or indirectly, by mixing in the plasma or serum substances which have the faculty of agglutinating, immobilising, killing or dissolving these microbes; or by neutralising the effects of their toxins, even in the case of alien poison, such as the venom of serpents.

* * *

When Dr. Comandon made his first films showing living microbes, his sole aim was to obtain photographic documents exhibiting the aspect and movements of mi-

(1) The μ or micron is equal to a 1000th part of a millimetre.
crohorganisms. But vit the projection of these films, all those who assisted, understood as clearly as the Doctor himself, the importance of the cinematograph, as an auxiliary in the study of natural science. M. Charles Pathé received great praise for this initiative and for his happy thought of entrusting to his new collaborator the direction of his studio for scientific films. It is in fact due to him that France can boast of being the first country to produce a series of scientific films, whose real aim was scientific instruction: the amebae; the filaria sanguinis hominis, the microbes of the intestine; the trypanosomes of sleeping sickness which is one of the most terrible scourges of mankind and has depopulated entire districts in Central Africa; the circulation of the blood; the vorticellides; Vincent's symbiosis spirochaetes, to be found in certain varieties of sore throats; the spirochaeta pallida, the parasite of syphilis, etc.

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Marey had foreseen the possible uses of motion pictures for the study of physiology; he demonstrated that by using the accelerator, or by slackening the speed, movements were reduced to the normal scale of our senses, thus making visible to our sight, the slowest and the quickest motions. He even made some micro-cinematographic pictures. Everyone knows that in a grotto near Naples, in the bay of Posillipo, he projected on a screen pictures enlarged by the solar microscope, of small crustaceae and infusoria, marking on the films of his micro-cinematographic apparatus the phases of their evolutions. Later, his pupil Pizon showed the growth of the settlements of Botryoids; Reisse showed the division of the eggs of sea-urchins.
« It is due to the invention of the brothers Lumière », Dr. Comandon declares
« that, with the progress of optical photography (ultra-microscope) and the use of
sensitive emulsion for films, it is possible to project, enlarged to the extent of
200,000 diameters, the pictures of tiny creatures a thousand times smaller than the
infusoria examined by Marey in the grotto near Naples.

« I have endeavoured to use this improved method for the study of biological
phenomena such as the movements of the protoplasma, the growth
of cells, phagocytosis, etc. You know these reels which have been projected in several of my lectures, therefore I will not insist on the subject.
Many of these films have been created with the help of clever experts who,

The trypanosome of sleeping sickness.

making use of my technical knowledge, gave me the benefit of their great
learning.

« We often discovered new facts, through the careful examination of the
films we had composed. The film has the great advantage of keeping the
record of events and is always in a position to reproduce them. The slackened
movement has often been of great utility, by this means we have been able to
capture the movements of the slowest modifications occurring in animal life.

« Modern physics enable us to see through opaque bodies, by the use of X rays.
My friend Dr. Lomon, the distinguished radiologist, asked me in 1911, to attempt
with him to reproduce on the film the transitory aspects of the fluorescent screen.
Prof. André Broca was kind enough to put at our disposal the laboratory of physics
of the Medical School. Having at our disposal an improved equipment and the
valuable advice of our master, we succeeded in establishing a technical method which,
before the war, enabled us to take radio-cinematographic pictures of small animals and human limbs, at a speed a little below the normal. Some time later, we again attempted these experiments, but equipped with new instruments. This made it possible for us to take short reels on which appeared the movements of healthy and diseased human hearts, at the speed of 18 pictures per second. Thus microcinematography continued to supplement microphotography.

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M. Lucien Bull, the present director of the Marey Institute, had demonstrated the possibility of taking successive photographs on films rotating at the speed of several thousand pictures per second; this was obtained by illuminating the object

![Reproduction of a film showing the effects of a hypotonic solution on the blood of a rat infected with trypanosomes. Bursting of a leukocyte.](image)

with a rapid succession of electric sparks. With the help of M. Noguès, he also made an apparatus in which the motion of the film is produced by jerks, as in the Lumière apparatus, but which can produce several hundred pictures per second. Dr. Comandon did not neglect to adopt these methods, which enabled him to capture the quickest movements and Dr. Labrély, one of his collaborators, invented an ultra-fast apparatus most ingeniously contrived. It was a revelation and Louis Forest said that Labrély was the inventor of the ultra-slow and ultrafast apparatus.

Backed by his experience and sound technique, Dr. Labrély constructed in his turn, with the collaboration of the Debrie Factories, a new kind of apparatus of great precision, thoroughly equipped for its various tasks. Confident of success
and desiring to give a specimen of his work, Dr. Comandon this indefatigable seeker focuses his microscope on the smallest objects and produces motion pictures of surprising interest and novelty.

His researches in the field of biological cinematography are pursued untiringly at Vincennes and Bellevue. In 1920, the cinematographic laboratory in the «Office National des Recherches et des Inventions» (National Office for Research and Inventions) was entrusted to his care. A year ago, he was called to work in the splendidly equipped laboratories at Boulogne-sur-Seine, which we owe to M. Kahn, the promoter of all scientific research for the welfare of mankind.

In 1925, we saw some of these films. The following are the most important:

- Small tubes and osmotic formations, comparison with living elements.
- Germination of pollen grains, chimiotactism of pollinic tubes.
- Ameba, or the simplest living cell.
- Myxomucetes and the rhythmic movements of protoplasm.
- Heart movements of fish, isolated heart of a turtle.
- Cineradiography of the human heart (with Dr. Lomon).
- Blood circulation in various organs of the frog.
- Metazoa, (a Rotifer, stephanoceros).
- The caryocinesis of the cells of Tritons (with Dr. Jolly).
- Culture of tissues, multiplication and movement of cells. (with Dr. Levaditi).
- How all the cells of a metazoa derive from a single cell: the egg.
- Development of sea-urchin's eggs.
- Disease, the blood invaded by microbes.
- Spirochaete of relapsing fever.

Spirochaetes of recurrent fever in the blood.

Development of certain insects: *the tinea of the hives*; the big dragon-fly.

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Dr. Comandon's films had already obtained world-wide fame and were shown in many countries. Medical Schools made use of them for teaching purposes. He tackled many subjects and passed from the field of biology to that of pathology and surgery. His series of films on surgery are classic.

He is not satisfied with mere documentary work, he aims at making the use of scientific films a necessity in general instruction.

What he asserted ten years ago still applies:

« In our days, motion pictures are a necessity to the scholar who wishes to demonstrate to his colleagues transitory phenomena, delicate experiments or the general observation of things, beings or facts, whose records can only be preserved with accuracy by the film that reproduces living pictures at will.

« Those films are precious documents for the instruction of pupils.

« Some of these films properly arranged, have proved very useful to popularise science and for hygienic propaganda.

« But the cinematograph is more than an apparatus to take records for documentation, teaching and scientific propaganda. It is as well a laboratory instrument, that becomes more and more indispensable for modern research.

« Acting on time, as optical instruments act on space, it reduces all movements to the scale of our senses, thus enabling us to perceive certain movements which we could not follow because of their swiftness, (the bullet of a fire-arm, the flight of an insect), or because of their slowness, (the division of a cell, the behaviour of white corpuscles in the blood, the rhythmic movements of certain protoplasts).

« The experimental laboratories will benefit by all the improvements of the cinematograph and I do not doubt the brilliant scientific future reserved to the motion picture ».

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The cinematographic record of phenomena is to-day a recognised fact. Abundant research is made in the laboratories with the help of micro-cinematography. Quoting France only, we may mention the splendid work of Melle. Chevrotot (Mад- dame François-Franck), Prof. Vîès, Prof. Fauré-Fremier and M. Jean Painlevé.

After hearing a lecture delivered by Dr. J. Comandon, which he, like a veritable apostle, gave frequently and to the most varied audiences, everyone felt enthusiastic about the mysterious power of the cinema.

I remember among others, a meeting held in November 1922, in the great amphitheatre of the Conservatoire des Arts et Métiers under the auspices of « Les Amis du Cinéma ». Dr. Comandon explained the rôle of the micro-cinema, its wonderful discoveries and its great usefulness. He limited his demonstrations to
microbes and showed us one of the most interesting series of films ever projected. On this occasion the eminent critic of the «Temps», M. Emile Vuillermoz, wrote a most interesting article:

«It is like fairy land. As soon as the luminous rays pass through a pulmonary cell, an artery, the capillaries or a fragment of mucous, the living movements compose harmonies, lines, volumes and movements of exceptional beauty. Here is a strange and hallucinating landscape, a wonderful horizon...» (1).

In fact the partisans of so-called advanced theories, have found nothing more original, peculiar and unexpected than the entirely scientific films which probably are the only manifestation of pure cinema.

M. Vuillermoz concluded his article by saying: «In spite of the ignorance and the bad habits of the cinema, its enemies are falling back every day. One can already foresee its wonderful future. But no cinematographic composition will attract sincerer or more enthusiastic friends, amongst artists as well as scholars, than the scenes depicted on the screen by the ingenuity of Dr. Comandon. They are veritable lyric tragedies enacted in a drop of water. The spirilla and the vibrios are powerful actors, graceful dancers and incomparable producers».

It is only right to mention that the creator of his own films must be a great artist and an expert stage manager. In fact Dr. Comandon operates himself and produces his work only with the help of collaborators trained by himself. Moreover, the investigator, in treading the path of knowledge, soars into the realms of poetry and reveals his poetic feeling even in the most abstract subjects.

* * *

In the splendid hall of the «Centre de Documentation» at Boulogne-sur-Seine, I saw the first projection of the recently created films, dealing with plants and flowers.

Dr. Comandon projects pictures that seem to come from a fairy tale, such as the sleep of vegetables and their various phases. He has detected their most hidden secrets. It is a poem that can be understood by all. The scholar draws new learning from it and the ordinary spectator is impressed by the mystery of nature. He becomes acquainted with these wonderful beings, whom he wrongly considered inferior and to whom he usually attached little importance.

Other films affording equal surprises, are those showing tendrils attaching themselves, the opening of flowers and leaves, the graceful evolutions of the helianthus or sunflower, and the marvel of Peru, whose petals only open under the light of the stars.

How many hundreds of films of this description have been signed by Dr. Comandon? He himself does not know. Many of his reels he considers only as experiments or for documentary purposes. Although we have often begged him to give us the complete catalogue of his works, he is too modest to compile it.

Towards the end of last November, I received from the «Centre de Documentation» at Boulogne-sur-Seine and the «Laboratoire de Biologie», this very kind invitation:

«If you could spare the time, some afternoon, to come to Boulogne, I should be very glad to show you my plant... Thanks to the generosity of M. Albert Kahn, the new studio where I can continue my experimental work is almost ready... It is part of the fine work of documentation, created and maintained by M. Kahn.»

A few days later, I was on the banks of the Seine by Boulogne. Everyone knows of the immense park, the majestic city created there by M. Albert Kahn. The whole world is there represented in the rich libraries and in the files packed with documents, not less than in the trees of the park. An authentic Japanese village, with trees and plants directly imported from Japan, stands side by side with an idyllic valley of the Vosges mountains; a few steps further can be seen an alpine garden containing the whole flora of the glaciers. All this is kept up for study as well as for the gratification of the eye. The wanderer is puzzled at every turn, his curiosity is awakened and he acquires information while he is entertained by the variety of scenes which unfold themselves before him.

A villa with out-buildings has been put at the disposal of Dr. Comandon. Thus he was able to instal and equip his laboratory and make it into a little temple of scientific cinematography.

The director of this new scientific centre and his young and ardent collaborator, M. P. de Forbrune, received me most cordially.

I was immediately introduced to the principal hall, which is study and laboratory combined. Here everything arrests the attention. It contains the dark-room and the equipment room. At the far end stands the great microcinematographic apparatus with its levers, pedals and optical instruments, plugs, commutators, and near by, stands a bent steel pole supporting the photographic apparatus.

M. André Debrie constructed this laboratory according to the precise indications of Dr. Comandon. It is undoubtedly the most practical, complete and accurate plant of its kind in the world. Not the slightest vibration is perceived; the inevitable movements coming from the outer world have been completely deadened, so as not to influence the optical instruments. To this end, the whole plant has been built on a huge block of concrete, entirely isolated and set deep down in the soil.

I looked round, while I listened to the interesting explanations offered by Dr. Comandon. He explained the workings of each section and took in my presence several series of photographs of invisible beings placed under the microscope.

Everything is ingeniously contrived and is the result of long experience. Dr. Comandon speaks of his machine as of a personal friend. The satisfactory results of his sagacious and meritorious researches are greatly due to it. Nothing has been neglected to assure good results, both in the taking of slow and accelerated views.

«For the shooting of slow pictures», explains Dr. Comandon, «we use the in-
Dr. Comandon's present laboratory: View of the micro-cinema constructed in the André Débrie Factories.
candescent lamps (motor-car lamps of 1000 candle power, 12 volts). By this means, we have obtained ultra-violet light cinematography by using Koehler's device: sparks between cadmium electrons, prism of quartz. I should mention that the whole of the optical plant is in quartz.

« It has been necessary to alter the excellent G. V. apparatus from the Debrie Firm, to increase the time exposures, while keeping up the necessary speed to obtain the correct reconstruction of the movement.

« We have added an arrangement which enables us to inscribe the duration of time on each picture and to control the exact speed of the pictures while being shot.

« The focussing is done directly on the film, through a magnifying glass placed sideways and a prism. Notwithstanding the slightly oblique position of the optical axis, focussing is very easy. Even during the shooting of pictures, this point can be corrected; movable objects can be followed and kept continually in the view field, by working the screws of the microscope.

« We have used this micro-cinematographic apparatus for many months and have found it very satisfactory. Its simple manipulation makes it easy for anyone who is familiar with a microscope to produce good micro-cinematography. By using its manifold lighting and speed devices, many subjects can be approached, and valuable microbiological documents obtained. Our main idea is to obtain the cinematographic reproduction of objects and phenomena, by means of the best enlargement, so that they can be plainly seen on the screen, at a rhythm which makes them perfectly perceptible, comprehensible and analysable. « By this process, we do not merely become the masters of space (by the use of optical instruments), but also masters of time, with the help of the cinematograph », says Prof. Charles Richet. « It is a powerful instrument of research work and its use will surely become indispensable for the exploration of microbes and living cells ».

***

But teaching films are not lucrative and this has prejudiced Dr. Comandon's work; he has also suffered through the lack of funds at the disposal of official laboratories. He is therefore rejoiced to have met M. Albert Kahn, the great philanthropist, who put the right equipment at his disposal and from their very first meeting gave him his unbounded confidence.

Dr. Comandon is not a man to boast of his achievements, but I can vouch that he will always respond to the confidence shown him, and be an honour not only to the Boulogne station, but to French cinematography and science.

His fame will endure as one of the most distinguished pioneers of the cinema. He has acquired a great name in the medical world and the discovery of wonders which our senses cannot perceive, has gained for him the reputation of a great populariser of science at his university.

The work of a man like Comandon, is a legitimate source of national pride.

C. Michel Coissac
Director of Le Cinéscope.
Honorary President of the Cinematographic Press.
Vice-President of the Scientific Press.
FILMS FOR TEACHING HEALTH

What is perhaps the most extensive series of educational films for health teaching which has ever been undertaken by a single organization is now in process of production by the Eastman Teaching Films, Inc., a branch of Eastman Kodak Company. The series is being produced with the cooperation of the Department of Biology and Public Health of the Massachusetts Institute of Technology. Prior to the development of this set of films there were some three hundred health films available in the United States. Most of those had been produced for general audiences, the producers having the general adult audience in mind rather than the pupil audience or school audience. Some of these are useful auditorium films. The great majority of them give relatively little information and are designed primarily to produce a particular attitude on the part of the person who sees the film. Most of them carry a story and any film which is essentially dramatic in its nature must compete or suffer comparison with the films which children see at the theatres, — films upon which hundreds of thousands of dollars are spent in production.

The Eastman Classroom Films represent essentially a new type of health film. Those which have been made in this series so far are primarily on informational subjects. We recognize the importance of habit training and motivation toward proper health behavior and we are now beginning the preparation of films for younger pupils which will contribute primarily to habit and attitude formation. The films already completed, however, are nearly all subject-matter pictures for pupils more than twelve years of age. The films which are already on the market include Bacteria, Circulation, Circulatory control, Blood, Breathing, Digestion, Diphtheria, How Teeth grow, The Living Cell, Mold and Yeast, Posture, Sewage Disposal, The Skin, Tuberculosis.

To some extent these films carry motivation; for instance, the film on Posture illustrates the fact that the athlete who is putting a strain upon the body is likely to use the body in its proper mechanical position. We see a famous baseball player at bat, an internationally known tennis player, and college oarsmen, to illustrate the straight back in activities of which the child is fond and to which he looks forward. Again at the end of the film we see the attractiveness of good posture in slow-motion pictures of a base-ball pitcher throwing the ball, and in other illustrations. The body of the film is teaching material showing good standing posture, how it is attained, the nature of poor posture and how it is corrected, contrasting the two and showing by scientifically prepared animation of the body frame work and important muscles just what takes place in the body while changing from poor posture to good posture.

Similarly in other subjects we see desirable practices. In Tuberculosis we learn the nature of the germ, the nature of the tubercle in the lung, the nature and im-
portance of the early detection of tuberculosis and the day's schedule in the preventorium. This institution is presented not as a hospital but as a place to which the child who may be subject to tuberculosis, predisposed to it, or threatened with it can enjoy a happy period of a few months under an ideal health programme. The habits which the children in the preventorium are following are those which we as teachers are urging upon our children; thus classroom discussion can bring out basic hygienic practices.

The film on Diphtheria shows primarily the important facts in connection with the disease, its control and prevention. We see the organism, the way in which it is grown in laboratories, the way in which antitoxin is made, the way in which the health department of a city handles a case of diphtheria, the cure of the disease with antitoxin, and the way in which diphtheria is prevented by the use of toxin-antitoxin as an active immunizing agent. Here again we are presented with an appreciable amount of new scientific fact in a way which is challenging, stimulating and interesting to the child. At the same time we are given the basis for a proper attitude toward diphtheria, toward parental responsibility for its prevention, and the responsibility of the citizen in maintaining an adequate health department.

Similarly in the film on the Skin we see in some detail, by microscopic photography and by scientific animated drawing, the structure and function of the skin. The definite visual impression is superior to any knowledge which the child can obtain from the text book or general discussion concerning cellular organs like the skin. We see a greatly enlarged view of the skin of the hand, showing the creases of the skin and the pores. We see the hand from such a view clean and when dirty. Shots of this type give a new conception of cleanliness and make it more to be desired.

In a similar way the films on sanitation — Water Supply and Sewage Disposal, present new scientific facts as do also the films on physiology, like Digestion, Breathing and Circulation. In some of the films it is obvious that the subject lends itself to the presentation of scientific information almost exclusively. There is always some element of health training, however, which is suggested either in the film or in the carefully prepared teacher guide which goes with it. The teacher is relied upon to supplement the film in any needed respect with classroom discussions.

There are certain facts which are worthy of note in connection with this entire series. In the first place each film is planned to teach a definite piece of material. It is designed for a particular age level, but, like a working model, it may be used advantageously for groups varying several years in age. The scenario is laid out with the same care and the same scientific accuracy as would be a series of model lessons or a text book. Each picture is produced by some established commercial film-producing organisation. It undergoes careful editorial revision before it is put into production.

A teacher guide of some ten to twenty pages is prepared in connection with each film. It describes the film scene by scene, giving in addition the primary teaching objectives, suggested correlations, and questions for review. Each film is divided into teaching units and these units are indicated in the film by titles printed
We begin the study of circulation by watching the process in the chick embryo (Circulation Film). Animated diagram shows the parts of the digestive tract (Circulation).

The work of a villus is shown in animated diagram (Digestion Film). Animated diagram shows the nature of capillary circulation (Digestion Film).
The growth of living tissue
(Skin Film.)

The structure and position of the lungs
(Breathing Film)

Nozzle of sprinkling filter
(Sewage Disposal Film)
Good food builds strong bodies

(Preventorium children get plenty of sunshine)

(Tuberculosis film)
Intrusion.

The worker looks for Diphtheria Bacilli

(Diphtheria Film)
in large capitals. They are also indicated in the teacher’s guide. For example, Tuberculosis presents, first, a unit dealing with the nature of the disease, second, a unit dealing with the early detection of the disease and its importance and, third, a unit which depicts the ideal mode of living for maintaining health as well as for recovering from the incipient stages of the disease. These films are packed full of information. In most cases not more than one unit would be used at a lesson.

There are few titles. Every foot of title means a foot of film.

Some of the health films which were prepared several years ago are found to contain one third to one half of the footage in the form of printed materials. It would seem to be less expensive and more satisfactory to do necessary reading elsewhere. The ideal is to present to the child or sell to the school a maximum of picture and a minimum of title in every film.

These pictures are printed on 16 millimetre safety stock and the picture can be stopped at any time on the screen. In the ordinary film there are nearly 16,000 separate frames or pictures each of which may be considered a potential still picture. The wise teacher will stop the picture frequently and develop class discussion of the material. In fact, instead of supplanting the teacher the film is a new instrument in his hands. It enables him to do things which he had been unable to do previously, but it requires real professional ability on his part.

These films cannot be used advantageously without advance teacher preparation. The teacher who shows a classroom film without having seen the picture or read the teacher guide, who shows the film without discussion or comment and dismisses the class is not a professional person. Little learning will have been achieved by the children. Much of the material needs discussion and explanation at the time when the film is shown.

We believe that these films will contribute to the training of the child’s power of observation. In teaching the natural sciences teachers stress the development of power. Pictures as well as specimens may be studied for detail.

One of the chief values of the film is its power to present to the child anything which can be seen directly, microscopically, or telescopically, or which can be imagined and reproduced in drawing. A few weeks ago the writer showed some of these films to a group of university men including doctors of medicine. At the end of the showing a physician said, “These films should be shown in medical schools.”

When asked if he meant that the films were too difficult for high school children, he replied, “No, I mean that here, through photography and animated diagrammatic drawing, visual concepts of physiological processes are presented more clearly than we, who are physicians, have been able to imagine them from our readings and dissections.”

Any person at any age level will get a better concept of the operations of the body from seeing those processes depicted on the screen, devoid of all gruesomeness and the confusing elements involved in the examination of the human body itself.

When we teach with pictures we are free from those problems which involve vocabulary. The child knows what is happening. He may not be able to describe it
perfectly, certainly not in the vocabulary of the physician, but he can draw pictures of the sort of thing he has seen and he can tell you in his own words what has taken place. As a matter of fact it is one of the best methods of developing vocabulary. Teachers know that it is much more valuable to have the child in the position of seeking words with which to express an idea than it is to have him in possession of words which are not associated with a definite concept. Here is a splendid opportunity for vocabulary development and an association of word with structures and functions.

These films are made with the same accuracy which would be needed if they were to be shown to physicians, although they were prepared for public school pupils. Many of the films are being shown at more than one age level and the child will learn more or less detail from the film according to his previous training. We do not expect to teach to the child everything which we, as teachers, see in every film.

Teachers should think of these subject matter films, not as entertainment «movies», but as source material, — in fact each film brings to the teacher a whole series of models, charts, and classroom demonstrations. Instead of spending many hours getting the demonstration ready, the teacher goes to the cupboard and gets the film which will show what she wants. Obviously talking pictures could not be used to advantage for films of this type which demand repeated, sectional study. These films are bought outright by schools. Purchase is less expensive and much more satisfactory than rental.

C. E. Turner, M. A., Dr. Ph.
Professor of Biology and Hygiene
at the Massachusetts Institute of Technology.
THE CINEMA AND FASHION

COSTUME ON THE SCREEN.

(from the French)

While the question of scenery has been closely — perhaps too closely — studied, costume has been largely neglected.

This statement may cause surprise in view of the fact that all films known as «super-productions» draw attention to the dresses, cloaks and adornment of the principal actresses, giving the names of the designers and creators responsible for them. It is a fact, however, that even in the case of a film where the «toilette» figures prominently, we have not yet passed beyond the ideas and traditions which governed the theatre of yesterday. When the order is given to the dressmaker—even a well-known firm — the costumier is not asked to invent and adapt a creation to the requirements of the screen, but — for reasons of economy or perhaps publicity — to deliver a dress which is frequently chosen for its originality alone, or merely because it looks grand or comes out well in a photograph. Often, too, the model has to be changed, which means distorted, and this neither fulfils the producer's intention nor satisfies the maker.

We will only refer in passing to historical costumes, even period costumes designed from authentic documents. These are executed en masse or in a series and roughly fitted to the actor or mannequin without any regard for line or colour. We need only look at the wardrobe of a big studio to realise how little care is devoted to the design and execution of artistic dress. For the most part, even when the chief actors are richly attired, the rest of the company has to put up with appalling cast-offs. There is the same disregard for anachronisms or errors of taste. As a result, most films, owing to the costumes and rapid changes of fashion, become ridiculously out of date almost as soon as they have celebrated their success and masterpieces have been sacrificed which could easily have taken their place in a chosen cinema repertory and have been frequently revived with great success and without having unduly dated. Carelessness of this kind has been seen to be injurious in more than one direction.

It will be urged that films are bound to aim at verismimilitude alone if they would escape criticism. This argument is specious; it would apply if the cinema were intended to be no more than a slavish reproduction, or trustworthy document; it is however of no force at all if we agree that the cinema is an instrument of artistic expression and interpretation, independent of outward happenings.

In any case the representation of a specific period can always be allied to certain general principles which, while putting its stamp upon the film, will not date it, still less compel it to be classed among the definitely dead and buried. What we need is specialisation on the part of the costumier and an enlightened understanding of the art and technique of the cinematograph.
Not enough attention has been paid to this fundamental question. Costume has not been considered in relation to its environment and to scenery, in relation to the character it is to clothe, the milieu and period of the story, so as to guarantee a creation which will not be in danger of becoming an anachronism or an anomaly.

Undoubtedly, long and careful study must go to the making of a costume which will fulfill its function and help to improve or, as we may say, play its part in the film. Luxury and magnificence are not enough; they may often be valueless and even absurd; the great thing is to realize the requirements of the screen and carefully comply with them.

Is it possible to anticipate fashion without risk of those incongruities which marked a number of films shot two or three years before they were released and therefore behind the fashion as regards dress? Certainly it is, if the designer understands his business and has the power of divination and adaptation, that is to say if he can avoid dangerous exaggeration and show real inventive genius.

This reflection brings us to another point no less important, and that is the influence of the cinema on fashion, and education in tasteful dress and adornment as imparted by the screen. We need not repeat what so many have already said — that the film exercises a kind of fascination, persuades by force of suggestion and compels imitation, good or bad, of what it represents. A certain succession of pictures drugs the will. No teacher was ever more persuasive, either in suddenly arousing emotion and brutally forcing attention or in gradually convincing step by step; the Cinema, indeed, casts a certain spell.

To quote a single example only, it has only required the two little bits of Charlie Chaplin's false moustache for the whole world, without really knowing why, to sacrifice its upper lip in a droll and even ridiculous manner. Similarly our old woollen waistcoats have for the same reason been supplanted by American pullovers and sweaters; we could quote a hundred examples of how feminine fashion has adopted some foreign fancy taught and, as it were, imposed by the cinema.

Could we not reverse the factors and, instead of submitting to the often questionable influences of the screen in the sphere of fashion, aesthetic dress and adornment, entrust it with an educative mission?

This is a most important question, nationally and internationally. In this way each country would vie with others in originality and the result would be an artistic gain which would raise the level of all-round taste. Alongside inevitable whims of a day, there is room for a form of fashion which would evolve in accordance with the advancement of general education. This is a use of the cinema which has in our opinion been all too much neglected.

We must not, however, deceive ourselves; a dress for the screen is conceived and executed in obedience to numerous factors which only a specialist can properly appreciate.

Dress is a question of line, form, volume, general harmony, and minute study of detail; a question of colour or shades; character and circumstance; a question of atmosphere and of the living environment. Imagination guards its full rights, but the fancy is subjected to special conditions. What is right in the theatre or in daily
life does not at all meet the requirements of the screen and entails different consequences.

More and more, as the talking film and colour film develop, not to mention the three-dimensional film, the cinema will insist upon truth and upon interpreting this truth in the sphere of art, by means which are at present unknown.

We must therefore no longer have recourse to the reach-me-down costumes of the theatrical wardrobe but must aim each time at something fresh and new, the expert costumier being left all freedom of action consistent with the approval of authors and producers.

We have confined ourselves to present-day fashion. Much might also be said about period costumes and the use to which they are put on the screen. Many blunders are made, the result of which is to give us wrong information. There is an undue tendency to be content with the rough-and-ready and to be impressed with the magnificent or the unusual; for example, some of Velasquez' infanta dresses were so abused that they almost restored the vogue of the eighteenth-century panier without at the same time resuscitating the minuets and other dance-steps which in the huge drawing-rooms of our forefathers were its sole justification.

In brief, fashion on the screen must inform and teach us, it must be an expression of cinematographic art, offer variety and novelty and cease to be a fake and an offence against good taste, truth and aesthetic laws.

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FILM CENSORSHIP IN SPAIN AND PORTUGAL

I Spain.

Legislation. There is no precise and complete system of film censorship in Spain but the legislative provisions which safeguard public morals in the matter of films and which really serve as general criteria for control, are the following:

Child Welfare Law of August 12th, 1904;

Regulations of January 24th, 1908 in execution of the above law;

Regulations of October 19th, 1913 concerning police supervision of public entertainments;

Royal Decree of December 31st, 1913 reproducing the provisions issued on November 27th, 1912 on public cinema performances; Penal Code, Article 618;

Royal Decree of February 26th, 1929, No. 575, issued on the recommendation of the Minister of National Economy;

Royal Decree of April 12th, 1930 No. 393, issued on the recommendation of the Minister of the Interior.

The essential principle underlying the above legislative provisions is that of devising the best means of protecting children against the possible dangers of the cinema by counter-acting — especially in respect of children under 14 — tendencies which may contribute towards the demoralisation or perversion of the young.

Cinematographic undertakings are therefore required by Art. 32 of the Law of August 12th, 1904 to submit to the authorities the subject-matter and captions of any films which they intend to show publicly. In default thereof or in the case of managers who contravene the rules mentioned (Art. 33) and show films which are subsequently deemed to be unsuited for public performance, a fine is imposed which varies from 50 to 250 pesetas, irrespective of prosecution under the penal law.

The Royal Decree of December 31st, 1913 confirms the obligation to submit the subject-matter and captions of films to the public authorities and lays down that the latter may, whenever they think fit, appoint a special child welfare committee to control films. The Decree also makes any persons who show pornographic films, even in a private place, liable to prosecution.

Article 618 of the Penal Code imposes a penalty of imprisonment for a period varying between four months and two years as well as a fine of 1,000-10,000 pesetas upon any persons who:

(1) publish, traffic in or otherwise possess obscene photographs, cinematographic films or other objects for the purpose of dealing in them, distributing or publicly exhibiting them;

(2) import, transport or export, for the above purposes, any of the said obscene objects, dealing in them in any way, exhibiting them, or hiring them;

(3) participate in public or private traffic in the said objects, dealing in them in any way, exhibiting them, or hiring them.

(4) Advertise or make it known by any means whatever, with a view to encouraging the said criminal circulation or traffic, that a person is engaged in manufacturing the above-mentioned objects or who undertake to advertise or make known persons who can directly or indirectly procure the said objects.

Offices. — On the basis of the afore-mentioned provisions two Committees of Control were established, one at Barcelona and the other at Madrid. The Review "Proyección" (Madrid, year II, No. 8, October 1929) pointed out that film producers and renters for a variety of reasons deplored the existence of two offices of control. According to them, the ideal would be a single central office applying uniform rules to films and avoiding duplication of work and frequent conflicts of opinion between Madrid and Barcelona.

As the result of requests from all sides the Royal Decree No. 393 of April 12th 1930, provided for a quasi-uniform system of official control. It prescribed as follows:

"Cinematographic films shall be censored at Madrid by the Directorate-General of Public Safety, with the exception of comic,
and topical films, which may continue to be censored either by the said Directorate or by the Civil Governor at Barcelona.

As regards films not included in the two categories mentioned, producers, renters and other interested parties who wish to obtain permission for public performances must submit their films to the Directorate-General of Public Safety with titles and indications of the different scenes in Spanish. A special official will attend the projection of the said films in premises prepared for the purpose by the applicants concerned.

In Madrid applications and control are free of charge, but at Barcelona a fee is charged of 1 centesimo per metre of film examined, payable by the cinematographic firm as a voluntary contribution to the Maddalena hospital.

The Committees of Control at Barcelona and Madrid are, as we have said, Government creations, and the Government authorities are therefore responsible for establishing their rules of procedure.

In practice, the system is as follows:

The Control Office enters upon a special form submitted by the cinema firm the scenes or parts of the film suppressed or, if there are none, the authorization to show the film.

The form, signed by the censor and visaed by the Chief of Police, is returned to the firm (film owner or renter), a duplicate being kept in the office registry.

In their capacity of State authorities, the Committees have to account to the State for the discharge of their activities. When approval of a film is refused, the normal recourse is to the Minister of the Interior, against whose decision the only appeal lies in an administrative action.

Films intended for private projection in schools, educational institutions, clubs, etc., are exempt from control by the special Committees. The performances, however, are liable to prosecution under the penal law if they are contrary to good morals and as such morally or intellectually harmful to children.

CENSORSHIP CRITERIA. — (a) General. — As we have seen, there is no real system of film censorship in Spain. The main, if not the sole concern is to protect the child, and this principle directs not only the Bar-
celona and Madrid Committees, but the school inspection offices which authorize performances in schools. The offices which forbid the projection of a film are not the authorities of last instance, appeal being allowed to the Central Inspectorate under the Minister of Education.

The general safeguarding of the minds and morals of children is effected through a number of special provisions. Article 34 of the Law of August 12th, 1904 on child welfare forbids children under 10 to attend evening performances unless accompanied by adults; for the rest, it leaves all responsibility in the hands of parents, guardians or other persons in charge of children.

On the other hand, managers are permitted to organise special performances for children.

The provisions of Art. 34 are supplemented by a series of regulations issued in the form of circular instructions by the various prefects acting within their respective spheres of jurisdiction.

(b) Specific. — In addition to the general aim of the official Committees and school inspectorates, which is to protect children and forbid them access to cinematographic performances of an immoral nature or, in the broadest sense, bad for the minds or which in one way or another may inspire or incite them to crime, certain specific criteria are applied — hygienic, artistic, political, military, religious and technical.

Hygienic — in order to prevent films classified as health films from being used for immoral propaganda and to prevent the public exhibition of films suitable only for performance before a limited circle.

Artistic — so as to ensure that a film — even if not actually a work of art — may have at least a certain value as a source of enjoyment and beauty.

Political and military — lest the representation or false picture of certain political and military aspects of life should amount to a distortion of facts and constitute a direct offence to the State or its constituted organs, to foreign countries, the army and its representatives.

Technical — in order to guarantee the technical qualities of films shown to the public, which is entitled to demand a certain
standard of cinematographic performance and that the spectator shall not be exposed to the risk of physical injury (to the sight, etc.).

The last specific criterion of censorship is the veto on anything offensive to the Catholic faith or to any other form of religion recognized by the State.

Statistics. — During the last year 389 films were examined by the two Committees, of which only 4 were definitely rejected as unsuited for public exhibition, while 14 were required to undergo certain alterations before being finally approved.

The prohibited films were the following:

(a) The Tragedy of the Street, forbidden as altogether immoral.
(b) The Mysteries of Venus, because, with an anatomical pretext, it exhibited photographs of the sexual organs.
(c) The Last Command — clearly communist in tendency and containing propaganda against the existing social system.
(d) Lady, be good, considered by the censors to be immoral.

The 11 films approved after alteration were the following:

(a) The Pompadour's Spy, because its subject was the Emperor Peter II and it contained scenes of brutality and cruelty to his discredit.
(b) Carmen's Lovers, as containing scenes offensive to Spain.
(c) The Madonna of the Sleeping Cars, censored because part of it was turned in Russia under the Soviet regime and contained scenes of cruelty.
(d) In honour bound, included immoral scenes.
(e) The Girl with the Song, a film from which scenes were cut as being of republican tendency.
(f) The Odyssey of a Duchess and Three Hours of Life, because they contained indecent scenes.
(g) The Lady of the Rose, suspended because the author of the story claimed an infringement of copyright after proving that his work had been grossly distorted.
(h) José María el Tempranillo (a thief), suspended after being denounced as holding up Spaniards to ridicule.
(i) The Wolf, stopped because the ow-

ners did not observe the alterations inserted by the censor.

(k) The Legion of the Damned, because it contained scenes of espionage.

Of the 389 films examined the majority were dramatic films; next came so-called topical films and then films with animated drawings.

Pending Arrangements. — By Decree No. 575 of February 28th, 1929, already mentioned, provision was made for a special form of film enquiry, whereby Spanish private persons or firms engaged in the cinema industry and film writers were given an opportunity within one month of the publication of the said decree in the Official Gazette (March 3rd, 1929) to communicate their opinions and wishes regarding the final legislative rules governing the cinema to the Council of National Economy attached to the Ministry of that name.

Once the opinion of the competent circles has been obtained, it was the purpose of the Government to issue the regulations best suited to develop the film industry.

The results of this enquiry, are not yet known. As regards systems of control, however, a clear desire appears to have been expressed that film censorship in Spain should take the form of those measures by the State or organs under State authority which are in force in most European countries.

PORTUGAL.

Legislation. — In Portugal, unlike Spain, there is a genuine system of film censorship governed by the Laws of May 6th, 1927 No. 13.504 (Arts. 133 et seq.) and June 29th, 1929, No. 17.046 and by general instructions issued by the competent ministerial departments.

According to the general principles underlying these laws, no film, national or foreign, may be shown, even privately, until it has been submitted to the Censorship Committee.

The duty of general control rests with the Inspectorate of Public Entertainments, which discharges its functions through its inspectors.

All censorship and inspection of films takes place at Lisbon. In virtue of the above-mentioned Decree of June 29th, 1929,
the Prefects and Sub-prefects may be delegated for the purpose by the Inspectorate of Public Entertainments, but only within the area of the city of Lisbon.

**Offices.** — According to the censorship regulations, the film must be submitted forty-eight hours before its inspection and must be accompanied by mention of the manufacturing firm, the place of origin, number of parts and length of film. A list of the captions must also be attached, duly numbered and in Portuguese, with the name of the Portuguese translator.

The opinion of the inspectors is not final. Appeal may be made against their decisions to the General Inspectorate. The final decision lies with the Minister of the Interior.

Detailed provisions regarding the definitive functions of the Inspectorate of Public Entertainments are lacking and will appear in the form of regulations.

The work of the Censorship Committees is unpaid.

The inspectors must examine indiscriminately all films submitted to them, both cultural and recreational, and must give their opinion favourable or otherwise. If the opinion is favourable, the film is authorised for public performance, subject to alterations or cuts.

In addition to the duties of the inspectors and their subordinate organs, prefects and inspectors delegated in the different districts may intervene in any particular case to forbid the projection of immoral films or of films containing anything prejudicial to public morals and order.

**Censorship criteria.** — As in Spain, the censorship is exercised from a twofold standpoint:

(a) **General:** by forbidding the exhibition of films of a low moral character and which by their content or form may be harmful to the minds and morals of the public and, particularly, children;

(b) **Specific:** films are also examined from the artistic, hygienic, political and military, religious and technical standpoints.

The underlying purpose is to prevent films which are of little or no artistic value or which represent hygienic or pseudo-hygienic subjects in a demoralising instead of an educative light, or which, in the political or military sphere, do violence to the republican idea and prejudice the relations of the State with other countries or which offend the religious susceptibilities of the majority or, finally, which are technically inferior, from being shown on the screen to the detriment instead of the advancement of this latest art-form.

In particular, the following are forbidden: surgical operations, mutilations, ill-treatment, scenes of torture, executions, military exercises, scenes offensive to the existing regime, to religion, to the head of the State or recognized head of a foreign State, or to the representatives of foreign countries and their authority and scenes depicting the army, the navy and other incorporated forces of the State.

As regards the moral censorship, the Portuguese Government has kindly furnished the Rome Institute with a full statement of the reasons which guide the inspecting officials in the exercise of their control.

Among matters upon which they place their veto are the following: the exaltation of crime, the reproduction of acts of violence, murder and theft, incitements to mutiny and law-breaking both in military and in civilian life, the exhibition of the nude, if obscene, lascivious dances, suggestive movements, anything that may make an unfavourable impression upon the public and give an artificial and corrupt picture of life and, lastly, which may threaten the forces of unity and of family sentiment.

**Statistical.** — During the first half of 1929 the censorship inspectors examined 451 films, of which none were refused.

These rules are very elaborate when it is considered that the national production is small and that before reaching Portugal the films have already been examined and censored by committees or officials in other countries.
NOTES ON CINEMATOGRAPHY IN SOVIET RUSSIA

Industrial Organisation. The Pan-Soviet Cinematographic Association has been established under the following management: Chairman — Arjutin; Members — Cvedelikov, formerly chairman of the central Soviet Cinema office, Almazov, Grünfeld, director of the Leningrad Film Factory, Kozak and Sutirin.

It is proposed to create a number of new sections, including a rural section, a film purchase and sales section, a renting section, etc.

In April of this year an autonomous pan-Soviet office was established for the import and export of films, under the name of «Intorgkino», which has the functions and status of a monopoly institution. Throughout the Soviet Union no cinema undertaking may export or import cinematographic material except through Intorgkino. In order that the new organisation may have as free a hand as possible, the People's Commissariat for Trade has granted to Intorgkino the right to regulate the whole of the importation and exportation of cinema material.

A Soviet Hollywood. In the autumn of 1928 a start was made with the construction of an enormous centre of cinematographic production, with a capital of 12½ million roubles. According to plan the buildings are to be completed within five years, that is to say, by the end of 1933. One group of buildings, including the operators' rooms, the producers' rooms, the cutting and assembling rooms the rooms for scene painting and photographic work, will be ready during this autumn. It is also hoped to complete the studio by the end of this year.

It is reckoned that 50% of the original building plan has already been put into execution without an increase of working staff and without exceeding the original estimate of costs. When it is finished, the Soviet Hollywood will be a cinema town accommodating thousands of workmen in suitable homes covering 25 hectares of ground.

The plans also include special buildings for the manufacture of sound-films, for the offices of the Moscow branch of the Soviet Cinema Company, a cinema university and a students' hostel.

All the buildings are rationally designed to secure maximum comfort for the workers combined with maximum output efficiency.

State Factory in Georgia. The five-year scheme for the development of the film industry in Georgia provides for an increase of output during this period from 12 to 17% with a reduction of 48% in the cost of films in spite of a 37.50% increase in wages. The scheme provides, among other things, for an expenditure of 2,154,000 roubles on workshops, 2,340,000 roubles on new cinema theatres and 285,000 roubles on film education, technical and artistic.

Ethnographical Sound-films. The Leningrad film industry has experimented with the making of ethnographical sound-films. Documentary films which reproduce real life on the screen are becoming more and more important to ethnographical research, especially when it is a question of investigating and recording the life of small nationalities and of minor and gradually vanishing ethnical groups for the benefit of those who live so far away that they could otherwise see nothing of it.

Acting in agreement with the Leningrad studios, the Institute for the study of the peoples of Northern Russia, a part inhabited by various groups with strongly contrasted modes of life, has sent some of its students to observe the habits of the Osties, the Samoyeds and other Siberian natives and to make a collection of the songs, dances and characteristic ceremonies of those distant parts.

Labour. One of the most important industrial films produced by the Vufku is Dnieprostroy.

Vols has kindly furnished a resumé of
this film which enables us to form an opinion of its value.

Dnieprostroi is an 800,000 horse-power hydro-electrical station on the Dnieper, which is destined to transform the whole industrial economy of the Lower Dnieper and to rationalise the life of the country side. It will also suffice to drain the marshes and bring many hundred thousands of hectares of land into cultivation. The station is further to serve the requirements of an enormous electro-metallurgical group of steel, ferromanganese and aluminium firms.

The film shows the progress of the work of installing this station, which will be larger than any in the U.S.S.R. or in Western Europe. It shows the rushing torrent of water passing through walls of iron and cement whereby it is converted into electric energy: we see a colossal embankment being constructed, while numerous gangs of workers break up the stone used in the manufacture of the millions of cubic metres of cement which the work consumes.

Along with this purely industrial film is another on the rationalisation of labour. It is called «Chaos and Order» and has been produced this year by the Cultural Film Manufacturing Company.

This film shows the economic advantages of a scientific organisation of human labour from the point of view of industrialisation and the creation of rational methods of production.

In 1926 there were only about 100 standardised products in the whole of the Union, but the five-year economic development scheme anticipates a rapid increase in this number to 4,000, which is equivalent to 80% of the total production of the country.

The film clearly illustrates the necessity of a rationalisation of working processes and shows that, if wholesale rationalisation is out of the question, at any rate a partial standardisation must be effected which will at the same time economise effort and increase output.

The Centrosus (Union of Soviet cooperatives) has convened a pan-Soviet conference of cinema workers to examine questions relating to rural cinematography and in particular to study suitable subjects for cooperative films.

Art. Sciorin’s workshops are now engaged in the sound-recording of the first film programme of the official White Russian cinema, including White Russian, Polish and Jewish songs and pieces of local music played on national instruments by local musicians.

Along with this first series of folklore and artistic pictures, and as a first experiment in rational museum cinematography, the Leningrad Museum has organised at the War and Art Exhibition a display of films entitled «War as seen by cinema artists», the aim of which is to show the line of cleavage between the static art of painting and the life and movement of the cinema, with its many and great artistic possibilities.

Thus at Peterhof, in the former Palace of the Czar, films are being made which are based upon old cinematographic material showing the life of the imperial family. At Peterhof, too, on the occasion of the exhibition on «imperialist war and the revolution» organised in the train in which the Czar Nicholas signed his abdication, a room has been fitted up to seat 200 people in which films will be shown illustrating the war of 1914-17.

The studios of the International Workers’ Branch are now making an art film called «Song» under the direction of Gendelstein. The film deals with the problem of art in its twofold aspect of a help and a hindrance to workers in the struggle of life. It expresses the view that what is called art must be stripped of its old traditions, establish close contact with the masses and reflect the new expressions of Soviet thought so that it may render more valuable service and help to develop instead of opposing the new ideology by which the peoples of the world should be ruled.

The film will be partly a talking and partly a sound film.

Another art film — «The Sleeping Beauty» — now being prepared at Leningrad under the direction of the brothers Vassiliev, has as its subject the development of art in relation to the working classes.

Another, «The Silent Don», based upon Cholokhov’s well-known novel, has been completed under the direction of Presbrajenskaia.
Sport. The first pan-Soviet Olympiad has been held in the Moscow physical culture and recreation park, and one of its chief attractions was the Film Olympiad, in which competitions all the cinema organisations of Soviet Russia exhibited their best artistic and educational films. The various pavilions contained everything serving to illustrate the development of the Soviet film industry, its present situation and future prospects.

The organising committee of this Film Olympiad includes representatives of film concerns, of the Society of Friends of the Soviet cinema, of the Association of the Revolutionary Cinematograph and of the cinema press.

Publicity. A Conference met recently in Moscow to consider means of reorganising Soviet film propaganda. In the course of the meeting various reports were submitted by experts on «the possibilities of developing film publicity» and «the functions of cinematographic advertising».

The view was expressed that film publicity should be regarded as part of the cinema's educational work. The conference therefore prepared a number of schemes with a view to developing this among the more important activities of the Russian film.

Medicine and Surgery. The Photofilm Association has produced a film called «Cases of modern surgery». It is made up of a number of pictures showing various surgical operations — a trepanning, a cancer operation, a cutting open of the stomach, blood-transfusion and an X-ray experiment. All the photographs were taken under the direction of Professor Silverberger and Dr. Liubarsky.

Miscellaneous Soviet Film Notes. The Leningrad studios have started work on the art sound-film «The Unique» under the direction of Trauber and Kozintsov. Some of the photographs have been taken in the Altai mountains.

A number of purely documentary scenes from Central Asia, especially the Amudaria Basin, from the Kara-kalpakia and Lake Issikul have been filmed under the direction of the producer Bluvstein, the Eastern Cinema Company and Dr. Lapin.

In the opinion of the Soviets one of the most important problems of reconstruction is the question of public feeding, and it is held that the only way of rescuing workmen, and particularly working women, from the slavery of housekeeping is by establishing restaurants in offices and workshops, thus leaving the workers free to take an active part in social life. The Soviet Photocinema Association has therefore manufactured a film called «Office Restaurants», in the making of which the cinema has for the first time employed young men recruited from journalism and photography. The actors in the film are all students of the State technical school of cinematography (Carmen, Slutzki, Friedland and Samsonow).
Agricultural teaching in Uruguay. — We are informed by our collaborator, Señor Enrique José Rovira, Uruguayan Delegate attached to the International Institute of Agriculture, that the Information and Education Section of the Department of Agriculture in Uruguay has equipped its travelling cinemas with radio-telephonic apparatus with a view to improving the visual and aural machinery for the teaching of agriculture by means of the cinematograph. The Section is proposing before the end of this year to establish on a 46 metre tower a broadcasting station with an 80 metre aerial, which will constitute one of the most powerful installations in Uruguay and will be used to transmit reports on agriculture.

The travelling cinemas, for their part, will supplement their propaganda work by artistic and musical representations, concerts and recitations in order to promote popular education in other fields of life and thought.

The Cinema and Education. At the annual prize-giving for all French public schools and colleges, held in the presence of the President of the Republic on July 9th, 1930 at the Sorbonne in Paris, the inaugural address was delivered by M. Bessil, Professor of Natural History at the Lycée Montaigne, and dealt with the intellectual fascination and educative value of natural science. The speaker made the following reference to the cinematograph.

«To illustrate his meaning, the teacher seeks the aid of drawings, wall-charts and, still more, of fixed and cinematographic projections.

«If there is one subject in our schools which is more suited than any other for screen representation, it is natural history: the screen can reproduce the movements of objects and beings, the habits of animals, scenes of hunting and fishing, geological phenomena, aspects of life which cannot be better
described than by the cinematograph. Natural history films are easily intelligible and many of those in existence have proved very successful. The mechanism of the photography is very simple and the necessary skill can easily be acquired without any danger to the operators.

«How delightful and how valuable it will be for students to watch on the screen the marvellous evolution of butterflies, scenes of deep-sea fishing, work in coal-mines or the process of a volcanic eruption.

«With the aid of this modern instrument of education, the teacher arouses the interest and enthusiasm of his pupils, evokes their response, stimulates their curiosity and introduces into the class-room the vitalising force of nature herself.»

* * *

Cinema activity in Spanish-speaking countries. On June 12th, 1930 the Marques de Guad-el-Jelu, Spanish Minister of Labour and member of the Governing Body of the I. E. C. I., broadcast the following speech made before the Hispano-American Cinematographic Congress:

«His Majesty's Government, at the request of a select group, foremost among which is the doyen of our journalists, Don José Francisco Rodriguez, has approved the proposal of the Ministry of Labour and granted official recognition to the Hispano-American Cinematographic Congress.

He has thus confirmed the Government's view that this is no ordinary congress, but an assembly met together with a view to finding a solution for problems which are from every point of view of the highest importance.

For some time, happily, Spain has understood the full value of the screen as an instrument of progress and the best elements in the country, especially among the younger generation, inspired by the vitality and actuality of what is known as the seventh art, have been working to make up for lost time and to urge our country to take its part in the great world movement for perfecting cinema technique, finding a new solution of the problems of film production and circulation and spreading knowledge in the light of this newest star in the firmament of human progress.

«As proofs we have the work of our Cine Club under the skilful direction of Giménez Caballero, our collaboration with the Rome Institute, our laudable endeavours to produce or disseminate cultural films and the desire manifested on all sides to achieve this aim.

«It is therefore the Government's hope that the Congress will mark a fresh advance of the Spanish-speaking peoples towards high-quality cinematography. The term «Hispano-American» is a conventional expression that may be accepted on condition that it implies the conception, dear to us all, of collaboration between Latin-Americans and us elder, possibly maturer, brothers in the pursuit of our joint purpose. This collaboration, however, must observe the limits of our respective sovereignty and culture and follow certain lines that must be mutually recognized and respected. It is easy enough to determine historically what is meant by Spanish thought and it would be a grave mistake and calculated to cause much confusion if the term America were to be used in respect of what is only a group of nations belonging to a vaster America, in which millions of persons are united within the most diverse ethnical groups.

«With its common and its different characteristics Latin American life is in touch with Spanish thought, for our thought is after all, the common denominator whence, like the branches from a stem, have originated the various national activities which have created a number of free and independent civilisations, each with its own separate character and individuality, but bound to the others by the ties of friendship and brotherhood.

«This is a Peace Congress which should lead to the fusion of the joint wishes and interests of the Spanish peoples to participate in the campaign for the ennoblement of the screen.

«It is a Congress directed against noone but in favour of the splendid cause of voluntary cooperation.

«Let us hope that it may help us to understand each other better, to discuss matters together directly and not by indirect contact,
often devoid of any real substance and consisting of empty compliments, but on the contrary let us hope that by combining for a concrete purpose we may succeed in defining with the necessary exactitude the complex and urgent problems arising out of the cinema.

«I do not wish to sing a hymn to the screen or on the other hand to contribute to that body of negative criticism which has already assumed more than reasonable dimensions.

«It is a prevalent idea in the cinema world that the screen is only to be considered as a source of amusement.

«Simple amusement, if governed by a sense of proportion, is not a matter for censure; but great instruments of progress — and the cinema is one of them — have not been placed in the hands of civilised peoples simply to be unproductively consumed or to be used as a child’s plaything.

«The time has come to purge the cinema of its element of triviality. Life is short and it is the duty of all of us to make a worthy use of it and to raise its level instead of lowering it as we do if our only ambition is to pass time without any regard for the higher life and things of the mind.

«The Hispano-American Congress will notably contribute towards spreading in Spain and in all Spanish-speaking countries an understanding of the spiritual values of the screen. This is the firm hope of our Government, which has every confidence in the competent organiser of the Conference.

«In an atmosphere of liberty and mutual recognition of each other’s high ideals we shall achieve a work which will establish a fresh landmark in the history of the relations uniting those countries whose language is the language of Cervantes».

***

_Henny Porten in a talking film. «The Scandal of Eve» (Skandal um Eva) is a new film_
in which Henny Porten, the cinema star, makes her first appearance in a sound-film.

The cinema press speaks of it as a revelation. « Der Film » of June 14th last declares that Henry Porten’s voice is particularly well suited for sound-films. The « Lichtbildbühne » of the same date, in its criticism of the film, adds the following comment:

« An event! To-day the artist who, at a time when the big actors of the stage looked scornfully upon the cinema, devoted her powers of psychological expression to the silent screen and became the symbol of cinematographic art for the German people, makes her début in a sound-film. In a new age of cinematography when the conditions are not at all the conditions natural to her art, Henny Porten triumphantly accepts the challenge to furnish new proof of her qualities, and remains in the sound-film, too, the great star of the German screen.

B I B L I O G R A P H Y

WILL H. HAYS: See and Hear. Motion Picture Producers and Distributors of America 63 pages: 8 illustrations.

« Cinematography is at the same time an illusion and an industry » said Seldes, in a short study of the silent and speaking cinema, to which we have already alluded.

Will H. Hays, developing the same idea, declares that cinematography partakes of the vital elements in civilisation, that is to say, industry, science, art and religion.

The great possibilities of the cinema are gradually being realised and the first-fruits are now being gathered in various fields — scientific, political, religious, educational, commercial and in the field of publicity. Even the schools, which rightly leave novel experiments to others and confine their teaching to fully explored branches of knowledge, have not remained impervious to this great movement. Visual instruction — advocated for centuries by all the best educationalists — finds practical application in the film, which by supplementing the spoken explanation, imbues lessons with that life and potency that words alone so seldom possess.

The value of the cinema — not only to children but to adults — soon became apparent. For example emigrants can see in films the land of their choice and thus the first days in a strange and far off country are made less hard for them.

« We must realise », said Mr. Hays at a luncheon in Berlin given in his honour by the Spitzenorganisation, « that the public goes to the cinema above all else for the recreation which it needs after the day’s work, and it would therefore be robbing the public of its just rights to cram programmes with propagandist ideas of whatever kind ».

This is true within certain limits, but Mr. Hays himself qualifies his statement by fully acknowledging the duty incumbent upon the cinema of teaching the different peoples to get to know each other: if they know each other, they won’t hate one another and, if they don’t hate one another, they won’t go to war. Is not that the programme of the League of Nations itself, a part of which at least it has entrusted to the cinematograph?

The book contains interesting passages on the censorship. At the end of the war this « punishment from Heaven », as he calls it though in more picturesque terms, was introduced in seven States—Pennsylvania, Ohio, Florida, New York State, Kansas, Maryland and Virginia. In 1921, however, a reaction began to set in, due to the fact that the industry was becoming better organized, had acquired a sense of its own moral strength and shown that it could look after itself. As a result, the censorship of topical and educational films has recently been abolished in the States of Kansas, Pennsylvania and New York.

Finally, we would draw attention to a few eloquent figures from the published statistics of the Washington Department of Trade which the author quotes in his book with pardonable pride. The United States
manufacture more than 85% of all the films shown in 70 countries of the world and, before the advent of the sound-film, the captions of silent films were translated into 37 languages. Further, the industry spends 125 million dollars a year and permanently employs 255,000 persons.

Such, in brief, are the ideas set forth in this study, which also contains the history of cinematography — fascinating as a novel — from its earliest beginnings to our own day, and which ends by prophesying the arrival within the near future of stereoscopic and natural-colour films.

G. Charensol, Panorama du Cinéma, Edition Kra (price 16 fr. 50), 20, rue Henry Regnault, Paris XIV.

The author of this book deals with the silent cinema, of which he gives a general account, historical and geographical.

He is not concerned with the cinema as a problem of contemporary life, nor with its applications to various branches of science, and as regards sound-films and talking films, he makes but a few passing references to them, as being still in the embryonic stage.

In tracing the development of the screen in the different countries, he omits Japan, owing to insufficient data, Great Britain, whose production he considers small and artistically unimportant, and Italy, whose people he declares lack a "film-sense." This last assertion is not supported by any arguments and he even quotes certain films which, like "Cabiria," denoted at the time they were produced a first and important advance in cinema enterprise and technique.

His study is therefore confined to the United States, Germany, Scandinavia, Russia and France. He also gives short sketches of the artists in each country who have admittedly influenced the development of cinematography.

Ben D. Wood, of Columbia University; Frank N. Freeman, of the University of Chicago, Motion Pictures in the Classroom, Houghton Mifflin Company, The Riverside Press, Cambridge (Mass.), 392 pages, 12 illustrations, 8 drawings, 44 tables.

The authors of this work, which is packed with information, report in detail on the results of the enquiry they carried out at the instigation of the Eastman Kodak Company, in collaboration with the National Educational Association, in the schools of 12 cities of the United States on the value of cinematography to education.

We will say no more of this comprehensive experiment, since a very detailed account of it, carefully compiled by the Eastman Teaching Films, Inc., Thos. E. Finegan, appeared on pages 131-149 of the August 1929 number of our Review.

Adriano Giovanetti, Figure mute, published by Quartara, Turin (L. 10).

The writer, who has no literary pretensions, has drawn pen portraits of the following, regarded as artists and private individuals:
1. Mary Pickford.
2. Charlie Chaplin.
3. Lilian Gish.
5. Maria Jacobini.
7. Pola Negri.
8. Oreste Bilancia.
10. Franz Sala.
12. Harold Lloyd.

The Neighbourhood and its Motion Pictures 107 pages.

A sub-title makes it clear that this book is merely intended as an aid to those wishing to participate in cinema reform by offering amusing and morally healthy cinema performances for the family.

The book may be divided into two parts. The first part contains the replies to a questionnaire circulated by the agency of Dr. Augustus A. Thomas, President of the World Federation of Educational Associations. The questions are many and interesting.

(1) What methods have you adopted to interest your association in cinema reform?
(2) What associations have more especially cooperated with you in this reform work?
(3) Have you established relations with local managers?
The final judge and arbiter of every performance is the public, who by attending or keeping away decides in the last resort the success of the show. It is therefore public taste that must be educated. How to interest the public, how to overcome apathy and indifference — these questions were put to a Committee including representatives of various associations which met in a special congress in New York and to which we owe a series of interesting reports collected in this book.

The American public, young and practical-minded, keen on success and progress, does not resent, but rather invites criticism. It is quite common to find firms advertising in this way: «If our goods please you, tell your friends; if not, let us know». Silence, like all inactivity, often leads nowhere. The important thing is action, notification to the proper quarter — in this case the cinema industry itself — of the cinema's defects, if we are to cooperate seriously in meeting the new and universal demand for educational cinematography.

The second part of the book consists of reports from associations on cinematographic work, of which one of the most interesting is Dr. Howard M. le Sourd's report on religious films.

This describes the work set on foot by a Committee established in New York in 1929 for the purpose of determining how the film could contribute towards religious education, both Protestant and Catholic. The results of the studies and enquiries that are being made will be published separately.

The book ends with a short and interesting history of silent and speaking cinematography.

Professors Miaglia and Raimondi have written a collection of 13 plays, including monologues, fables and short comedies, which have been published in 6 volumes by the Libreria Salesiana of Rome, under the title of Il Nuovo Teatro per i piccoli. The separate volumes are as follows:

Vol. 1. «The Box of Providence», patriotic monologue for the small child. «The Visit of the Infant Jesus», a religious play in two acts for small children. (L. 1,50).

Vol. 2. «The Dolls' Mother» a play, with a moral, in one act for little girls. «The Easter Lullaby», a religious play in one act for little girls. «Lollí's Tooth», play with moral in one act for little girls. (L. 2).


Vol. 4. «Granny's Rosary», religious play in one act for little boys. «Perfection» a play with moral, in one act for little girls. (L. 2).


Vol. 6. «Rodomonte on the Lead», humorous play in one act for boys and girls. «Pay and say nothing», humorous play for boys and girls in two acts. (L. 2,50).

The above collection has met with the approval of scholastic and religious authorities. It is certainly deserving of notice, for the plays, on account of the simple form in which they are written and their moral, poetic and religious content, make an ideal theatrical repertory for children of both sexes and at the same time provide amusing and instructive reading.

It is hoped that the cinema may do similar work in the same field.

RENE SCHWOB, Une Mélodie Silencieuse (274 pages), published by Bernard Grasset, Paris (12 francs).

The writer aims in this book at framing the poetics of an art still in its infancy but of enormous importance and which, more than any other and in spite of appearances, affords a picture of our inner life, a representation as it were, of the invisible.

These poetics he derives from a number of films which he analyses and criticises with the exquisite sensitiveness of an artist and man of letters.

Very interesting is the study of the art of Charlie Chaplin, whom he describes as a real genius of the cinema; equally interesting is the evidence on every page in the book of the artistic qualities of the screen.

The writer shows how the cinema is a real art, distinct from the others and possibly the
greatest of them all, because, even without the aid of words, it reveals the harmony between the visible and invisible world. To appreciate it, however, requires analytical passion and a love of the mystical and also a kind of courageous self-surrender; rationalists, like Souday and Duhamel, are therefore unable to recognize its virtues.

Not all countries, however, are capable of developing the art of the cinema, which demands of its votaries naivety and a negation of conscious personality: «the cinema only lives for those who forget themselves». The countries of cinematography are therefore, according to the author, youthful America and mystic Russia.

This book, for its form among other reasons, deserves to be read not only by lovers of the cinema but even more by its adversaries.

ERNEST A. DENCH, Motion Picture Education. The Standard Publishing Company Cincinnati. 353 pages.

The author is convinced himself and seeks to convince others. His book is therefore written for, and deserves especially to be read by the sceptical. By these we mean sceptics not in matters of religion but in matters of cinematography, all those who, in spite of the brilliant achievements daily recorded by the cinema, persist in despising it and in denying it its place in modern life. We, however, are as convinced as Mr. Dench, if not more so. And many others besides ourselves, beginning with the League of Nations and the Italian Government, have believed in the expediency of creating our Institute, the essential purpose of which is to develop a new international cinematographic sense.

What can we say, therefore, after reading this interesting book, except that we entirely share the author’s views, follow daily in reviews and newspapers the progress of the cinema in America — of which he gives a full and clear account — and, like him, desire to encourage the movement for embellishing educational films with all the attractions of art? For this, unfortunately, is a point most open to criticism — and not of the ill-disposed only. Educational films it is often said, are dull and badly made; their plots are uninteresting; no attention is paid to stage production or technical perfection. The public, which is by now accustomed to a very different kind of performance, has no interest in educational films and boycotts those theatres that show them. This is true within limits, but, even granting this is a weak point in the cinema’s armour we must not forget the excellent and brilliantly successful work of cinema enthusiasts like Mr. and Mrs. Johnson and Monsieur J. B. Lévy, who in their different educational fields have given us films of unquestionable social and cultural value. This is no merely personal opinion, confirmed as it is by the public of nearly every country, which has flocked to see and applaud M. Lévy’s «Maternité» and to admire the Johnsons’ pictures of savage life in darkest Africa.

To return to our author, Mr. Dench’s book contains a great deal of interesting material and every chapter shows how much has been and is being done in America in the sphere of culture and education. Schools, universities, the Church and even Governments now realize that few factors in life can exercise such influence on the mass of the people as the cinema. They have entrusted to it the very delicate and difficult task of propaganda.

Thus not only teachers, but scientists, clergymen, politicians, industrialists, commercial and agricultural circles, sociologists, hygienists and even the police will find chapters in this book that will particularly interest them, while it contains a wealth of detail and valuable information which, if intelligently applied to the individual case, cannot fail to advance the cause of human progress.

GILBERT SEDLES An hour with the movies and talkies. Published by G. B. Lippincott and Co. 16, John Street, Adelphi, London. 156 pages.

An hour is certainly not too long to study the birth and development of the silent and spoken cinema, but the author by his succinct résumé has made his subject extremely interesting. He takes us back to the first tentative experiments in film-making and
the first public performances. Between 1903 and 1908 various films were produced and met with success because at that time the cinema public had no standard of criticism and applauded even bad work. The years 1909-15 saw the first European productions of big dramatic films, which were exported to America where they enjoyed great success. Among these should be mentioned the Italian film «Quo Vadis», made in 1913, which denoted a real advance in cinema technique and artistry. In the same year the «Famous Players» Company was formed in America, and in the following year Charlie Chaplin began his series of comic films we all know so well. In 1915 Griffith created «The Birth of a Nation», illustrating the idea philosophically represented in Beard’s History of America that the United States as a nation are the outcome of the Civil War. This film had a unique success. It was shown uninterruptedly for ten years and the profits amounted to 150,000,000 dollars.

From 1915 onwards the silent film continued its prosperous career until it was joined by the synchronisation of sound and speech, which marked the entry of cinematography upon a second phase. At the same time the eyes of the world, irresistibly attracted to the new, did not withhold their admiration from the incomparable artistic and technical achievements of the great Russian producers like Eisenstein and Pudovkin, to quote only the best-known.

Cinematography is both an illusion and an industry, says Mr. Seldes at the beginning of his book. As an industry, he concludes, it may rise and fall with or without synchronisation, but as an illusion it will last as long as human life.
The BILDWART furnishes information on all questions bearing on the Cinematograph; it organizes and spreads film activities in all the domains of Science, Art, Popular Education, Religion, Children's Welfare, and Teaching.

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This Review is recommended by the German Educational Authorities Specimen Copy sent free of charge on application

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*Film Censorship in Norway and Sweden* | 1199

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Virgil from a painting by Luca Signorelli (15th cent.) in Orvieto Cathedral.
PART I.

1st Picture.

The home of Virgil near Andes not far from the banks of the Mincio. It is the house of simple well-to-do farmers.

Large hall on the ground floor.

From the wide open door in the back-ground the setting sun can be seen, illuminating the country-side. The future Virgil is not born yet. His expectant mother is preparing his little garments. A carpenter enters bringing a cradle. Exit the carpenter. The mother looks at the cradle with admiration and makes it rock. She sits beside it and falls asleep. Something stirs in the cradle. It is not a child, but a tree that springs up and grows very fast. The cradle and the hall have disappeared and in their stead, a tall laurel bush spreads out its boughs.

Virgil's father comes home, his wife wakes up — her dream has vanished — the cradle is again in its place, astonished she describes her dream to her husband.

2nd Picture.

The child Virgil sets out hesitatingly to discover the world.

A series of pictures dissolve one into the other:

a) Virgil walks along the banks of the Mincio; he pauses before a flowering tree, his small hand strokes the rugged bark.

b) Virgil sitting near a shepherd in the shade of a beechtree, is watching the peaceful herd.

c) Virgil stands awhile near the hives and looks at the bees at work.

d) Virgil enters the large stables, the horses look round at him. The child has a vision of a wild cavalcade of heroes.
MANTUA — Statue of Virgil.
Virgil stands by the Mincio on a misty morning; the mist dissolves and the god of the river appears surrounded by nymphs.

Virgil watches the stars on the terrace of his house. Little by little the stars move together and form a wide barrier; suddenly the word GOD appears above in flaming letters.

3rd Picture.

Winter. The hall on the ground floor. The parents of Virgil are seen sitting by the hearth. Slaves are at work, one of them is teaching Virgil to read and write. The boy is proud of his first achievements.

4th Picture.

The same hall. An old female slave spinning by the hearth is telling some ancient tale of far-off countries to Virgil. Mythological figures appear in the flames and the smoke of the fire.

5th Picture.

A field full of flowers. Young Virgil is seen taking part in the poetic competitions of the shepherds and is much applauded.

6th Picture.

The shepherds carry the reluctant Virgil in triumph and bring him home. His parents welcome him. The father declares that his son's hands shall not touch rude instruments; the boy must study and become a magistrate.

7th Picture.

At Cremona. Virgil in a grammar school.

8th Picture.

At fifteen Virgil is so advanced in his studies and development that his father wishes him to wear the magistrate's robe.
A ceremony in the paternal house. Virgil abandons the garments of his childhood and receives the white toga presented to him by the magistrate. His friends and relations accompany him and guide him towards the household gods, to which he pays his respects. Under the loggia a banquet is prepared.

9th Picture.

At Milan. Virgil frequents a school of rhetoric. He is disappointed because his elocution is not good.

10th Picture.

At Rome: Virgil is seventeen when he arrives in Rome. A series of dissolving pictures showing life in Rome in those days.

a) The Servian walls, once standing in the country, now encircle a new town.

b) Demolition of old houses to reconstruct handsome buildings.

c) The Forum. The first stone theatre constructed by Pompey.

d) The cosmopolitan crowd in the main streets.

f) The unfrequented Senate; a speech delivered by Cicero.

f) Procession of Asiatic people. A temple of strange foreign divinities.

g) Nocturnal orgy corrupting some young poets.

11th Picture.

Virgil's simple study; far away from the noise and splendours of the great city.

12th Picture.

The school of the famous rhetorician Elpidius. Virgil frequents the school without enthusiasm. There are sons of noble families at the school amongst whom, the young Octavius, seven years younger than Virgil. Virgil is again disappointed in his studies of rhetoric and eloquence.
Virgil’s house. He has decided to abandon the study of rhetoric. He is writing a burlesque farewell in verse.

In this picture, some of the words of the poem will appear on the screen, accompanied by illustrations:

a) ...Such studies are empty bombast — swollen words, vain clash of cymbals...

(Strange swollen shapes — words which grow in size without increasing their significance — enormous cymbals that vibrate and disappear in the sky).

b) ...I want to sail towards the blessed haven of philosophy — where life is free of care...

(A white ship is seen sailing into a port, Virgil finds himself anchored in an infinitely peaceful and solitary spot. The Camenae, pastoral muses honoured by him, advance bashfully towards the poet offer their presents and try to retain him).

c) ...Depart, sweet Camenae, go far away... — but return to look at my tablets from time to time...

The Camenae smile, nod their heads and disappear.

The same solitary spot; in the background stands a rock pierced by a great door, on which is written:

De rerum natura.

The shadow of the poet Lucretius stands near Virgil and offers him the key of the door. The poet opens with trepidation.

The school of the epicurean philosopher Siron. Distinguished students. An hour of study.

Virgil steps into the interior of the cave to which the key of Lucretius has given access. Virgil stands before a statue of Epicurus. The statue comes to life and leads Virgil through mazes where scenes of earthly enjoyment are enacted. Virgil asks: — And after? — Epicurus leads Virgil to a smooth wall on which is written: Nihil.
After a moment of anguish, Virgil tears a pole from the ground, which in his hands is transformed into a lyre. He strikes the dark wall with his lyre; the rock splits and through its opening are revealed scenes of love, faith and human activity. The rock closes up again and the words which Virgil will some day write in his *Georgics* appear in luminous letters:

*Scilicet huc reddi deinde ac resoluta referri*

*Omnia, nec morti esse locum, sed viva volare*

*Sideris in numerum alque alto succedere caelo.*

17th Picture.

A meeting in the house of Maecenas. Luxurious and elegant surroundings. A crowd of poets, friends and protégés of Maecenas. Virgil is introduced to the great personage. They discourse of poetry. The poets belong to the group of neo-Hellenes, whose master was Catullus. Cornelius Gallus likens the poet’s art to that of the

*Virgil's country: Temple of Jupiter Anxur at Terracina*
goldsmith. A precious stone has no value until cut and mounted. These words are visually reproduced; Gallus is transformed into a goldsmith, surrounded by all the instruments of his trade, he prepares his poetry as if it were a necklace... Virgil watches with great attention. Another young poet offers him a book of verse by Catullus.

Meanwhile, loud cries are heard coming from the street. All run to the windows, Cornelius Gallus, the poet-goldsmith, remains a moment alone, then he joins the others on the loggia.

18th Picture.

We see Julius Caesar returning in triumph from his Gallic conquests.

19th Picture.

Virgil is on the Appian way along which the triumphal pageant has passed. It is evening. He picks up a palm leaf and holds it up towards the City as a symbol of faith and an augury of perpetual glory.

Calliope, the muse of epic poetry, appears. The poet walks towards her tremblingly, but the vision fades.
PART II.

20th Picture.
Virgil has returned to his father’s home. He sees again the sweet meadows and the blue river; his parents, and his friends the shepherds.

21st Picture.
A charming country-side with shepherds and cattle grazing. Virgil writes his BUCOLICS under the shade of an oak.

The horizon darkens; suddenly Rome appears and the great events which are happening there unroll themselves before his eyes: a) The murder of Caesar. b) Caesar’s funeral and the revolt of the people. c) The men of the second triumvirate. The serenity of country life returns, Virgil is seen still writing, far away from the clamour of the world.

22nd Picture.
The palace of Asinius Pollio, Governor of Cisalpine Gaul. Virgil offers the first eclogues to his friend Pollio. The Governor congratulates him, then he tells the poet that he has some serious news for him. From Rome, he has received the order to confiscate the land and to distribute it amongst Caesar’s veterans. The operations have already begun in the district of Cremona and will soon spread to Mantua.

Consternation of Virgil. Asinius Pollio advises the Poet to go to Rome and put himself under the protection of Octavius. He writes him letters of recommendation.

23rd Picture.
On the way to Rome, Virgil meets processions of refugees (settlements who have been expropriated), and listens to their lamentations. These will later appear in the BUCOLICS.

24th Picture.
At Rome, in the palace of Octavius. Conversation between Virgil and Maecenas. Maecenas introduces Virgil to Octavius. The two great men meet. (Octavius was then 20 years old;
a very handsome youth with an expression of quiet strength). Octavius reads the letter of Pollio and immediately grants his protection to the Poet. He writes a few lines which are to assure immunity to Virgil's property. These two men of such divergent qualities, have a premonition of each other's greatness. Octavius recognises in the modest countryman, the poet who will immortalise the feats and names of heroes; Virgil recognises in the noble and enigmatic features of Octavius, the young brother of Quirinus, the new hero of Rome. These mutual impressions are expressed symbolically: While the two confront each other, the laurel bush seen by Virgil's mother in her dream springs up beside him; near Octavius, an oak tree appears. The branches of both trees interweave and form a triumphal arch over which a resplendent Roman eagle spreads its wings.

25th Picture.

In the house at Andes. The old parents of Virgil are telling him of their fears; they speak of a new and imminent distribution of land. Virgil tries to reassure them. Thanks to the protection of Octavius have they not already passed a year in safety? A breathless servant enters. He relates that some soldiers have forced their way in to the farm, saying they are the new masters. Other servants arrive; scenes of confusion; Virgil's parents are conveyed to the inner rooms.

26th Picture.

In front of the house. Virgil stands on the threshold with a few slaves. The centurion Arrius arrives accompanied by soldiers. He arrogantly orders all to leave immediately. Virgil shows the document given him by Octavius. The centurion takes the parchment and tears it to pieces while the soldiers stand by laughing. He renews his order. Virgil tries to resist; the soldiers unsheathe their swords; a slave is killed. Virgil returns to the house.

27th Picture.

On the road to exile. Virgil, his parents and a few slaves are seen travelling towards Rome.

They arrive at a suburban villa belonging to Siron a former teacher of Virgil. They enter the fine gardens. Virgil stands on the terrace
and shows the distant monuments of Rome to his parents. He tells them that they can remain in this peaceful house, while he will return to the City to resume study.

28th Picture.

Rome. Virgil's simple bare room. By the light of a lamp, the poet writes the last words of the Bucolics. He steps out on the terrace and watches the sun rising over the City: the dawn of his fame and his poetry.

29th Picture.

A feast in the house of Maecenas. Many poets and artists are present. Virgil reads an eclogue from his Bucolics. They create a great sensation and he receives congratulations from all sides. The actress Cytheris, a friend of Cornelius Gallus, is an enthusiastic admirer of the poem. She proposes to recite one of the pastorals in a public theatre. Virgil is induced to consent.
Virgil's country: Temple of Apollo at Cumae.

30th Picture.

A crowded Roman theatre. Cytheris is about to recite the sixth Eclogue (Varo).

(This recital is visualised on the screen).

"Old Silenus, the son of Bacchus, is seen sleeping in a grotto overcome by the effects of drink. Two young shepherds and a nymph surprise him. Silenus has often refused to sing for them, therefore they revenge themselves by tying him fast and keep him in bonds until he consents to sing. Silenus wakes up, he looks about and laughs goodhumouredly. — Get away youngsters! untie my bonds and I will sing anything you like — Silenus is free, he sings."

The scene closes with the projection on the screen of the words which conclude the eclogue:

\[\text{Omnia, quae Phoebu quondam meditante beatu}\\ \text{Audit Eurotas iussitque ediscere laurus,}\]
Ille canit-pulsae referunt ad sidera valles
Cogere donec oves stabulis numerunque referri
Iussit et invito processit Vesper Olympos.

The audience on their feet, cheers and applauds. The actress is overwhelmed. Someone asks the name of the author. Cytheris says: "Virgil". The unknown name goes from mouth to mouth. Cornelius Gallus points towards a youth on the steps who is about to leave: there's the poet! The crowd press around him and carry him in triumph.

31st Picture.

On the morrow Virgil is famous. Some booksellers come to his study and ask him to allow them to publish the Bucolics. A messenger brings a rescript from Octavius, in which it is decreed that he will receive fruitful lands in Campania as a compensation for the small farm he lost. Admirers and solicitors surround him. At last, only an unknown youth remains; he was in the theatre on the previous day, and as a friend of the Muses, he was moved by the beauty of the new poem; his name is Horace; he too has been dispossessed of his property and is now a scribe, but his inclination prompts him to write poetry. A spontaneous friendship springs up between the two young men.

32nd Picture.

Virgil introduces Horace to Maecenas. The three go together to the Esquiline and Maecenas consigns to Virgil the house which he has given him. He shows him the foundations for his own palace which will be erected close by. He assures Horace of his protection. Together they will be able to do great things for the glory of Octavius and Rome.

33rd Picture.

Maecenas, Virgil and Horace travel together in Italy. A halt near a village. From a hill, Maecenas shows deserted fields to his friends. There is too much uncultivated land in Italy! And yet, the greatness of Rome sprang from the soil.

(To illustrate these words, there appears projected on the screen, a spade quickly transformed into a Roman sword; this picture dissolves into the scene of Cincinnatus abandoning the plough to assume dictatorship).
Inspired by this desolate landscape, Maecenas suggests to Virgil the theme for his GEORGICS: a poem which is to awaken in the hearts of the Italians, the love for agriculture.

Virgil feels the beauty of the theme. With his style he engraves on his tablet the word GEORGICON. His companions bend down to see what he has written. The poet gazes in the distance. The barren land is quickly transformed into fertile country dotted with farms and meadowland on which flocks and herds are seen pasturing.

34th Picture.

The villa of Virgil situated between Capua and Caserta. Gardens, terraces, meadows. Virgil passes through the olive groves, the palms and flowers. He listens to the voices of nature.

35th Picture.

The large library in the villa. Virgil deep in thought by the window. The Camenae, whom he had formerly dismissed, appear to him and smile upon him. Virgil writes the first lines of the GEORGICS.

Qui faciat lactas segetes, quo sidere terram
Vertere, Maecenas, ulmisque adiungere vites
Conveniant, quae cura houm, qui cultus habendo
Sit pecori, apibus quanta experientia parcis,
Hinc canere incipiam.

36th Picture.

While Virgil is writing his poem of the land, important events for the history of Rome are taking place.

Octavius announces to the Senate that he has declared war on Egypt because his rival Antony, repudiating Octavia his sister, has married Cleopatra. The battle of Actium. The capture of Alexandria, the death of Antony and Cleopatra. Octavius returns triumphantly to Rome to celebrate his victory and assume direction of the State.
37th Picture.

At Atella, a small village in Campania, Virgil reads his poem to Octavius, who has stopped there on his way to Rome.

Octavius is accompanied by Maecenas and a few followers. The audience sits round the poet. In the semicircular background of the room are seen four large volumes bearing the inscription: Georgics, I, id. II, id. III, id. IV. (close-up).

38th Picture.

The four books of the Georgics. The first volume opens; it widens out, becomes like a large window; there appears a visual and pictured translation of the contents of Book I, namely: the various methods of cultivating the land, the origins of agriculture, ploughing implements; the seasons’ tasks; warnings of storms; a digression on the portents which preceded and followed Caesar’s death.

The four books reappear as a close-up. The second one opens. Its contents become visible: the life of plants; the cultivation of plants in the various parts of Italy; the olive and other trees; praises of rural life.

The four books reappear. The third one opens. Its contents become visible: The care of cattle; oxen and horses; sheep and goats; dogs; the illnesses of animals.

The four books reappear. The fourth opens. Its contents are visible. Bee-keeping; the bee-hive; Swarms and their battles; the kingdom of bees; honey and wax; the care of hives. Evocation of the legend of Aristaenus; Orpheus and Eurydice.

39th Picture.

Octavius is leaving Atella. Virgil bows and tells him that he will write a new poem in praise of him. Octavius waves his hand towards the horizon and says that the poem will have to celebrate the glories of Rome at the beginning of a new era.

The party leaves. Virgil remains alone in the twilight, the vast design beginning to shape itself in his brain.
PART III.

40th Picture.

Roman peace. Augustus is closing the temple of Janus. Visions of Rome’s greatness during the period of imperial peace. Before the closing of this scene, Virgil appears and contemplates the scene with visible emotion.

41st Picture.

The library in Virgil’s villa in Campania. The poet is deep in thought. Various figures appear to him, they represent the delights of life, they are: Fame, Pleasure, Riches, Leisure etc. Why give all his attention to these sterile papers? One must enjoy life while there is time. But Virgil repels these allurements and continues his studies; he is looking for the inspiration of a theme for the glorification of Rome.

42nd Picture.

Virgil is musing; suddenly he finds himself at the mouth of a great river. He sees in the waves of the river a vision of the Roman people spreading over the earth. The mystery of so much glory, thinks Virgil, is not to be found at the mouth, but at the source of the river. Captivated by this idea, his mind retraces the stream. At last he reaches the source high up in a valley where he meets two unknown figures; these are Aeneas and his son Iulus; the ancestors of Rome and of the Julian race to which Augustus belongs. Aeneas gives to Virgil a flame that shines without burning. Virgil holds the flame aloft.

Darkness falls, the wonderful torch traces in the sky the name of Rome.

43rd Picture.

The same villa. Virgil receives Maecenas and tells him that he has found the theme of his new epic poem. Virgil examines books and maps which refer to the legend of Aeneas.
44th Picture.

A villa near Naples. Virgil watches the sea from the heights of a terrace.
A walk in the gardens. Every now and then, the poet halts and writes a few notes on his tablets.

45th Picture.

On the sea-shore, by the boats which have been pulled up on the beach. Virgil listens to the fishermen who relate old Mediterranean legends.

46th Picture.

A moonlight night. The terrace of the villa on the sea. Virgil steps out on to the terrace.
He is tired and despondent. He descends a flight of steps and stands on the shore. A cloud passes over the water, it reaches land and takes the shape of an old man, he is robed in white and is blind; it is Homer. The poet of antiquity lays his hands on Virgil’s brow with a gesture of benediction and then he disappears.

47th Picture.

In a suburb of Naples. Virgil passes in the streets, the people point at him; the children surround him; he caresses them and gives them a few coins. He enters the poor abode of a sick fisherman. He speaks to him and encourages him; he talks to the distressed wife and gives her a purse of money. The children accompany him to the door.

48th Picture.

The terrace of the villa. It is dawn. The windows of the study are still closed. Many country girls appear, they carry garlands of laurel leaves and baskets of roses. They decorate the entrance to the study with festoons and bunches of roses, and heap up more roses in front of the closed windows; then they retire and hide behind the bushes that stand on both sides.
Virgil opens the door and finds himself surrounded by roses, standing under the arch of laurels. The girls laugh and are discovered, they run away towards the sea.
Several years have elapsed, during which Virgil has written the *Aeneid*. Some poet friends have come to visit him in his Neapolitan villa; they have been sent by Augustus who is impatient to read the poem. Virgil wards off the request. Nothing is finished yet; many parts have still to be composed, others to be corrected. His friends insist. Virgil has to give way; he will go to Rome and read to Augustus Book VI, which can be considered as finished.

*50th Picture.*

In the Palace of Augustus in Rome. Virgil is about to read before a distinguished audience, Book VI of the *Aeneid*. Augustus and his sister Octavia are present, also Maecenas, and the poets Horace, Varius and Tucca. The scene dissolves into a close-up showing a volume entitled *Aeneid*, Book VI.
Virgil's country: The Cave of the Sibyl.

51st Picture.

Cinematographic projection of Book VI.

1. In the temple of the Cumaean Sibyl, Aeneas wishes to visit the realm of Pluto. The Sibyl tells him that it is very difficult to do so, but not impossible; others have done so before him. He must offer a "golden bough" as a gift to Proserpine.

2. Aeneas is wandering in a dark forest, looking for the golden bough. Two doves appear, they are the sacred birds of Venus his mother, they lead him to an oak tree, on which a bough is shining. The hero breaks off the bough, which immediately sprouts again.

3. It is dawn, one sees Aeneas waiting with some followers, near the lake of Avernus, by the forest. The Sibyl appears and dismisses all except Aeneas to whom she beckons to follow her. She leads him towards the dark entrance to a cavern. The hero obeys and unsheathes his sword.
4. They descend into the bowels of the earth. The infernal abyss. At the entrance are stationed Penitence and Remorse; pale Diseases, Old Age, Fear, Hunger and Poverty; other horrible phantoms appear: Fatigue, Death and his brother Sleep and the fatal Joys. On the threshold can be seen War, the Eumenides and Discord. In the centre stands an old elm-tree from the branches of which hang the idle Dreams. Other monsters group round: the Centaurs, Briareus, the Lernaean Hydra, the Chimaera, the Gorgons, the Harpies, Geryon. Aeneas raises his sword, but the Sybil stops him.

5. The Acheron. Charon the ferryman. The shades of the departed reach the other bank of the river. Aeneas recognises some of his companions who perished in shipwreck. Charon is appeased by the sight of the golden bough and ferries Aeneas and the Sibyl across Cerberus.

6. An infernal forest. Shadows pass. Aeneas meets Dido and implores her pardon. The Queen of Carthage never lifts her gaze to the hero, she disappears silently in the dusky wood.

7. A cross-road. The infernal prison; the Tartarus (various visions). Pluto’s palace. Aeneas hangs on the door the golden bough and accompanied by the Sibyl, directs his footsteps towards the Elysian Fields.

8. Elysium: pure air and suave meadows, groves and hills. The happy inhabitants pursue the occupations they preferred in life. Songs and dances. Chariots and war horses, harmless weapons. Heroes, priests and poets. Meeting with the poet Museus. The Sibyl asks the poet where Anchises, the father of Aeneas is.

9. Museus accompanies the two guests to a hill. From that height one sees old Anchises choosing his lineage from among the souls who are ready to return to earth. Aeneas descends the hill and runs towards the meadow.

10. Meeting of Aeneas and Anchises. Tender embraces.

11. Near the river Lethe, where innumerable souls stop to drink before reincarnation, to prepare themselves for a lasting abode in the Elysian Fields.

12. Anchises shows his descendants to his son. Each figure appears in surroundings associated with its name. Sylvius, the founder of
Alba Longa, Romulus. Caesar Augustus, Numa Pompilius, Tullus Hostilius, Ancus Martius, the Tarquinii, Brutus. The first Consul. The Decii and the Drusi. Titus Manlius Torquatus, Camillus. Caesar and Pompey. Warriors and legislators: Fabricius, Lucius Mummius, L. Paulus Emilius, the Gracchi, the two Scipios. Claudius Marcellus (son of Octavia and nephew of Augustus, who died very young and was celebrated for his noble virtues). Anchises encourages his son to perform noble deeds which are to herald a period of glory.

13. Anchises says farewell to his son and to the Sibyl by the entrance of a white door. Aeneas walks along a road at the end of which the sea and ships are visible.

52nd Picture.

The hall of Augustus (same as in the 50th Picture). In the background appears and immediately fades away, the youthful figure of Claudius Marcellus. Octavia is crying and Augustus standing by her is visibly moved. They all crowd around Virgil who is still under the impression of the splendid visions he has evoked.

53rd Picture.

The villa near Naples. Eleven years have passed since Virgil began the Aeneid. The poem is finished, but Virgil is not entirely satisfied. One summer's night, he falls asleep over his papers. Callicope, the muse of epic poetry, appears and caresses the slumberer. Virgil awakes and has a vision of what he must accomplish. He will have to travel to Asia Minor, where some of the episodes of the Aeneid occur. On his return, after having had these direct impressions, he will be able to correct and complete his poem.

54th Picture.

The same villa. Preparations for an impending journey. Horace, Varius and Tucca arrive. They have heard of Virgil's intention and have come to dissuade him. The hot season is not made for such journeys, especially as Virgil is not well. But he is firm in his purpose, nothing will induce him to give up his idea. He greets his friends affectionately. Before saying farewell, he shows them the manuscript of the Aeneid which he has put away in
a cupboard. In case I do not return — he says — promise that you will destroy it.

55th Picture.

The port. Virgil is leaving the shore on a ship. His friends sadly wave him farewell.

56th Picture.

At Megara, a Greek city on the Isthmus of Corinth. Virgil has a sun-stroke and must interrupt his journey.

57th Picture.

Augustus, after two years in Greece, is on his way back to Rome. He goes to Megara to visit Virgil. He proposes to the poet to return to Italy with him. The sick Virgil is brought on board.

58th Picture.

A storm at sea, between Megara and Brindisi.

59th Picture.

At Brindisi. Virgil has been brought on land, he is dying. His friends stand around his bed. The Poet entreats them to destroy the manuscript of the Aeneid. Last delirium of the Poet. Virgil reevokes a prophecy of the Bucolics (Eclogue IV); and murmurs the verses...

Magnus ab integro saeclorum nascitur ordo.
Iam redit et Virgo, redeunt Saturnia regna;
Iam nova progenies caelo demittitur alto.
Tu modo nascenti puero, quo ferrea primum
Desinet, ac toto surget gens aurea mundo...
...Ille deum vitam accipiet, divisque videbit
Permixtos heroas, et ipse videbit illis
Pacatumque reget patriis virtutibus orbem.,
...Aspice convexo nutantem ponderem mundum
Terrasque tractusque maris caelum quo profundum,
Aspice, venturo laetenur ut omnia saeclo!
O mihi tum longae maneat pars ultima vitae,
Spiritus et quantum sat erit tua dicere facta!
Virgil's grave: restoration work.
At the last words, Virgil expires, but before the end, at the back of the room a lovely Child is seen outlined against a luminous cross.

60th Picture.

Virgil's library in the villa at Naples. Augustus consigns the manuscript of the Aeneid to Varius and Tucca and tells them to publish it in the form in which it has been found. Then he announces to the silent crowd waiting in the garden, that Virgil will live on in his works.

61st Picture.

The tomb of Virgil on the road to Pozzuoli. On the centre of the monument are seen the words of the epitaph dictated by the Poet himself:

Mantua me genuit; Calabri rapuere; tenet nunc
Parthenope; cecini pascua, rura, duces.

Beneath the moon Calliope is seen standing by the tomb accompanied by the other muses. The figures seem to float upwards and form a vaporous wreath about the monument. But suddenly the luminous Cross appears, the sombre skies are torn by flashes of lightning, the Muses flee in terror.

The night is calm once more and a man is seen in profile kneeling by the grave. It is Dante.

Above, appear in luminous letters the words:

O degli altri poeti onore e lume!

Prof. Giuseppe Fanciulli

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THE CINEMA AS A FACTOR IN TEACHING AND CULTURE

(From the Spanish)

The campaign started by the International Educational Cinematographic Institute, to study the influence of the cinematograph in the field of education, culture and science, is worthy of all praise and deserves universal support.

The efforts of all well-disposed persons who specialise in the training of children, in teaching, medicine and hygiene should be directed towards encouraging this initiative. Although the cinema at present is only a simple commercial undertaking, it is destined to become a foremost instrument of culture, directing the mind towards the highest in morals, art and science. Because of the general popularity of the cinema all over the world, representing as it does, a synthesis of human life, it can achieve its ends "delectando pariterque monendo", as no other teaching method could.

It is very unfortunate that the cinema shows such a morbid preference for the lower passions, and even more or less openly exalts adultery. Even historical events are often inaccurately reproduced so as to give a confused and wrong idea, while tales of crime and adventure are so vividly enacted as to constitute a veritable danger for youth.

The greater part of the public which frequents the cinema halls, and particularly children, whose minds are more receptive to objective external impressions, can only derive harm from influences which destroy their moral ideals, encourage them to form disparaging ideas of love, social life and women. They will acquire a false notion of history, the main facts of which are often altered to suit the scenic requirements of the screen, and will often become enthusiastic about a clever delinquent, magnified into a hero. The cinema has a great moral and intellectual influence over people.

It would be absurd to demand that commercial cinematographic firms should reform the world. But it is desirable, for the sake of youth, to have a good production of films depicting real historical facts, moral precepts or dramas that awaken noble sentiments; entertainment films describing travels or instructive films on art and science.

Much attention is due to the child in this field. Cinematography for children should aim at reproducing subjects in the style of the tales of Perrault, the simple stories of De Amicis or the scientific and fantastic adventures of Jules Verne. It should create films showing the ethnical and geographical conformation of foreign countries, and others carefully
selected and adapted for the teaching of history, giving faithful descriptions of true facts. If cinematographic producers were to follow this programme, they would not only secure a numerous and enthusiastic audience keen for instruction and amusement, but would no doubt receive the help of all Governments which include in their programmes, the spiritual and moral protection of the child.

The actual reform of cinematographic films, should proceed simultaneously with the improvement of theatres, which should be adapted to the requirements of youthful audiences. We know of halls in several South-American and some European countries which present many disadvantages. Want of fresh air; seats made for the accommodation of adults may be harmful to children; captions written in small print and vivid colours are trying to the sight of the spectator; from the back seats, the writing on the screen often appears indistinct. All these drawbacks strain the sight of the child whose visual faculties are slightly below the normal, and may be the cause of serious defects.

To recapitulate what has been said on the subject and without wishing to dogmatise, but basing conclusions upon our personal experience of public and private cinematographic performances, certain points can be fixed as a general rule.

1. The production of films for children and young people should be encouraged. Subjects should be adapted to their intellectual standard. The popular adventures of Jules Verne, the tales of De Amicis could be reproduced with an accurate rendering of historical facts, and documentary films of travels, moral and ethical plays depicting life in a pleasant and wholesome form. The applause with which Pathé's films are greeted show to what extent such cinematographic performances could be successful.

2. The cinema as an aid to teaching can be used with greater advantage for secondary instruction than in elementary schools.

3. In the reproduction of historical facts, the truth must be closely followed. If the mind of the child is crammed with false ideas, the work of the teacher will be twofold. He will have to correct the mistaken ideas and counteract the false impressions received by the child during a cinematographic performance by teaching him the true facts over again.

4. Love dramas exciting the nervous system and exalting the imagination of highly strung children, should be banished from the programmes of films to be projected in the presence of children and adolescents. Some films can produce such strong impressions as to give rise to mental disturbances to weak temperaments, incapable of curbing the will or controlling the instincts. Neurasthenic subjects finding themselves under such influences fall victims to their imagination and believe themselves to be the real actors in the plot of the film. They are transported into a world of fantasy and cease to be subject to any of the restraining influences which judicious education should exercise.
5. The cinematographic halls for children must be technically adapted to their requirements. Good ventilation, right-sized seats, prohibition to project captions in small print or in vivid colours especially in red. Normal distance of screen, so as not to tire the eye-sight.

The creation and the work of the International Educational Cinematographic Institute justify our hope that effect may be given to these few points, to the advantage of the whole community.

Jorge Wils-Pradilla
THE CINEMATOGRAPH IN SCIENTIFIC TEACHING AND RESEARCH

In this article I will treat with what is, perhaps, the most important phase of scientific cinematography,—the application of the motion picture to educational methods, and its potentialities as a vehicle of research in experimental science.

If only the cinematograph had existed in their time, we might have had the wonderful philosophy of Darwin, the theories of Locke or Lubbock, materialised on so many feet of film, and bequeathed to posterity, to enlighten and assist the peoples of all ages. Now, however, that cinematography has come into its own as an educational factor, and that its possibilities in the service of science are no longer disputed, it remains for us to put into practical form the teachings of its philosophers,—to prove the real value of their deductions, and, incidentally, to perform an invaluable service to humanity.

The national necessity for scientific education is imperative. The modern man is too prone to forget how much he owes to science, because so many of its wonderful gifts have become, as it were, part and parcel of his everyday existence. Familiarity has begat a certain amount of contempt or carelessness as to the origin of the inventions that help to make their existence tolerable. Scientific study in the schools, at the present time is nothing far short of a farce. Even where students are allowed to conduct experiments in the laboratory, the nature of the work is of such a limited and stereotyped character as to render the results almost worthless. Little scope is allowed for personal research,—it is simply repetition of certain performances which are no longer experimental. It is a simple matter, then, to explain why there is so very little progress in scientific teaching. In this, as in so many other matters, we are the victims of convention. The existence of the cinematograph almost justifies a complete educational reformation. It has certainly sounded the death knell of the text book, in very many directions. The visual method of instruction is one which has to come; why, then, further delay.

Sir John Herschel, has impressed upon us that «it can hardly be pressed forcibly enough on the attention of the student of Nature that there is scarcely any natural phenomenon which can be fully and completely explained in all its circumstances, without a union of several, perhaps all the sciences». It is necessary then, to complete, the code of scientific study before it can become of any real value.
One can almost imagine that Locke had in mind the discovery of some such invention as the cinematograph when he said: «That discoveries, innumerable, marvellous, and fruitful, await the successful explorers of Nature no one can doubt». «We are so far», he says, «from being admitted into the secrets of Nature, that we scarce so much as approach, the first entrance towards them». Then again Sir John Lubbock, asks, «What would one not give for a science primer of the next century, for, to paraphrase a well known saying, even the boy at the plough will then know more of science than the wisest of our philosophers do now?» This is indeed true, and it lies quite within the power of the cinematograph to bring about this desirable state of things.

Herschel told us that «we may expect a constant increase in the physical resources of mankind, and a continual accession to our power of penetrating into the arcana of Nature, and becoming acquainted with her highest laws». Sir John Lubbock makes the same complaint, that has so repeatedly been made by writers on the Cinema, as to the misguided method of our educational authorities in their system of teaching. «Though so much» he says, «has been said about the importance of science and the value of technical instruction, it is unfortunately true that, in our system of education, from the highest schools downwards, both of them are sadly neglected».

I would also commend the words of Sir John Lubbock to all those who have at heart the instruction of the next generation. «Too much concentration on any one subject is a great mistake», he says, «especially in early life. Nature herself indicates the true system, if we would but listen to her. Our instincts are good guides, though not infallible, and children will profit little by lessons which do not interest them». It is our duty, then, to amuse as well as instruct,—and what is more capable of achieving this than the cinematograph? The true power and value of the motion picture lies in the best of which it is capable, delectando pariterque mouendo.

THE CINEMA AND BOTANICAL STUDY

As biological science advances, and the cinematograph is beginning to be seriously recognised as a potent factor in scientific research, the experimentalist is now able to obtain glimpses of fields of thought, the mere existence of which was practically absent, even in the most imaginative of earlier scientists. The new means of interrogating Nature — viz, by the employment of cinematography, and the wider views of the functions of living beings, — have together proved the means of enriching our stores of culture. In no department of science has the advance in question been more plainly seen, perhaps, than in the field that the botanist claims as his own.
The modern student of plant life no longer regards the objects of his study as so many things which merely demand classification and arrangement, and whose history is exhausted as soon as a couple of Latin or Greek names have been appended to each specimen. On the contrary, the modern botanist — especially at this season of the year — seeks to unravel the mysteries which hedge about the living actions of even the humbles plant that decks a wall or tints the stones with its delicate incrustation.

To the cinematographer the plant is no longer a kind of half inanimate being, but stands revealed in so many feet of film as an organism exhibiting sensitiveness, often showing likes and dislikes, possessing its own way of life, and governed apparently by instincts which, in their degree, are certainly as well defined as are analogous traits in the existence of the animal.

The cinematograph renders it possible for us to study what I may legitimately term "instinct", in plants; the phenomena witnessed in the «climbing» movements of certain forms may be selected. We have found that plants possessing weak stems may climb and support themselves in different ways. Again, we have noticed that, whilst certain climbing plants appear to climb in one fashion, others exhibit an opposite method of obtaining the same end. Certain films, for example, have shown us that of plants which twist their stems around fixed objects by far the greater number twine from left to right, or contrary to the direction of the sun. We have proved, by means of the cinematograph, the philosophy of Darwin to be correct, at any rate, with regard to botanical science. Darwin showed us the still rarer case of plants, each of which twines for somuch of its length from right to left, and in another epoch from left to right. In these simple observations the cinematographer has discovered the existence of instincts of plants. «Instinct», if defined as blind habit, or as automatically carried out action, in which consciousness plays little or no part, would certainly appear to be the term applicable to the causes which lie at the bottom of these remarkable movements.

The cinema beyond dispute to the careful observer has proved that Charles Darwin had indeed discovered in many instances, merely by the aid of constant research and a wonderful philosophy, the very origin of life. Darwin, in one of those researches which must remain for ever classic in its nature, describes in detail the features exhibited during the growth of a young hop plant. When the young shoot appears above ground, the first joints of the stem grow straight and remain stationary. As soon as the next joints are developed, however, they may be seen, not merely to bend in a curious way to one side, but they also move round from right to left. What scientific instrument can more closely show that an essentially similar process is observable in all twining plants than the cinematograph.

Now, the explanation of these peculiar movements of revolution is a matter which naturally claims and demands the attention of every lover
of Nature. Even to the general type of cinema patron, to comprehend the causes of these movements is an easy matter when a series of pictures is thrown on the screen in proper sequence. Doubtless these laws themselves have been determined and initiated by external condition, but as we see them presented by the unerring eye of the cinematograph of to-day they appear to originate from deep-rooted causes, which, in truth, form part and parcel of the plant constitution.

Very curious revelations await the cinematographer who dips into the habits and instincts of climbing plants, and I would here put forward the suggestion to these gentlemen who have done so much for scientific cinematography that they turn their attention to this interesting species of plant life. They will probably learn that the shaking of a plant, by its removal from one place to another as it grows in its pot, will cause its twining impulses to be suspended for a time. They will also observe, that the «twiners» climb their supports as a rule, and whilst such a climber as the «ivy green» will attach itself by its false roots to a thick stem, the hop, honeysuckle, and all true «twiners» affect supports of delicate calibre.

From this brief consideration, of the function of twiner and climbers in plant life, the experimentalist may be led to still deeper questions of the philosophy of organic nature. Can the cinematograph show us the reason for these plants becoming so developed? Were the «twiners» antecedent in time to the tendril-climbers, or are the latter the more primitive of the two types? The answers to these queries are naturally important, as bearing upon the fundamental problem which underlies all biology—the origin and development of the varied forms of life that people our globe. Whether or no it is possible for the cinematographer to find an answer matters not for the present. At any rate, there need be no halo of mystery existent around the nature of climbing habits in plants. It is quite within the capabilities of the motion picture to show us all these things, and from them we can carefully form our philosophy, and direct our forces of investigation in the correct channels.

**THE MOTION PICTURE IN SURGERY AND MEDICINE**

The cinematograph, used in conjunction with the microscope, becomes the most effectual investigator science has ever known. By their use we are able to study the living movements of Nature's smallest creations. That which was a few years previously, regarded by the experimentalist as an «unknowm quantity» is now a visible organism, having life and motion. The value of the cinematograph as a demonstrator is unequalled, and it is for this reason that the motion picture is destined to become an indispensable factor in our everyday life. Prevention is always better than cure, and far less expensive. The cinematograph can show us what precautions are necessary in order to avoid the scourge of disease. Therefore,
those engaged in the business of cinematography should do all that is possible
to bring the potentialities of the motion picture in this direction before the
notice of those in authority.

Very little time elapsed between the invention of the microscope and its application to public service. Why, then, this delay with the cinematograph?

In «The Cinematograph and Natural Science». I have devoted considerable
space to the subject of the utility of the motion picture in operative surgery. There is clearly shown, in the remarks by Dr. Doyen — who has done such
notable work, with the cinematograph — that the motion picture can be of
the greatest service in demonstrating operative methods to medical stu-
dents. Dr. Doyen refers to what he terms an «unexpected peculiarity of the cinematograph». «To the Surgeon» he says, «who entrusts it with his operations, it becomes a valuable master. It is thanks to this mar-
vellous instrument that I have been able to improve my technique and eliminate all useless manipulations». Then, later on, he says, «The cinematograph is within everybody's reach. To the professional man, its manage-
ment presents no difficulties. The one indispensable factor in the attain-
ment of good results is the choice of a well lighted operating theatre... As
far as the patient is concerned, there is no diminution in safety, for, when about to operate under the eye of the cinematograph, your preparations will be made with exceptional care».

Thus, then, we see how the cinematograph can be of service in the lecture room and operating theatre. But the work should not stop here. What is needed, perhaps, more than anything else is a convincing demon-
stration of the many ways in which tubercolosis may be inoculated. The evils of the drug habit and our national curse of drunkenness might also be
made the subject of motion pictures. More experimental work, is necessary with the cinematograph. The boy or girl at school should be instructed in a more practical way on the subject of physiology. It is all very well for us to be told that in our bodies we have more than 200 bones, over 500
muscles, that the heart beats over 30,000,000 times in a year, and that the brain contains no less than 600,000,000 cells, each cell consisting of several thousand, visible molecules, and each molecule again of many millions of
atoms. All this is admittedly very wonderful, but such knowledge will not prevent that boy or girl catching cold or becoming addicted in later life to the drink or drug habit.

In his essay on «The Hope or Progress» Sir John Lubbock, says: «It is, indeed, as true now as in the time of Newton, that the great ocean of truth lies undiscovered before us... Who can say on the verge of what discoveries we are now standing? It is extraordinary how slight a barrier may stand for years between man and some important improvements... Take the discovery of anaesthetics. At the beginning of the century, Sir Humphrey Davy, discovered laughing Gas as it was then called. He found
that it produced complete insensibility to pain, and yet did not injure health. These facts were known to our chemists; they were explained to the students in our great hospitals, and yet for half a century the obvious application occurred to no one. Operations continued to be performed as before; patients suffered the same horrible tortures; and yet the beneficent element was in our hands; its divine properties were known, but it never occurred to anyone to make use of it.

By these remarks, then, we see the great evil of hesitancy or procrastination. Who knows what remarkable discoveries await the diligent investigator with the cinematograph? If our scientists and medical men truly have the future welfare of the race at heart, they would be in grievous error if they failed to avail themselves of this wonderful power of investigation.

THE TEACHING OF HYGIENE

It is only a few years ago since the first demonstration of scientific films was given in London at the Incorporated Institute of Hygiene. It is to be regretted that such a long time has been allowed to elapse before the British Scientists have given their serious attention to this excellent means of imparting knowledge. For many years now the cinematograph has merely been regarded as one of the many forms of amusement which are provided for the masses. Much useful work could have been done in illustrating matters connected with preventive medicine and common dangers to health, such as the fly pest, stagnant water, etc. Illustrations of domestic science, as applied to the home would be an important feature, and the various incidents of child life and the care of the infant offer excellent subjects for motion pictures. At the Incorporated Institute of Hygiene some time ago films were shown of the "blood dust" and the corpuscles of a sucking rat and fowl, magnified many hundreds of times. It was shown, that, while the blood corpuscles of mammals were of circular form, those of birds were elongated or oval. Then followed pictures illustrative of the dangers of infection carried by the common house fly. Firstly, the flies were shown actually laying their eggs in a piece of putrid meat. Then followed the rapid development through the stages of grub or maggot and pupa or chrysalis, to the actual emerging of the wingless fly, which, eleven days later becomes a full grown insect. The flies were then shown clustering thickly round some foul fish, sucking up the putrid exudations with their tongues, to settle a moment later on a basin of sugar on the teatable!

The manner in which tuberculosis may be carried from the aged to the young by the housefly formed the subject of another excellent series of films. The flies were shown crowding in and around a cuspidor, then the picture showed the flies walking over the teat of a baby's feeding-bottle. Then a final picture showed the infant drawing into his healthy system (if he were actually using the infected feeding-bottle) thousands of microbes
responsible for the most terrible diseases! These pictures which indeed, would appear repulsive in the extreme to the average spectator — were unmistakable in the lesson they conveyed. These were the type of films that would impress upon the community the importance of cleanliness far more than any lecture or teaching could ever do.

Dr. A. T. Scholefield M. D., tells us that «there is nothing more difficult than to know how to help the poor without injuring them». He believes and it is indeed true, that certain of the poor will always be poor, whatever is done for them, and the surroundings will always be as insanitary as they are allowed to make them. This is perhaps a pessimistic view, and one that the scientist desirous of improving the conditions should not allow himself to hold. Now is the time for the cinematographer to step in and illustrate the most valuable hints that can be given to those of the poor who would not begrudge ten minutes in the two-hour programme with which they are provided at the cinema theatre. The craving for amusement, with certain individuals, must apparently be satisfied, even if at the expense of a sick child. We must, then, take advantage of this circumstance, and do all in our power to blend instruction with amusement, in as judicious a manner as possible.

THE CINEMA IN THE SCHOOLS

The trained teacher, as manipulator, will certainly follow the institution of the cinematograph in the schools; whilst the training colleges, it may be logically supposed, will automatically adopt this method of work, and what may, in the first instance be left to public enterprise, will ultimately become a State matter of the highest educational importance. The step already taken in this direction by the British Education Department should be enthusiastically received by the entire scholastic community.

The first task will be to clear away all growths which have cropped up under the system which has allowed head-teachers and inspectors to crowd subjects into the already overloaded curriculum, until the overburdened child is incapable of taking more, or even of properly digesting what is now placed before it.

Nor need the scientific and mathematical sides, too often illustrated merely by chalk and blackboard or stilted and worn-out experiment, be neglected.

Thus it will be seen that the educational film is destined to become a great power in the training of the next generation. The film industry itself has with characteristic alacrity, developed the educational branch of cinematography, even while its advocates were pleading the cause of its desirability.

LEONARD DONALDSON
Author of «The Cinematograph and Natural Science», Cinematography for Amateurs, etc.
THE CINEMATOGRAPH AS AN IMPORTANT FACTOR IN THE INVESTIGATION OF OCCULT PHENOMENA

From the German

The cinematograph makes it possible for many thousands of people to view on the screen the movements and events of certain things which, under ordinary circumstances they would be unable to see; and gives to the spectator almost the same impression, as he would have received by witnessing the real events. Besides that, there is the so-called chronomicrocinematography which is invaluable to science, especially for the research and uptake of events unfolding themselves with such rapidity, that the naked eye cannot perceive them or distinguish their various phases. With the help of this contrivance, we can analyse movements and thereby understand their workings, see how action begins and attribute results to their original causes.

The cinematograph is therefore, a valuable help for the scientific investigation of so-called occult phenomena, and for demonstrations thereof. Unfortunately, up to now the cinema has only seldom been put to such uses. As a rule, one was satisfied to show the scholar or the general public, the results of certain investigations, probably obtained by other means. But of course such films have no demonstrative value.

I am well aware of the fact, that the opinions as to whether and to what extent occult phenomena can be scientifically proved, are very divergent. Although none of us are in the position of having a definite opinion as to the actual existence of occult phenomena, one can at least say that with regard to telepathy, prophesy, clairvoyance, apparitions, materialisation of ghosts, etc. etc., one does not as may be supposed, deal with questions which have been investigated by science in an attempt to solve the problem, only since the last decade. It is on the contrary a very old question which preoccupied the folks of the ancient classical periods, the peoples of oriental civilisations and even uncivilised populations. Whole libraries could be filled with the books written on that the subject, during these last centuries. Towards the end of the 19th Century, many physicians and intellectual men have examined these works. In the course of their studies, they have observed that hypnotism, which to a certain extent is connected with occult phenomena, although not considered a science some twenty or thirty years ago, is now recognised to be a real phenomenon. However, all the attempts made by the students of occultism and the voluminous literature on the
subject written by pseudo-scientists, cannot convince those who, having studied the subject critically, do not believe in clairvoyance, materialisation of spirits, etc. This is the current state of things; not only in Germany, but in all civilised countries. Everywhere, only a small number of scientists believe in the reality of this or that occult phenomenon. This does not imply that their opinion is wrong in every respect. Under these circumstances, it is obvious that all those who seek the truth, should aim at developing and rendering more precise the scientific methods adopted for the examination of these problems. Therefore, one has used photography and partly also cinematography for investigative purposes. But since then, there have been many cases in which the critics based their theories on the assurances of occultists; as for instance, the late Baron von Schrenk-Notzing, who published photographs, which he thought could be considered as genuine. It was however unconditionally proved, in each particular case, that these were the results of machinations operated by the medium, to deceive the investigator. This is the reason why, mediums and experimentalists are now loath to photograph their productions. To justify this reluctance, one now brings forward the argument that the nature of occult phenomena, at the time of tele-cinematic performances or materialisations is such, that mediums cannot be exposed to day-light. The room must be darkened or at the utmost, illuminated by a feeble red light. Mediums suffer from psychological shock, endangering their health, when awakened from trance by sudden shaking or by the effects of flash-light at the moment of taking the photographs. I do not wish to prove that the opinions of occultists on this matter are very contradictory, but only to mention that it is to be regretted, from a scientific point of view, that mediums and ghosts do not, apparently, like to be photographed.

It is obvious, that if it were possible to take cinematographic pictures of these occult phenomena, if such they really are, it would be extremely valuable to science. One should be able to photograph, besides momentary action, also the phases of materialisation, as demonstrated by Eva C. or the development of tele-cinetic movements shown during a sitting at Baron Schrenk-Notzing’s, by Willi and Rudi Schneider. A single cinematographic film showing an event of this description, would be more persuasive to those who study the question with a critical eye, than a dozen voluminous books recording reports and memorandums. As mentioned by Baron Schrenk-Notzing, in the preface of his work dealing with materialisation phenomena (Munich, 1914, page 31), he has attempted to take cinematographic pictures of the medium Eva C. Unfortunately, although this film was taken with an apparatus having special electric lamps and equipped with great care by Schrenk-Notzing, it gave — « no results », — as he himself laconically remarked. Whether Schrenk-Notzing admits that he was incapable of taking a cinematographic film of Eva C.’s performances, or whether he only wishes to imply that the results were not worth recording, is not clearly
stated in this short remark. After witnessing the results of several very obscure experiments, we have unfortunately every reason to doubt the absolute honesty of Schrenk-Notzing's investigations.

I do not consider it improbable that cinematographic pictures have been taken, but not published, because the sceptical observer might have found some arguments against the genuineness of the performance of materialisation given by Eva C. This consideration applies particularly to the case; after the revelations published lately, with regard to this medium.

It is supposed that telepathic mediums have the faculty of moving objects placed beyond their range, without touching them. For instance: of winding up a musical-box at a distance of three metres, or of picking up a handkerchief and waving it in the air, etc. In Schrenk-Notzing's book on tele-cinetics, many such experiments are described. With the taking of a single cinematographic film, it would be possible to ascertain whether the statements of Schrenk-Notzing are true. Namely, that a supernatural composition of fluid, called pseudopodium, streams from the body of the medium and reaches out towards the handkerchief, or winds up the musical-box, and, after having accomplished these somewhat ridiculous actions returns to the body of the medium; or, that it is the trick of a conjurer. There are many important facts which point towards this last solution. Cinematography would enable investigators to see clearly into the matter and make sure whether it is a real occult phenomenon or a swindle.

The cinema can be used with the same results, to explain the mystery of haunted houses, which, as the case may be, are heard of yearly. Up to now, one was content to record the vagaries and hearsay of all sorts of eyewitnesses and the testimony given by the inhabitants of the haunted house. The medium acting the ghost scene is usually to be found amongst them; as a rule, it is a young boy or girl. Such films, shown sometimes in the law-courts, give the irrefutable explanation of the mystery. Therefore, the next time such a ghost story arises, it would be advisable to send on the scene, a cinematographic operator who could record his evidence on the film. Some progress would thus be made.

Even in cases of so-called pseudo-occult phenomena, such as telepathy clairvoyance, etc., etc., the cinema can be used with advantage. Often experiments have been made, but always with bad results. The film which was then produced by a well known German cinematographic firm, has therefore never been publicly projected. It was filed in the archives of the film factory.

Here are the facts: At Bernburg, a small town in the province of Anhalt (Germany), the school master Drost, an amateur spiritist, thought that with the co-operation of clairvoyant mediums hypnotised by him, he would be in the condition of discovering and explaining crimes. An apparent success recompensed his first attempts. Later, I was able to prove indisputably, that the whole thing was a mystification. However, the good and
impartial comments of the Press and the astonishment of his no less impartial clients, praising the performances of his mediums, encouraged him in the conviction, that his so-called criminal-telepathy could be of use. But in the course of time, and through reasons that have no importance here, he must have come to the conclusion, in accordance with the interpretations of the attorney-general, that his mediums were not capable of performing what was expected of them. An accusation of fraudulence was brought against him. I acted as expert in the trail. Although the case was considered suspicious, Drost was acquitted. The written accusation proved beyond every doubt that, in the 40 cases thoroughly discussed during the session, there was absolutely no question of actual clairvoyance. The Press, which is only interested in sensational events and whose correspondents seldom have the necessary knowledge to understand such questions, certainly did report that criminal telepathy had been sanctioned by the law-courts. One of the consequences was that an important editorial office in Berlin, took the copyright for the works of Drost, and a film factory of Berlin made cinematographical pictures of his experiments. Of his works, only one short biographical sketch has appeared in a magazine. It is full of untruths and inaccuracies. The experiments with the cinema were not more successful.

The experiments tried, were as follows: Drost and a medium hypnotised by him, stood on the stage of the cinematographical theatre, a notary and an inspector were present and had to vouch for the faithful recording of the experiments. For instance, a dice-box with 3 dice was thrown on the table. The medium was to say what numbers figured on the dice, without uncovering them. Simultaneously, these proceedings were recorded by writing and on a film; the experiment was an extremely simple one, for a medium who was supposed to practice criminal-telepathy. Several experiments of this description were made, but the medium had no luck; he never guessed the correct figures. Another experiment was tried with a watch, whose lid was closed. The needles were turned so that even Drost was ignorant of the time they indicated. The medium was not more successful, even during this experiment. A third trial was then attempted at criminal-telepathy. The medium was to give the explanation of a murder which had been committed at Potsdam. However, the mystery of this case, has remained unexplained to this day, notwithstanding the fantastical indications of the medium.

The possibilities for the cinematograph to develop into an instrument for the investigation of occult phenomena, are exceptionally manifold. I have no doubt that this method could be applied in many ways, if a serious interest were taken in the question. Perhaps it is the mission of the cinematograph to contribute materially to the solution of this very ancient problem, which, in our modern times, has again awakened deep interest.

Dr. Albert Hellwig
Director of the Provincial Court of Justice.
Potsdam
SHOULD WAR FILMS BE SEEN BY CHILDREN?

(From the French)

This question has now been answered in the affirmative by some countries, but in others school censorship committees still forbid boys and girls under 16 — unaccompanied — to witness war-films, which are thus, in fact if not with intention, placed on the same footing as demoralising and pernicious films.

This absolute veto, which even applies to an impartial document like "Verdun" by Léon Poirier, is obviously inspired by the best intentions. Taking into consideration the extreme sensibility of children and the suggestive influence of the cinema on many highly nervous temperaments, these "protectors" of children leave to the parents alone the responsibility of revealing through the screen the most terrible of all calamities, fratricidal war, the odious conflict of human bodies and human souls.

And what is the parents' decision? Will they not naturally prefer "Shoulder Arms!" to "The Big Parade", in other words, the comic to the tragic? No doubt, laughter and gaiety are as necessary for children as they are for adults, but what idea of war will the men and women of to-morrow derive from all these scenes of "fun in the trenches" with Charlie Chaplin in the midst of it, if the other side of the picture is not shown? If you ask them what war is, they will imitate a soldier turning a somersault or parody the man who surprises the enemy by camouflaging himself as a tree. Are they to learn the meaning of war from buffoonery of this kind, more ridiculous than the wildest Punch and Judy shows at a village-fair? This might be all very well, if no children were over 10, at which age they may well be kept ignorant of passion and bloodshed. There are, however, others who, without being trained in a militarist sense, must be prepared for the struggle of life. By showing to the young the sad scenes of farewell, the tears of those who are left behind, the endless fields of wooden crosses where the golden corn should be waving in the breeze, are we not applying the homoeopathic remedy of driving out one evil by means of another? In the case in point, we have to create an intelligent as well as an instinctive horror of war by cinematographic documents borrowed from war itself. By the time that the whole of the next generation all over the world is imbued with the spirit of peace nurtured by hatred of slaughter and when the right to live confronts the helmeted spectre of death, will it not be more difficult for conflicts to arise out of some slight to a country's
amour-propre or from some economic or financial cause? Will not the old antagonisms yield to a single strong and unanimous determination — the overwhelming and righteous desire for peace? The cinema can contribute towards this new ideology and morality by a wise choice of war-films, the aim of which will be the pacification and transfiguration of mankind.

It is the mission of the Educational Cinematographic Institute first to collect and then to disseminate all films of a nature to create the new spirit. Backed by a special visa granting them customs exemption at frontiers, these films should be shown in schools in the same way as historical, scientific and travel films, censorship committees in each district being, of course, the ultimate judges as to the expediency or otherwise of showing the film.

EVA ELIE

A RECOMMENDATION

Could not the International Educational Cinematographic Institute — which has already done so much — undertake to go through all the films for the young now in the process of manufacture, with a view to drawing up a list of those which are of an instructional or recreational character? It would no doubt be a heavy task, but what a help to organisers of cinema performances for children. Such a list, accompanied by any remarks which the selected films might suggest, would be equally appreciated by the local censorship committees. The International Educational Cinematographic Institute could undoubtedly supply information which would help committees in deciding to authorise or refuse permission for certain films.

Then, perhaps, we should no longer find the scene in which a young cabin-boy defends with his fists the honour of his captain and his ship cut out of Jackie Coogan's cabin-boy film on the grounds that it might prove a bad example to children! Similarly, the same captain might then be allowed to kiss his fiancée on the lips in the American fashion. Are children supposed never to have seen couples kissing in this way, in real life? On the other hand, if we had this useful list, cinemas would surely be required to inform their patrons that "The Woman and the Marionette" is not a film for children, even when in the company of grown-ups. All those simple-minded mothers who had not read their Pierre Louys took their children to see this film, because, as they said, there was a doll in it. There was also, be it added, a naked woman.

Unaccompanied, children were permitted to applaud "The Iron Mask" with its amorous intrigue, its duels, murder and attempt at poisoning. But they were forbidden to go, except in adult company, to "The Mark of Zorro" as being too violent and to "The Last Round", which was a modern rendering of the old battle between David and Goliath.
May this motto on the arms of Geneva continue to inspire the International Educational Cinematographic Institute.

E. E.

The note by our contributor Eva Elie raises one of the most delicate and important problems with which the screen is concerned in its relation to the minds of young people. Is it desirable, the writer asks, that children should be allowed to see war-films and, if so, what limits should be set to the representation of these films?

This is certainly not a question which permits of a categorical reply in either sense. It must and should logically involve practical and theoretical examination. Practical — in order to discover, by means of an enquiry conducted among different categories of children of all ages and, especially, of all countries, whose parents took part in the Great War either as actors or spectators, what traces have remained to influence the child’s mind, what vital elements the child may have extracted from its impression of the tragic events which convulsed our world for several years, whether that impression itself is indirect, whether it is more or less distorted or whether it has been, as it were, “domesticated” by forms of art the aim of which is to seek the suggestive and emotive in life, divesting it of its more crude and painful aspects.

The question is deserving of theoretical study by psychiatric experts, psychologists and educationalists in order to analyse the effects which scenes of horror, death and destruction may have upon young and growing minds.

War is an historical fact. More than that, it is an essentially social and biological fact. In judging cinematographic reproduction, we must take account of the value of the representation as a mere exposition, that is, a reproducing and recalling of documentary facts, or as a creative narrative. In the latter case, the film belongs to the realm of the imagination, in the former, it is no more than a piece of documentation.

We must therefore examine by two different criteria the value of film projection, according to whether it depicts real events, even of a remote date, which children and young people may never see again, or an invented story which has only the appearance of reality but which derives its raison d’être from other aspects of life and another emotive basis.

It is difficult therefore, if not impossible to say in advance whether a documentary or a dramatic film (a simple document may itself be dramatic) is useful in educating the minds of the young or whether both are dangerous and furnish material for suggestions which go beyond the limits of knowledge pure and simple.

In any case the documentary is of undoubted value to dramatic fiction. It states facts. It permits of a true and live representation of phenomena. As such it lends itself better to oral comment by whoever assists at the projection of
the film and may wish to extract from the facts the theory necessary to the formulation of ideas. Its appeal to the emotions is less, it gives a less false or misleading version of the facts which it seeks to present; it shows life, or one of its aspects, in the raw, just as it is, without the trappings of fiction.

War is not heroism alone. It is also tragedy, death, destruction, however inevitable these may be. And when it is combined with sentiment or an artificial plot, it loses its aspects of truth and even confuses and misleads the spectator.

For this reason the war film as a document might perhaps within certain limits be shown to children and young people accompanied by the necessary comments. This would apply less to dramatic films.

But, we repeat, the question will remain unsettled until an enquiry based upon practical data and a scientific study of children makes it possible to analyse the value of war-films in their relation to time, and to the age, sex and even nationality of the children who are to be the passive subjects of such experimentation.
CINEMATOGRAPHIC EXPEDITION IN THE YEMEN

(From the French)

To many people, the word Yemen conveys little or nothing. Few know that in the S. W. of the Arabic peninsula, between the latitude of the Cancer and the Equator bordered on the one side by the Red Sea and on the other by the Indian Ocean, there exists this independent Arabic Imamate. Its inhabitants lead a strange life coloured by the traditions of ancient times. In certain districts medieval customs are still unaltered.

The Europeans who have ventured inland can be counted on the fingers of the hands. Religious fanaticism, prohibits the cinematograph, broadcasting and even gramophones. The attempts made by foreigners to take cinematographic views of the country, have hit against insurmountable obstacles and have not been crowned with success.

The desire to aquaint people with this country and its unaltered feudal system, its vestiges of ancient culture and the various types of inhabitants and their strange customs, have induced the “Mejrabpomfilm” (Moscow) and “Prometeus” (Berlin) to organise an expedition in the Yemen with the purpose of taking a documentary film, showing this country in its manifold aspects. It is hoped that this cinematographic expedition will be more successful than others have been.

In May 1929 the Soviet steamer “Dekabrist” sailed from Odessa bound for Hodeida — chief port of Yemen on the Red Sea — with the “Mejrabpomfilm” and “Prometeus” expedition on board. The chief manager was V. Chneiderov and the operator I. Toltschan. The expedition was provided, besides the apparatus and films, with many presents for the local authorities and the population.

The steamer passing Port-Said and the Suez Canal, entered the Red Sea two weeks after having left Constantinople. At a few miles from Hodeida, the party was transshipped on local sailing boats (sambouki) and finally landed at Hodeida.

On the morrow of his arrival, the manager V. Chneiderov, chief of the expedition was received by the Prince Seif-Il-Islam Mohamed, administrator of the Tihama desert region, on the coast line. After going through the ceremonies of reciprocal salutations and speeches of welcome, the expedition offered the Prince a portable cinematographic apparatus for projection “Gog” with a dynamo and an assortment of Sovietic films. The perpetual snows of the film “Pamyr” made a great impression on the Prince and his household, many of whom had never seen snow.
The Prince being informed of the aims of the expedition, allowed the party to station at Hodeida and to make tours in the neighbourhood. For a beginning it was pretty good.

Working conditions were incredible. During the day-time the thermometer marked as much as 165° to 170° F. Even at night the heat kept up to 104° to 113° F. The air is damp and unhealthy. The water is not fit to drink and one is obliged to make provisions of water when a ship lands in the port. The natives drink the nauseous brackish water of the wells. Besides tropical malaria, various diseases are endemic here.

The town population consists of officials, soldiers, merchants, fishermen, artisans, dock-labourers, and the workmen of the coffee magazines. Agriculture is much developed. Certain districts in Tihama yield up to four crops a year. At Hodeida the coffee is cleaned and sorted. It is cultivated in the higher regions of Djebel. The Yemenites are a very fanatical population and strict Moslems. It is therefore, almost impossible to photograph the women whom the law obliges to wear the tchartchaf. Still, notwithstanding all the difficulties, we have been able to record on our films, the customs of the natives and also the life of the women. We organised a small caravan composed of mules and camels. Escorted by soldiers we crossed the desert and penetrated the mountainous region of Djebel, thus reaching the land of the ancients, the mysterious country of Afr.

After travelling a few days, the mountain chain of the Djebel is seen against the horizon. The landscape changes. Instead of treading on sand, we pass through rich, cultivated land and groves of flowering oleanders. After a last halt in a bedouin village, the caravan crosses the mountain pass Vadi-Khidijan where the road is indicated by the bed of a dried up torrent. Instead of the few chamois we saw in the Tihama region, we meet these lizards of many colours, venomous serpents, chameleons and herds of monkeys, somewhat like dogs.

After a stiff climb, we leave the tropical jungle behind us and arrive in a mountainous region. The slopes are cultivated with maizes, millet, coffee, etc. The coffee grown here is known all over the world by the name of Moka. It is the principal stock in trade of this country.

Yemen is divided in two parts: the lower and desert-like coast (sands of Tihama) and the mountainous regions (Djebel). After abandoning the Tihama with its scorching sun which is almost deathly to Europeans, our expedition penetrated the mountains of the "Afr country" the "Blissful Arabia" of the ancients. Here, in the days of yore, hundreds of years ago, the prosperous south Arabian States flourished. Nimjar, Shieba and others. One can still see, on the fringes of the desert Rob-el-Khali, some vestiges of ancient Shieba (Mareb), the residence of the mystic queen of Shieba.

The dwellings of the former feudal lords are still visible in the Djebel.
Enormous mountain groups, overgrown with a rich vegetation, tower around us. On each summit cluster castles and villages, like eagles’ nests. In truth the Yemen could be called, "the land of breezes."

From these summits down to the plains, the cultivated fields spread in terraces, like plateaux. They have been tilled by generations and generations of Yemenites for more than ten centuries. These fields are planted with millet, maize, coffee and other cultures.

The name of "Blissful Arabia," which has been given to this region is justified and comprehensible. It is a veritable Eden for the wild nomad tribes of Najd and Hejaz, or for the inhabitants of the burning Tihama, when they come to this magnificent land, where cool springs gurgle under the shade of orange and lemon trees, where bananas grow and flowers bloom in profusion.

We ourselves, were agreeably surprised when we came away from the Tihama. The climat changes suddenly. The unbearable, torrid heat is mitigated by a fresh and pleasant breeze. The thermometre marks 95° F. in the shade, which to us seems little.

We camp at Houssel, typical Yemen village. At the summit, the manor of the shiek, a landed feudal lord, dominates the landscape. It is a white-washed three storied house. The windows have sculptured orna-
ments, the panes are made of semi-transparent alabaster. Below, the delapidated stone huts of the peasants are scattered in the fields which spread out in soft declivities along the sides of the mountains. This terrace land is propt up by walls.

From morning to night the peasant is at work, ploughing his fields, but the greater part of the harvest belongs to the shiek. Frthermore, the Koran prescribes that one tenth of the harvest should belong to God.

We were surprised to see that all the villages are perched on the top of the mountains. This, we were told, is not done as a means of protection, but to benefit of the air which at this altitude is damper. How does one, at such a height, transport the water supplies, combustibles, and the fodder for the cattle? The difficulty is easily overcome. The women carry up everything that is necessary. In fact, we have seen them, like ants climbing up and down along these rough slopes, with loads on their heads.

In this country, women are generally very unhappy. At the age of 9 or 10 they are married and shut up in a harem. They have no rights or authority.

Taking advantage of the ignorance of the people, with regard to a cinematographic apparatus, we have been able to shoot films of women and children. This however, was not done without the attending difficulties and scandal. The sole fact that women should be seen by strangers is considered as "intollerable" and "criminal."

After another few days journey, we reach the last mountain pass. At our feet, spreads a wide valley. In the middle of this valley there is a large
city enclosed by a double row of walls, flanked with towers. It is Sana, the ancient capital of Yemen, the residence of the Imam Jahja, direct descendent of the Prophet and Sovereign of the Faithful. At the door, our caravan is detained. We are able to give all the necessary explanations and show the documents which certify that the Imam himself has given us the right to entre Sana, and thus we are allowed to pass.

We go through the Jewish quarters called: "The Valley of the Jews." Young boys in gray tunics run towards us. Their hair is closely cropped on their foreheads, but long curls fall from their temples. There are 80,000 Jews in the Yemen, whose general population is about 3 millions. They are the descendent of the Jews established in Arabia since time immemorial. They are still oppressed and inhabit separate quarters.

After passing through the Jewish quarters or rather, the Jewish town, we come to a large square separating the Ghetto from the Moslem quarters, and reach Bir-Azil (the well of the bachelors). It was in this part of the town that a house had been prepared for us, which we could make our head-quarters. Bir-Azil is a suburb separated by another wall from the ancient Sana, where are located the Governmental institutions, most of the mosques, the market and the commercial centre of the capital.

Our first days were consacrated to the paying of official visits. We were received by the Grand Vizir Cadi-Abdall-el-Amri and the Minister for Foreign Affairs, Cadi Earglib. After which we explored the town and made preparations for our cinematographic expedition.

The tales of thousand and one nights, the remarkable work of generations of Arabic and Persian story tellers (perhaps also Hindou), seem to have been enacted in the Sana of to-day. The xxth Century is only represented by the Remington rifles carried by the soldiers and by a squadron of British aeroplanes which is seen high up in the skies, flying from the Cameroons to Aden.

The market place is the centre of local life. Here one sells and purchases clothes, materials, sweet-meats, weapons, camels, zebras, agricultural products, coffee, etc.; while all around, the artisans are at work: weavers, oil makers, sword-cutlers, and so on. Many other handicrafts are exercised under the vigilant eye and the indications of the head of the family.

We took cinematographic views of the town with its market and palaces, the stone huts, the craftsmen at their work, the merchants, the peasants in the fields, the army and the feudal lords. We have obtained for the cinematographic screen, views depicting the Arabic and Jewish customs, and have taken films of the factories at work, the fishermen, bedouins, selamlikas, military parades, the dances and even the members of the Government. A total of 10,000 metres of film have been sensitized. They will from the documentation on the Yemen. A few films of short footage, complete the collection.

It is time for our return. Hearing that a Soviet steamer, the "Mikhail
Frounțé” was passing near Aden, we cable to the captain, asking him to anchor at Hodeida and take our expedition on board ship.

Again we ascend the Djebel and cross the burning plain. At last we reach Hodeida; Russians and the gay sailors of the “Mikhail Frounțé” meet us.

We embark and sail homewards. Djedda, Suez, Port-Said, the Dardanelles and Stamboul, Greece, Italy, Austria, Germany and finally — after an absence of 8 months — we are back at Moscow. Now we must undertake the long and delicate preparations required for the mounting of the films taken in the Imamate of Yemen, which will finally be thrown on the screens of U.R.S.S. and abroad.

V. CHNEIDEROV
Prior to the recent reform of communal education, the idea of utilising the cinema as an aid to teaching in Brazil, and particularly at Rio de Janeiro, had found considerable support and the production of educational films had already begun. It should be borne in mind, however, that these measures were merely of a tentative nature, lacking in cooperation and in special assistance from the public powers, and no concrete results could therefore be expected.

The reform in teaching, planned and executed by the present Director General of Education at Rio de Janeiro — Fernando de Azevedo — in collaboration with specialised experts of undoubted competence, comprised also the problem of the educational cinema, and various clauses were added to the regulations in force, amongst which were the following:

*The elementary, secondary, domestic and vocational schools will have rooms to be used for the projection of lantern slides and moving pictures of an educational nature.*

*The cinema will be utilised solely as a means of education and to help the teacher in oral tuition.*

*The cinema will be used for the teaching of science, history, geography and the arts.*

In accordance with these regulations, the technical sub-management began work for the organisation of a central film library in order to form a collection of educational films to serve as models for circulation in the various scholastic districts.

In order to give teachers an idea of the best types of projection apparatus, arrangements were made to organise an exhibition of educational cinematography, the first of its kind in Brazil and probably the first in the whole of South America.

The exhibition was held in August 1929 and was such an extraordinary success that even the organising committee were surprised.

The choice of premises was a matter which entailed many considerations of an educational nature. It was necessary to find a school situated in the centre of the town, easily accessible, and which would immediately give the visitor the impression of a centre of education and moral training, while making it as attractive as possible. The exhibition occupied several halls but projections were not made in them all. In order to avoid any
impression of monotony, the exhibition was designed to show, in the various rooms, the technical progress of the cinema. The entrance hall, where there were exhibit of the boys' and girls' vocational schools, led into a room containing the best types of apparatus for motionless projection (episcopy and diascopy); another room was then reached where there was a collection of the plans, sketches and models of the new schools created by the Board of Education. Next came a room for motion pictures with Pathé Baby apparatus. There were also other halls with interesting exhibits of school hygiene and finally a large projection hall containing apparatus manufactured by the principal firms of the different countries.

This hall was, as a matter of fact, the most interesting of the whole exhibition. Teachers were able to acquire practical knowledge from a study of apparatus at work and of projecting material. Many visitors realised that they had never known the real meaning of words such as «apparatus for medium projections», «diascopy», «episcopy», «positive», etc. By visiting the exhibition everyone learnt which was the most suitable length for educational films, and collected catalogues and pamphlets, as well as information regarding books and reviews on educational cinematography.

In the evening illustrated lectures were given on subjects connected with the cinema and its relations with the various branches of teaching, the moral training of children, and social and family education.

Interesting experiments with regard to sound films also took place, with explanations concerning technique and future possibilities.

The exhibition was visited by thousands of people and the press displayed the greatest interest in it. The visitors comprised many teachers from the northern and southern Brazilian States, on their way through Rio de Janeiro. They all appeared to be extremely enthusiastic and anxious to spread the cause of the educational cinema in their respective districts.

The Italian Embassy sent a LUCE projection apparatus to the exhibition and several films produced by that Institute. There were also several copies on show of the first number the International Review of Educational Cinematography.

In spite of the success of the exhibition, increased effort is needed to instal the cinema in all the schools of the Federal District; this is partly due to the fact that the various municipal and federal organs lacked the necessary means and work could not therefore go forward with great rapidity. It is however being pushed with enthusiasm.

My dearest wish is to bring about the institution of official courses in the physical geography of Brazil by means of films. With the assistance of the Governments of the various States, it should not be difficult to carry out this idea, which would entail the collection of 22 films (one for each of our 20 States, one for the Federal District and one for the District of Acre), by means of the collaboration of cinema experts and of teachers, assisted by all the advantages of modern technique.
This series of films could reproduce in beautiful pictures the sea-coast, mountains and rivers of Brazil, the characteristics of the ports and of the districts in the interior, and also the various aspects of administrative, intellectual and religious life, historical events, means of communication and everything included within the vast field of human geography.

It would thus be possible to bring to the knowledge of the inhabitants of the South the mode of life of those of the North, as far as the extreme borders of our Republic and vice versa.

These films would constitute an unrivalled means of propaganda for Brazil. In order to attain this end it will be necessary to begin by convincing all government, federal and municipal authorities of the enormous educational importance of this matter. Next some film producer will have to be found who will take an interest in our idea.

When once interest has been aroused in the whole Republic, from North to South, when the Governments decide to grant special subsidies for this purpose, the prospects of educational cinematography will be sufficiently favourable to attract the collaboration of producers.

Jonathas Serrano
Technical Vice-Director of Education
TREMENDOUS INFLUENCE OF FILMS ON FAMILY LIFE OF TODAY

Someone has said that the box office receipts are the indication of the moral standard of the motion picture. That is rather an abrupt way of stating it and it is not altogether accurate, for I am sure that the majority of our motion picture exhibitors over the country would not consent to show indecent and immoral films.

It is true however, that the picture producers and exhibitors strive to give the people what they want. Quite obviously, their financial gain depends solely upon their ability to please their patrons. For this reason, they are, by necessity, governed by the public’s wishes and tastes.

In my opinion, there is one and only one way to accomplish our dominant purpose of having a steady supply of wholesome and worthwhile pictures, and that is by patronizing the good pictures already in existence. We, the public, are virtually the producers of motion pictures, for do we not tell at the box-office our preference in the way of entertainment, thus influencing the ultimate character of the films that are to be produced? Are we not, in the final analysis, responsible for the weak and often stupid films which find their way into our theatres? And is this not partly due to ignorance on our part? Do we try to investigate the types of films we are to see before going to the theatre; or do we choose them rather indiscriminately and without much forethought?

The motion picture business is dominated by the law of supply and demand, for after all, this business is just as much a commercial enterprise as the making of automobiles. It cannot exist on the sole patronage of the morally corrupt or the ultra-artistic; but must thrive on the patronage of the general public.

The producers are only too willing to provide the best quality in theme and treatment of pictures, provided the public will patronize and encourage them. It is a sad fact that some of the most splendid and artistic motion pictures have failed of commercial success because of the lack of patronage of those whose principal interest in life seemed to be the censuring of so-called «bad pictures» or those which were slightly off colour.

Constructive criticism of motion pictures directed at the source of production is what the whole moving picture industry needs today more than anything else. Too many people have been finding fault and too few have been praising what was good in pictures. If you are dissatisfied with
the motion pictures of today, there is only one way to remedy it; and that is
to put your shoulder to the wheel by giving your active moral and financial
support to the better pictures. The motion picture industry realizes its
responsibilities. The screen of today is no more like the screen of ten
years ago than day is like night. A new idealism has come in—a higher
standard has been adopted—and a realization that the picture that appeals
to the highest in us is the picture that succeeds. Openly condemning a
picture only serves to advertise and exploit it.

I cannot too strongly remind you that films are having a tremendous
influence on the family of to-day and that if we wish this influence to be favor-
able and effective, we must take an intelligent interest in motion pictures,
just as we do in other civic and public matters. In other words « Boost
the best, ignore the rest » and « make the best pictures pay best ».

The movies are everybody's business. They are part of our daily life.
So each of us must decide what our responsibility is in regard to this matter.
Each of us is responsible for his share in motion picture production. If we
condemn certain types of films and then go and see them, we are helping
to produce them. So let us be informed of the nature of the entertainment
we are going to patronize and throw the weight of our support on the best
and starve out the inferior offerings. Take your photoplay entertainment
seriously, accepting the screen as the mirror of life.

Florence Jacobs
THE REPRODUCTION OF SOUND ON FILM
WITHOUT PHOTO-ELECTRIC ELEMENTS

(from the Italian)

The engineer Gastone Frediani of Viareggio, has communicated to us an invention of his which is intended to dispense with the use of photo-electric elements in the reproduction of sound photographed on film. We have pleasure in offering this description of it to the readers of our Review.

The object of Signor Frediani’s apparatus is to dispense with the use of photo-electric elements in the reproduction of sound photographed on film, by photographing the sound either directly on the edge of the film or on separate film, which is then turned in perfect synchronisation with the cinematographic film. The reproduction of the photographed sounds is obtained by substituting for the photoelectric elements in the amplifier a device consisting of two electric contacts in the form of metal drums placed at a certain distance from each other and electrically insulated. They rest upon the layer of developed sound images which connects them electrically with the grid circuit of the first audion (low-frequency amplifier). The photographic layer of sound images, as the sound film passes over it, acts on the grid circuit as a conductor of variable resistance. In point of fact, the layer constituting the photographed images of sounds is made of very fine particles of silver and possesses more or less electrical conductivity according to the degree of darkness or intensity of the sound images, that is, according to the quantity of silver salts reduced by the light during the process of photographing the sound. Accordingly the passage of the film with its developed layer beneath the two afore-mentioned metal drums, connecting them like an electric bridge in the grid circuit of the first audion, produces variations of electric potential in the grid of this audion in proportion to the electrical conductivity of the photographed sound images, and these variations of potential in the grid will result in corresponding variations in the electron current, which when amplified by the other tubes will be transmitted to the loudspeaker.

In the subjoined diagram $P^s$ stands for the sound film with the photographed images of the sounds; $R_1, R_2$ represent the drums, separated from each other and electrically insulated. These rest upon the developed layer of sound film and are connected electrically by means of the conductors $l l$ in the circuit of the grid $F G$ of the first audion, which also contains the battery $E$. $S S$ indicate the supports of the metal drums mounted upon
insulating shafts and of $R_c$ also of insulating material (shown in the diagram as a line of dots, because it is under the sound film). The film passes between these supports as over a roller, turning its developed strip towards the metal drums $R_1$, $R_2$. The circuit is only shown to indicate the electrical connection, by means of the drums, of the developed layer of sound film with the electric grid circuit of the first audion.

This system of reproducing sound photographed on film — which can be specially adapted to sound cinematography — eliminates the photovoltaic elements with their optical illuminating device, and therefore, since the film need no longer be transparent, it can be made of paper, oil-cloth, etc. instead of celluloid; these paper copies of the original transparent sound negative can be sensitised not only by silver salts but also by bichromate gelatine with the addition of colloidal metallic solutions or electrically conductive powders. These films, too, will be electrically modulated, according to the same law of modulations which governs the transparent sound negative. Corresponding, in fact, to the more transparent parts of the sound negative, a greater quantity of light will pass through and, when printing the copy on gelatine paper, after development, a greater quantity of electrically conductive powder will adhere to the film, which therefore at these points will
possess maximum conductivity (as is the case with sound-film copies on paper sensitised with silver salts). If the very fine powders added to the bichromate gelatine consist of magnetic elements such as iron, cobalt or nickel, the result will be a sound-film on paper which is not only electrically but also magnetically modulated. After being developed, it will, according to the transparencies in the original negative, offer the maximum thickness of magnetic powder and therefore the minimum magnetic resistance. If this sound-film — of bichromate gelatine and magnetically modulated — is then passed between the poles of a permanent magnet having at its poles two coils which by means of two other coils act upon the grid circuit of the first audion in the amplifier, these coils will set up electro-motor tension which will alter the potential of the grid in the first electron tubes and reproduce the sounds in the loudspeaker in the usual way.

This invention was officially patented in Italy under Patent No. 275,669 on February 14th 1930, but a description thereof was deposited with certain Royal Academies of Science in November 1929.

Gastone Frediani
The BILDWART furnishes information on all questions bearing on the Cinematograph; it organizes and spreads film activities in all the domains of Science, Art, Popular Education, Religion, Children's Welfare, and Teaching.

"Der Bildwart"
(The Film Observer) Popular Educational Survey

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Laws.—The censorship of cinematographic films in Norway is governed by the provisions of the Law of July 25th, 1913, on the public exhibition of films, as amended by the Law of June 3rd, 1921, and by the Regulations issued under the Royal Resolution of September 12th, 1913, which were modified by the Royal Resolutions of November 16th, 1917, November 6th, 1920 and July 2nd, 1921, as well as by the ruling decision of the Ministry of Justice dated February 18th, 1927.

Film censorship is not the sole object of these laws which also deal with the following particular questions relating to cinema theatres.

a) Public exhibition of films.—The last comma of Paragraph 3 of the Law of July 25th, 1913, provides that the license as regards halls for the public exhibition of films must in every case be granted by the competent Municipal Council.

b) Limitation in the number of picture-theatres.—Failing special regulations issued by the local authorities, the police must be notified before the license for the opening of a cinema hall is granted by the authorities. The license may be withheld if the applicant fails to give adequate guarantees against a misuse of the license on his part, or if the number of picture theatres is manifestly out of proportion with the population of the district, or, finally, if the rejection of the application is prompted by other motives.

Paragraph 3 provides that the maximum number of cinema halls in the various communes may be fixed by a special regulation.

c) Validity of license.—The term of the license may not exceed three years at a time; the license may before its expiry be withdrawn by the Municipal Council after a vote of a two-thirds majority in the case of misuse. The license is strictly personal and may not be ceded to any third party.

d) Safety of cinema halls.—No public exhibition of films may be given except in places which have been licensed by the police after the previous sanction of the local Building Commission and the Fire-Brigade.

Censorship Offices.—No films which have not been previously approved by the competent board of revision may be shown in public. This does not apply to news films shown within fourteen days from the date of the event recorded on the film.

The Government Board of Film Censors sits at Christiana and consists of two permanent experts and a supplementary expert. The Ministry of Justice is empowered, if the necessity arises, to appoint other experts for a long or short period of time as the case may be.

When a film is shown to the censors no other person may attend without the permission of the permanent experts.

The composition of the Board is not subject to modification except in case of necessity as stated above. Its decisions are final, no appeal being admitted against a refusal to certify a film as suitable for public exhibition.

Functioning of the Board.—No film may be rejected unless two experts are agreed. If these fail to agree, the film is shown to a third expert, and a decision is taken by majority.

In this connection the Regulations provide that as a rule the revision of films is carried out by one expert. He examines the film on his own account and judges whether it is suitable for public exhibition. He may, in agreement with the interested party, suggest excisions or alterations. If the expert considers the film as unsuitable, or if the interested party does not approve of the suggested excisions or alterations, the supplementary expert is called in. If no agreement is reached
between the two experts, the other permanent expert is called in, as already stated.

The director of the Government Board of Censors distributes the work between the experts.

As a rule, the films are censured in the order of presentation. The experts may, however, depart from this rule in the case of films or of copies of the same film.

The procedure is very simple. The person asking for a certificate of exhibition must present a written application to the Board of Experts indicating:

a) the name of the producing firm and the number of fabrication, if any;

b) the title of the film in Norwegian and a summary of the plot with subtitles;

c) the length of the film.

The experts may also ask that posters and programmes written in Norwegian be submitted for revision.

Revised films are marked with a stamp bearing the number of registration.

The Board of Censors grants also an exhibition certificate for every film containing:

a) the number of registration;

b) the name of the producing firm;

c) the title of the film and a short summary of the plot;

d) the length of the film and, if an excision is made by the censors, the length of the excised part;

e) the statement whether the film has been approved or not.

The certificate must be presented to the police authorities on their request in all the places where the film is to be shown.

If a part of the film is banned by the censors, the Council of Experts may keep that part or return it but only after delivery of the stamp and of the certificate of exhibition. Failing this and in any case after two years the part of the film which has been kept must be destroyed.

If it is necessary to affix a new stamp or to issue a new certificate in place of a stamp or certificate worn out by use or other reasons, a special fee is charged.

**Other organs of revision.** — The King may, when and if he thinks fit, grant exemption from the provisions relating to cinema halls in general or to film censorship in particular.

The police authorities may, on the other hand, stop or limit the exhibition of films passed by the Council of experts, for reasons of public order or for any other reason, according to their discretion.

**Educational films and private exhibitions.** — It has already been stated that censorship regulations do not apply to news films shown within fourteen days from the event recorded on the film.

Films to be shown in private are also exempted from revision. Censorship regulations equally do not apply to film exhibitions which are part of scholastic programmes or are used for purposes of illustrating lectures given in schools or colleges or lessons in teaching institutes.

The previous authorization of the police is required in all kinds of lectures or of illustrations of particular courses other than those specified above.

**Children.** — In the case of films intended for children the Censors must grant a special certificate of which the exhibitor must give public notice.

As a general rule, access to cinema halls is interdicted to children under sixteen years of age, except when films licensed as specially suitable for children are being shown. Children are refused admission to picture-theatres after 8 p.m., whatever the type of film shown, unless they are accompanied by their parents or guardians or other responsible person.

**Criteria of censorship.** — In the absence of a definite classification of the reasons which call for revision, the law mentions only one of the principal categories of such reasons, namely, those dealing with morality. The representation of immoral subjects likely to lead to physical or moral degradation or, as such are contrary to the laws of the Kingdom, is prohibited. Censorship, therefore, more or less aims at the protection of children.
and is intended to avoid that, in spite of the restrictions imposed by law as to the access of children to cinema halls, they might be shown unsuitable films.

The Law of 1921, bans all films which may influence the minds of children or their sense of justice to such an extent as to falsify their idea of righteousness and morality.

That the protection of children, direct and indirect, is the fundamental concern of the Norwegian Law is shown also by the fact that under a section of Paragraph 8 of the Law of 1913, confirmed by that of 1921, the censors are forbidden to reject films to be shown to adults for any other reasons.

Fees. — A fee is charged for the revision of films. Such fees are intended to cover the emoluments of the experts and all other incidental expenses.

The amount of the fee is fixed as follows:

a) Two Norwegian crowns for every news or publicity film, with a supplementary tax of 50% for every fifty metres or fraction of that amount;
b) the fee is raised to three times as much in the case of all other types of films;
c) a supplementary increase of 50% on the ordinary fee is charged for films in which captions are not in Norwegian.

When several copies of the same films are submitted simultaneously and by the same person, the full fee is charged on the first copy and is reduced by half for every other copy.

The payment of the fee may be claimed before revision.

A fee of one crown is due for having a new stamp marked on an old film in which the former stamp has been lost or is illegible, and also for the issue of a copy of the certificate of public exhibition.

Penalties. — Paragraph 11 of the Law of 1913 provides that all violations of the provisions laid down in the Law itself or in the regulations are punished with a fine.

FILM CENSORSHIP IN SWEDEN

Laws and general principles. — The provisions governing film censorship in Sweden are embodied in the Law of June 22nd, 1911 on Cinema Exhibitions, partly modified by the Decree dated November 1st, 1929, on the State Board of Censors.

The fundamental criterion is that censorship has a Statal rather than an official character. It is, in fact, carried out by a special State department whose members are appointed by the Crown.

All films destined for public exhibition (this term is applicable to all those shows to which the public is admitted on payment of an entrance fee), must be submitted for revision, whether they deal with dramatic, scientific or educational subjects.

The board of censors and its functioning. — It is the duty of the State Board of film censorship to examine the films to be shown in the Kingdom.

It consists of the following: the Director who is at the same time the ordinary censor; two ordinary and two extraordinary censors, one charged with the examination of films dealing with military or naval subjects; of an undetermined and varying number of extraordinary and supplementary censors which can be called up if necessary in equal numbers to the ordinary and extraordinary censors.

Permanent or temporary officials belonging to other departments may be attached to the Board of Censors, their number varying in accordance with the volume of work.
Apart from his duties as ordinary censor, the Director shall: 
- distribute the work between the staff;
- be responsible for the funds of the Board, consisting in the proceeds from the revision tax;
- check the cash in hand at least once a month;
- hand over to the Treasury the proceeds of the revision tax once a month, and at the same time make a request for the sum of money required for the upkeep and functioning of the Board;
- send once a year within a fixed period of time to the State audit department the statement of accounts of the previous year together with an inventory;
- submit to the King a yearly report indicating the questions which the Riksdag might take into consideration as subjects of legislative measures;
- submit before October 1st, of every year a brief report on the activities of the Board to the head of the ecclesiastical department;
- take all necessary action with regard to the staff (leave, etc.);
- and finally, propose all those modifications and amendments which he might consider advisable to suggest in the interest of the future activities of the Board.

Art. 3 of the 1929 Decree specifies the duties and particular tasks of the cashier of the Board and provides that every member of the staff is expected at any time to lend his assistance, regardless of the distribution of work decided upon by the Director, in order that the Board of Censurs may function without interruption.

The work of revision is generally carried out by an ordinary censor or, in his absence, by a deputy censor. He may, if he thinks fit, ask another non-military ordinary or extraordinary censor to attend. In case of disagreement between the two censors, a third ordinary or extraordinary but non-military censor is asked to take part in their discussions and view the film. The decision taken by the majority will then be final.

When films on the military, naval or air forces of Sweden are submitted for revision one of the two military censors is asked to attend. He acts on the instructions received from the Chief of the General Staff of the Army or Navy, and his decision for or against public exhibition of the film is final.

When an extraordinary censor is asked by the Director of the Board to examine a film, he has the same responsibilities and rights as the ordinary censor.

No other person may be present when a film is on view other than those whose duty it is to attend in accordance with the above-mentioned regulations.

The Director of the Board shall do all in his power to secure a logical continuity of labour and see that all the members of the Board adopt the same criteria of revision.

The order in which films are examined is fixed by the Director. Precedence is granted to news films.

A register with numbered pages is kept in the Office of the revised films. Every certificate of revision allowing or prohibiting public exhibition is entered on the register, one on each page. For all intents and purposes this copy will have the same value as the original handed to the interested party and is signed by the censors who have viewed the film in question.

Parts of an unfinished film may be submitted for revision. The Board issues in their case a provisional certificate on payment of the fee and under the condition that the final certificate will be issued when the complete film is submitted for examination.

The censors may either merely authorize the exhibition of the film or subordinate its exhibition to modifications or restrictions which do not affect the essential and artistic value of the film or reject it altogether.

Appeals.—Under Swedish law no real appeal is allowed against the decision of the censor. An extraordinary appeal to the Crown may be granted.
**Auxiliary organs.** — As regards news films, the police may be regarded as an auxiliary organ of the State Board of Censorship.

The Public Entertainments Act, provides in fact, that, in urgent cases and when it is impossible to make an immediate application for revision by the competent officials, the police may grant a certificate of exhibition which is provisional and valid for ten days, within which the film must either be submitted to the State censors or be withdrawn.

The interested party may lodge an appeal only with the Censorship Board against the refusal on the part of the police to grant a provisional certificate.

**Fees.** — The law establishes various revision fees to be paid by the interested parties to the Censorship Board. The proceeds are administered by the Board and then transferred to the Treasury by and under the responsibility of the Director.

The fees are fixed as follows:
- Dramatic films: 4 öre per metre;
- Educational films and scientific films in general: 1 öre per metre;
- One Swedish crown per film is also charged as stamp duty.

**Criteria of censorship.** — An official memorandum kindly communicated by the Swedish Government to the Rome Institute deals at length with the standards of film censorship both as regards the general principles which the censor must follow in each case making no distinction between children and adults, and also as regards the special criteria which must necessarily be adopted for the moral and spiritual protection of children.

It is pointed out with regard to the first category which is of a general character that the most frequent reasons of revision include scenes of brutality, various forms of incitement to crime and immorality, and scenes holding up the law to ridicule or insult.

The Memorandum states it is impossible to lay down a precise and definite classification of the reasons for rejection, given the infinite variety of subjects which come up for revision. It is in fact necessary to consider the various episodes of the plot in order to judge whether an apparently harmless scene is in reality dangerous and suggestive. Moreover, a film should be examined as a whole and not in its particular details which have a limited importance from an artistic standpoint and should not be judged separately.

As a special criterion to serve as guidance for the censor, the Memorandum considers that the following scenes should be prohibited:

**Politics.** — Scenes or facts which may give offence to the representative elements of the State or are likely to foment manifestations contrary to existing laws or to perturb the friendly relations between the Kingdom and other foreign countries;

**Immorality.** — Scenes of vulgarity or manifestly immoral; false or artificial representation of the life of immoral or criminal persons in an environment of happiness, pleasure and comfort; the use of "dope;" white slave traffic; and other scenes generally suggestive of immorality.

**Crime.** — Scenes representing criminal acts, or holding up police methods to ridicule, or displaying the life and the modus operandi of criminals or bands of criminals in open defiance of the law; violent fights; scenes of strangulation, brutality or cruelty to men and animals; murders, suicides, and scenes which constitute an incitement to a criminal life or which may be regarded as a school of crime and depravation.

**Children.** — A special category of prohibitions and legislative measures of protection relates to children. The Memorandum of the Swedish authorities referred to above, rightly claims that in this field experience has shown that the aims of the 1911 Law have been completely attained.

The law, in fact, states that, for the purposes of public exhibitions, the censors must classify the films submitted for their consideration, into two categories. The first includes the films to be shown to the general public, irrespective of age, while those to be
exhibited in the presence of children come under the second category. Films which might have a deleterious influence upon the psychical and intellectual development of children cannot be included in shows to which children under 15 years of age are admitted. The censor may ask two medical experts to give their opinion on films likely to be injurious to the moral health of children.

It is also laid down that the certificate authorizing public exhibition is made out in a different form in the case of a film pronounced to be fit for children. The recognition that a film is suitable for children must form an integral part of the certificate and must be indicated on the posters or advertisements at the entrance of every cinema hall. In any case, children who are not accompanied by an adult are generally not admitted to cinema shows which continue after 8 p. m.

The Swedish Official Report states that the censors carry out their task with the strictest rigour. Not more than 23% of the films submitted to the Censorship Board during the last few years has been passed as suitable for children.

With this end in view and in order to secure a more efficacious protection of children and adolescents, the report admits that the ideal form would be the conclusion of an international understanding between the various nations and more particularly between the various Censorship Boards which would render possible an exchange of views on the different methods of cinema control and eventually lead to an agreement or to a series of particular agreements, with the object of preventing the circulation of immoral films or of films likely to exercise a demoralizing influence on youth.

**Education Films.** — The protection of children and adolescents and the spreading of scientific and educational films are the object of a series of measures tending to give an impulse to this branch of film production.

It has already been stated that in Sweden cinema shows for the purpose of instruction are private. They lack, as such, the two fundamental characteristics of public exhibitions, namely, free admission of the public and the payment of an entrance fee.

No special authorization is required for these scholastic shows, it being recognised that they take place under the direct and personal responsibility of teachers and heads of the schools.

With reference to this aspect of the question, the above-mentioned Official Report kindly sent to the Rome Institute, states that it is of the highest importance that the public authorities should encourage to the utmost degree, the exhibition of educational films and by this means promote the spreading of culture and the vulgarization of science. The Riksdag has taken the lead in the matter, and the difficult question is now under consideration. The action so far taken by the State is confined to the allocation of important sums of money in the budget towards the spreading of the use of films in schools.

A well-known Swedish film-producing firm is now in touch with the organs of the State and is tenaciously pursuing the same ends.

Moreover, the Report hints at another possibility which not only lies within the field of activity of the Rome Institute, but is actually in course of elaboration, that is, the compilation of an international catalogue of cultural, scientific and educational films, for the purpose of facilitating the exchange of such films between all nations taking an interest in this problem.

**Statistics.** — During 1929, 350 theatrical films were submitted to the State Board of Censors for revision; of these 75% came from America.

The total number of censored films, comprising original (sample copies) and other copies in respect of which the authorization of the censors was also applied for, was 4781. This number comprised
2665 theatrical films (big spectacles) and short subjects of a dramatic character, and 2116 scientific films, news films, etc.

Omitting the number of copies, which from a statistical standpoint is of little value with regard to the correct idea of the censors’ work, 1974 new films were submitted during the year.

Of the 4781 films referred to above, 1987 were Swedish, 2053 American, and 741 imported from other countries. The greatest number of news-films were of Swedish production.

The original films examined represented a total length of 1,224,620 metres; the length of films or of parts of films rejected by the censors was of 76,086 metres. About two-thirds of the films examined by the Censors were considered unsuitable for children under 15 years of age.
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The topical documentary film is occupying a more and more prominent place on the world's screens and it would seem that this form of film satisfies a special need of the cinema public. Tired after the day's work, most spectators do not relish a long film which adds to their fatigue and compels them to think, to concentrate and follow the incidents of a plot.

The documentary film is usually short. In any case it aims at avoiding the banal and the conventional; it offers light and restful fare, and presents life to the spectator from an entirely new angle or in aspects unfamiliar or unknown. Thus instead of tiring, it offers the best facilities for rest, instruction and amusement.

Fox Film has realised the possibilities of documentary and topical films and for the year 1930-1931, has devoted the substantial sum of 20 million dollars to this branch of screen work (The Daily Film Renter, London, D. 6-540). Moreover, this kind of film, with very few exceptions, costs much less to produce than the ordinary dramatic film. Sound Waves, Hollywood (D. 34-586) reckons that an American studio spends on the average 1000 dollars an hour in producing a section of a theatrical film which it will only take six seconds to show.

Again screen enthusiasts and critics have been paying increasing attention to the documentary film. Pierre Emsey, in the Eclair of Montpellier (D. 6/514), prophesies the triumph of the documentary film, especially when, as in Moana or White Shadows, the document constitutes the leit-motif of the film, threading its way through a dramatic plot or other elements which give it emotional effect. M. Gérard, who is officially in charge of French tourist propaganda (The Daily Film Renter, London, C. 6/533), has proposed that through the agency of the French consulates every country should be persuaded to show documentary films made in France and illustrating the natural and artistic beauties of the country. Finally, Marcel Lapiere, in Le Peuple Paris (D. 6/503), in an article entitled "The propaganda film," regrets that official propaganda in France has not been developed as it should be.

The documentary film, however, possibly for formal reasons connected with production, has its critics. Jean Painlevé (Bordeaux Ciné, Bordeaux, D. 6/507), at a recent lecture at Strasbourg bitingly criticised the pseudo-documentary film created for the sole purpose of obtaining fiscal alleviation. At the same time he is in favour of the genuine documentary film unadorned with the inappropriate trappings which belong only to the theatrical film. Léon Moussinac (Humanité, Paris, D. 9/137) attacks it on other grounds, namely, on the score that a cinema monopoly — through a series of topical films — would make anti-Russian propaganda. A contrary opinion was expressed (Humanité, Paris, D. 18/325) by those who were invited to attend a private exhibition of uncensored Russian documentary films. The spectators made no protest against the monopoly privilege, but complained that the censorship, by prohibiting certain films, did in fact limit artistic expression.

For frankly national reasons the Social-Democrats on the Copenhagen town council (Le Courrier Cinématographique, Paris, D. 6/462) have proposed the building of a special cinema to be exclusively used for the exhibition of documentary and educational films, more especially with the purpose of stemming the rising tide of American imported films, which they hold to be silly or superficial.

The documentary cinema has itself been abundantly filmed. According to the Epoca of Madrid (D. 6/538), an exceedingly interesting film was shown at the Ciné Club in Madrid, under the name of "History of the Cinematograph," in which were shown successively the praxinoscope, the
zootrope, Marey’s photographic gun, the apparatus of the Lumière brothers, and the world’s first printed film Workmen coming out of the Lumière works at Lyons-Montplaisir in 1895.

***

Historical Films. — A typical form of documentary film is the film reproducing incidents in history. Here the Western producer is faced with a twofold difficulty — the financial cost of reproducing historical events with that perfection of mise-en-scène which is required to transplant the spectator back to whatever period may be desired and the difficulty of recreating atmosphere. This difficulty is perhaps even greater than the first, which the resources of the film industry may over — come, and necessitates patient and laborious effort by artists, savants and investigators in order to reconstruct an historically accurate environment. A certain number of mistakes are unavoidable, if only of a formal character.

In the East the producer is aided in this task of historical reconstruction by the life about him. The world has now gone on for untold centuries. In the west everything has been replaced and renewed, scattered or entombed in museums, but the eastern world with its basis of tradition and the religious and symbolic significance attached to everything in life, has remained essentially static.

A film like Ben Hur cost a staggering sum as well as years of unremitting toil. Other films made in the east by local companies, local artists and adorned with all the magnificence of local colour include The Light of Asia by the Great Eastern Corp. Ltd. of Delhi, reproducing the life of Buddha in a scenario which was furnished to the International Review of Educational Cinematography by our collaborator Carlo Formichi; The Love of the Mogul Prince,
by the same company, a love-story with a purely oriental texture, the costumes for which were lent by the oldest princely houses of India, and Hatim Tai produced by the Krishna Company of Bombay. This last film, which was acted by Indians and the scenario of which was frankly Asiatic, is especially remarkable for the fantastic magnificence of its scenic effects.

In the East the story or legend of Hatim Tai is a part of popular folklore. Hatim, as the name itself signifies, is a fine and pure example of human nature. His motto is service to God and Man. He was a traveller who visited the remotest parts of Asia preaching his doctrine of service to humanity. Fable relates that as an infant he refused his mother's milk until he was assured that other babies were receiving their due supply.

Hatim was Prince of the Yemen. While out hunting he met a certain Muniristan, who told him of his love for Hushnabanu, Queen of the Sahabod, but that he might not marry her until he had answered a number of riddles put to him by the queen.

Hatim bid him be of good cheer. Desirous of helping anyone in physical or spiritual need, he undertook to solve the riddles. They therefore proceeded together to Sahabad, where Hushnabanu accepted the offer of the prophet-seer and the nuptials of the two oriental princes were thereupon celebrated. Hatim Tai set out upon his lonely and wearisome quest. After long years of travel and meditation he found the answers to the riddles, but not until body and mind had been strained to the uttermost limits of human endurance.

In New York an enquiry has been made among the cinema public and students to ascertain the favourite class of film. According to Daily Review, of New York (D. 34/573) the historical film received the largest number of votes.

Historico-documentary films have also their own museums and libraries. Hollywood (D. 34/64) has collected not only the most varied objects belonging to famous film actors, but — side by side with the technically perfected films of 1930
— the first faded photograms ever thrown upon a screen.

Similarly, the Netherlands Film Archives (Daily Review, New York, D. 39/3), established at Amsterdam in October 1919 for the purpose of preserving all films illustrating the history of the Netherlands, announces that it is now in possession of more than a thousand films including all the most important Dutch productions.

Religious Films. — In spite of the fulminations of the Rev. W. E. Denham of Chorley Wood, who threatens with eternal damnation any Christians that attend the cinema, motion pictures as a source of healthy recreation and propaganda are becoming increasingly popular in religious circles. Religious films even enjoy certain privileges. According to the Courrier Cinématographique of Paris (D. 11/140), several German towns have given permission for the projection of religious films after service on Sundays and church festivals, while the Exhibitors Herald World
of Chicago (D. 11/133) states that similar authorisation has been granted by the Presbyterian Church of Albany. Instead of protesting against this preference shown to religious films, cinema managers are said to welcome the innovation, on the grounds that church-goers, having acquired a taste for the cinema at these Sunday projections, will increase their attendance at ordinary performances during the week.

Among Catholics, too, the cinema is becoming more and more popular as an instrument of recreation and instruction. The ecclesiastical authorities naturally insist upon a strict censorship of this type of film. Thus the Bishop of Venice has addressed a letter to Catholic institutions in his diocese containing the following passage: "In order to avoid unpleasant incidents and ensure that performances are of the standard demanded by the dignity and sacred nature of our trust as educators of the young, we stipulate that no films shall be shown in our cinemas until they have been seen and approved by the Association of Patrons of the Educational Cinema (Bollettino Ufficiale dell'Azione Cattolica Italiana, Rome, D. 11/14).

In Belgium the Young Christian Workers Association, which includes all associations of Catholic workers in the country, is preparing a series of films which will be submitted for approval to the ecclesiastical authorities (D. 34/456). In Ireland several of the bishops, in their Lenten pastoral letter, urged upon their flock to keep a watch over the religious aspect of films exhibited in public (Daily Film Renter, London, D. 11/25).

Religious films are either documentary or they reproduce scenes and incidents from the Bible or legends which have grown up around the lives of the early Christian saints and martyrs. Among documentary films the Publicitat of Barcelona (D. 11/135) mentions the film made by Rafael Martinez at the monastery of Poblet in Catalonia; and the Tribuna of Rome (D. 11/129) a film on the Lourdes pilgrimages. Among films based on holy writ, the Courrier Cinématographique, of Paris (D. 11/148) announces one Holy Bible, a talking and singing film with a footage of 340 metres. This will shortly be exhibited by the Union of French Film Manufacturers.

The Italian film Frate Francesco by Count Antamoro has recently been shown in London. English critics, while praising the film, found fault with a number of anachronisms of costume and scenery, which recalled the Renaissance rather than the Middle Ages (The Daily Telegraph, London, D. 11/142).

The directors of the Bon Cinéma of Geneva have also shown films on St. Francis of Assisi and quite lately a film on the martyrdom of Saint Maxentius, reflecting life in the fifth century and contrasting the civilisation of Christian Gaul with that of the barbarous hordes which were at that time drenching the land of Clovis and St. Martin in blood and carnage (Courrier de Genève, D. 11/128).

We may perhaps mention a few other events which have aroused the interest of Catholics. In Berlin an exclusively Catholic cinema has been opened bearing the name of its founder Herr Sonnenstein (D. 11/127); Paramount is making a religious propaganda film called Pastor and Rabbi (D. 11/129); at the Princetown Club in New York a film has been shown in illustration of the ascetic life of an old hermit who spent thirty-seven years in a cave on Mount Athos (Film Daily, New York, D. 11/36); in France Cardinal Wiseman's well-known story Fabiola is being filmed (Le Bon Cinéma, Montreal, D. 11/137); in Italy during Holy Week the original edition of The King of Kings was revived and incurred the criticism of Catholics, who would have preferred the edition censored by the ecclesiastical authorities (Osservatore Romano, Vatican City, D. 11/49); Toni Attenberger, the Munich producer, has made a film Oberammergau (Deutsche Filmzeitung, Munich, D. 11/145), faithfully depicting the life and folklore of this little Bavarian town, whose inhabitants devote such fervent and loving care to the representation of the characters figuring in the scenes of the Passion.

Religious films are also making great headway among non-catholics. According
to The Daily Film Renter (D. 11/130) a colour film of The Prodigal Son was shown recently in a church with oral comments by the officiating clergyman.

In the "Morizkapelle" at Nuremberg was lately produced The Sacred Waters, showing beautiful scenes of ancient and modern Egypt and Palestine. On this occasion a lecture was given by Herr Kleber, representing the Protestant Chamber of Cinematography, during which the speaker declared that, contrary to the belief held in certain quarters, the Protestant Church was in no way hostile to the cinema; on the contrary, it regarded the screen as an excellent medium of popular education and was endeavouring to encourage the widespread diffusion of educational films (Film Kurier, Berlin, D. 11/146).

The Cinema, of London (D. 11/152) announces that the Minister of the Methodist Church at Dunedin (New Zealand) has instructed the Western Electric to install a sound apparatus in his church, which will not only serve for projections, but replace the harmonium as an accompaniment to the chants.

In the United States the Lafayette Episcopalian Methodist Church has at its own expense made a film called The Call of the Past, illustrating the story of its foundation. The scenario was written by the Minister, the Rev. J. D. Clinton, and the film was shot by Professor C. G. Merick, an amateur (The Educational Screen, Chicago, D. 11/151).

The Jewish community announces a notable series of films. One of these, shot partly in the Caucasus and partly in Palestine, is called Pogrom and will be a talking-film recorded in three languages (To-Day's Cinema, London, D. 11/131). Twelve more films are now being prepared in a New York studio and the first of these, which is nearly finished, bears the title of A Shoemaker's Romance (Film Daily, New York, D. 11/124).

We cannot too strongly emphasize the contrast between religion as we know it and the various forms of superstition which were so widespread in bygone centuries and which even to-day persist in certain remote parts. Here, too, the cinema can serve the cause of religion.

At the Ciné Club in Madrid Dr. Lafora presented a film called Witchcraft, a creation of the Swedish producer Benjamin Christensen of the Svenska firm, illustrating the belief of primitive peoples in magic and examining these beliefs in the light of a modern-day knowledge of psychology and mental pathology.

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Another form of documentary film is that which illustrates folklore and the life and customs of peoples, their characteristic religious practices, certain more or less unknown habits of theirs — all of which are of interest not only to cinematographers but to the general public.

Local colour is also of value to theatrical films owing to the rich variety of material it offers for creating an atmosphere that will arouse the interest and curiosity of spectators. Folklore, as has already been pointed out in our Review, is a typical means of recording survivals from a past which our children's children will never know.

The sound-film and the talking-film supplement this type of reel. L'Informacion Cinematografica Española is preparing a sound-version of Salamanca, reproducing the festivals and customs of that province (El Debate, Madrid, D. 6/454); the Sinchro Cine is turning a documentary film, taken 400 metres below the surface of the ground and showing the life of the Auvergne miners. This is the first underground attempt, all previous mining films having been studio reconstructions (Hebdox Film, Paris, D. 6/473).

Other folklore films which have either recently appeared or which are now being made, include Montparnasse, taken on the spot by Eugen Deslau (Cinéma, Paris, D. 6/457) and two Ufa films, one on the life of the inhabitants and the flora and fauna of the Carpathians and one on Wallachia and Transylvania (Licht-Bild-Bühne, Berlin, D. 6/550 and Film Kurier, Berlin, D. 6/534).

Outside Europe mention should be made of the following: an original Japa-
nese film *Yakishi the Woodcutter* by the Shochiku Kinema. Unlike so many other Japanese films, it deals not with old legends of the Empire of the Rising Sun, but with the life of present-day Japan (D. 6/476); *The Mysterious Indies*, illustrating the mysticism of the East and the mosques, pagodas and interiors of Indian palaces (D. 6/506); a film on Samoyed life, hardly fit for public exhibition, as it contains revolting scenes, such as that which shows the inhabitants eating raw meat dripping with blood (D. 6/520); a film now being made at the Vostokkino works under the auspices of the Commissariat of Education, on life and customs among the Mongols (*Kinematograph*, Berlin, D. 6/553); *A journey in the Congo* by André Gide, especially interesting for its representation of marriage rites and ceremonies among the natives (The Daily Telegraph, London, D. 6/513); *Campus Capers*, which reproduces scenes of student life in the University of Wichita, Kansas (*Movie Makers, New York*, D. 6/522); *Amongst the Red Indians of South America*, taken by Dr. A. Baesaler among the natives of the Titicaca and Gran Chaco regions and shown at the Mozart Saal in Berlin (*Licht-Bilde-Bühne*, Berlin, D. 6/552); lastly, a film shown at the Empire Theatre in Buenos Ayres, reproducing the customs of the gauchos, their equestrian games and exercises, local dances and revivals of some of their ancient traditions (*Imparcial Film*, Buenos Ayres, D. 6/478).

***

TRAVEL FILMS. — This class of documentary film, which is closely allied to landscape, tourist and folklore films, includes films which illustrate travel in countries near and far, in more or less unknown parts and in which we are shown the work of investigators and explorers.

A film of this kind which also has an archaeological value is one on Crete, shown at a lecture given by Md.lle Oulié at the French Institute in Madrid (*El Imparcial*, Madrid, D. 6/496).

The most important travel films, however, are naturally taken in countries outside Europe. As regards Asia, the Marquess of Zetland, who was for several years Governor of Bengal and President of the British Royal Geographic Society, gave a film lecture on India, at the Student’s Hostel in Madrid. (*El Debate, Madrid* - D. 6/480). Another Indian film is *Perils of the Jungle*, the first three parts of which, taken by F. B. O. Ltd., were lately shown in London (Daily Film Renter, London - D. 6/541); Herman Cron and his wife have just started on their return journey to New York after forty days’ hunting in the forests of Annam, and have with them cinematographic pictures of tigers, buffaloes and elephants taken in the wild state (D. 6/516). The Netherlands Indies have attracted two groups of film-makers. The first, under Adolf Zarkowitz, visited Sumatra, while the second, organised by Bowes Prod. has after two years’ work completed a documentary film called *Mawas*, the name given by the natives to the giant orang-outang found on the Island of Borneo. The latter film depicts wild life and big-game hunting in the Jungle (D. 6/471-531).

The largest number of travel-films are taken in Africa, the continent that has always appealed to investigators and explorers. Among these are *The Black Journey, Wild Animals, The Lion’s Roar* and *Bulls and Bears*, the last three of which are sound-films (D. 6/488, 504, 512), another film about lions turned in the neighbourhood of Kilimanjaro, and a film about Togoland, especially its still unexplored parts (D. 6/477, 3/286). Others are *The Wild Men of Caliñkari, Central Africa, Stark Nature*, taken in Western Sudan. With the Cannibals and the cinematographic photographs taken by the Prince of Wales illustrating close-quarter fights between the natives of Central Africa and lions (D. 6/459, 468, 494, 511, 524).

America contributes *Through Bolivia* (*La Película*, Buenos Ayres - D. 6/453) taken during a nine months’ journey of more than 20,000 miles, two films about Alaska, one by the scientist and explorer, H. Whitney, and the other, *Among the gold-diggers, backwoodsmen and Red Indians*, shot in an expedition organised by the “Meridian” Film Society of

Two films have been turned in Australia: Moana and L’Homme qui passe the first in Central Polynesia and the second in the New Hebrides. (La Semaine à Paris, Paris - D. 6/489 and To-Day’s Cinema, London - D. 6/547).

Even the polar regions have been reproduced in films. An element of fancy appears in The Lost Zeppelin, where scenes of nature are connected together by a story (D. 6/544), otherwise the cinematograph has been used to illustrate natural life. Included in this category is the film shown in Barcelona — with a lecture by the Rev. Joseph Ribes — on a voyage to the North Pole (La Publicitat, Barcelona - D. 6/505) and two other films, one on sealing off the Coasts of Labrador and the Arctic Ocean and the other, by Sir Hubert Wilkins, the explorer, about the Antarctic region and the unexplored land around the South Pole (D. 6/491 and Exhibitors Herald World, Chicago - D. 6/529).

One of the most interesting cinematographic expeditions is the Cape-Cairo-Rome journey.
at present being undertaken by Commandante Attilio Gatti, under the scientific direction of Prof. L. Cipriani. The leader of the expedition has sent to the Rome Institute a short description of the objects of this trip.

"The films we are making in the course of our long and fascinating journey from the Cape, via Cairo to Rome and which in the main relate to animal and native life, works of human activity and natural beauty and other matters of interest (including, of course, scientific work, discoveries and excavations of prehistoric man), are intended to furnish as full and faithful an account as possible of what we shall have seen, and the result should be a collection of instructional films arranged on the most modern lines and of an extreme variety and interest ".

The Gatti expedition is at the moment particularly valuable from the point of view of prehistoric research. An interesting article by Aldobrandino Mochi (Bollettino della R. Società Geografica Italiana, October 1929) describes the discovery of prehistoric settlements in Northern and Southern Rhodesia and in particular paintings of men, animals and objects on rocks in the district of Marandellas, South of Salisbury, in parts, that is to say, where no such documentary material was thought to exist.

The expedition has to contend with an infinity of troublesome insects, but it continues to employ the most modern means of taking film photographs and sometimes the operators even have to hide in the nests of the white ants or termites, while waiting for a good "shoot". The result should be a strikingly original series of films comparable with the Siliva Zulu which the same Commandante Gatti brought back from a journey to Zululand and which, with the help of native artists and a genuine African scenario, was a real work of art.

Dr. LUCIANO de FEO, Editor and Responsible Manager

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HENRI PESTALOZZI
(1746-1827)

"Nature is fair, but there is something fairer than nature and her material splendours, and that is the human heart."
(Henri Pestalozzi)
HENRI PESTALOZZI

PART I.

Scene 1.

"The Swiss people in 1745"

1. Peasants toiling in the fields.  2. Their sunburnt faces.
   3. and rough hands.  4. They can hardly drive their spades
   into the hard ground.  5. One man wipes his brow with the
   back of his hand...  6. looks into the distance  7. stops working
   in alarm.  8. Attracts attention of other labourer.  9. Their alarm.
   10. A long way off on the road is seen a group of horsemen.  11. Hor-
   ses' hoofs on the road.  12. Gay laughter of the riders.  13. Terror
   on the peasant's face.  14. Horses' hoofs.  15. Terrified face of
   peasant.  16. Group of nobles draws near...  17. and nearer -
   18. and nearer (last three dissolving one into the other).  19. Horses'
   hoofs.  20. The group draws up in front of the peasants.  21. Pea-
   sant, whose head is bent, raises his eyes...  22. from the ground
   upwards until they rest on the rider's face.  23. The latter's hard
   face.  24. Uplifted face of terrified peasant.  25. Nobleman's
   face. His cruel smile.  26. Peasant's hands gripping the spade.  27.
   Gesture by noble: "Let's cross the fields."  28. The group
   makes off across the ploughed fields.  29. Labourers' dejection.

Scene 2.

   32. An old man bent beneath his load (three pictures dissolve one
   into the other).  33. A guard laughs at him.  34. Gives the old man
   a kick from behind.  35. Old man's face is contorted with pain.
Scene 3.


Scene 4.

39. A carpenter’s shop. – 40. Carpenter’s coarse face. – 41. A workman is busy planing. – 42. His master knocks him about... – 43. and laughs.

Scene 5.

44. The word “Schule” is scrawled on an old door. (dissolves into) – 45. Inside. A number of children and a teacher. – 46. The teacher, who is the cobbler... – 47. is nailing a sole to an old boot... – 48. while the children are reading... – 49. squabbling... – 50. sleeping. – 51. A fight. – 52. The teacher drops his boot... – 53. separates the combatants... – 54. ...and cuffs them.

Scene 6.

January 11th, 1746, at Zurich, in the humble home of the surgeon-oculist Pestalozzi.


Scene 6-a.

70. (A beautiful peaceful landscape).

Scene 7.

71. (A stormy scene).
Scene 7-a.

72. A room. The father is ill in the arm-chair. Babeli, the servant. - 73. Suffering face of father. He speaks. - 74. Babeli goes and leans over his chair. - 75. Babeli’s anxious face. - 76. The father’s face. He speaks. - 77. Babeli’s face. She speaks.

The servant-girl promises the dying father to look after the children.


Scene 8.

82. In the room. The father is dead. - 83. The mother is on her knees in tears. - 84. Babeli comforts her... - 85. ...draws little Henry towards her. - 86. The other two children are frightened and bury their faces in her skirts. - 87. The mother weeps. - 88. (the bed) - 89. (the mother) - 90. (the children). - 91. Babeli’s face. - 92. (the children) - 93. (the mother) - 94. (the bed).

Scene 9.


Scene 10.

dishes his stick – 123. bawls at them – 124. hurls himself upon the boys – 125. and beats them (a series of close-ups). – 126. Henry wards off the blows... – 127. and makes his escape...

**Scene 10-a.**

128. ...goes out of the door – 129. runs along the street, looking over his shoulder, – 130. and putting out his tongue at the school.

**Scene 11.**

*While living with his grandfather at Honegg, little Jean-Henri Pestalozzi sees something of human suffering*

131. Henry is walking happily along the road (dissolves into) – 132. and goes on (dissolving into) – 133. he comes to a farm. – 134. As he passes, – 135. he stops suddenly, – 136. listens, and looks towards the farm.

**Scene 11-a.**


"If that's all your brats can do, I shall place my orders elsewhere".


**Scene 11-b.**

148. Henry approaches the open door – 149. looks in...
Scene 11-c.

150. sees the two confronting one another... – 151. ...the children 152. one of them is scraping out the bottom of... – 153. an almost empty basin... – 154. and licking the spoon hungrily.

Scene 11-d.

155. Henry looks on. – 156. His head drops.

Scene 12.

157. He goes slowly away (dissolves into) – 158. Walks along in sad mood (dissolving into) – 159. Then stops, lifts his head and looks back at the farm. – 160. His face is grave. – 161. He clenches his fist. – 162. Then his face lights up.

“*When I grow up, I will help you.*”

163. His face. – 164. He goes on his way.

PART II.

Scene 1.

1767. Pestalozzi, a student at Zurich, is friends with Professor Bodmer, who is more interested in politics than philosophy.

165. The bank of a river. Bodmer, Pestalozzi and a few others discussing as they go. – 166. They argue. – 167. and stop. - 168. Bodmer speaks. – 169. Pestalozzi listens, then speaks. (dissolves into)

Scene 1-a.

170. A room. Bodmer, Pestalozzi, and a number of others. – 171. Bodmer is talking, bangs his fists on the table. – 172. Bodmer’s face. – 173. He brings his fist down on the table. – 174. Bodmer’s face. – 175. Pestalozzi listens, then replies. – 176. A man comes in... – 177. ...goes up to Pestalozzi, who looks upset. – 178. The man’s
face. He speaks quickly: Bluntschli is dying... – 179. Pestalozzi is alarmed – 180. makes his excuses... – 181. takes up his coat and goes out with the man.

**Scene 1-b.**

182. They run along the street.

**Scene 2.**

*Pestalozzi meets Anna Schulthess at the bedside of their friend Bluntschli.*


**Scene 3.**

204. Pestalozzi and Anna are walking in the country – 205. planning... – 206. planning. – 207. Pestalozzi gesticulates as he goes. – 208. Anna bows her head. – 209. They stop. – 210. Pestalozzi’s face. He asks her a question. – 211. Anna’s face, as she replies

*Father and mother won’t hear of our marriage."

212. Anna’s face. – 213. Pestalozzi’s face of consternation. – 214. He gesticulates. – 215. They resume their walk.

**Scene 4.**

176. Compromised by the political activities of Bodmer’s pupils, Pestalozzi leaves Zurich for Birr (Neuhof) where he has bought a little land.

216 Pestalozzi is seated in a small cart; at first only his face is seen as he sits thinking. – 217. Pestalozzi seated; he speaks to the
driver. – 218. The driver’s jolly fat face. – 219. Pestalozzi. – 220. The cart moves on \((dissolving \ into)\) – 221. moves on further. – 222. and disappears round a corner.

**Scene 4-a.**


**Scene 5.**

1770. In spite of the opposition of Anna’s parents, Pestalozzi has married her. A child, Jacqueli, is born.


**Scene 6.**


_ingl._
268. Pestalozzi smiles and draws the child towards him — 269. ca-
resses him. — 270. Pestalozzi’s earnest face. — 271. Jacquel’s head
head and shoulders (close-up). — 274. Several impressions of this
head and shoulders — 275. each turning into a different child —
276. which stretches out its arms to Pestalozzi. — 277. Pestalozzi’s
earnest face. — 278. The children — 279. vanish leaving Jacqueli in
their place. — 280. Pestalozzi’s face.

Scene 7.

*Pestalozzi collects little beggar children around him and teaches them domestic tasks.*

281. A courtyard. Children (some sawing wood, others carrying
it). — 282. Pestalozzi comes up to two children who are dragging a
branch — 283. smiles — 284. a child’s smiling face, — 285. draws
them towards him and caresses them. — 286. Anna, with Jacqueli
beside her, stands in the doorway, smiling. — 287. Pestalozzi sends
the children back to their work, — 288. watches them as they go —
289. and, still watching them, steps backwards — 290. (a branch lying
on the ground) — 291. catches his foot in the branch — 292. and
collapses. — 293. The children gather round him — 294. a child’s
face. — 295. Pestalozzi’s face wreathed in smiles. — 296. He caresses
the children. — 297. Anna stands smiling in the doorway — 298. looks
into the distance. — 299. Her face clouds.

Scene 7-a.

300. Merki, dressed in black, enters the yard.

Scene 7-b.

301. Goes up to Pestalozzi — 302. who rises and dismisses the
children — 303. and talks to Merki. *Merki, a sly man of business,
has led Pestalozzi into unfortunate speculations and ruined him.*

304. Merki’s foxy face. He speaks. — 305. Takes a paper from his
pocket and hands it to Pestalozzi — 306. who makes a gesture of
despair - 307. puts his hand in his pocket and brings out his purse - 308. counts out money. - 309. A gesture of despair: Not enough. - 310. Merki grimaces - 311 takes Pestalozzi's arm and leads him into the house.

Scene 8.

1781. Poverty. His wife and child have returned to Zurich. Pestalozzi is left alone at Neuhof without any fire to warm him or food to eat.


Scene 9.

Having completed "Leonard and Gertrude", Pestalozzi takes it to his friend Iselin of Basle, who undertakes to get it published by Decker of Berlin.


Scene 10-a.

Scene 10-b.

349. A man is walking along reading. – 350. His face. – 351. The book is "LEONARD AND GERTRUDE" (dissolving into)

Scene 10-c.

352. An old man is reading. – 353. His face. – 353. The book is "LEONARD AND GERTRUDE" (dissolving into)

Scene 10-d.

354. A pastor is reading from the pulpit. – 355. The congregation listens. – 356. The book is "LEONARD AND GERTRUDE. – 357. The congregation and (superimposed) a title, two titles, ten titles: "LEONARD AND GERTRUDE ".

Scene 11.

358. Pestalozzi’s face. – 359. Pestalozzi sits at his table, reading (358 dissolves into 359)

"... and in honour of the author of this book, the Berne Economic Association sends him a gold medal specially struck."


Scene 12.

369. A baker’s shop. Pestalozzi comes out with a loaf of bread – 370. walks along the street.

Scene 13.

371. A child in rags, sitting on a doorstep – 372. holds out its hand. – 373. Pestalozzi stops and bends down – 374. caresses the child – 375. and gives it his bread – 376. stands up again, looks once more at the child and then goes off, with bowed shoulders.
PART III.

Scene i.

1798. The triumph of the Revolution in Switzerland.

377. A village (spacious scene) – 378. (superimposed) Crowd of faces passing along shouting the Marseillaise. – 379. The countryside and (superimposed) the faces (dissolving into) – 380. A town and (superimposed) the faces. – 381. The mountains and (superimposed) faces.

Scene 2.

French troops invade the territory of the Confederation, which becomes the Swiss Republic.


Scene 2-a.

385. On the walls of a village we see shadows – 386. of bayonets. – 387. Doors are seen shutting, shadows pass across them.

Scene 3.

The mountain-folk of Nidwald refuse to swear the oath of allegiance to the new Constitution and rise in revolt. The Swiss Directorate sends troops to subdue them.

Scene 4.


Scene 5.

Pestalozzi, sent for by his friend Stapfer, a member of the Directorate, offers to devote himself to the orphans of Nidwald.


Scene 6.

December 7th, 1798. Pestalozzi arrives at Stanz and takes up his quarters at the Clarissa Convent.


Scene 7.

He soon gathers round him some hundred orphans, to whom he is both father and teacher.

Scene 8.

442. Same room. The children are cleaned up, Pestalozzi is at the table. They are singing. 443. Pestalozzi beats time — 444. and sings. 445. A child singing — 446. another — 447. a child laughing in a corner. 448. The children singing.

Scene 9.


Scene 9-a.

458. A local worthy passes, dressed in black.
Scene 9-b.

459. Sees the children playing with Pestalozzi. – 460. His look of horror and disgust. – 461. He passes on, looking back as he goes – 462. very shocked.

Scene 10.

The local notables view Pestalozzi’s work with disapproval and regard him as a dangerous heretic.

463. A meeting of the notables, who are seated round a table. – 464. The man in the last scene comes in. – 465. He salutes the company – 466. sits down at the head of the table – 467. and opens the discussion. – 468. He makes a speech. – 469. (Pestalozzi playing with the children). – 470. His speech. – 471. (Pestalozzi is described as passing a church without turning his head). – 472. The man talking. – 473. Another man listens and then replies. – 474. (He meets Pestalozzi – 475. greets him – 475. but Pestalozzi, sunk in his own thoughts – 477. passes on without returning the salute. – 478. The man turns round offended). – 479. Is seen speaking to the company. – 480. They all talk at once, their fists banging upon the table. – 481. They get up – 482. and go out.

Scene 11.

484. Pestalozzi playing with the children. – 484. The notables come on the scene – 485. brush the children roughly aside – 486. and gather round Pestalozzi. – 487. The man in the earlier scene talks.

Scene 11-a.

On the grounds that the convent annex, which is used as the school, is needed for a hospital, the notables request Pestalozzi to clear out at once.

488. The man talking. – 489. Pestalozzi’s face of surprise, then of rage. – 490. He gesticulates angrily. – 491. The other man is furious and signs to him to leave. – 492. The man’s face and pointing finger. – 493. All the notables point to the door. – 494. their out-
stretched fingers. - 495. Pestalozzi looks helplessly around - 496. and takes his departure. - 497. The men roughly scatter the children who have gathered near - 498. and depart. - 499. One child looks at Pestalozzi as he enters the convent - 500. and then at the notables - 501. shakes its fist at the latter - 502. as they disappear - 503. then gets up and runs to the door by which Pestalozzi went out.

**Scene 12.**

504. Same room as No. - 415. Stapfer is walking up and down. Pestalozzi is sunk in an armchair - 505. with eyes full of tears he tells the story. - 506. (The notables). - 507. his story. - 508. (the outstretched fingers). - 509. his story - 510. (the children with their arms held out). - 511. Then, covering his face with his hands - 512. he bursts into tears. - 513. Stapfer stops walking up and down - 514. and tries to console him. - 515. Pestalozzi is seized with a fit of coughing and can’t get his breath. - 516. Stapfer is alarmed and summons assistance. - 517. He busies himself with Pestalozzi helped by a servant who comes in.

**Scene 13.**

*As soon as he recovers from this cruel blow, Pestalozzi undertakes the care of a class of poor children at Burgdorf (Canton of Berne).*


**Scene 14.**

*He next opens a school in the Castle at Burgdorf, where Anna joins him after the death of her son Jacquel.*

529. In the castle courtyard. Children. Pestalozzi. - 530. A carriage drives up and stops. - 531. Pestalozzi runs up - 532. and
helps Anna to descend – 533. embraces her – 534. and points out the children. – 535. A big boy is sitting beside a little one, teaching him the alphabet – 537. with his finger he points to the letter A. – 537. The small child’s face as he says “A”. – 538. Anna and Pestalozzi look on. – 539. A big boy places stones on the ground: 1, 2, 3, 4 – 540. and points them out to a small child – 541. ...ein... zwei... drei... – 542. The child raises three fingers: ein, zwei, drei. – 543. The big boy shows four stones: ein, zwei, drei, vier. – 544. The child puts up four fingers: ein, zwei, drei, vier. – 545. Anna smiles – 546. guides her husband towards the door. – 547. As she passes she caresses two children – 548. who cling to Pestalozzi – 549. and follow them.

**Scene 15.**

550. Castle yard. A mother brings two ragged little children – 551. to Pestalozzi, who draws them towards him – 552. chucks them under the chin. – 552-a. (We see No. 257, Pestalozzi and Jacqueli sitting on the bank). – 553. He sends them to play with the other children – 554. who include them in their games. – 555. The mother’s look of thanks. – 556. She is about to kiss Pestalozzi’s hand – 557. but he prevents her and escorts her to the gate.

**Scene 16.**

558. A room. Anna is sewing; Pestalozzi is walking up and down, a letter in his hand. – 559. He reads the letter.

_The fall of the Directorate cancelling all its decisions, We, the prefect of Burgdorf, order Monsieur Pestalozzi to hand over to us the Castle, which is our property._


**Scene 17.**

and hides his face in his hands. — 569. Another, then two others, them several more, run up to Pestalozzi — 570. and clutch hold of him. — 571. Pestalozzi, eyes filled with tears, disengages himself — 572. and gets into the carriage. — 573. They move off. — 574. The children follow a little way — 575. waving their hands to Pestalozzi — 576. who looks back at them from the window, the tears running down his face, — 576. as he leaves the children behind — 577. The carriage disappears in the distance.

PART IV.

578. A room. Pestalozzi at his table. A mother sits facing him, with her little boy. — 579. The woman — 580. speaks fussily — 581. her profile as she talks — 582. points to her neatly-dressed little boy — 583. talks.

SCENE 1-a.

584. (The boy is seen seated in class. — 585. A teacher brings in another boy in ragged clothes — 586. and leads him towards the little
bourgeois. – 587. The latter looks askance at him. – 588. The new boy is given a seat. – 589. Face of the poor child. – 590. Disgusted face of the other).

Scene 1-b.

591. The woman goes on talking. – 592. Pestalozzi’s grave face. He replies.

“This institute is a labour of love, a love which embraces the poor as well as the rich.”

593. Pestalozzi’s face. – 594. The woman’s face; she is reassured. – 595. She takes Pestalozzi’s hand. – 596. The child goes to Pestalozzi and climbs on his knee. – 597. Pestalozzi and the child, the woman’s hand in Pestalozzi’s.

Scene 2.


Scene 3.

Scene 4.

1814. The allied armies have entered Switzerland. Czar Alexander of Russia has established his headquarters at Basle.

628. A room. The Czar is writing at a table. - 629. His absorbed expression. - 630. He writes.

Scene 5.

631. Yverdon. A room. Pestalozzi is writing at his table. - 632. A teacher comes in. - 633. Pestalozzi looks up enquiringly. - 634. The teacher's face as he speaks:

"The municipality has had orders to billet troops here, in the château."

635. He goes on talking. - 636. Pestalozzi jumps up unable to believe his ears. - 637. He bangs his fist on the table, the papers are sent flying - 638. walks furiously up and down.

Scene 6.

639. At Basle. A big door is opened by a flunkey - 640. He advances respectfully towards the Czar, who is standing. - 641. The Czar signs to him to bring in the visitor. - 642. Servant returns to door and signs to those outside. - 643. Pestalozzi enters, followed by two nobles. - 644. He bows. - 645. (Czar's face as he returns the salutation). - 646. Pestalozzi advances to the Czar - 647. and starts to speak. - 648. His face lights up.

"Your Majesty will not allow troops to be billeted in my Institute or in Yverdon."

— 1260 —

- 663. asks forgiveness - 664. and makes as if to kiss the Czar's hand. - 665. The Czar anticipates this movement and embraces Pestalozzi.

Scene 7.

After the death of Madame Pestalozzi internal dissensions break up the Institute. Pestalozzi leaves Yverdon to join his grandson Gottlieb at Neuhof.

666. On the road. Pestalozzi, four children, Schmid, a number of tramps pass by. - 667. Pestalozzi is seen walking along, talking and gesticulating. - 668. A child, tired, takes his hand. - 669. They pass along the road - 670. and proceed on their way.

Scene 8.


Scene 9.


Scene 9-a.

683. (A room. Two teachers are quarrelling in front of Pestalozzi. - 684. He tries to calm them - 685. one goes out banging the door (dissolving into)

Scene 9-b.

Scene 9-c.

693. Pestalozzi continues the story. - 694. Gottlieb gets up and, going to Pestalozzi says "Take all I've got".

Scene 10.

1827. Worn out with work.

695. A room. It is night. The lamp is lit. Pestalozzi writing - 696. writing. - 697. His tired face. - 698. His head sinks on his arms and he falls asleep.
Scene ii.

Pestalozzi, now 81 years old, falls seriously ill and has to be taken to Brugg.


Scene 12.

February 17th, 1827, in the early morning.


Scene 12-a.

726. The room, seen from another room. Pestalozzi’s bed framed in the doorway. Someone shuts the door.

Scene 12-b.

726. Pestalozzi’s monument at Yverdon (superimposed upon the door.).

A. Ehrler
After reading M. Ehrler’s delightful scenario, it might reasonably be held that this film version of the life of Pestalozzi should be followed by an article on child welfare rather than on modern pedagogy, a system, that is, of teaching which attaches increasing importance to the use of the cinematograph. It was naturally a difficult matter, in a scenario of movement and action, to do justice to Pestalozzi’s methods of educational reform; M. Ehrler has preferred to emphasize the exquisite sensibility and loving — kindness which inspired the work of the famous Swiss pedagogue. With great suggestive force he shows us Pestalozzi living, fighting and suffering in an atmosphere exposed to the strong blasts of the Encyclopaedists. The intellectual whirlwind which swept Europe at that time did havoc among the reactionary and the unprepared, but it brought new life to those whose ears were already tuned to catch the voice of reason and truth.

Pestalozzi was one of these. Children were his first, indeed his only care and it was his endeavour to make education fruitful instead of burdensome. Thus his life is an example to those who devote themselves to child welfare and to those who seek to make lessons more attractive and thereby more effective.

Nature decrees that the tree must blossom before it bears fruit. Childhood and adolescence have often been called the spring-time of life, but until Pestalozzi’s day this spring was without fresh air, sunshine or flowers. Culture was a hot-house plant for a few privileged people; the rest had to be content with the rudiments of knowledge knocked into them by some village cobbler who was more gaoler than teacher. Pestalozzi’s great merit is that he introduced life and colour into elementary education, bringing light and sunshine into the classroom. Following in his tracks, Froebel was destined later to create those kindergartens whose very name conjures up visions of sunshine, fresh air, spring flowers and happy children.

It may be said that all teachers worthy of the name have always tried to make school a pleasanter place and the lessons easier to assimilate, and it may even be added that they have all found one of the main conditions of this increase of pleasure and assimilative power in visual teaching. Pestalozzi, if he had lived in our day, would certainly have been a strong supporter of film-teaching.

We should be anticipating the article that follows if we were to point out in this note how and why the cinema is an admirable means of humouring youthful brains and of making school more attractive to children. M. Angé shows this so convincingly that we need add nothing to his arguments in favour of teaching by film and to his replies to objections. In inserting this note between M. Ehrler’s scenario and M. Angé’s article, our only intention is to stress a factor common to all educational reformers — love of children and love of progress.

Before concluding, however, we would draw our readers’ particular attention to the second part of M. Angé’s article, which deals with the pedagogic aspects of film-teaching, and we would ask them to refer to the letter-questionnaire recently circulated by the I. E. C. I. to the teachers of a large number of schools in different countries which had already received other questionnaires addressed to the pupils (See Int. Rev. of Educ. Cit., No. 6, June 1930). This letter to teachers contained numerous questions on the method to be followed in film-teaching. M. Angé gives some practical hints of the greatest value to all who are working for the introduction of the cinema into our schools. B. de Ch.
TEACHING FILMS FROM THE PSYCHOLOGICAL AND EDUCATIONAL POINTS OF VIEW

(from the French)

I.

THE PSYCHOLOGY OF TEACHING FILMS.

There are many excellent reasons for introducing the cinematograph into schools.

1. The fundamental defect of collective teaching is the inequality in the intelligence of pupils with the result that in every class a minority follows the teacher's words, while the rest constitutes a regrettable "tail," passing its time on the school-benches more or less unprofitably.

This state of things is mainly due to the fact that many of the pupils, being less able than the best to understand and absorb what is taught them, are soon discouraged and left behind and make no further effort to deal with a situation which is only aggravated as term goes on. There is no denying that the acquiring of instruction is a dry business and, at the age when it first begins, against nature. There is a story of a little boy who ran away from school because "teacher's all black and I mayn't laugh." Again and again experience has shown that though the fruits of knowledge are sweet, the roots are bitter.

Many children's prospects are blighted at the outset, because they have what we may call a "visual" instead of an "auditive" or "cerebral" memory and can only grasp and retain what is seen by the eye. The cinema is the best possible instrument of all-round education, that is, education imparted through the eyes as well as through the ears and mental faculties. For all of us, the cinematograph will make learning easier, thus conforming to the rules of practical pedagogy, which aims at a maximum intellectual return with the minimum of cerebral fatigue. By this means effect can be given to the wise dictum of Monsieur Ch. M. Conyba, president of the Association "L'Art à l'École" and a former minister: "Between an Academy of Tears and Dame Nature's kindergarten there is room for a school of brightness and gaiety, of light and joy."

2. Even when it is possible to show pupils things directly or to carry out experiments in the class-room — which is not often the case — a serious obstacle is encountered in the fact that nearly always only a few of the children see properly what is going on; most of them have either a poor view or none at all. The cinema, by throwing on to the screen a magnified
picture, is the ideal instrument of collective education and profits one and all.

3. Then again the cinematograph saves time. It shows very rapidly indeed what in real life it would take many hours to observe and is thus quite the quickest means of teaching.

These three advantages make up what M. Brucker, professor of natural science at the Versailles Lycée, in a lecture given in 1912 at the Pedagogic Museum in Paris, on class-room instruction, declared to be the essence of all good teaching. "Other things being equal," he said, "let us choose the most direct method possible."

"Other things being equal, our best method is the method which is the most collective.

"Other things still being equal, a more rapid method is better than a slower one."

4. The cinema has one special advantage, a peculiar power of attracting and holding attention and of arousing interest, as Dr. Toulouse fully realised when he wrote in an article in the Figaro on "The psychology of the cinema:" "Cinematographic reproduction pleases in so far as it is, like photography, a reproduction, that is to say, an unfamiliar aspect which stimulates our curiosity...

"How interested we should be if we could see Napoleon returning from a campaign, a tragedy acted by Talma or even a ball at Madame Récamier's."

5. By concentrating upon a lesson the whole of a pupil's forces — his curiosity, attention and interest — the cinema enormously enhances the value and profit of the lesson. The pupil is all eyes and ears; not a word or a flash of light escapes him. In this way he learns to improve his powers of observation, memory and reflection. Attentive watching trains his visual memory, and this will lead him to exercise his imagination and mental faculties. Psychology teaches us with absolute certainty that the cinema, by applying all a pupil's faculties to the subject taught — the process of learning becoming to some extent a pleasure — is for this reason the most effective of all methods of instruction.

6. The cinematograph will give our schools that reality and actuality they so often lack, since it will replace vague words, dim conceptions and inexact abstractions by the clearness and force of concrete things.

Rousseau, the founder of modern teaching and to this day the greatest of our educators, exclaimed long ago: "I hate books; they only make people talk about things they don't understand." The cinema, by supplementing and illustrating the printed word, will endow it with the qualities of true knowledge. We may say with Virgil: "Visu patuit dea Veritas."

7. Further, the screen, by analysing movements too rapid to be directly followed and by synthetizing movements so slow as to escape our notice — by slow-motion and acceleration — allows pupils in certain special
and particularly important cases to enlarge the field of their knowledge and to acquire notions which they would otherwise find difficulty in seizing. Along with the microscope and radiography the film of today is the most subtle instrument of scientific research and therefore of demonstration and record in our schools.

8. Lastly, films possess the enormously valuable quality of incorporating the whole universe and every aspect of life within the school curriculum without its being necessary to leave the class-room and without therefore relaxing the strict form in which teaching is given. The drawback of scientific excursions and organised school walks is that, once out of the class-room pupils forget that they are still expected to learn and to work and they profit little by the instruction given. With the help of the cinema, the mountain comes to Mahomet and knowledge comes to children without, their leaving their desks and exercise-books. The teaching of the film is natural, for the very atmosphere of the class-room keeps the pupils in the right mood for learning. This is an educational factor of inestimable importance.

Compared with these many advantages, the objections to teaching films raised by a few adversaries are either very superficial, very inconsistent or else do not apply to present-day conditions.

1. It is said that the introduction of the cinema into schools encourages the pupil to relax the intellectual effort which is the first condition of all progress and that the pupil will be bored by all lessons which are not illustrated by a film. To complain that animated pictures make the schoolboy's task too pleasant and too easy is surely as if a man were to complain that his wife was too beautiful! To say that teaching unaccompanied by a film would be ineffective and uninteresting to the pupils is surely the strongest possible testimony to the value and importance of school films. This being so, why delay any longer in introducing the cinema for all branches of teaching instead of confining its use to certain subjects? This would ensure successful educational results throughout the whole curriculum.

Those who argue in this way, however, are bad psychologists and fail to take account of two important facts. In the first place, if pupils cease to be interested in lessons unaccompanied by films, it is because these lessons never did interest them, in which case nothing is lost. The cinema can only influence those lessons in which it is employed and here its influence is admittedly good. In other directions there will be no change.

Secondly, the diminished effort required of pupils is offset by the increased and fuller exercise of their powers of vision, attention, observation, memory, imagination and thought. Instead of remaining a passive listener, the child gives the whole of his mind to absorbing the intellectual content of the film presented to him in the plastic, coloured, animated and living forms in which he can best assimilate it. It is impossible to conceive of a closer collaboration between teacher and pupil than through the invaluable medium
of the film. Unprofitable brain-fag is replaced by the fruitful deployment of all the conscious and unconscious forces which impel children to drink in knowledge through the eyes.

This objection, in fact, is on a par with reproaching a sailor or astronomer for using a telescope and thus preventing the naked eye from exercising the wholesome visual effort which alone can profit him!

2. It is also argued that the darkness is bad for discipline. To this argument, too, we have two answers. Firstly, experience of teaching films has led to shaded lamps being placed above tables or desks which allow a certain amount of light in the room without affecting the visibility of the screen. Moreover, an unruly pupil can be sent out of the room or threatened with dismissal or with some less agreeable exercise in place of the film, and there will be no further trouble on the score of discipline. People who raise objections of this sort show more knowledge of the methods of the police and the reformatory than of modern school-teaching.

3. A legitimate objection — and one that is based upon pedagogic experience — is the argument that films are shown too quickly so that the pupil loses the thread and fails to derive full profit from the lesson. This criticism, however, has lost its force now that improved technique allows us to stop the film at any point and to combine the advantages of animated and fixed projection, the teacher being free to emphasize subtle points and to dwell on difficulties or anything that is especially remarkable. In this way, the teacher, as is only right, remains pre-eminent.

4. Similarly, the grave objection based on the danger of fire has no longer the force it used to have, now that films can be made uninflammable and modern apparatus offers all the guarantees and precautions required by the administrative authorities.

5. When it is argued that the cinema will never altogether replace the teacher as an educative medium, that is an opinion that the partisans of the school cinema are the first to endorse. After all, books have not replaced the teacher, yet they are used in class. So, too, the cinema only claims to be one medium of education, an aid to the teacher, an adjunct to the technical equipment of schools and even with these limitations, it fills an important rôle.

The only objections that can still be raised are those founded upon the unskilful or inappropriate use of films in schools, and this brings us to the pedagogic aspect of the educational cinema.

II.

THE EDUCATIONAL CINEMA FROM THE POINT OF VIEW OF TEACHING.

Without laying down hard-and-fast rules or encroaching upon the powers of the competent authorities, we may be allowed to summarise very briefly what experience of the school cinema and the science of education
indicate as the general lines which the modern teacher should follow in order that school films may give the best results.

I. Firstly, films should be shown at the school and not in a public hall. Of course, instructional performances in cinema theatres have an educational value and are in every way an improvement on "The Mysteries of St. Francis" or "La main qui... terrific." This is another matter, however, affecting the social aspect of the commercial cinema, which can be both educational and interesting, as is every day shown by the scientific topical films produced by film manufacturers who seek to amuse and instruct the public at the same time. But this is not the point of view with which we are here concerned. If teaching films are to give the best possible results, they must be shown in the schools themselves.

The ideal would be for each class-room to be fitted up with a view to film teaching, and this is a much simpler matter than is generally supposed. All that is needed is room on one of the walls, preferably beside the blackboard, for a screen of about 2 m. × 1 m. so, and space in the room for the projector. Further, there must be an electric switch, lamps with special shades in the room and in front of the blackboard, the possibility of shutting out daylight by curtains, screens, shutters or some other device. There is therefore no occasion to disturb ordinary class-room routine. Before the class begins the apparatus would be put in readiness as required, without any fuss or disturbance. The installation is simply added to the class-room in the same way that maps are let down from the wall for lessons in geography.

Pending, however, this ideal state of affairs, for which we shall doubtless have to wait a long time, a special hall, room or yard will have to be provided and fitted up in the way described, to which each class will proceed in turn whenever the lesson requires illustration by film. Boys and girls will go to the cinema room on these occasions, just as they go now to the gymnasium, the physics laboratory or the drawing class. The only "movement" necessitated is the customary movement of a class from its own form-room to that of another.

2. Teaching by film can only yield the maximum return if it is brought into its true relation with the school curriculum. That is to say, it must not be regarded as a side-show, an unnecessary luxury, a haphazard arrangement. Filmed lessons must be incorporated in the programme for the term or year; their function clearly defined and they must have their own allotted place in the general body of knowledge to be imparted to the pupils. In other words, the films must not be chosen anyhow or be merely vaguely instructive, but must be films which teach something definite and specific and strictly relevant to the scheme of work laid down for the class.

Films of this kind can only be made by collaboration between teachers and cinema specialists. The relation is the same as that which exists between teachers and publishers in regard to school text-books and manuals. The teacher
arranges the book in accordance with educational requirements, while the publisher puts it into the necessary material shape. With regard to teaching films, the teacher, having the requisite authority and also the necessary understanding and appreciation of their purpose, will fix in all its details the subject-matter of his film teaching, in accordance with the programme of studies officially prescribed for each class.

The teacher will thus determine the 20, 30, 40 or 100 films normally included in the programme of a course, a class or school year, just as to-day our school text-books include diagrams, illustrations or explanations devised or framed in accordance with the views of the teacher. It is only then that the cinema specialist — the publisher, as it were, of the film — will be called upon to produce a school film in accordance with the resources of cinematographic technique. The result will be a new manual, a filmed manual, in fact, but, instead of being put into the pupil's hands, it will remain at the teacher's disposal to be shown on the screen at a given moment in the lesson or during the school year.

Just as there are several text-books published on each subject by different firms from which teachers can make their choice, so, too, when film teaching has developed, there is no reason why there should not be several series of films in each subject, making up, as it were, a kind of filmed text-book compiled by the various cinema firms for the use of the teaching profession. We even foresee a time when school-films will be so much the rule that the ordinary printed text-books will mention the films which they recommend should be shown to pupils at a certain point in the book. Or they may themselves propose a scheme of lessons by film.

A few big firms have already begun to build up stocks of teaching films adapted to school curricula and are steadily developing this branch of their work.

3. A teacher, once in possession of a series of films relating to the subject he is teaching, must not be content with mere projection, if he wants his pupils to derive the maximum benefit from them. The film must be made to contribute to the lesson in exactly the same way as a map drawn on the blackboard, a drawing, a geometrical figure, a sketch, a graph, or an experiment carried out in physics, chemistry or natural history.

The film will not be a thing apart, but will be fitted into the rest of the lesson. Before, during and after the projection the teacher will give oral explanations not only about the film but as if it did not exist. He will ask questions and the pupils will make notes; he will use the film as material for written and viva voce exercises and for essays to be written in class or afterwards. Above all, he will stop the film whenever it is necessary.

Enough has now been said concerning the teacher's use of films and this intimate fusion with the normal curriculum, whereby the best results will be obtained from both film and teaching.
4. From the material standpoint lessons by film are very easy to conduct. Present-day projectors have been brought to a high degree of perfection and the teacher can have every confidence in them. They are strong, solid and simple and give a clear and luminous picture. A mere turn of the switch will throw the necessary light on to the screen, into the room or on to the screen and the pupil's desk at the same time.

To quote M. Callette, the apostle of film teaching, "the lights in the room only illumine the tables and diminish the luminosity of the projection very little. The teacher can therefore put on the lights in the room during the projection; he can even secure a fixed image by stopping the machine and can then light the room so that the pupils can take down notes or copy the picture on the screen ».

Thus at any moment and by a simple movement of the hand, the teacher can project animated pictures in the dark or a fixed image in semi-darkness or he can stop the apparatus and light up the room.

The manipulation of the projector is very quickly learnt, and the makers are only too pleased to show any teacher how to use it. Moreover, teachers' training colleges will as time goes on more and more instruct their students in the operation of school cinemas, with the result that before long young teachers will be as familiar with this new educational instrument as they are to-day with the telephone and type-writer. Meanwhile, in colleges and high schools it should be easy enough to obtain the services of an operator, who will go from class to class according to the time-table, like the assistants and servants who prepare the work of our science laboratories. This outside help will cease to be necessary when every teacher, of whatever age and grade, has learnt to appreciate film teaching to the point of being his own operator.

Louis Angé
Professor at the Ecole Supérieure de Commerce,
Paris and at the Institut d'Enseignement com-
cmercial supérieur, Strasbourg
In the article that follows, Dr. J. Hanauer proposes to classify and catalogue films according to the decimal classification system, familiar to all whose work necessitates a copious and varied documentation and adopted by a large number of public and private institutions all the world over.

By reason of its scientific value, such a proposal deserves very careful consideration.

The I. E. C. I. is especially interested because it has for some time been engaged in compiling a full catalogue of all educational and instructional films in existence, which should become of great practical value to the Institute's work as soon as an international diplomatic Conference has adopted the Customs Convention on educational films already approved in principle by the Council of the League of Nations.

The decimal classification permits of a uniformity in cataloguing which would confer upon the catalogue a universal character by making it accessible to users in every country, independently of the alphabetical classifications in each language, which are of very relative universality.

Can the decimal method be applied to the work of the I. E. C. I. and, if so, how? Should the Institute employ it forthwith in the early stages of its classification or not till later on? All these questions will have to be studied. For the moment the Institute desires to submit Dr. Hanauer's proposal to the criticism of those who are interested. It does not, of course, claim to be complete nor is it wholly intelligible to the layman; it only seeks by examples to show the universal value of a general system of classification that might be applied to the cataloguing of films.

Every end presupposes certain means, and an international institute which deals with scientific subjects, in either material or ideal form, will do well to employ available methods which have already proved their value. This is especially the case when the methods are international, that is, independent of a given language. Without being blind to the difficulties which exist in this matter, I may safely assert that it is better gradually and organically to improve an already existing procedure than to select haphazard the films now in existence as the basis of a special system which in a few years would prove to be unduly rigid. The adoption of a fully worked out encyclopaedic sub-division would, as Wilhelm Ostwald has pointed out, not only have the advantage of making generally known what already exists but, if competently carried out, would further open up branches which for one reason or another have not as yet been the sub-
ject of cinematographic representation. To make myself clear, I would propose the same system of keeping films which for the last fifty years has been more and more employed for keeping book catalogues, bibliographies and also lantern-slides. This suggestion is all the more natural since it is quite possible that some monograph may be published on the same subject as the film deals with, and that the librarian must therefore be in a position to classify that subject. On the other hand, it is to be assumed that many librarians who are entrusted with the keeping of films will extend to the latter the system adopted in their libraries for books. The first thing to do therefore is to analyse the procedure already employed with advantage, more particularly in natural science, engineering and medicine.

Several decades ago Mr. Melvil Dewey, the able head of the Educational Department in New York State — when suddenly faced with the necessity of establishing a large number of libraries — recognised that consistent and uniform classification could only be brought about by means of numbers, and he therefore divided the whole realm of intellectual activities, in so far as these assume documentary form, into ten large groups, which others might perhaps have divided differently. The fact, however, that this classification, which is called the Decimal Classification, has proved its worth in a very large number of libraries and recently in bibliographical undertakings and even in industrial archives, and is being increasingly used, shows that the same system will be found useful in all cases when experts employ it with the assurance that it will work. Thus O denotes General Works: works comprising several branches of science: (1) Philosophy, including psychology; (2) Religion; (3) Social science, economics, law, administration; (4) Philology; (5) Natural science including mathematics; (6) Engineering, applied science, medicine; (7) Art; (8) Belles lettres; (9) History, geography. Under this system any extensions that become necessary as time goes on are indicated by the addition of further decimal figures as follows: 17 Morals; 175 Morals in connection with amusements and recreation; 178 the Drink question; moderation, abstinence; 33 Economics; 331 Labour; 331.2 The wages question; 331.6 Unemployment; 331.7 Individual occupations; 331.8 Other labour questions; 331.81 Working hours; 331.811 Sunday leisure; 331.814 Holidays; 331.815 Labour festivals; 331.82 Places of work: factories; 331.822 Industrial hygiene in general: prevention of occupational diseases; 331.823 Protection of labour; occupational accidents; safety devices in factories; occupational dangers; 331.825 Occupational diseases: incapacity for work; disablement; 331.826 Vocational suitability, choice of vocation, etc. 63 Agriculture. It may be said that all kindred questions are included by name and provided with a short and perfectly distinct numerical symbol. A great advantage of arranging educational films in this way, following the literature on which the system of classification here described was originally based, will be that the film and the literature on the subject are under the same number, as well as all other explanatory matter
such as statistics and diagrams. The second French edition of this "Classification Décimale Universelle" is now being published by the "Institut International de Bibliographie", Palais Mondial, at Brussels, and the German translation has begun to appear even before the publication is complete.

We will proceed with our description of the system, the importance of which is especially remarkable in the field of natural science, engineering and medicine. Many critics have objected that the numerical symbols are sometimes unduly long, and I may be allowed to answer this objection. I will confine myself to the methods employed in one important branch such as electro-technology. Taking 6 as the symbol for technical science, we get the following:

62 Engineering
621 Construction of Machinery
3 Electro-technology
31 Supply of Electricity in the widest sense
311 Electrical Power Stations
316 Distribution of Electric Force
1 Distributing Systems
2 Feeding of Systems
26 Sub-stations
265 Independent sub-Stations.

The large group of engines and boilers is placed under 621.1; further subdivisions are 621.18 Steam Boilers and 621.182 Heating of Boilers. As we know, each country employs different materials for this purpose, which come under 66, Technical Chemistry. 662 comprises Furnaces and Fuels, the latter being divided into 662.6 Heating and Fuels in General, 662.7 Heating Material obtained from Natural Substances, 662.8 Mechanical Fuels, 662.9 Stoves and Heaters.

It is to the credit of the founders of the International Bibliographical Institute at Brussels, M. H. La Fontaine and M. P. Otlet, that they have resorted to the very convenient system of combining two or more decimal numbers. Thus, if it is desired to show that a steam boiler is heated by coal dust (as we know, there is a considerable body of literature on this subject), we simply put 621.8: 662.87. In this way, everybody interested in steam boiler heating by mechanical means, on the one hand, and everybody interested in coal dust heating on the other, receives information of every new publication bearing his own decimal number. In the cataloguing of films, recourse must be had to this or some similar method for the purpose of bringing order into our present-day confusion. I will not, on the present occasion, refer to the problem which will certainly arise one day of cataloguing parts of films in such a way that parts specially desired will be found in the catalogues, and thus in many cases save taking pictures over again, at great expense and trouble.
After this survey of a classification according to subjects, let us turn to geographical arrangement on the following lines:

(4) Europe
(42) England
(43) Germany
(436) Austria
(437) Czechoslovakia
(438) Poland
(439) Hungary
(44) France
(45) Italy
(46) Spain
(469) Portugal
(47) Russia
(481) Norway
(485) Sweden
(489) Denmark
(492) Netherlands
(493) Belgium
(494) Switzerland
(496) Turkey
(497) Jugoslavia
(498) Roumania
(499) Greece
(5) Asia
(51) China
(52) Japan
(54) India
(56) Turkey
(6) Africa
(61) North Africa
(62) Egypt
(64) Morocco
(68) South Africa
(7) North America
(71) Canada
(72) Mexico
(728) Central America
(729) West Indies
(8) South America
(81) Brazil
(82) Argentine
(83) Chile
(85) Peru
(9) Oceania
(92) Sumatra, Java
(94) Australia

This description of countries by numbers establishes their order in a perfectly clear manner and users need not depend on any alphabetical arrangement. In order to appreciate this advantage, we need only look at any statistics or book containing international surveys, where we find countries arranged in the most arbitrary order. The procedure here described permits of film catalogues being classified according to two points of view — subject-matter and geography — giving the following system of subdivisions:

Arranged according to subjects

178 Alcohol Question
640.244 Tea Rooms
(421) In London
308 Social Conditions
(58) In Afghanistan
351.81 Traffic Regulation
(443.6) In Paris
392.51 Marriage Ceremonies
(54) In India
614.8 Accident Prevention
674.05 Wood-working Machinery
(481) In Norway
621.311 Electrical Works
(431.5) In Berlin
631.556 Harvest
633.72 Tea
In China
634.33 Lemon-growing
(45) In Italy
634.8 Vineyards
(569) In Palestine
640.244 Tea Rooms

GEOGRAPHICALLY

(4) In Europe
614.8 Accident Prevention
(421) In London
674.05 Wood-working Machinery
640.244 Tea Rooms
(51) In China
631.556 Harvest
(431.5) In Berlin
633.72 Tea
621.311 Electrical Works
631.556 Harvest
(443.6) In Paris
531.81 Traffic Regulation
392.51 Marriage Ceremonies
(45) In Italy
634.8 Vineyards
(569) In Palestine
634.33 Lemon-growing
(58) In Afghanistan
634.31 Orange-growing
608 Social Conditions
(481) In Norway

Until we have an international language — a problem this of the utmost importance to educational films — it is a matter of considerable importance to indicate the language in which film captions are written. This, too, has found a very ingenious solution.

c89.2 in Esperanto

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</table>

The above table shows that the language in which captions are written is indicated by the number at the end of the caption, followed by a second number in parentheses, which indicates the language.

I see two possible ways of applying this system to our present subject-matter. In the first place, the main index, which for the present is kept at the Rome Institute, could be compiled on the decimal system, both according to subject-matter and also according to the place of deposit.

There occurs to me, however, another method employed in the film department of the Allgemeine Elektricitäts-Gesellschaft in Berlin and also elsewhere, which furnishes a basis for the unification so generally desired.
A sort of «bibliographical» copy will be printed of every educational film which will contain all the necessary details, including the symbol-number employed as described above. In this way an agreed form and library symbol will bring about a kind of collaboration which will leave room for individual initiative, while enabling all to feel that they are participating in the great international educative mission which the Cinematographic Institute has so successfully inaugurated.

Dr. Julius Hanauer
THE GERMAN QUOTA LAW

(from the German)

Dr. Walther Plugge's article setting forth the ideas of the Spitzenorganisation of the German film industry tells us the past history of the German Quota Law and the execution of the various provisions contained in the Decree of July 21st. of this year.

Many enquiries have been addressed to the Institute asking for an explanation of the scope of the new German quota regulations. Although the matter is quite unconnected with the work of the I. E. C. I., we are anxious to meet the wishes of our readers and publish Dr. Plugge's article as a contribution to the subject of film legislation.

Although a discussion of this question is no part of the work of our Institute, which is concerned with the cultural aspects of the film, the pages of our Review are at all times open to anyone who wishes to explain the film legislation of the different countries or who desires to support or dispute the views expressed by our contributor.

On July 15th, 1930, the Reichstag passed a law, Article 1 of which authorises the Minister of the Interior to issue, with the approval of the Reichsrat and of the Parliamentary Committee, an executive decree on the exhibition of foreign films. This decree was promulgated on July 21st, shortly before the Reichstag was dissolved, with effect as from July 1st, 1930 to June 30th, 1931.

Since 1916 the importation of foreign films into Germany has been subject to certain restrictions; the new law makes the exhibition of foreign films dependent upon the fulfilment of a number of legal provisions. Whereas formerly importation was restricted for reasons of commercial policy, the showing of foreign films is now restricted on cultural grounds, and the business of enforcing the regulations has accordingly been transferred from the Ministry of Economy to the Ministry of the Interior.

The restriction on the importation of foreign films in 1916 was a war measure and was based upon the Decree of February 25th, 1916, which forbade the import of inessential commodities into Germany except with the permission of the competent authorities. In 1920 the "Foreign Trade Office for Films", under the German Commissioner for Import and Export Licences, was granted control over the importation of films. Until 1924 manufacturers and renters were allowed to import a fixed annual meterage
(meter quota). From 1925 onwards, however, renters were only granted permission to import foreign films if they could show that in the previous year they had rented a corresponding number of German films in Germany. Later an annual import maximum was fixed on the basis of market requirements. In practice, this system worked out at one foreign film for every German film.

The Diplomatic Conference for the Abolition of Import and Export Prohibitions and Restrictions, whose meetings extended over several years, aims at the international removal of all but a few specified prohibitions. During the period allowed for notifying such exceptions, no application was made to exclude from the effects of the Convention the film as a commodity. On the other hand, views differed as regards cultural films. In 1928 the French Government informed the Conference that a law had been enacted in France by which all foreign films had to be examined by a Committee of 32 members under the chairmanship of the Minister for Education and Fine Arts and were only admitted provided they were not prejudicial to the national and cultural interests of France. Moreover, in granting permission to foreign films, account would be taken of the extent to which French films were shown in the corresponding foreign country. The French Government maintained that this provision did not come under the International Convention or run counter to it.

At the International Conference held in June 1928 all the European Powers held the view — in opposition to America — that each country must be left free to take such measures to protect its film industry as national and cultural reasons might dictate.

In virtue of this principle several countries have since decreed measures whereby either cinemas have to show a certain — in most cases annually increasing — percentage of native films, or foreign films may only be imported on certain conditions.

The German quota regulations up to that time in force restricted the importation of foreign films, and the coming into force of the International Convention on the Abolition of Import and Export Prohibitions and Restrictions involved the cancelling of these national provisions. It was laid down that the Convention should come into force on June 30th, 1930 provided that by May 31st, 1929 18 countries, including certain countries specified by name — among these, America, Germany, Poland and Czechooslovakia — had affixed their signatures. In spite of the fact that Czechooslovakia did not sign and Germany thereupon withdrew her signature so that the Convention has not yet come into being, the German Government on June 30th, 1930 repealed the former import restrictions on films and replaced them by the above-mentioned Law and by the "Decree in execution of the law on the exhibition of foreign films".

The new German quota law was promulgated just at the time when the sound-film was making its appearance and it attempts to take
account of the new situation by distinguishing between silent films and sound-films.

Before the law was published, the competent associations of employers and employees, of actors and authors and the departments concerned were invited to communicate their wishes and views. In deference to previous practice the law has endeavoured to take account of national and international wishes, but in order to avoid any hardships that may nevertheless be involved, some of the articles are accompanied by reservations. It is certainly a pity that the wish of the industry that the drafting and any necessary amendments of the executive decree should be entrusted exclusively to the Minister for the Interior was disregarded, and that the decree needs to be approved by the Reichsrat and the Parliamentary Committee and is only valid for one year. Although this shows the importance attached by the legislative bodies to a share in the wording of the law, it makes it very much more difficult to adapt it quickly to a change of circumstances.

In view of the uneasiness aroused and the doubts expressed in various quarters, most of which will vanish on closer acquaintance with the law, it may be useful to explain the essential articles of the Decree:

Article 2 properly defines the term "foreign films", since these are the only films the projection of which is placed by the law within the province of the Minister of the Interior. The following are not to be regarded as national films:

1. Films which have not been made by a German national or a German company;
2. Films of which the studio scenes and out of doors scenes (as far as the subject of the film would permit of the latter being turned in Germany) have not been made in Germany;
3. Films the scenario and musical score of which have not been composed by a German national.

These categorical provisions are intended to ensure that German subjects are chosen for German films and that German films are made by German manufacturers in German studios.

In deference to the wishes of German Actors' Associations, the following are also not to be regarded as German films:

4. Films of which the producer is a foreigner or
5. in which the majority of the collaborators are foreign.

The Minister of the Interior can overrule these two last provisions and in individual cases may for artistic or cultural reasons class as German films which do not comply with the conditions specified. (Art. 2).

This clause met with the strongest opposition from those producing countries and producing firms in Germany which are or desire to be engaged in joint production. Views differ as to what "joint production" means. The German producer understands by the term such films as are manufactur-
ed, whether as silent films or in the German language (even when they include parts spoken in a foreign language), with German actors, foreign capital and the assistance of a foreign manufacturer. The authorities on the other hand maintain that a joint production is one by which a German and a foreign manufacturer jointly produce one film in Germany and one abroad.

Everyone knows that the German film industry is anxious to maintain and foster joint production, and it has backed up all applications made to the German Government to that end. The extent to which joint production can be recognized and taken into consideration must depend upon individual cases and cannot be fixed by law, but the willingness of the Government to meet the wishes of joint German and foreign manufacturers is proved not only by the foregoing remarks but by the fact that the Minister of the Interior has set aside 30, that is, one-seventh of the 210 quota coupons to be distributed, "in order to remove any hardships due to the distribution of coupons for the projection of sound-films." It is believed, however, that the normal number of coupons available for distribution within this period will be sufficient to satisfy all legitimate needs. The German film industry as a whole has intimated to the Reich Government its wish that joint production with individual countries shall be considered and encouraged to the extent that the country concerned buys and shows German films.

Article 3 of the Law defines theatrical films as films containing a consecutive plot from which the separate pictures are put together; cultural and educational films are those which cultivate the mind or instruct but which lack the theatrical element and do not illustrate topical events; sound-films are films which by mechanical devices convey to the ear, partially or wholly, the noises going with the pictures, the speech, singing or musical accompaniment at exactly the same time that the eye receives the image. The reproduction of noises, speech, song or music by means of records which have not been specially made for the projection of a film is not entitled to be considered as sound-film. This last definition, which makes a clear distinction between the so-called "100% sound-film" and the synchronized film, is sufficient for the execution of the decree. In practice, it will be necessary to further sub-divide the different kinds of sound-film.

Article 4 — in common with British law — forbids the "blind" booking of foreign films, that is to say, no contracts may be concluded for foreign films until the film has been shown in Germany to the proper authorities. This is in accordance with the wishes of the public.

It is still a matter of uncertainty whether a foreign film which for special reasons (cultural, artistic, joint production, etc.) has been granted the same treatment by the Ministry of the Interior as a national film, may or may not be rented in Germany.

The following articles must be taken in conjunction with one another. The essential questions involved are these:
(a) Who is entitled to apply for the right to show foreign films?
(b) What conditions govern the issue of the coupons which, after the passing of the film by the censor, confer the right of exhibition?
(c) What is the annual maximum number of foreign films for which coupons are granted?

Ad (a). As hitherto, the quota applies in the main to renters. Coupons are issued exclusively to renters established in Germany and only to the extent that they have in the previous year rented a certain proportion of German films. If, for example, 100 coupons are issued to renters on June 30th, 1935, the calculation would be as follows. Supposing that 100 German films were rented between January 1st, 1934 and December 31st, 1934 and that renter A had distributed 10 of these, he would receive one-tenth of the 100 coupons to be distributed on June 30th, 1935 (= 10).

In order to prevent traffic in coupons, they are made non-transferable. Further, in order to prevent speculation in coupons by renting firms which rented German films in the previous year and are therefore entitled to apply for coupons for the next year, but which at the time of distribution are either bankrupt or no longer in business, these firms are excluded from a share in the distribution.

Article 13 penalises anyone who shows films without being in possession of the necessary coupons or who makes false statements in order to obtain coupons (Art. 2 of the Law provides for imprisonment, a fine and confiscation of the film) and the right to further coupons may be suspended or refused.

A part of the total number of coupons is reserved for exporters of German films. These are distributed to exporters on January 1st of each year in proportion to the exporter’s contribution to the total export of films during the preceding year (Art. 9). As the exporter — frequently he is the manufacturer himself — is in many cases not a renter, he is allowed to transfer his coupons — but only en bloc (Art. 6, para. 2). For 1930-31 an exception to the rule has been made, the basis for the distribution of coupons to exporters being the average figures of the last two years.

This rule, if strictly enforced, bears unjustly upon renting firms which have come into being since the advent of the sound-film and on those manufacturing firms which have created their own renting firms for the distribution of their sound-films and are thus excluded from this year’s distribution of coupons. In order to meet this difficulty, the Minister of the Interior has, as already mentioned, set aside a certain number of coupons. (Art. 13, para. 2).

Ad (b). Hitherto the holder of quota coupons has had the right, on production of his coupon, to import a foreign theatrical film into Germany. The Decree of June 26th, 1930 amends the third sentence of para. 6 of Part b of the Reich Decree in execution of the Film Law of May 12th, 1920, as follows:
Films of foreign manufacture may only be submitted for censorship on production of a certificate from the Minister of the Interior or office authorised by him, stating that there is no objection to the exhibition of the film after it has been passed by the censor.”

Renting firms only receive coupons from the “Foreign Films Office” if they have during the previous two years shown a due percentage of German films. Each coupon grants the right to submit one foreign dramatic film to the censor’s office and, under para. 2 of Art. 14, one-third of the coupons cover sound-films, two-thirds silent films. 5 short films up to 300 metres in length each or 3 short films up to 500 metres in length each may be submitted for censorship in the place of a single longer film.

Educational and cultural films are subject to the same conditions as theatrical films. Coupons are issued in the proportion of two German films to one foreign film. If the films are only for use in schools and institutions or are also shown in public cinemas, it is enough that the proportion of 2 to 1 shall be observed for one of these purposes. Foreign topical and publicity films are subject to no restrictions.

Films which by reason of technical novelties may assist the development of German cinematography and films of exceptional artistic and cultural value may be specially allowed for individual showing (Art. 12).

Ad (c). The number of coupons to be issued is fixed for each year (July 1st-June 30th). For 1930-31 the figure has been fixed at 210 (Art. 14, para. 1); in addition the Minister of the Interior has reserved 20 further coupons to be distributed, as may be thought best, in order to remedy hardships (Art. 15).

Four-sevenths of these coupons are distributed to renting firms each year in so far as they have during the previous year rented a due percentage of newly-censored German films. Under Article 14, para. 3, distribution in 1930-31 is based upon the average of 1928 and 1929. Accordingly, out of the 210 coupons 120 have been issued to distributors for use in their own business. The same paragraph entitles one-third of the coupons to be used for sound-films, the remainder for silent films.

Two-sevenths of the total number of coupons are distributed on January 1st of each year to German nationals or companies having the right to show German theatrical films abroad. They will receive coupons in proportion to the contribution they have made to the total foreign sales of films during the previous year. One-third of these coupons cover sound-films and two-thirds silent films. Here, too, the distribution for 1930-31 is based upon the average of the last two years. Thus on January 1st, 1931 exporters of German films will receive 60 coupons, which in accordance with Art. 6, para. 2, they can transfer, but only en bloc.

The remaining seventh — in the present year, therefore, 30 coupons — remain in the hands of the Minister of the Interior to compensate any
hardships arising from the distribution of coupons for the exhibition of sound-films.

Thus, during 1930-31 60 sound-films and 120 silent films can be submitted to the censor on the strength of coupons issued to renters and exporters. Out of the "hardship" fund the Minister of the Interior can admit 30 further sound-films and he has also the right to issue 20 more coupons, as he may think fit, for either silent or sound-films.

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At first sight the new quota law may seem to aggravate the previous situation, but in actual fact all eventualities have been considered as far as is possible within the rigid framework of a law. Individual film-producing countries at first feared lest the quota law might hamper joint production but they have come to see that the law permits of a joint production based on true reciprocity and that this development will be encouraged in Germany. The quota under German law is not based upon the system of reciprocity, as it is in France, but the idea of reciprocity finds expression in the issue of quota coupons to exporters of German films. Among producers this idea of granting quotas to individual countries in proportion to their purchases of German films has met with strong support.

DR. WALTHER PLUGGE
Official Representative of the German Confederation of Cinematographic Industries
FILM CENSORSHIP IN HOLLAND

(from the French)

Nearly all countries have adopted some form of film censorship, but the systems differ in almost every case. The rules to be followed by the censors, the age of admission and many other details are subject to very varied regulation.

Needless to say, the rules adopted take full account of the manners and customs and other peculiarities of each country, although a greater measure of uniformity would be exceedingly welcome. The industry itself, which is essentially international, would know better where it stood; less hampered by uncertainty, it would cease to waste millions on the totally useless production of films that fail to obtain admission into many countries.

Although complete agreement between systems is neither practical nor necessary, some liaison is certainly required between the official organs of censorship in the different countries. Correspondence I have exchanged with several of my colleagues has convinced me of the necessity of mutual cooperation of this kind between several countries.

Before all else we must be informed of the character of the film censorship now in force in other countries, in order to take due account thereof both in execution and in the codification of laws.

I am sure therefore that I shall be doing a service to many people who for one reason or another are interested in cinematography if I give a fairly detailed analysis of the existing censorship system in Holland.

Film censorship in Holland is in the hands of the Government, which has appointed a Central Film Censorship Committee with headquarters at The Hague.

The system came into force as recently as March 1st, 1928. Before then a number of towns had local censorship committees which were really no more than advisory committees to assist the Mayor and derived from the law on municipalities certain rights of supervision over public entertainments. Each town exercised this supervision as it thought best. In one the regulations would cover only persons under 16, in another persons under 18; elsewhere the age-limit for admission would be 14-16 or 16-18. There was no control over adults and in most towns no censorship at all.

This situation became in the long run impossible. With municipalities issuing conflicting decisions, film censorship lacked the necessary authority, and the public could not understand why films which were allowed in one place were forbidden in another.
Further, importers experienced great inconvenience, as they could not be expected to buy films without even an approximate idea of whether they would find a market for them.

In the interests of spectators, both children and adult, for the sake of censorship authority and in order to furnish the trade with legal guarantees, it was felt that some form of central censorship applying to the whole country was absolutely essential. It is worth noting that this governmental form of censorship came into being as the result of pressure brought to bear not only by several sections of the public but by municipal committees and by the association of the cinema industry, which in Holland consists of the producers and owners of films and of cinema proprietors.

After a political struggle of no interest to foreigners the present law on film censorship was adopted by the Chamber of Deputies on October 16th, 1925 and by the Senate on May 11th, 1926. The Left Party (Radicals and Socialists) voted against the law in both Chambers, mainly because it legislated for adults and provided for a form of municipal (see above) as well as central censorship.

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The law in question is based on the principle of a centralised system of Government censorship. This is exercised by a Commission of about 85 ladies and gentlemen living all over the country and chosen proportionately from among the different political parties and religious sects. For the sake of convenience a large proportion of the Central Commission is made up of censors living at The Hague.

The Commission is under the Ministry of the Interior and its members are appointed by the Minister for 5 years, at the end of which they may be re-elected. It is presided over by a permanent Chairman, appointed by the Queen for an indefinite term; he is assisted by a secretary and a committee of 5 members representing different cultural interests. One member represents the trade, and he is the only representative of the industry who is permitted to belong. The Government was anxious to grant the industry a certain influence in the matter of censorship, but was averse to the representatives themselves acting as censors.

The Central Commission has its own premises, which, in addition to offices comprise four projection halls with operator's boxes, a strong-box for films and archives.

All examination of films takes place in this building. They are examined by a committee of 5 censors, representing as far as possible the different political parties. One of the censors is chairman of the examining committee; he is in charge of the meeting and keeps the minutes. The committee usually works morning and afternoon for two hours at a stretch. In this way it examines 7-8000 metres of film per day of sitting.
Censors on the Committee who are not resident at The Hague receive travelling and subsistence allowances, nor do those living at The Hague work for love, as they are paid 6 gulden for each day of work.

Every film which is intended for public exhibition in Holland has first to be passed by the Central Commission. Anyone wishing to obtain a licence for a film must make an application giving all necessary particulars; he must also pay the examining fee. This used to be 4 cents per metre, but since January 1st, 1930 has been reduced to 3 cents per metre. In the case of cultural or scientific films the Central Commission may fix the fee at 1 cent per metre.

It is the Government's intention that the censorship, while not aiming at profits, should be self-supporting. When it was found that the first two years of operation yielded quite a substantial profit, the examining fees were reduced as just mentioned.

Applications for a licence must be accompanied by the title of the film and a description of its contents. The day of examination is fixed by the chairman, the interest and convenience of the owners of the film being considered as far as possible.

One of the projectors can be used for sound films (movietone or vitaphone).

Since the advent of sound-films, the Central Commission has held the view that in many cases it could not judge of their suitability for children unless they were examined in the exact form in which they would be shown to the public (visual projection and sound combined). The cinematographic industrial association (Nederlandsche Bioscoopbond) was opposed to this, but the Ministry of the Interior upheld the Commission's view and in future all films must be submitted in the form required by the Commission.

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A censorship committee decides on a majority vote. In 1929 96 % of the committees’ decisions were adopted unanimously. Committees may decide that a film shall be passed (a) for persons of any age; (b) for persons over 14; (c) for persons over 18. They are further entitled to prohibit the exhibition of films which they consider to be contrary to good morals or calculated to disturb public order.

The Central Commission acts on the general principle that all films of a sensational, brutal, vulgar, blood-curdling or Grand Guignol character shall be forbidden to children under 14, while films which reflect unfavourably upon marriage or which deal with erotic subjects or acts likely to arouse morbid curiosity, etc. may only be shown to persons over 18. The rules for adults are specified in the law.

In pronouncing for or against a film each censor is guided by his personal opinion and applies the rulings of the law in accordance with the dictates of his own conscience.
The varied composition of the Central Commission, alluded to above, is an adequate guarantee that an examining committee's decision will accord with public opinion in the Netherlands.

During the past year 3003 films were examined, representing 2,255,350 metres of footage; of these 2297 were passed for persons of all ages, 310 for persons above 14 only and 375 for persons over 18 only; 21 films were prohibited for all ages.

Applicants are informed of the result of the examination without delay. If they wish to dispute the decision, they may appeal within one month.

A minority of the committee (2 members) and the permanent chairman may also demand a re-examination if they cannot concur in the decision of the majority. This second examination will be made at the earliest possible date by a committee of 7, presided over by the chairman of the Central Commission. These seven members must include no one who took part in the previous examination.

If re-examination is demanded by the owner of the film, he must pay the examining fees down, but they will be refunded to him if the film is subsequently passed.

The permanent chairman of the Central Commission is entitled to examine on his own special films, such as topicals, events of the week, educational films, etc.

The law contains a special clause exempting from previous examination by the committee films representing topical Netherland events, in cases when delay would deprive the films of their value.

Publicity matter (photographs, lithographs, etc.) must be submitted at the same time as the film. The committee's decision takes account of the fact that such material is shown in public places, so that it must be such that even quite small children can see it without harm.

As proof that a film is passed, the owner receives a number of censorship tickets varying in colour according to the age of admission fixed. On the back of these cards mention is made of any cuts that the committee may have ordered. All publicity matter must be stamped on approval. If the film is refused, the publicity matter is returned without being examined.

Despite the fact that film censorship in Holland is entrusted by law to the autonomous Central Commission, there is also a system of municipal supervision of cinema performances. In the first place, mayors may at any time forbid the exhibition of a film, even if it has passed the censor, if they fear that its performance may give rise to a disturbance. It is by no means impossible that, owing to special circumstances, the exhibition of even a good film in a certain place at a certain time might arouse public feeling and lead to undesirable demonstrations.

This censorship by mayors is not directed against the film itself, but is due to the recognition of local conditions and temporary circumstances.
Secondly, the law provides for the appointment of a permanent supervisory committee in all towns and villages where cinema performances are regularly held. This committee, which is nominated by the mayor and his assistants, sees that the law is observed. Further, the law prescribes the sphere of influence and the powers of these special bodies, which, having obtained official recognition, are concerned to combat the possible moral dangers of films.

Cinema managers who are licenced under the law (see below) may voluntarily place themselves under the special supervision of these bodies. The aim of this measure is to make sure that films passed for public showing by these associations offer special guarantees to certain sections of the population and will not offend their feelings. The manager, however, is at liberty to terminate any relations that he may voluntarily have contracted with such association. At present only one association has obtained this sanction by the Minister of the Interior, and that is the Catholic Central Association (K.F.C.) in South Holland.

No one is allowed to carry on the business of a cinema manager without the previous authorisation of the mayor and his assistants. This permission (permis) is granted in writing. It will be refused if there is reason to suppose that the concessionnaire is not observing the provisions of the law, or if the place of performance does not furnish the necessary guarantees of public safety and morals or if it is less than 5 years since the cancelling of a previous authorisation.

A municipal regulation, with the sanction of the Crown, subjects the granting of the permit to the observance of certain conditions by the concessionnaire, but the law excludes from the scope of this regulation any provision relating to cinema performances to which only persons over 18 are admitted. On the other hand, the regulation may cover the censorship of films and the projection of advertisements of films. According to the interpretation of juisconsults, this power conferred by the law on municipal authorities does not comprise the right of the municipal supervisory committee to make cuts in a film which has been passed by the Central Commission. The cinema regulations incorporated in the cinema law impose a fine upon anyone who exhibits a film in a form or with a content different from that prescribed by the Central Commission.

Nevertheless, the prohibition to alter a film does not debar the municipal regulation from a further censorship both of films and film advertisements. Thus the municipal censors may absolutely prohibit a film, even when it has been passed by the Central Commission, provided that the veto is based upon rules contained in the municipal regulation. The municipal censorship may also raise the age-limit fixed by the Central Commission, but may not, of course, lower it.

The concessionnaire pays an annual fee fixed by the Minister and amounting at present to 25 gulden,
If the permit is refused, appeal may be made against the decision within 30 days and will be heard by the permanent Council of the provincial States.

In order to enforce the law and the obligations attaching to permits mayors and their assistants have the right of suspension and cancellation. If the law is broken or if the stipulated obligations are not observed, a written warning is sent to the concessionnaire. In the event of a second offence, the permit may be suspended for a maximum period of 6 months, or may be cancelled. The permit may further be withdrawn if the circumstances are such that, had they been known at the time, permission would have been refused.

In every case the persons concerned have the right to be heard and may appeal against any decision given against them. This appeal, too, will be brought before the permanent Council of the provincial States.

In addition to the written warning and the suspension or cancellation of the permit, the law imposes the penalty of imprisonment and a fine of not more than 1000 gulden for any offences against the provisions enumerated in the cinema law and regulations. These offences will be tried by magistrates.

D. van Staveren
Chairman of the Netherlands Central Film Censorship Commission.

The preceding article by Dr. van Staveren, which contains a few omissions of an essentially technical kind, we are supplementing by a systematic statement of existing cinema legislation in force in the Netherlands.

The two articles are complementary. The first is of especial interest from the historical and statistical points of view and for its criticism of the present system of film censorship in Holland. The second explains how the law is enforced in cases in which Dr. van Staveren gives us no specific indication and it also considers the policy adopted towards censorship and supervision in the Dutch colonies.

The Review would particularly draw attention to Dr. van Staveren's official proposal that this Institute should examine the possibility of an international enquiry with a view to completing and, if possible, standardising censorship methods and criteria.

This proposal is reproduced in italics after the first part of the note written by the Institute. It is of the utmost value to the study of legislation upon which the I. E. C. I. is now engaged. Without endorsing and forthwith issuing this proposed questionnaire, the Institute notes that Dr. van Staveren has exactly the same aim in view as the legislative work initiated by the Institute and brought to a successful issue in the formal convention deposited with the League of Nations, and which will before long form the subject of an international con-
ference for the abolition of Customs duties on films recognized as educational or scientific.

In examining the different methods of film censorship we must distinguish between methods of enquiry and control which could be more or less universal and those which are only suited to one country or one people having its own particular mentality and its own view of life and social needs.

The former could within the near or more distant future be incorporated in some scheme, which like the convention on educational films, could lead to an enquiry among all countries interested in the cinematograph.

In this connection we may well refer back to what was written in the last number of the Review concerning the censorship system in Sweden. An official report kindly communicated by the Government at Stockholm declares that the ideal means of effectively protecting the young from the real or potential dangers of the cinema is through the institution of an international enquiry between the various countries and especially between the different censorship offices with a view to an exchange of ideas on methods of control and thus arriving at an agreement or a series of separate agreements to prevent the showing of immoral films or films injurious to the young.

It may be seen, therefore, that Dr. van Staveren’s views are in full agreement with the official view of the Swedish Government and with the aims of the Rome Institute. Nobody desires that all kinds of films should be censored. Those which are exclusively dramatic or in which the educational or scientific element is subsidiary or which have a political or military significance will continue to be subject to national control. As regards the first category (dramatic films), however, countries which are concerned to protect the interests of children and young people must take the necessary domestic and international measures to prevent the exhibition of films unsuitable for children. This work of supervision and control could very well be entrusted to the Rome Institute.

With regard to educational, scientific and cultural films (which represent a high percentage of total output), their character will, in accordance with the Customs Convention proposed by the Institute and due to be examined at a forthcoming international conference, be dependent upon official recognition granted by the Institute direct or through its authorised organs or associated bodies. This aspect of the question is therefore more or less settled and practical results should follow at an early date. As regards the first category, the agreement of States or of the competent offices will have to be obtained and, in cases where no application has yet been made, will have to be asked for.

G. de F.
FILM CENSORSHIP IN THE NETHERLANDS
AND NETHERLAND COLONIES

NETHERLANDS

1. The Netherlands.

LEGISLATION. — Film censorship in the Netherlands is governed by the law of
May 14th, 1926, published in the Law Gazette of 1926, No. 118, and containing
a series of measures of control which aim at countering the moral and social
dangers of the cinema.

Besides this basic law there are certain supplementary general provisions and royal
decrees. Of these the most important is the Royal Decree of December 22nd,
1927, published in the Law Gazette of that year, No. 403, which came into force on
March 1st, 1928.

The legal system is as follows:

Public cinematographic performances require the previous written authorisation of
the mayor or the local judicial authorities. This permission is not in every case required
for performances in certain educational institutes specified by the Ministry of
Education or for the projection of films which deal with scientific, industrial,
agricultural or commercial subjects and which the Central Censorship Commission
shall have recognized as such.

The above authorisation refers to the safety conditions of the hall where the film
is to be shown. It is therefore quite independent of any decision that may be
taken by the Censorship Commission in respect of the film itself.

The holder of the permit (cinema proprietor) must make sure that the film
he is intending to show is not contrary to good morals or public order and that
no film advertisement is posted up or distributed with the exception of those
referring to films which have been submitted to the Censorship Commission.

The holder is bound at any time to produce the censor’s authorisation to the
officials responsible for the strict enforcement of the law and to give any explanations
concerning the films which may be needed.

The mayor and judicial authorities, after consulting with the local censorship
committee, may suspend the manager’s licence for a maximum period of six months
if the latter has infringed the regulations either as regards the hygienic and moral
safeguards provided by the theatre or as regards the films to be exhibited. In
serious cases the licence may be cancelled.

These general regulations, which relate more particularly to the management of
cinema theatres, are supplemented in Arts 15 et seq. by special provisions concerning
the system of control.

CENSORSHIP COMMITTEES. — A Central Censorship Commission has been established
for the whole kingdom at The Hague. This body controls and directs all the subsidiy work of the local committees set up by mayors and judicial authorities
in all communies in which public cinematographic performances are held.

Art. 20 of the Law prescribes that this subsidiary work may be entrusted to institutions or associations which under their statutes aim at preventing or countering
the moral and social dangers of the cinema and that these bodies may be authorised
to undertake such work by the competent ministers.

The Central Commission consists of a chairman, a secretary and at least 60 members. These are divided into examining committees, each of 5 members, which decide by a majority vote.

Films must be examined in a special office and only in exceptional cases elsewhere. An examining fee is charged fixed at 0.03 gulden per metre of film.
No films may be shown in public until the Central Commission has passed them as harmless to morals and public order.

In addition to supervision by the Central Commission, the local or commercial committees already mentioned and legally recognized institutions and associations (the work of these latter being regarded as auxiliary) there is the control exercised by mayors, referred to in van Staveren's article.

Generally speaking, the law aims at establishing a centralised and uniform censorship at The Hague. The functions of the local committees or institutions are essentially communal and are due to recognition of the fact that a central and general authorisation may not be enough and may often be at variance with local conditions and requirements.

Article 18, para. 2, of the Law lays down that the work of individual organisations, central and local, must be so regulated as to avoid a conflict and duplication of examinations and decisions.

Control.—The proprietor of the cinema, as already stated, is bound to project only films for which he has obtained an authorisation. If the approval of authorised institutions or associations has not been given, he may not announce in the advertisements of the film that it has been censored and approved by the said bodies.

The strict enforcement of the law is entrusted not only to the ordinary authorities, but to all members of the central or local committees, institutions or associations and to mayors. Accordingly, all these persons have free access to public cinemas at all times and the right to report any infringement of the regulations. Articles 23 and 24 of the same law impose penalties upon offenders in the form of imprisonment (up to two months) or a fine (up to 2000 gulden). The penalty may also involve withdrawal of the licence.

Among other censorship rules in force in the Netherlands are complete exemption for films not intended for public projection and uniformity of treatment for theatrical films and educational films in cases when both classes are to be shown in public. The examining fee for educational films is 0.01 gulden per metre (van Staveren).

Children.—The intervention of the local committees and, as a rule, of the commercial authorities is especially important when it comes to protecting the interests of minors.

Public performances may be subjected to certain limitations as regards the persons admitted. It may be laid down that certain films shall not be shown to children under 14 or under 18. In either case cinema proprietors may only show the films included in the two categories provided they have informed the public by means of posters or advertisement of the category of spectators for which admission is granted.

Censorship criteria.——The general principle governing censorship in the Netherlands is to prevent the projection of films from disturbing public order or constituting a social or moral danger. To this general principle must be added certain particular rules based on political and hygienic considerations. Anything that may reflect unfavourably upon the Dutch people, their representative organs, and the colonies or be a source of dispute with friendly countries is automatically prohibited.

From the hygienic point of view, no films may be shown in public which deal with problems of a kind or in such a way as to offend public taste.

As regards social or moral problems, there is no exact rule by which the censor's decision is determined. The basic principle is the avoidance of propaganda in favour of immorality or crime under the guise of films which offend against morals or which incite to and glorify crime.

There is no censorship of films from the artistic or technical standpoint, the Committees and the law making producers alone responsible for these aspects.

On the other hand, the Censorship Commission decides which films among those submitted to it are entitled in virtue of their general content to be classified as cultural, scientific or simply theatrical.
films, following in this matter the normal system of distinguishing between films recognized as suitable for all ages and films which are only fit for children above a certain age.

Proposals concerning the existing censorship system. — Our eminent collaborator, Dr. van Staveren, head of the Netherlands Censorship Office, has forwarded to the Rome Institute the following particularly interesting communication suggesting the possibility of an international enquiry with a view to unifying the existing censorship systems of the different countries, not only as regards the general rules laid down, but in order that the system itself may be better able to help in bringing about a higher moral standard in film production.

"I believe that the official proposal to summon an international conference on film censorship emanated from your Institute and that it should be held in some centrally situated European town like Rome, Basle, Paris, Geneva or Brussels.

"I would further recommend in the interests of the conference that those who take part in it should transmit not only a summary of their national legislation on the subject of censorship, but also some indication of the results of their own experience of film censorship as exercised during the last few years.

"The following questionnaire seems to me designed to obtain the end I have in view:

1. Do you think that it is expedient within the near future to convene an international conference of Government delegates or censorship offices with a view to encouraging greater unity and international cooperation between the States represented at the conference in the matters of film legislation, government supervision and such other matters as may be agreed upon?

"If so, are you prepared to take part in this conference?

"Have you any preference as regards where it should be held?

2. Do you think it possible and expedient to obtain permanent agreement between the censorship organs in the different countries for the purpose of influencing individual offices and public opinion itself so as to ensure uniform criteria and decisions as regards government supervision of films?

3. What is your opinion as to the expediency of distinguishing between generally educational films, films for popular education, artistic films and ordinary commercial films?

"Do you think it necessary to create an international office to establish the distinctions between these different classes of film or that the distinction could be made by the local censorship committees or special national organs?

4. When, in your country, is a film considered to be too vulgar or brutal to be shown in the presence of children under a certain age?

5. What films are prohibited, by the laws and practice of your country, to children who have not reached the age limit fixed in the various laws?

"Have you fixed rules for each age-group? If not, what rules could you establish?

6. Do you believe in the possibility or expediency of a regular international exchange of decisions between the various censorship organs concerning the most important films, with mention of the reasons which prompted the passing or the prohibition of films?

7. What is your country's attitude towards the sound film, from the point of view of censorship? In your opinion, should the element of sound be taken into account when sound films are submitted for censorship?

"Is it necessary to distinguish between sound films with dialogue, with illustrative noises, with a musical accompaniment, and synchronized with silent films?

"Does the sound in your opinion constitute an integral part of the film so that it may be exempted from censorship or do you think that the law should make special provision to include sound within or exclude it from the ordinary rules of film censorship?

8. Do you wish to consider other questions than the above?

"Are you prepared to take part in a conference on one of the subjects in this questionnaire or on some other subject connected with the cinema that may be selected?"
(a) Netherland Indies.

Legislation. — The censorship system in the Netherland Indies is governed by the Cinema Ordinance published in the Netherland Indies Law Gazette, 1925, and amended in No. 7 of the Gazette for 1926. The provisions taken in execution of the Ordinance are regulated by decrees of the Governor-General, all of which are published in the Gazette and the most recent of which are dated September 30th, 1926 and March 10th, 1928.

In accordance with the above rules, all films of 25 mm. width and normal perforation and which by reason of their standard type can be projected in any cinema throughout the world must be submitted to the special Committee for the examination of films before being shown to the public. No distinction is made for these purposes between theatrical films and cultural or educative films.

Films imported into the Netherland Indies are subject to the Customs regulations at Tandjong Priok and the consignment is regarded as suspect until the Committee has given a favourable decision.

Committees, their composition and operation. — The control committee is composed of at least nine members, including the chairman and secretary. The expenses of the committee are met by the fees for examining films, which are fixed at 1.50 Dutch gulden per 50 metres of film.

Every film is first examined by three members of the committee appointed by the chairman ad hoc. If they unanimously agree that the film is not contrary to public order or good morals or harmful to children under 17, the authorisation is granted. But if the members disagree, the film is referred to the full Committee, which will entrust its re-examination to five chosen members, three of whom must not have taken part in the first examination; this committee of five will decide by a majority vote. In the event of equal voting, the chairman or his substitute has a casting vote.

If the committees of first or second instance decide that a film must be rejected or cut, they must, before giving their decision, hear the views of the producer or importer and, if the explanations offered are unsatisfactory or if he refuses to make the cuts required, the film is condemned and the committee may proceed to destroy the objectionable parts.

In the case of approved films the producer or importer may, if he wishes, demand a declaration to the effect that the film is suitable for children under 17. In any case he may require the committee to furnish him with a copy of its decision.

Condemned films are returned to the Customs Office at Tandjong Priok if they are of commercial importance. The importer is then given six months to withdraw the film, after which it will be destroyed.

Children. — As already stated, one of the main principles underlying the film censorship system in the Netherland Indies is the moral and social safeguarding of children. Art. 10 of the Ordinance of 1925 lays down that children and young persons under 17 may only visit the cinema on two conditions:

(a) they must be provided with a special permit;

(b) the film shown must be one for which the control committee has issued a declaration stating that it is suitable for children.

Exceptional measures of control. — Special supervision is laid down in Articles 11 and 13 of the 1925 Ordinance, which prescribe that members of control committees may attend any cinema performance in order to ascertain that the rules they have imposed are being observed.

Further, the Governor may forbid, quite apart from the decisions of the control committee, the projection of any film which he considers unsuitable or dangerous in view of local circumstances.
He may also, if he thinks fit, grant to certain scientific institutes or associations the right to possess films which have been condemned by the committees, subject to the withdrawal of the permit and destruction of the film, if the privilege is abused.

Penalties. — Articles 14 and 17 of the above-mentioned Ordinance deal with the penalties for offences against the foregoing rules.

These are as follows:

(a) Anyone who infringes the regulations concerning the importation of films (compulsory importation through a specified Customs office) is liable to imprisonment up to six months or to a fine of 5000 gulden as well as the confiscation of the film. The same penalties are imposed upon anyone who possesses, advertises or publicly sells films to which parts have been added subsequently to the examination or who without holding a special permit are in possession of films which have not been submitted to the committee or which have been condemned;

(b) anyone who projects films prohibited by the Governor under his special powers or films which are indecent or merely forbidden or who makes use of an authorisation for another film or who exhibits censored films under a different name is liable to imprisonment up to three months and a fine of 500 gulden;

(c) anyone who grants unauthorised admission to the cinema to children under 17 is liable to a fine of 300 gulden.

Examining criteria. — The general principles underlying examination have already been mentioned viz., obvious immorality or crime, danger by reason of social conditions or local circumstances.

There are, however, certain more particular criteria, as follows:

(a) Political. — As regards home politics, all films are banned which reflect discredit on or show a lack of respect for members of the government or the police, or which exalt revolutionary acts or riots (including titles and captions of an obviously subversive character). In regard to political crime, all scenes are prohibited which illustrate the destruction of roads, railways, public telegraphs, derailments, the sinking of ships, the manufacture of infernal machines, etc.

In the field of foreign politics all films are absolutely banned which direct odium or ridicule against other nations or races;

(b) Religions. — The general rule of censorship in these matters is to ensure the utmost respect for all forms of religion without exception and not only for the rites and ceremonies of the inhabitants of the Netherland Indies;

(c) Judicial. — In order that films may not induce in the spectator a feeling of disgust for judicial practice, it is forbidden to reproduce scenes of hanging or other forms of capital punishment;

(d) Moral. — In order to safeguard children and young people, one of the most important duties of censorship is to combat immoral influences. Here the committees interpret their duties in a very wide sense. A veto is put upon the representation of female nudity or semi-nudity, women in thin bathing costume or in drawers, the exposure of the private parts of the female form, indecent or lascivious dances (except native dances of a definitely non-erotic character) passionate or low love-scenes, scenes of corruption or generally reproducing immoral acts, lewd gestures by women, movements by actors suggestive of sensual desire — made more conspicuous and harmful by means of close-ups — and, finally “guy-watching” through a window or keyhole at naked women or women in the act of undressing.

This category includes all scenes referring to traffic in women and children.

(e) Criminal. — Anything which reproduces crime in a suggestive fashion or which in any way exalts it is absolutely prohibited. Thus a veto is placed on the use of fire-arms for criminal purposes, fights with knives and other small arms (except duels), reproductions of robbery with violence, murders, massacres in general, poisonings and especially scenes which represent criminal acts in an attractive or heroic light.

(f) Cruelty and brutality. — Anything that may degrade or offend the cardinal
principles which govern the human mind
is also forbidden, e.g., reproductions
of suicides, vulgar brawls between women,
ill-treatment of women, children, cripples
or animals. Under this heading are also
included representations of the shooting
of birds.

An official report forwarded to the Rome
Institute points out in this connection
that foreign importers, who control the
local market, have for the most part
readily accepted these simple, but nec-
essary rules of control. The native supply
of theatrical films is negligible, nearly
all films produced in the Netherland
Indies being of a documentary kind.

Statistical. — During 1929, 2363
films were submitted for censorship in
the Netherland Indies, representing a total
length of 2,491,914 metres. Of these 21
were rejected and cuts were made to a
total length of 33,260.88 metres. 1493 films
were considered suitable for all ages. It
is worthy of note that only 141 of the films
examined were scientific or educational
films, all of which were admitted without
question.

Apart from artistic considerations, of
which no account is taken, and apart
from the impossibility of differentiating
for purposes of censorship between films
intended for a European public and those
intended for natives, since importers and
producers work in the main for, and derive
the bulk of their profits from, native ci-
nemas, the reasons for the prohibitions
imposed in 1929 were as follows:

2 films were condemned for their crim-
inal tendency;

1 for its criminal tendency and because
it reproduced a mutiny on board ship;

5 for their revolutionary and crimi-
nal tendencies;

1 because its plot raised a dangerous
racial question;

2 for scenes offensive to religious
views;

1 as being disrespectful to royal
dignity;

1 for its revolutionary tendency and
because it included an attempt against
the lives of royal persons;

2 for improper clothing of the actors
and contempt expressed for the Salvation
Army;

4 for immorality, crime and lascivious
nudity;

1 on racial grounds and because it
contained murders.

Legislative amendments. — Through
the strict enforcement of the law the work
of the censorship committees has achieved
both its main and subsidiary purposes.

Recently a special committee has been
created under the Department of Educa-
tion and Public Worship to deal with ap-
peals from the decisions of the ordinary
committees concerning the projection of
educational films in schools.

(b) Surinam.

Committees. — Films intended for pub-
lic projection must be examined beforehand
by a committee (unpaid) appointed by the
Public Prosecutor. The work of the
committee is that of a body of first instance
and appeal may be made against its de-
cisions to the Public Prosecutor.

Generally speaking, the work of both
instances is of relatively small importance,
as there is no local production and the
few films imported into Surinam (in 1929
only 150 films were shown) have already
been officially or semi-officially censored
in their country of origin.

As already mentioned, all films have
to be censored, whether they are theatrical,
cultural or purely educational; also if they
are intended for use by schools, institutes
or associations which are not of a strictly
private character and to which therefore
the public is admitted on payment or by
invitation.

Censorship criteria. — The commit-
tee’s examination is confined to the moral
content of the film, in the interests, that
is to say, of the intellectual and spiritual
wellfare of children, which is the particular
purpose of censorship.

In this respect the censors have a con-
siderable power of veto and each case is
considered on its merits, whereas, in regard
to adults, only obvious immorality is prohibited.

In accordance with this principle, it must be made clear in the case of performances open to children under 16 that the films are suitable for children and the latter will be excluded from all projections which are not specially indicated as suitable for the young.

(c) Curacao.

Legislation and Committees. — Film censorship is regulated by the general police decree of 1917 (published in the Official Gazette of 1917, No. 11, and reproduced in the Gazette of 1925, No. 32). The decree itself clearly and precisely defines the limits of its application. It only considers the possibility of films being harmful for children, and it therefore requires all managers to specify in the posters and advertisements of films that they have been approved as suitable for children under 16.

Otherwise, admission to public cinemas is forbidden to all children under that age.

The exact regulations are as follows:

"Art. 27. It is forbidden to organise public performances, or meetings generally, for the purpose of public recreation and entertainment, without permission from the chief of police.

"Art. 27-a. No children under 16 may be admitted to public cinematographic performances.

"Art. 27-b. The following exceptions are allowed:

"(i) representations specially intended for children and previously authorised by the special committee appointed by the Governor;

"(ii) If it is publicly announced at the entrance to the cinema that the performance is for children only."

According to official information communicated to the Rome Institute by the local authorities, the practice in Curacao is as follows:

the projection of every film requires the permission of the chief of police, who may make his consent conditional upon the fulfilment of certain financial formalities;

A declaration by the above-mentioned special committee is necessary, establishing the cinemas and projections to which children under 16 may be admitted.

Films intended for private showing are therefore not subject to the examination of this special committee; the latter's decisions are final.

Censorship criteria. — The examination takes into account not only the scenes in the film, but the expressions on the actors' faces, lest these may be of a suggestive or corrupting nature. The main reasons for banning films are immorality, crime and cruelty and brutality towards persons or animals.

Statistical. — In 1929 the two cinemas at Willermstad showed 168 theatrical films. One film was prohibited by the chief of police as being morally unfit for public exhibition.

The special children's committee passed 74 films as suitable for young people under 16. The remainder were considered unsuitable for children on the general moral grounds already referred to.

The committee contented itself with a general expression of opinion. It did not proceed to consider whether the films it condemned as undesirable might some of them be made suitable by cuts or alterations, since it was of opinion that the 74 films passed in 1929 were sufficient to meet the requirements of the young.

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From Zurich across Africa to Kilimanjaro.

On October 11th was shown, for the first time in Italy, in the hall of the International Educational Cinematographic Institute the film of Mittelholzer's expedition from Zurich to Kilimanjaro.

The film reproduces the unsensational but extremely interesting trip by the latest explorers of the Dark Continent in a type of machine fitted up with the newest technical improvements. The trip is a splendid example of courageous enterprise undertaken with a view to adding to our knowledge of the geography and folklore of areas not yet fully explored.

The air photographs of Mounts Kenia and Kilimanjaro alone give the film an authentic value far in excess of the mere reproduction of daily incidents and ordinary geographical features.

The Mittelholzer expedition left the Dubendorf aerodrome at 3 a.m. on December 15th, 1929, in the "Switzerland", a three-engined two-ton Fokker, for an estimated flight of 20,000 km. there and back.

The "Switzerland" reached Cairo in four stages instead of three. It was found impossible to get to Catania the first day, as a large détour had to be made to cross the Alps in the Splügen area. Being short of petrol, Mittelholzer had therefore to descend at Praia on the Calabrian coast. On December 17th they crossed the Mediterranean from Sicily to Tripoli in three hours, thence past Bengasi and along the coast of the desert for 3000 km. to Cairo. From there Mittelholzer followed almost the same itinerary as the Gouzy-Mittelholzer expedition of three years before. Ascending the Nile nearly to its source and passing Nairobi, the party reached the Serengeti Plain, the scene of their intended hunting activities, where a landing-place had been made ready.

The expedition had no intention of shooting lions, gazelles and elephants from the air, as has several times been attempted by others with less sporting sense. The Fokker was made for transport and not for hunting. At one moment it even served as an ambulance, when soon after arrival at Serengeti one of the party was attacked and badly mauled by a leopard. He owes his life to the fact that the aeroplane brought him in an hour and a half to the hospital at Nairobi, a journey which would have taken a week by car and a month by caravan.

Mittelholzer's sole weapon was the camera, and a large number of photographs were taken of animals in the natural state. These include antelopes of every kind (the airmen claim to have seen herds of 50,000), giraffes, lions and elephants. The elephants,
Camp at Serengeti.

Palm grove at Serengeti.
The Kenia Crater seen from the air.

Massai women in gala dress.
Mawenzi peak.

The Kibo, in the Kilimanjaro massif.
On the Kibo. Photographed from 6,000 m. altitude.

The Kilimanjaro crater taken from 6,400 m. altitude.
in particular, were caught at very close range, as the machine flew low over the marshland formed by the Nile and stretching for an area twice the size of Switzerland. While in the neighbourhood of Tanganyika, Mittelholzer made the first flight over the two highest mountains in Africa — Kenya and Kilimanjaro, both near to the Equator. The views he brought back with him are exceptionally clear and their documentary value is unique. Kilimanjaro is one of the several extinct volcanoes to be found in these parts.

The photographs were taken from an altitude of 6400 metres and give a magnificent bird’s eye view of the immense Kibo plateau, which forms the western summit of the huge African mountain. A colossal rim of ice surrounds the crater, giving the effect of the eye of a Cyclops, with an almost geometrically regular circumference of 2 kilometres. These walls 200 m. high, whose dark sides contrast with the dazzling whiteness of the ice, are extraordinarily interesting. Seen from the East the Kibo suggests Mont Blanc and from above it is even more impressive.

Mawenzi, the eastern side of the Kilimanjaro massif, is quite different in character. The landscape is absolutely wild. Its sides are black in colour, as if from smoke, and furrowed with vertiginous crevasses. Pinnacles of rock stand up like a forest of spires and towers, so precipitous that they have never yet been scaled.

From the camp at Serengeti the expedition proceeded to more civilised parts with an European population, while Mittelholzer made a magnificent flight over Kenya, Uganda and the Nile Valley, and thence across the Mediterranean to his starting-point at Zurich.

The Review has great pleasure in publishing some of the very interesting photographs which Colonel Gouzy, Mittelholzer’s companion, has kindly placed at the Institute’s disposal.

G. DE F.

A Massai type.

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On October 14th, Monsieur J. Avenol, Deputy Secretary-General of the League of Nations, when passing through Rome, visited the I. E. C. I. accompanied by the Marquis Paulucci di Calaboli, Under Secretary-General in charge of Internal Administration. Dr. De Feo, Director of the Institute, received the visitors and showed them over the Villa Torlonia. M. Avenol praised the work of the I. E. C. I. and referred to the esteem in which it was held among the higher officials of the League at Geneva.

***

Many producers or renters in Rome are in the habit of offering the I. E. C. I. the opportunity of first projecting films they have made or put in circulation — an act of deference which the Institute fully appreciates. The I. E. C. I. is sometimes enabled in this way to show to a small, but select international public — whose impressions often furnish useful indications — productions which, if not strictly educational, not only bear witness to the progress of the art and technique of the cinema, but illustrate human types not generally known.

From this last point of view these films are eminently instructional and on that account — *pace* any distinction between the two terms — educational.

Regarded as a work of art, *Hallelujah*, which was shown at the I. E. C. I. in October, is too well-known in the different countries to require any discussion. All that we desire to mention here is the close alliance, the complete fusion of the artistic and educational elements in this film, which are all too often deemed to be mutually exclusive.

The film is educationally valuable as a record of the life, morals, sentiments and mind of a race which some are determined to regard as inferior and whose state of inferiority is due entirely to the survival of ancient prejudices. In this respect *Hallelujah* came as a revelation to many and we must all agree that the American negroes in the film, who have reached a certain stage of civilisation, compare favourably in many points with some of the so-called higher races.

*Hallelujah* is also morally and humanly educational. This touching version of the parable of the Prodigal Son, with its mystic element — is a profoundly human tragedy as well as a fine moral example — as a whole, anyhow, for there are, it must be admitted, certain episodes which, if taken separately, are of doubtful morality. What can be more human than this story of errors and mistakes, repentance, the forgiveness of the splendidly patriarchal father, the effort of the sinner to repair his faults, the further relapse, the bitter expiation, a fresh pardon from a true father and a true mother and from a pure and loving girl, the rejoicings at his homecoming and his reinstatement within the happy family circle? Which of us does not see himself in this mirror — though it reflects only black faces — and who will deny that films like *Hallelujah* are well designed to break down racial prejudices and to help a man to regard every other man as his brother, whatever the colour of his skin?

***

Under the heading *Great documentary films* we give elsewhere in the present number a short account of the flight from Zurich to Kilimanjaro in the heart of Africa undertaken by Major Mittelholzer, the great Swiss aviator.

The film illustrating this adventurous trip was shown early in October in the projection hall of the I. E. C. I. before a large and specially invited public which included the international elite of Rome and many officers in the Italian Air Force. M. Wagnières, the Swiss Minister, occupied a seat in the front-row.

The main object of this film, which is a magnificent record of a great flight, is to
show the value of aircraft as a means of locomotion in long-distance tourist traffic and for scientific purposes, or rather, as a means of attaining certain otherwise unattainable ends. Thus both flight and film are propaganda on behalf of aviation, but are of the greatest importance from the geographical and scientific points of view.

The film was shown by Colonel Gouzy, who has accompanied Mittelholzer on several of his splendid flights. Colonel Gouzy was very successful in bringing out the technical and scientific features of this great journey over the Dark Continent as well as the important objects of the flight, which, thanks to Mittelholzer's tenacity of purpose, were all achieved.

***

Professor Stutzin, who has been engaged for many years in the cinematographic exploration of the cavities of the human body, recently showed at the Institute two films he has made at the Kaiserin Augusta-Viktoria Hospital in Berlin. The company present included many professors and scientists, representatives of the diplomatic world — notably, Herr von Schubert, the German Ambassador — and the press. Professor Stutzin, who was introduced by the Director of the Institute, explained the problem of his cinematographic photographs from a medical and purely technical point of view. We may refer our readers to the Professor's article on the subject which we published in our February number.

The difficulties which Dr. Stutzin has overcome after many years of work, were mainly optical. The cystoscope has long been in use, but the light which enabled the cystoscope to see the mucous of the bladder or the organs situated in the thoracic and abdominal cavities was not sufficient to allow of these organs being filmed. It was therefore necessary to increase the luminous strength of the small electric bulb at the end of the cystoscope without increasing its size. In order to be able to cinematograph operations, it was also necessary to affix to the cystoscope a lateral device which allows the interior of the cavity to be seen while the film is being shot.

Professor Stutzin's efforts have met with success. His remarkably clear films show us such surgical operations as the cautery of a tumour of the bladder and the removal of pulmonary adhesions. Particularly interesting were the cinematographic views of bladder mucous, movements of the ureters, the pulsations of tumours, etc. The ability actually and clearly to see into the cavities of the human body is of incomparable value for purposes of demonstration. Professor Stutzin also pointed out that the new technique is not only valuable for teaching, but, through observation of the movements of the walls of the bladder and of the ureters, furnishes evidence of great importance in diagnosis.

***

On October 17th, the Spanish author, Gimenez Caballero, director of the Gaceta Literaria, gave a lecture in the hall of the Institute illustrated by a film Essence of Verbena, made by the lecturer himself. Señor Gimenez Caballero sought to establish a parallel between the political and spiritual ideals of Spain and Italy and entered into considerations which, although germane to the issue, were somewhat unfortunate in the form they took.

As regards the film — which is the more important point — we are sorry that we cannot give it our unqualified praise. Its author appears to class it among films of the modern school, but we found no real element of novelty in Essence of Verbena; nor can it be called a folk-lore or documentary film.

The large public which filled the hall was justified in anticipating a very different representation of the life and genius of Madrid.

We hope that this plain-speaking will not offend Señor Gimenez Caballero, but his cultivated intelligence and especially his enthusiasm for cultural and educational films had led us to expect something very different.

***

On the 6th of this month was shown for the first time in Italy, in the hall of the
Institute, the film of Admiral Byrd's heroic expedition to the South Pole—a projection of quite exceptional scientific and documentary value.

Prepared with the Paramount's usual masterly skill and with perfect sound reproduction, the film is an authentic record of the enterprise and enthusiasm which inspired this new achievement of Byrd and his companions.

The projection assumed an unusually official character. The company included the leading representatives of the Air Force, the Navy and the Army—headed by the respective Ministers—Admiral Thaon di Revel, Signor Umberto Cagni, the North Pole explorer, the Minister of Corporations, the Minister of National Economy and a large number of under-secretaries of State. The Diplomatic Corps was represented by the American, French, Brazilian, German and Polish Ambassadors and by the Ministers of several countries, together with members of their staffs. To these must be added distinguished representatives of science, politics and culture, together with members of the Italian and foreign press.

After a short introductory speech from the Director of the Institute, followed by a stirring tribute to the explorers from the Conte d'Elia, President of the Italian Geographical Association, the film from the very beginning claimed the close attention and enthusiastic applause of the crowded hall.

Of the film itself, which was shown when the present volume of the Review was already in the press, more will be said in the December number, which will contain photographs of the expedition kindly presented by the Paramount.

For the moment the Institute wishes only to record the occasion and to draw the attention of all makers of historical, scientific and documentary films to the action of the Paramount firm, which has presented a copy of the film to the Institute in recognition of its high cultural purpose. It will take its place among the most important documentary and scientific films in the Institute's collection and will remain in the archives as a shining example and permanent record of such devotion and enterprise as are only to be found among men to whom life means conflict and struggle.

May the future breed a race of cinema pioneers in the form of explorers and operators who combine bravery with an accurate vision of what the cinema of tomorrow should be, namely, a picture of life itself made up of the dramatic contrasts to be found in all nature human and inanimate.
The first number came out in March 1929, in quarto format, and contained over 1,000 pages, numerous and beautiful text illustrations, and 200 coloured and black and white full page plates. Since that date one volume has appeared regularly every three months. As the work will consist of 36 volumes, the whole will be issued to the public in the course of not more than nine years.

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Two thousand contributors, divided into fifty-five categories, are at work on the Enciclopedia Italiana under the direction of Senator Giovanni Gentile and Dr. Calogero Tumminelli. The Offices and Secretariat are established in Rome in a historical palazzo now the property of the Treccani Institute. The Institute is not a money-making concern. On this account the Enciclopedia Italiana, the most modern and most perfect Encyclopaedia of our time, costs less than any of the great foreign encyclopaedias, and it has been possible to arrange the terms of subscription to meet all pockets.

H. H. POPE PIUS XI has bestowed upon the President of the Institute, Senator Treccani, the gold medal of his Sacerdotal Jubilee in token of his approval of the Enciclopedia Italiana.

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Deputation to the President of the Board of Education June 19th, 1930.

On June 19th, 1930 the British Commission for Educational and Cultural Films sent a delegation to the President of the Board of Education to render an account of the Commission's work, both current and completed, and of the results of its studies and enquiries.

The Commission, which was created primarily to consider the possibility and expediency of a permanent central film organisation, decided that this was a necessity of national importance, in view of the enormous development of cinematography, which if not turned to good purposes may do so much harm to the ignorant masses that come under its sway.

The censorship is a negative force which can only circumscribe harm already done. What is needed is a positive force that will not only avert evil, but promote within the vast field of the cinema industry everything that is worth having and developing scientifically, educationally, culturally, artistically and recreationally. The task is hard, but it is one that inspires enthusiasm and faith, both of which are sure guarantees of success.

Accordingly, the Commission, after carefully examining the situation of the film as an aid to teaching, deplored that the absence of any agreement between producers and teachers was damaging the interests of both, the former being unable to find a sufficient market for their goods, while the latter, though anxious to utilize this modern method of instruction, did not know where to procure the films they wanted. The result is a vicious circle and, until a solution is found in close contact between the film industry and the teaching profession, it will prove a serious obstacle to progress.

The Commission concludes its report by drawing attention to the draft Convention submitted by the I. E. C. I. to the League for obtaining Customs exemption for educational films and to the letter addressed by the President of the Institute to the British Minister for Foreign Affairs. In this letter the President of the Rome Institute asked what bodies would be entrusted with the examination of educational films, and the Commission takes this opportunity of offering its services to the Government, within the limits of its resources and capacity.

We have pleasure in briefly recording this report, which is further proof of the interest cinematography is arousing in all countries and circles.

* * *

Ever since its first number (July 1929) the International Review of the Educational Cinematograph has manifested its firm intention of serving as a platform free to all contributors who may wish to air their views on the different aspects of social life relating to the cinematograph.

By so doing, it desired — as is indeed the duty of any Review — to make its contributors solely responsible for any conclusions they might express as the outcome of their studies and their knowledge of life and of historical and scientific truth.

In proclaiming itself a "free platform", the Review expressly recognized the right of criticism and opposition on the part of those who, as happens in this as in all other matters, are of contrary opinion.

The article "The cinema and adolescence by Dr. Fabio Pennacchi, Medical Officer of the Perugia Asylum, which appeared in our September number, has elicited emphatic protests from our French friends against a reference in it to cinematography as having been created some thirty years ago by Edison.

Historical truth is a solid fact, and the Rome Institute, which numbers Louis
Lumière among the members of its Governing Body, has very particular reasons for not disregarding or distorting that truth.

Granted, however, that the history of the cinema, like the history of every other expression of human endeavour and human genius, must not be tampered with, the Institute, it must be admitted, has a right, nay, a duty, to respect the ideas of its contributors. If one of these is in error, history — and before history the opinion of his contemporaries, will set him right.

Be that as it may, we are glad that the correction emanates from our French friends. They stake a prior claim and history must decide. The claim is in this case of especial importance since it concerns the creation of a social factor which scales the topmost peaks of human knowledge.

***

The Berlin Central Committee for supplementary medical studies, under the direction of Professor Adam, is now organising a course of occupational hygiene. Dr. Curt Thomalla, Adviser to the National Committee on Health Propaganda, has made for the occasion a most interesting film on the subject of occupational hygiene, making use for the purpose of a series of pictures (views of factories and workshops of real value for specialists in this branch) lent by the archives of the Bundesfilm A. G. of Berlin.

An opportunity is thus given to spectators to pay a rapid but instructive visit to all factories or workshops engaged on work injurious to the health; the public can in this way be made acquainted with measures of health protection and learn about old and new conditions of work.

This film, which is of the utmost interest to doctors, factory inspectors, sanitary engineers, industrialists, etc., has, we repeat, been made from negatives borrowed from the film collection belonging to the Bundesfilm A. G. This work of film compilation will not be done again. Copies of the film may be made during the next few weeks, but after that the strips of which it is composed will have to be separated and put back again in the films from which they have been taken. Accordingly, anyone who wishes to obtain a copy should apply without delay to the Bundesfilm A. G., Kürfürstendamm 53, Berlin, W.
Harvey Fletcher, Ph. D., Speech and Hearing. Published by D. van Nostrand Company, Inc., 8, Warren Street, New York, 331 pages.

This is a careful study well worth the attention, not only of experts but of students, who will here find an answer to many of their questions.

The author has divided his work — which is furnished with numerous tables and explanatory diagrams and graphs — into four parts as follows:

I. Speech:
1. Mechanism of Speaking.
2. Characteristics of Speech Waves.

II. Music and noise:
2. Noise.

III. Hearing:
1. Mechanism of Hearing.
2. Limits of Audition.
5. Binaural Beats.

IV. The perception of speech and music
1. The Loudness of Sounds.
2. The Recognition of the Pitch of Musical Tones.
4. Effect of Changes in the received Intensity of Speech Sounds upon their Recognition.
5. Effect of Frequency Distortion upon the Recognition of Speech Sounds.
6. Effect of other Types of Distortion upon the Recognition of Speech Sounds.
7. Effect of Noise and Deafness upon the Recognition of Speech Sounds.

A. P. Hollis, M. S., Motion pictures for instruction. Published by the Century Company, New York, 45 illustrations: 1 table; 150 pages.

While human progress is a fact beyond dispute and all moving and sentient life evolves and improves, it is also true that man, nature's fairest product, does not follow in her footsteps, but only too often modifies and thwarts nature's ways. While nature slowly and relentlessly pursues her course, man fluctuates between progress and backsliding — a slow advance alternating with a rapid set-back, in which are lost the fruits of centuries of study and effort. Thus the Golden Age of Roman letters was succeeded by the Middle Ages, which if not quite so dark as they are sometimes painted by historians, can hardly stand comparison with the splendours of the Augustan era. These are the actions and reactions of time, against which humanity rebels in vain.

Our own century, which is essentially dynamic, has been called the age of machinery. Man's genius, which discovered machines, seeks ever to improve them and to relieve itself of that part of work which machinery can perform. There are, however, machines and machines; the subject of our present study — the cinematographic machine — does more than reduce human labour; it clarifies it and by so doing completes it. Such is the theme of Mr. Hollis's interesting book, and he gives a very clear and convincing demonstration of the value of the cinema in education. In order to help teachers, most of whom do not know how to get hold of the films they want, the author furnishes a descriptive list of about 1,500 educational films and gives six types of lessons illustrated by cultural films.

We have said enough to show the importance of this book to anyone engaged in the education and instruction of youth. And just as the praises of visual instruc-
tion have been sung by teachers of all times and schools make extensive use of maps, pictures, slates, etc., so too it will not be long before projectors are part of the equipment of every school, as they are now the privilege of a few. To hasten this day is to contribute towards the cause of human progress and to add one small stone to the great social edifice which man has built, and which he is every day modifying in accordance with the promptings of his own ideals.


The aim of the authors of this book is to encourage in every way the work of photographers and operators, by indicating the topical photographs and films most in demand, and by publishing for this purpose a list of illustrated reviews and cinema firms which would be likely purchasers.

The BILDWART furnishes information on all questions bearing on the Cinematograph; it organizes and spreads film activities in the domains of Science, Art, Popular Education, Religion, Child Welfare, and Teaching.

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This Review is recommended by the German Educational Authorities
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The Secretary General of the League of Nations.
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The Director of the International Labour Office.
The Director of the International Institute of Intellectual Cooperation are present at the meetings in an advisory capacity.
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THE CINEMA AND SCIENTIFIC MANAGEMENT

The present number of the Review publishes two articles, one by M. Albert Thomas, Director of the International Labour Office at Geneva, the other by Dr. Sante de Sanctis, psychiatrist and professor at the Rome University, on labour problems and the possible application of the cinema to their study.

Both articles are in the course of publication — one as a preface and the other as an introduction — in the volume on the Cinema and Labour, to be published by the I.E.C.I.

On account, however, of their intrinsic importance, it has been thought well to include them in the present number so that they may attract the notice of those who do not see the other volume.

Labour problems are of interest to all who are concerned with social life and the cinema. They are particularly important in connection with vocational guidance and the scientific organisation of production, the main, if not the only element in a rational distribution of the world labour output.

In its concern with this matter, the Rome Institute, acting in close collaboration with the International Labour Office, is inspired by a conviction that the investigation and statement of these problems may help to indicate labour's future lines of development.

Having endeavoured to trace the subtle influence of the cinema on the popular mind and after studying the use of films in the service of social and personal hygiene, the International Educational Cinematographic Institute has in the present volume sought to ascertain how cinematography could be applied to the problem of scientific management.

I cannot help envying our friends at the Institute. Instead of having to reconcile or decide between conflicting interests and in a world of hard
facts to defend principles of justice that sometimes encounter the opposition of selfish ambitions, their lives are devoted to beautiful ends which cannot fail to stimulate the dullest mind.

Freshness and novelty are the keynotes of their work. Did not Hegel say, «We love children because of their infinite possibilities»? A similar feeling may explain the active and enthusiastic support that is rallying round the I.E.C.I. The bureaucrats of public administrations tell us that answers are only received to 2% of the questionnaires sent out, but, if we turn to the last article in this volume, we find that the Institute questionnaires have been answered to an amazing extent.

There is surely no need to emphasize the possible uses of the cinema in scientific management. It is, of course, still in its infancy, but its future possibilities are magnificent.

The essence of Taylorism, which is the origin of all modern rationalisation, was the study of human effort, of the worker's movements. Is there any better way of studying effort and movement than the film? Have we not all of us marvelled at the revelations of the slow-motion picture?

As regards vocational selection, the cinema can find endless applications. The present volume furnishes some exceedingly interesting examples, such as the cinematographic reconstruction of street traffic, by which the vocational training staff of the Paris Transport Company is able to gauge exactly the qualities and defects of future omnibus and tram drivers.

Then again, take the vast field of accident prevention. It is now universally acknowledged that not even the most ingenious devices for protecting men from machinery can remove all possibility of accident. It is an admitted fact that the worker's attention must be roused and carefully trained, and for this purpose the cinema is of all educative instruments the most effective.

It must of course be employed with skill and understanding, and educationalists and propagandists must take care to avoid certain psychological errors. I once saw some films by the National Safety Council, some of which were very ill-adapted to the psychology of European workers. To judge, however, by the scenarios quoted in the present volume, there is already available a very large number of successful films on this subject.

Especially remarkable are the resources of the cinema at the service of technical training and propaganda. When the International Management Institute was founded at Geneva by an agreement between the International Labour Office and the Twentieth Century Fund, a discussion immediately arose concerning the American suggestion that scientific management engineers should at once be sent to European workshops for the purpose of explaining and introducing rationalised processes. Others were of opinion that men's minds ought first to be accustomed to the idea of rational organisation and that both employers and workers ought first to
be won over to the scheme. No large programme of rationalisation has any chance of success until it is unanimously supported by both classes. This view was strongly upheld by Monsieur Olivetti, who argued that it was impossible to initiate any large movement of industrial reform until an atmosphere of enthusiasm had been created. Can it be doubted that the cinematograph is an excellent method of forming this attitude of mind?

Such are the boundless possibilities indicated in this publication by the Institute. And not possibilities only, but achievements. The various enterprises and experiments of which we are here informed justify the belief that the proposed International Committee of Experts can already meet with every prospect of immediately successful work. The Institute, fully conscious of its high cultural mission and inspired by the aim of promoting closer human relations, has prepared the way most thoroughly.

ALBERT THOMAS
Director of the International Labour Office
I.

The International Educational Cinematographic Institute has devoted much space in its monthly review to the use already made or that may yet be made of the cinema in the fields of general culture and of personal and social hygiene and has also published special monographs on a variety of subjects. Quite recently the Institute and the Review have given their attention to the possible use of motion pictures in the scientific organisation of work — a problem not only difficult in itself, but complicated by a number of other questions connected with physiology and psychology, social hygiene and economics.

For the moment the Institute has set a limit to its enquiry — a further proof of its desire to proceed with circumspection and a sense of its responsibility. It hopes by this publication to have opened the discussion of the application of cinematography to the organisation of industrial work and reserves for later treatment the use of the screen in the rationalisation of agricultural and intellectual work. A considerable number of the practical problems affecting industrial work may be said to have been dealt with in this volume — the question of fatigue by M. Loriga, accident prevention by M. Lévi-Malvano and Dr. Curt Thomalla. These studies are a fit supplement to the discussions on the subject held at the Psychotechnical Congress of Turin in 1929.

These pages further show, however, that the cinema may add to our knowledge of the laws of industrial work by effectively contributing to the study of the physiology of movements — and not only to their measurement in time — thanks to means of distinguishing among working gestures what are called fundamental movements and the small fractions of time into which these gestures are divided. Herr Thun’s development of Gilbreth’s conception of the “fundamental movement” — he has sought to enumerate the movements common to all occupations — would seem to help towards the understanding and application of the laws of muscular mechanism in industrial work.

Herr Thun’s article, and Signor Grillo’s comments thereon, not only fix the seven groups of fundamental movements, but explain how the innumerable movements made by workmen in the course of work may be placed
under one or other of these groups. Not only may this be of great use in industry, but it also adds to our knowledge of the laws of muscular action in many other forms of work.

Although the I. E. C. I. has restricted the questions dealt with in this volume to industrial work, readers will find some reference to the use of the cinema in the rationalisation of agriculture (Jean Benoît-Lévy's article) and of brain-work (my own article). My own contribution does not claim to be more than a brief comment on the many possible applications of the cinema enumerated by Professor Niceforo in the programme which he suggests in the first article of the present volume.

As regards intellectual work, our readers will find certain information pointing to the decisive influence of psychological factors over the efficiency of manual work (article by Mr. W. V. Bingham on the Eighth Conference of the Personnel Research Federation of New York). In particular, they will find quoted the opinion of Professor John Dewey — coinciding with the view I expressed myself in November 1929 at the Turin Psychotechnical Congress — to the effect that, in the interests of the work as a whole, the workman should be conscious of his individual value. I have always attached great psychological and social importance to this idea.

II.

I do not, however, intend that this Introduction shall be a vain repetition of the articles in this volume, as it would become if I were to concern myself with all the special questions dealt with by my colleagues.

Professor Niceforo may be said to have anticipated and enumerated all the possible ways in which the cinema might be applied to rationalisation, while I myself, in different circumstances, have considered special aspects of the question.

I prefer to devote a few pages to developing certain points of view that are usually somewhat neglected and that I have not explicitly treated in my Report on the Turin Congress, in my Introduction to the Vocational Guidance Course for the Rome Schools (January 1930) or in my Psicologia applicata to be published shortly.

One point of undoubted importance referred to in the present volume by M. Jean Coutrot, Professor Niceforo and others and illustrated by well-chosen and convincing examples is that motion pictures must be regarded as a new instrument of culture, applicable therefore in one way or another, now or in the near future, to all branches and departments of social activity.

Everybody agrees that the cinema has revolutionised life, but not everyone realises that this revolution is culturally and technically of greater importance than it is aesthetically. It is a genuine revolution coinciding with another of much vaster scope which affects the whole of contemporary civilisation.
Hearing, sight and action are the material conditions of civilisation. In past ages, hearing (the sensus disciplinae) was the best and most appropriate means of spreading culture. Then after the invention of printing and the steady development of rapid means of transport a combination of hearing and sight was required and will continue to be required as long as the lessons of life are learnt from things and events. A combination of hearing, sight and action has become the favourite instrument of culture in our time, which derives large stores of information from experimentation and technique. Action — and therefore the sight of action — derives its cultural value from the universal need of movement and from the speed of movements. The combination “hearing-sight-action” is more than the integral instrument of culture; it is the integral factor of life itself. I am convinced that the success of the cinema — like all successful human theory and practice — satisfies a need of the contemporary mind, a need that can easily be recognised in all spheres.

Nothing in life is fixed or stable, everything moves, advances, goes and comes; all is movement or, as some prefer to put it, “dynamic,” even to lazy and indifferent minds.

But, it may be said, this was always so. No doubt. The new element, however, consists in the fact that until about fifty years ago nobody knew how, or even felt the slightest need, to bring his life and his aspirations into harmony with the various movements of the universe. This need has now been felt for several years and to-day if I am not mistaken, it has become a compelling urge. Half-a-century ago the conception of work was still so narrow as to be implicitly governed by the Old Testament curse. Do we not all remember hearing workmen curse their work? The curse was not directed against work as such, but against the conditions of work, which made it impossible for the workman to enjoy life and gave him the feeling of being a slave. Spartacus was the symbol of the new revolt. The imprecations of the workers which found an echo all over the world perpetuated the Old Testament curse. Thanks to the loyal enforcement of wise social legislation things rapidly changed. Little by little work was distributed among all social classes and became a necessity as well as a duty. It was proclaimed as a gospel that everyone ought to work, and indeed — quite apart from the sense of duty — nearly everyone does work in one way or another; everyone is active and does or tries to do something. No matter whether the result is mediocre or small out of all proportion to the effort; people work. Who then will maintain to-day that life can be spent in idleness? To watch things done has become a necessity even for those who cannot or do not know how to do things themselves. Everyone is applying to become a citizen of the kingdom of action. Those who do not work to “produce” are no less active; sport, even in the most brutal forms, realises the ideal of men who more or less unconsciously detest above all things — inaction.

In a word, the idea of movement and action dominates every manifestation of human nature. Hence follows restlessness, possibly, too, fati-
gue; but thence also the transformation of the world and of ideals and the growing demand for the training of heroes.

Motion pictures, which give the illusion of actual experience, have become the most striking and expressive manifestation of action. Immobility can be painted or photographed; children can watch immobile things and unchanging situations in the family and in nature. But at the cinema they watch a succession of situations, a sequence of acts; history is made before their eager and astonished gaze. This is why children prefer the cinema to pictures or photographs — or even to family life. Jean Cocteau, quoted by M. Coutrot in his article, put the point admirably "Even when nothing is moving, the cinema records the passage of time..." Thus children become enthusiastic film-fans and are impelled to penetrate further and further into the essence of beings and things. The cinema, therefore, which is the product of the new sense and of the modern need for speed, is becoming an educational factor in the action of future generations. A creation of this need, the cinema is also a source of its development, an effective means of giving it individual and social value. By reducing everything to terms of action, the screen attaches greater importance to action than to either sight or hearing considered separately. Although it teaches us to see and even to see and hear (sound-films), the cinema, by means of eye and ear — those eternal vehicles of culture — adds a new element by exalting action and encouraging and satisfying the modern need to watch human action.

When it is considered that needs once satisfied become habits and that the latter take root in the organism and mould it, it is to be presumed that the cinema will sharpen the sensibility of future generations and create new aspects of that complex of sensation which is a fundamental part of human personality.

It may reasonably be concluded that the use of motion pictures is or will become universal, since the desire to translate everything into action, in other words to re-experience acts and facts in their entirety is strong and permanent in all of us.

By virtue, therefore, of its achievements and its future possibilities, the cinema can be more to us than the source of amusement and aesthetic pleasure which for many years was all that was demanded of it and which is still the first requirement it has to meet. Even its economic importance will be overshadowed, although that will never disappear, for material interest is inherent in all human activity, even in those activities which seem most disinterested, like science, art and politics regarded as a manifestation of force.

III.

First however, an objection must be met — a psychological point to which no particular attention appears to have been paid. It will be asked whether the ceaseless flow of action on the innumerable screens of our cinema
theatres is really more effective in furthering knowledge, morals and human relations than the spoken word and oral teaching. After all the cinema is by definition silent. I am a firm believer in the sound film, but not in the "talkie". Words add nothing to a film, in fact, they detract a great deal from it. Alexandre Arnoux' criticism, which M. Coutrot quotes, hits the mark: by the addition of the spoken word films lose in originality what they gain in technical improvement.

I make no claim to answer the question I have raised, but, having put it, I should like to add a few words of explanation.

Psychology and history have shown that the word (logos) has a creative power: the commands of Jehovah, creator of the universe, the magic word of all the Priests, the word of the law or decree which prescribes or forbids, the soldier's word of command to attack enemy positions, the fervent pleadings of love. Thus, the word is a creative force. Paulhan illustrated this in an article published in the Revue philosophique in 1927. There is no doubt that latent in the human mind is the remembrance of the cabala, and of magical science, memories also of the sophists, masters of words (in spite of Socrates, who called them "professors of virtue"), of the neo-Platonists, even the Parnassians and the great orators.

Does it follow then that without words silent action is deprived of its most powerful aid to suggestion and therefore of its most effective instrument for the training of thought and morals?

No doubt. At the same time we must remember that the tradition of a thousand years has trained us not to understand or assimilate gestures alone. Our judgments of human character are for the most part the results of interrogation or reports by third persons. Nevertheless, education in magic was founded not on words, but on signs, that, is, on gestures. The melody of the voice, emphatic speech, rhyme, invocations, the monotonous repetition of laments, the pathetic cadences of chants are all pregnant with suggestion. Even as spectators do we not all of us, without realising it, put words into the mouths of the silent actors in emotional films? Spontaneously we ourselves help the action of the film to complete the picture of reality.

The verbal sign points towards reality, wrote V. Benussi; but there is no reason why the gesture should not fulfil this function as well. The re-insertion (past) and pre-insertion (future) of the things represented by verbal signs within the circle of current events, help to determine the physical and mental personality of the individual. This miracle, however, follows upon intellectual processes. "Words lead to a creative intellectual function. In this way the aspects of dead or not yet dead things become real" (Benussi). If this is true, gesture and action can have the same effects and exercise the same influence. Take, for example, rites and ceremonies, the repetition of mysterious gestures, the laying-on of hands, benedictions. Lastly, is it not evident that the meaning of a play, the perso-
nality of a teacher or of a military leader are conveyed to the mind of the spectator, pupil and soldier not only by the spoken word, but also and even more by gestures? *Seeing a thing done* is an extremely effective method of grasping the inner meaning of things and situations.

This simple consideration at once removes many of the difficulties from the problem. Moreover, it is to be supposed that the hero's gesture, the extended finger of the commanding officer, the act of the sacrificial priest, etc., develop by repetition a special sensitiveness and reactivity in modern minds and thus offer a new and shortened method of persuasion and direction—a method quicker and more effective than that of the spoken word. Intelligent young people of to-day are synthetic, dynamic, and reach their conclusions by intuition and instinct rather than by logical argument. They are in a hurry and apparently unwilling to spend too much time over preliminary statements, verbal demonstrations, straw-splitting discussion and explanations. They want facts, incidents learnt of not through the organ of hearing but by visual reproduction; rather than listen to the narration of an event they prefer to experience it with all the vital energy of their personality. They want—I am tempted to say—to make of it an "artistic" experience.

Viewed in this way, the question I raised at the beginning of this paragraph loses the force of an objection.

IV.

But, I shall be told, the cinema only offers the illusion of movement, simulated action, imaginary incidents. That is true, but it is also true that suggestion and education are the outcome of illusion. The illusion of movement is just as effective as the illusion of hearing and seeing. The kinetic imagination is a great factor in persuasion, for it contains within itself the germ of the actions which it anticipates. A Joan of Arc, a Margaret Alacoque, a Madeleine de Foligno and a Catherine Emmerich can at any time be evoked even by kinetic presentation.

Experimental psychology supplies us with data reliable enough to convince anybody that the function not only of words, but of movements is to evoke, complete and vitalise past experiences; that movement is capable of imparting a "perceptive presence" to objects that we are only picturing to ourselves (representative presence). For example, it can be shown by a very simple experiment that, by rotating a cardboard disc to which a figure is attached, we create new and strikingly real objects. The movements in question are apparent evolution, phenomena that are called "stereocinetic." The movement of the disc imparts plasticity and substance to the figure attached to it, which is involved in the movement of rotation, whereas, as long as disc and figure are standing still, they only present a static vision.
It will be remembered in this connection that Benussi made a small machine which he called a "synthesioscope"; it shows the phenomena of apparently orthogonal (synthesioscopic) movements due to our way of looking. Thus, by its oscillations the look sets in motion certain assimilative central processes and creates objective realities, that is to say, objects with a perceptive presence. "Autocinetic" movements are well-known to psychophysicologists.

If we watch a point of light placed against a dark background, we gradually get the impression that the light is moving. Similarly, if we look fixedly at a portrait in a dark room, the subject's eyes will seem to move. Then again there are negative "posthumous" impressions of movement; if we watch a waterfall for a long time, the adjacent rock will seem to be moving in the opposite direction to the fall of water. All these impressions are due to the constant oscillation of the eyeball, but they are also due to fluctuations in our visual attention. Sensations of movement are very complex and no doubt central factors such as the perception of variations also contribute to them. On the screen moreover, the moving picture is not caught solely by the stationary retina, by positive "posthumous" images or by the movements of the eye; the connectivity of movements is the product of central factors and more precisely, of integrating impressions drawn from the storehouse of experience.

All illusion, of course! Nevertheless, the movement that results is a reality. It is only upon reflection that we correct the impression received; at the moment of perception and before recourse is had to the evidence of previous experience, the vision is a reality.

I would suggest in passing that these facts we call illusory, which are the result of movement and can be reproduced by easy experiments, furnish us with the key to those departures from common-sense and ordinary experience which we call "delirium." Intellectual processes sometimes assume these exceptional guises, in which the illusion becomes fixed and in predisposed persons becomes an hallucination or a delusion.

By this I mean that persuasive and suggestive power developed until products of the imagination become real is not an exclusive prerogative of words; it is a force which also and in even larger measure resides in movement. From this theory, which has been proved by experiment, it will be easily understood that the cinema imparts a striking reality to rapidly moving photographic images or animated drawings. Hence the strong suggestive influence of the screen. Obviously, too, by reproducing realities ad infinitum and communicating them to millions of brains, the cinema is able not only to stir the feelings but to transform the mind.

V.

A more important question is whether the motion picture, which has now confirmed what is almost a new aspect of human progress, and become a powerful cultural factor, can and should also serve as an educational medium.
I would go further and ask whether the training of the visual attention of inattentive children could be entrusted to the cinematograph in the same way that I have been in the habit of entrusting to the wireless listening apparatus — graduating the volume of sound as required — the auditive training of the deaf and of persons lacking the power of auditive concentration. But can the cinema become educative in the strict sense of the term? This is a question of values, and here we must introduce a digression.

That the cinema is and should be an educational factor is everywhere agreed. The whole work of the I. E. C. I. is directed to this end. The difficulty arises, as in many other fields of activity, when it comes to fixing the limits to the use of films of an educative character. Each country ought to determine first the lines and the methods to be followed in the education of its young, and then the limits within which the instrument of education can be applied. National education and social education may, anyhow at certain points, diverge, and as regards moral education the divergencies increase. The nations do not fully agree even on the subject of natural morality. The right to kill, to dispossess, the rights of men over women, etc., are governed by very different conceptions in the different countries. How much more is this the case in regard to revealed morality or religion! Since the separate countries have not an educational code on the lines of their penal code, the conditions determining the use of the cinema in education vary from one country to another, even from one family to another (religious education, sex education, political education, etc.). What is educative at one period and for one nation may become definitely harmful at another period in history or when applied to another nation.

Could not the scientists follow Kant's suggestion that each country should have an Educational Code consisting of three parts (a) universal educational code (humanity in general); (b) a national educational code and (c) a religious educational code (Catholic, Protestant, Moslem countries, etc.)? This is a serious suggestion pregnant with possible consequences. It would serve to dispel a great deal of confusion current in the different countries with regard to morals. It would also provide a reliable standard for judging, not only from the technical, but also from the moral standpoint, such well known Russian films as "The Mother" and "Potemkin" or the war films of various countries or films in which blood and crime receive unqualified approval.

VI.

I may mention another consideration which, although a matter of methodology, is of decisive importance in practice and in the application of cinematography to psycho-technics.

It is still the custom to distinguish between the two antithetical terms manual work (by workman, artisan or agricultural labourer) and mental or
psychical work (office-work, artistic or scientific work). For years now (Organizzazione Scientifica del Lavoro, 1916) I have upheld the principle of the unity of all work and I can recognize no justification for distinguishing between muscular work and mental or psychical work except on the grounds of a potiori fit denominatio. The idea of the unity of work is now accepted by all the representative physiologists and psychologists of the day. The importance of this fact, especially politically, will be evident to all. Unity of work in physiological and psychotechnical laboratories, unity of work in social life. This is only logical, for it is not a man's arms or his imagination or his thoughts which work, it is the man himself. Of course, things we call single are made up of component parts, so that when we subdivide human work into various occupations, it naturally assumes different aspects according as it concerns one part of the body rather than another (a telephone-operator's ears, a watch-maker's eyes, a stevedore's back), or according as it makes demands upon both arms and legs (an organist) or upon the arms aided only by an organ of sense; or again work may draw upon the imagination (novelist, poet, short-story-writer), abstractive faculties (mathematicians) or logical powers (dialecticians, critics, controversial writers), etc. etc. In deference to this traditional antithesis between body and mind, two forms of application have been invented: material application (muscle) and mental application (brain); in point of fact, however, application in the case of all work concerns the person (physical and psychical) of the worker. It would therefore be more logical to classify men into workers and idlers; efficient workers (highly productive) and less efficient or inefficient workers (hypoproducive); workers with a specific task and independent workers.

Laboratory experience teaches us that muscular work and mental work react upon one another (Mosso, Féré, Krapelin, Joteiko, Patrizi, Della Valle, Treves, Colucci). For example, the representation of movements (as has been repeatedly shown even in my own laboratory in Rome) assists ergographic effort and the result (Féré, Patrizi); muscular work is an excellent means of ascertaining certain states of mind and vice-versâ; mental work benefits by certain dynamogenic movements (J. J. Rousseau, Pestalozzi, Victor Hugo, Mistral, Rossini, Luigi Luzzatti); muscular fatigue diminishes intellectual output; the kind of work, its rhythm, its intensity and the interest taken in it exercise the same influence whether it is mental work or muscular work; pauses and rest-periods are as beneficial in the one case as in the other, as is clearly shown by graphs, including the "recupera- tion" graph. Observation of daily life will suggest countless similar examples to illustrate this point.

VII.

In making these few psychotechnical observations I do not mean to deplore the small space allotted in the present volume to mental work, but rather to point to the value of the experiment made by Dr. Fantini and
myself in our contribution. The intrinsic value of the article is small, but its potential value may be considerable, for hitherto monographs and textbooks on psychotechnics have paid little or no attention to the scientific organisation of mental work, that is, work in which the psychical elements predominate. It would seem as if thought and action were regarded as antithetic instead of indissolubly bound up. Psychical work is apparently looked upon as something mysterious or at any rate inexact, a matter open to question and discussion, concealing some subtle device by which work is *dephysiologised* and *desocialised*. Philosophical prejudice is strong and modern psychology still a very new thing.

On the other hand, it is to be presumed that the cinema will sooner or later regularly be used in administrative and in scientific work (organisation of offices and physics, chemistry, physiology, anatomy, psychology and metallurgy laboratories); such attempts are already being made. Further the cinema will be employed not merely for propaganda and technical training, but to enrich our knowledge, especially of the invisible world (histological structures and alterations, life and activity of parasites, etc.).

Meanwhile, the cinema is being so widely utilised for teaching (that is, collective intellectual work), especially, it would seem, in Germany and America, as to claim our serious consideration.

The time has come, I think, to utilise the cinematograph with a view to discovering and encouraging the best methods unconsciously or anyhow automatically adopted in collective intellectual work. Members of large administrations, libraries and scientific institutes could and should derive from special films definite educational precepts. Amar urged the organisation of collective intellectual work many years ago; is not the cinema an excellent means of showing sound organisations in operation and of demonstrating a *standard* type? The unification of psychological methods, which congresses have frequently but vainly demanded, could be very greatly advanced by means of the cinematograph.

To take one instance only — the regime to be followed in general school work. Our experiments reveal the need of following and applying the *optimum* regime (based on Treves' ergograph law) having a well-defined rhythm subject only to exceptional acceleration. There is no better means than the cinema for determining a *standard* school rhythm calculated to secure the best results with the least expenditure of effort (excluding characteristically individual types of workers). What children are really being taught is to work mentally. It has been too hastily assumed that every child has its own way of memorising and that this way is the best. It is true of exceptionally gifted children, but not of the rest. I think that a film could very well show the *different processes* of memorisation, emphasising the most economical. We psychologists know what exaggerated things have been said about special imaginative types, the "mixed" type being far the commonest.

The cinema, having shown us the *best* and the *worst* in a group of school-
children, from the point of view of work and conduct, could also indicate things that must be avoided. Especially it should inculcate love for work as an act of creation, productive of values and as an indispensable instrument of social improvement. Nothing could drive home these principles so well as the cinema.

I notice further that the cinema is being applied in the sphere of mental pathology. Psychotic and neurotic cases are manifested by certain attitudinal fits or crises — motor and vaso-motor crises which can be shown on the screen. Thus lunatics are characterised by a special attitude. A motion picture of the attitude of the ordinary and of the criminal lunatic, of the mentally disordered and of the raving maniac taken in specific circumstances — whether discharging an imposed duty or acting of their own accord — is calculated to assist psychiatric symptomatology and to throw light on many problems of mental pathology and forensic and military medicine which are as yet almost terra incognita. The cinema should also help in the work of "psychical exploration" by means of action, to which Professor Niceforo refers in this number. It should in a word furnish us with the material to determine the extent and growth of "exceptional" and "morbid" attitudinal characteristics. Why should not the screen enable us to make kinetic studies of individuals which could then be used to construct group-types, even in the field of psychopathology?

To-day, therefore, we can no longer be content with stating that the cinema adds to the knowledge of the specialist in neurology and forensic medicine and that films are a great aid to neuro-psychiatric clinics because they enable doctors to study (by slow-motion) and analyse the gestures of a number of patients and because they lead to the identification of criminals (photography and subsequent projection of gestures and attitudes). We must enter into questions of detail and proceed to apply the cinema in all its possible fields.

Many people are opposed to the increasing mechanisation of humanity and protest against the advances of modern technical science. They advocate liberty in education, in teaching, the following by each of his own bent, etc. My own concern is very different. We intellectual workers waste three quarters of our time and energy in learning an enormous number of material facts, in finding out what others are thinking, in acquiring technical instruction. May we not hope that, once the cinema has made all these things more accessible, our minds may be left freer to explore beneath the surface and that we may furnish new and more valuable contributions to intellectual life?

Dr. SanTE de Sanctis
Professor at the Experimental Institute of the Rome University
FILM PROJECTIONS IN ELEMENTARY SCHOOLS

(from the French)

In response to the Director’s invitation, I have much pleasure in telling readers of the Institute’s review all I know about the use of animated projections in elementary teaching. As headmaster of a large school in Paris, in the rue Etienne Marcel, I have made it my business for the last seven years to prepare and deliver to all classes (children from 7 to 15) lessons in which use could be made of the cinema. It is the fruits of this experience that I am now offering to the International Review of Educational Cinematography. My remarks do not apply to films accompanying lectures nor to projections at educational gatherings. I purposely exclude everything that is not a projection by the teacher to pupils in class during school hours.

The use of films in elementary teaching is not meant to simplify the teacher’s work or to save him trouble, but to make his teaching more precise, more vivid, more vital and thus more fruitful.

A teacher wishing to make use of films must serve a technical apprenticeship; he will study his apparatus, learn to fix the film and check the electric connections; he must know how to keep the machinery in order, grease it and clean it. In this way he will without much trouble become a good operator. His pedagogic apprenticeship will be longer and more difficult.

In our last number we published an article on “Teaching films from the psychological and educational points of view” by M. Angé, professor at the Paris Ecole Supérieure de Commerce. In the second part of this article, dealing more especially with the pedagogic aspect of cinema teaching, M. Angé quoted M. Collette, describing him as “the apostle of film teaching”. To-day we are fortunate enough to be publishing an article by M. Collette himself.

Formerly headmaster of a large elementary school in Paris, M. Collette, who after a lifetime of teaching, might be enjoying well-earned rest in his home at Cagnes-sur-mer, still continues his work on behalf of film teaching. For years and years, in fact, he has been examining the best methods of such instruction and his writings are the fruit of long experience.

By publishing successively two articles on teaching films, the I. E. C. I. desires to emphasise its very special interest in this subject. Practical expression of this interest appears in the enquiry the Institute is now pursuing.
but it is a necessity, even if the teacher is exceptionally well qualified for his job and familiar with visual methods of instruction.

Teachers may be classified, according to the means they employ, in these three groups:

those who expound a lesson (explanatory method);
those who comment upon the school manuals (text-book method);
those who make a constant call upon the pupil’s faculties (active method).

Film teaching involves the third method only, but the method is reinforced by the perfect representation of the subject of the lesson.

A teacher who relies mainly upon the explanatory method talks too much. In most cases he only requires of his hearers that they should listen. As soon as their attention begins to flag, the teacher loses his grip over them and is talking for his own edification alone. His ideas, however well coordinated they may be, fall on empty air, and he will have to change his method. But he will use the aptitude he has acquired of composing a lesson, arranging its different parts and extracting the essential ideas requiring to be emphasised.

A teacher who resorts chiefly to the text-book method, has the text read aloud; he breaks it up, explains it, extending or enlarging its meaning. He effaces his own personality too much; he is imprisoned within his author’s text. He will relinquish this method, but not before he has realised the need for associating and coordinating ideas.

The teacher who is skilled in the active method has almost reached

in schools, to which specific reference was made in connection with M. Angé’s article.

The first results of the Institute’s appeal to teachers in elementary, secondary and vocational schools and colleges in various countries, exceed all expectations. Its questionnaire to teachers has already brought in nearly four thousand replies, many of which — opened at hasard pending systematic analysis of the whole material — constitute detailed reports and careful studies of the question. It is an inexhaustible mine of suggestions, the results of first-hand experience, observations and also wishes expressed by teachers. The information is all the fuller since, as our readers will remember, the questionnaire covers not only instructional, but entertainment films with all their possibilities of influencing children for good or ill; it deals, in fact, with the cinema as a social factor.

This flood of replies to its questionnaire furnishes the I. E. C. I. with what is possibly an unparalleled supply of study material. Strong in its determination, which greatly exceeds its financial resources, the Institute will lose no time in systematically sifting all this material, the essence of which it will extract and place before readers of its Review under the heading, beginning with the present number, “The Institute’s Enquiries.”
full development. A little practice and he will be in a position to make the best use of film projections. The pictures he throws upon the screen are definite, clear and vital, and the questions he asks must have the same qualities. He will not interpret, but point out; he will be careful not to state anything that can and should be formulated by his pupils. He must acquire the quickwittedness necessary to select the essential fact to be emphasised, the capacity to realise instantly the difficulties which may be preventing children from understanding, and he must be able at a moment’s notice to change the form and even the substance of a question so as to make it clearer, more exact and more suggestive, calculated to start the pupil upon the path of discovery.

If a teacher possesses these intellectual qualities, even in embryo, they will develop with practice and experience.

Other qualities are needed — such qualities as are the gifts of born teachers — devotion to the task in hand, the constant desire for self-improvement, and patience.

Let us suppose that a teacher has to give a natural history lesson about ruminants to schoolchildren of 10 and 11.

He will first prepare the lesson, quickly reading over the chapter in the text-book or his previously prepared notes. He is then in possession of the ideas and facts which constitute the substance of the lesson.

What plan shall he follow? He will probably reveal the specific characteristics of ruminants and then show the more important representatives of each group. If he is teaching in the country, he will be able to illustrate with a live ruminant and will even suggest to the class that it should watch some animal of their acquaintance before the lesson. He will seek material to which to draw attention during the lesson.

Realising that a mere statement of characteristics is of no interest, he will arrange them in two groups and note in his scheme:

1. Ruminants are herbivorous (they bite off the grass; function of tongue and teeth; they chew, a fact demanding explanation);

2. They are made for running: long in the leg; cloven-footed, with hoofs; in motion they only put the tips of their toes to the ground (supple gait, speed in running).

Lastly, the teacher draws up a list of the animals he intends to show in each of the four groups of ruminants.

When these preparations are complete, he projects the film on Ruminants for himself alone; a slow projection, frequently stopping to note the composition of the film, the author’s sequence of ideas, any omissions, any pictures that he may not wish to show. He will then fix the detailed scheme of his lesson and determine the point at which the projection shall begin.

The study of the film, picture by picture, with the naked eye or a magnifying-glass is necessary for this lesson; it explains the mechanism of chewing and reveals the movement of the tongue as it collects the blades of grass
before they are seized in the jaws, and also shows the lateral movement of
the lower jaw during the chewing of the cud by the molars.

This comparison of successive pictures takes rather a long time, but is
full of suggestion. I have never yet examined a film in this way without
correcting some error of interpretation, clarifying some previous notion
and learning something new.

There is one further matter claiming the teacher’s attention. What
questions shall he put to his pupils? Which pictures shall he make them
draw? Which titles shall be copied?

The lesson is now fully prepared and the hour for the Ruminants class
is at hand. The objects that the teacher may have been able to collect
(horns, hoofs, head, lower jaw, teeth, etc. of ruminants) are in readiness.
Pupils and teacher proceed to the projection room. The latter is furnished
like an ordinary class-room with desks, a blackboard (to one side) well-lit
by an electric lamp so shaded as to throw its light on the blackboard
only. The screen is at a suitable height facing the class. The projector
is behind. Between the blackboard and the screen and fixed to the wall
or on a shelf is the rheostat. The pupil’s desks are lit by electric
lamps with conical shades, which cast the light upon the children’s
copy-books.

The electric switches for the room and for the projector are beside
the blackboard.

The lesson starts with a few rapid questions on the previous subject
of study. Then follows a series of questions on ruminants, interesting
and to the point, according to the scheme prepared. The whole class is
told to get an answer reader for each question. The teacher indicates
which child is to answer or to correct a wrong answer given by another
child.

The teacher can collect the pupil’s observations of ruminants known
to them and write on the blackboard the two groups of characteristics
mentioned above. The film may now be projected.

The projecting lamp is lit and the title appears on the screen. This
and sub-titles are commented or explained as required. The teacher moves
the rheostat and the motor starts.

The pictures follow in succession. In the case of those requiring close
observation the picture is fixed as soon as the movement to be analysed is
completed or, if the teacher thinks fit, when an important part of
the movement has been completed. He will, for example, fix the image
as the cow’s tongue collects the blades of grass; on the other hand
he will not stop the projection until the end of the series of pictures
which illustrate the lateral movement of the lower jaw in chewing
the cud.

Throughout, the teacher will direct the children’s observation. He will
ask questions, await answers and correct mistakes; he will draw attention
to particular points and collect impressions. His questions will be short and to the point. The children are keen to answer; their eyes shine and they put up their hands, a sure sign that they are following attentively and have an answer ready. The whole class is interested and everyone is trying. Sometimes this enthusiasm must even be checked. The class is alive and each pupil is watching, noticing, thinking and composing his answer. The teacher guides and coordinates.

When the screen shows a large herd of cattle grazing, the teacher bids the class observe the animal in the foreground and describe its attitude (the picture being held fixed). The pupils say that the cow has its forelegs apart, its neck extended, head close to the ground and that it is feeding on the grass. The picture is then continued and the pupils are led by a series of questions to say that the animal goes on grazing without lifting its head, that it swallows the grass as it continues to break it off. The teacher points out that ruminants swallow their food without masticating it, and keep it in reserve. He then draws on the blackboard the complex stomach of a ruminant and the class copies the drawing, putting names to the different parts of the stomach.

The projection proceeds. We see a ruminant at rest under a tree. "Watch the animal's mouth," the teacher says. "What do you notice?" Everyone has noticed that the ruminant's (a buffalo) lower jaw is moving and the most accurate answer is recorded. What is the buffalo eating? Whence does he derive the grass that he is masticating? With what teeth is he chewing it? This is the moment for showing the ruminant's jaws. One pupil holds the head and points to the upper jaw; another takes hold of the lower jaw. A comparison of the two jaws; incisors in the lower jaw only; absence of canines; broad molars. One of the class draws on the blackboard what he sees on the crown of a molar (reliefs in the form of a double crescent). Then the teacher takes the head and shows that the lower jaw can move from left to right. What is taking place in the ruminant's mouth during this movement of the jaw?

When this mechanism has been fully understood, the projection will be continued, showing in moving pictures the process of chewing.

The teacher will further exhibit the legs of a ruminant either from an anatomical specimen or by pictures (only two toes; the tip of each of these touches the ground; protective nails, or hoof; length of toes, etc.). Ruminants are equipped for running; the film shows the rapid and supple running movement of ruminants.

The rest of the film, showing the chief representatives of the four groups of ruminants, can be projected more quickly.

The titles and sub-titles copied by the class during the projection constitute a kind of summary of the lesson. It is completed by some individual reading either from the class manual or from books in the school library.
We see therefore that the use of films in school teaching does not in any way simplify the teacher's task, but it increases its educational scope. It does not lessen the need of preparation or effort on the teacher's part, but it makes both more fruitful. The introduction of animated projections into class teaching compels the teacher to use the active method of instruction, but it also furnishes him with a means of cultivating his mind and increasing his professional value and his influence as an educator.

A. Collette
Member of the Extra-parliamentary Committee on Teaching Films
Fairy-tales are the product of poetic fancy, sweet, intimate, old-time stories all beginning with "Once upon a time." Handed down from mouth to mouth and then collected in books, they have for centuries been a treasure-house for the young. Children of to-day, however, are a new generation; they learn at school and in life to become unsparing critics and it must be admitted that the old-style illustrations to fairy stories give insufficient food for a child's imagination.

The first thing, therefore, is to banish unimaginative illustration. Many excellent teachers have after much endeavour succeeded in getting fables and fairy-stories for older children provided with illustrations which in an idealised form correspond to a child's mentality. The first experiments were made with scissor-cut figures (nowadays coloured silhouettes) and the first fairy-tale film (by Rochus Gliese) consisted of filmed figures moving upon a glass plate lit from underneath.

One of the most important foreign fairy-story films is Maeterlinck's "The Blue Bird." In 1921 the National Motion Pictures League was founded in New York. Its "Baby-Matinées" have much in common with the "culture matinées" organised later by Ufa in the Berlin "Mozartsaal," where recreational films with a fairy element were projected for children (and grown-ups).

"The Thief of Bagdad" — by United Artists — belongs to the same category and, from the point of view of the artistic and technical reproduction of magic incidents, is still unsurpassed. Continuing our survey of foreign products, Turkey and Czechoslovakia, in particular, have filmed the old Grimm tales of "Little Red Riding Hood" and "Hansel and Gretel." Since every country must naturally adapt its film manufacture to popular taste and certain national customs and traditions, not much has been left of the characteristically German story. Who, for example, can take exception when the Americans represent the German "Hans im Glück" as a cowboy? French producers, too — Alberto Cavalcanti and Jean Renoir — are working on a Red Riding Hood film, though Red Riding Hood (Catherine Hessling) rides a bicycle, motors and is finally carried off by the Prince in an air-balloon.

In Germany Paul Wegener was the first to concentrate upon the filming of fairy-stories, producing, among others, "Rübezahl's Wedding" and "The
Pied Piper of Hamelin”, Ufa followed a little later with “Kleiner Muck,” “The Lost Slipper,” “Peter Pan” and “Sumurun,” the last of which may be said to have been the fore-runner of the big Ufa film “Secrets of the East.” Another much-admired film at the time was the National-Film A. G. production “Prinz Elflein’s wundersames Erlebnis.” The “Colonna-Film” was responsible for “Die Elfenkrone” and “Der standhafte Zinnsoldat,” while the children’s films “Kater Mohr’s Tagebuch,” “Aus dem Leben der Familie Langbein,” etc., by the Express Films Company paved the way for the modern animal fairy-tale.

The Berlin Institut für Kulturforschung revealed a new conception of the delicacies of fairy lore by its systematic efforts to promote and develop silhouette-cinematography. The pioneers in this branch were Lotte Reininger and Toni Radbold: “The Flying Box” “Jorinde and Joringel,” “The Star of Bethlehem,” “Münchhausen,” “Caliph Stork,” “Prince Ahmed.”

The extraordinary charm of the shadow picture is referred to by Dr. Kalbus, the subtle art-writer, in his celebrated “Deutscher Lehrfilm.”

“The attraction of the shadow-picture lies in its power to evoke memories, to conjure up fancies and even riddles, while the eye is continually peering into and exploring the darkness. We imagine the eyespace and the expression; we construct for ourselves the lines about the mouth. From this external profile, we seek to understand the soul within. A hundred shades and differences of colour based upon the primitive and picturesque contrast of black and white, and the whole not a mere outline, but a picture.”

Dr. Kalbus pertinently observes that a silhouette film is really much more stimulating to the imagination than the fairy-tale film with its solid human actors and its natural (or wood and canvas) scenery.

One more method of reproducing fairy-stories in film should be mentioned, and that is the use of puppets and marionettes to represent men and animals. The “Stettiner Reformfilm-Ges.” (Stettin Company for Cinematographic Reform) carried experiment farther and in 1923 devised clever combinations of puppets and human beings to impersonate certain poetic creations (shepherd and princess, tin soldiers). The only work, however, on these lines which still survives is the production of the Russian Starewitsch, at present engaged on a version of “Reinecke Fuchs,” in Paris. The movements of his marionettes upon the screen extract healthy laughter and amusement from adults, and are a source of unadulterated joy to children.

Thus we see that a whole patch-work of views and conceptions has served to create in Germany and abroad fairy-tale films in accord with children’s mentality. A glance at Dr. Walther Günther’s “List of German Instructional and Cultural Films” published by the “Bildwart-Verlag,” shows that up to the present 122 fairy-tale films are in existence. Only a small fraction, however, is accessible to the public, and this, despite the fact that, according to the list, five and even more firms have made film versions of the same story. Most of these firms — commercial idealists, as we may
call them — have long disappeared. Where they exist, the copies of these films — which were not box-office successes — have for the most part been mislaid, and those still available in tolerably good condition the cinema proprietor is unable to use because as a rule their photographic technique and artistic quality are far below our modern standard.

The critic may perhaps point to the excellent Wegener films ("Rübezahl's Wedding," "The Pied Piper of Hamelin"), Ufa films like "Zwerg Nase," "Tischlein deck dich," "The Lost Slipper," "Im Lande des Glücks," "Peter Pan," or again to "Prince Ahmed," "The Thief of Bagdad," etc., etc. True enough, but these few films of real quality are unfortunately nowhere near sufficient to meet the international demand. Thus Turkey and Czechoslovakia did not set to work to produce the fairy-tale films we mentioned until two years ago, after they had applied in vain to the German film industry asking for good German fairy-stories.

The lack of fairy-tale films has been still more felt in schools. The so-called "suitable for children" film is not entitled to the label of a film "containing a fairy element." About eighteen months ago the first move was made by the "Film und Bildarbeitsgemeinschaft" under Dr. Walther Günther, but when it applied to several big firms asking them to undertake the regular production of fairy-tale films, not one of them would look at the idea.

It is, to be sure, more difficult to make fairy-tale films than most dramatic and cultural films and also very expensive. Herewith, a few examples:

First, there is the question of what material should be chosen to make a fairy-story for the twentieth-century child. Should the traditional form be used of "beautiful princesses, wicked queens, handsome, strong and virtuous princes" or shall the story be based on present-day situations, on flashlight glimpses of social conditions (and improvements therein)?

Then comes the question of captions. Are they to be in prose or verse? In "The Pied Piper of Hamelin" Paul Wegener made use of rhymed couplets, and in view of the romantic mediaeval milieu of this film — faithfully reflected in the photography — he was undoubtedly right. Recent research in child psychology claims that the best solution is the reproduction of the simple text of the story, which is easy to understand and has long been imprinted upon the memory. Wisely enough, Latin and also Gothic letters, so difficult for small children to read, are rejected in favour of the Sutalin script now taught in the schools and consisting in upright letters clearly separated one from the other.

Fairy-tales unfold themselves in Wonderland and the producer is faced with the fearsome problem of designing suitable scenery for fairy-tale films. To be sure, certain architects have won fame in the cinema and the theatre for designing highly fantastic scenes, but their first aim was expressionism. To create the unearthly atmosphere of romance and to make a beautiful
dream-picture out of cardboard and plaster calls for quite exceptional gifts. And when such gifts are found, they are not to be bought cheap!

But, someone will say, why do we need expensive studios? There are so many outdoor scenes with the beauty of fairyland. No doubt, but not round Berlin. Open-air work, as we know, costs a lot in transport, food, lodging, copyright, damage to woods and fields, long delays through bad weather, etc. Moreover, supposing the good old Grimm brothers were to come back to earth and see our modern traffic arrangements, with their ruthless desecration of scenic beauty, would they not ask in despair what had become of their lovely German fairyland?

What should fairies wear? Elves and sprites could presumably be clothed in veils, but what about the Ice Maiden, the King's son, the Ice Maiden's parents and the courtiers?

Fairy stories do not belong to time. The taste and fancy of a clever producer are therefore free to eschew vain magnificence and to devise combinations of dresses and draperies which will stimulate imagination. The dressen of the Ice Maiden's companions must be borrowed from every possible age.

But clothes must be worn with dignity, and the question of suitable actors for fairy-tale films is of the utmost urgency. The players must fascinate and bewitch; yet they must not be filmstars. For our enlightened children would very quickly recognize in the enchanted prince or lovely princess the chief actor or actress in a highly realistic love-drama or sensational blood-and-thunder film. This would destroy the child's illusions, perhaps for good and all. Imagine fairies with powder, rouge and lipstick!

A belief in unearthly and ethereal beauty will only be created and preserved by young girls hardly out of their teens with the perfume of freshness and naïveté still clinging to them.

On the subject of animals in fairy-story films, we need only quote a fact or two: The hire of a bear (including transport, keeper and food) costs 1000 mks a day. There is therefore no alternative but to entrust the part to a player wrapped in a bear-skin. Again, a producer thinks twice before paying 120 marks a day for a deer, when he has no guarantee that this extremely timid and stage-shy animal will even be serviceable and what man or beast could replace the deer in "Brüderchen und Schwestchen?" It will be remembered how angry teachers were at the use of an Alsatian dog to play the wolf in the film of "Little Red Riding Hood," although not a single child in the two lowest forms ever dreamt that the dog was not a wolf. Only the older children mildly protested and even they "didn't see how else it could be done." The teachers said no more!

These examples all show that fairy-tale films demand past-masters of the camera gifted with an artist's vision. Technically, it is now a fairly simple thing to fix upon film a magic wood for example, with elves or with toadstools which turn into gnomes, creatures with transparent bodies, etc.
But it requires a very special art to make a fairy-tale film in which the purely technical difficulties are so mastered as to fall completely into the background — in which the technical aspects are so overshadowed by the element of illusion that it never occurs to anyone to ask how it has all been done.

These glimpses into the organisation, technique and artistry of fairy-tale film-making reveal one fundamental fact. A fairy-story film of real worth can only be produced with the best actors, highly gifted scene-painters and photographers, omniscient producers (versed in fairy lore, the history of dress and architecture, etc) having a very deep insight into a child's mind. And this costs a lot of money, which explains the scruples and apprehensions of the film industry.

All the more credit must be given to the unobtrusive but zealous and disinterested work of "Märchenfilm-Produktion," Berlin, under the direction of Alf Zengerling. This is the only firm in the world which manufactures exclusively fairy-story films.

Alf Zengerling, who was formerly producer and dramatist at the Cassel Residenz-Theater, is not only director of "Märchenfilm-Produktion," but their producer as well. His first film "Little Red Riding Hood" was shown at the "Capitol" in Berlin at Christmas 1928 with the Film-Funk fairy-play "Funkheinzelmann filmt," "Schneewitchen" and "Hans im Glück" also had extremely successively runs when shown first in Berlin and later in the big provincial cities. Since then the following have been made and are now ready to be shown: "Brüderchen und Schwestchen," "Hampelmann's Traumfahrt," "Die Sterntäler," "Das Waldhaus", "Die Wichtelmänner" and "König Drosselbart." The latter is partly a musical and sound-film, which raises the question whether in the long run fairies may not also speak their parts? Alf Zengerling's answer is reassuring: "No, for the present anyhow the Ice Maiden, Red Riding Hood and the Wolf will remain silent." Let us for a moment imagine the following situation.

The theatre all dark and mysterious. Keyed up to the highest pitch of eager anticipation, children and grown-ups follow the events on the screen. The most arrant little chatterbox is dumb. Is it not inconceivable that sudden speech from the screen should tighten the spell binding the spectators or add verisimilitude to the atmosphere of fairy-land? Even allowing for the technical improvement of sound-films, fairyland remains a thing remote and mysterious. Any sound of mechanical origin would act as a physically painful reminder of our drab world and would destroy rather than create illusion.

One exception may be allowed, and that is the use of guitar or harp. We all know that these instruments have a special power of evocation through their delicate and subtle harmonies. Possibly, too, if the reproduction were good, sounds such as the ripple of a brook, the rush of a waterfall, rain beating on window-panes, the crash and peal of thunder, might heighten the atmosphere.
Accordingly, the possibilities of developing the fairy-tale film are infinite, but the responsibility upon its creator is enormous. Only the very best must be offered to children. Shams — introduced to children in earliest infancy — may permanently demoralise their taste. The delightful "Dr. Doolittle" films indicated the line to be followed in a modern fairy-tale of human, plant and animal life and the good work is being carried on by Professor van Osen, of Berlin, who demands that the material submitted to children shall be adapted to the age they live in. The modern child has no conceptions of princes and princesses and the place of the "puff-puff" is now taken by a big Mercedes or other make of car. Our mechanical age demands mechanised fairy-tales. What could be more magical and fantastic than the reality and vision of wheels rushing round, pistons moving up and down or the mighty explosive machinery by which man, freed from his earthly fetters, is now conquering the universe? Thirst for knowledge and intellectual curiosity must be implanted in earliest youth. Let us therefore work for a film-cycle for young and old, for the wonderland of 2000 A.D.!

Erwin Wolfang Nack
I. Present situation.

The great obstacle to all human achievement is intellectual laziness and the disinclination to abandon preconceived ideas and existing forms. Even a slight departure from tradition is regarded by the majority as a leap in the dark and the significance of any really revolutionary attitude of mind escapes all but a few.

It is therefore by no means surprising that both photography and cinematography are still fettered by the traditional chains of pictorial art, although the real importance of these discoveries lies in the fact that they mark a breaking away from painting not only as regards substance — light

Herr Moholy Nagy's article, which is interesting for its formulation of art principles not in themselves particularly new, seeks to show the need — Herr Nagy thinks it a very simple matter and certainly it should not prove insuperably difficult — to set the cinema free from the shackles of pictorial art and to create a new art-form resulting from a harmony of colours and chromatic scales obtained by the element of light — modelled and made almost plastic upon the screen by a new and bold technique.

Herr Nagy attacks painting on the grounds that it has manacled cinematography and photography with heavy chains from which they cannot free themselves. He maintains that, according to present-day conceptions of cinematography, movement exists only in theory.

Much has been written about the importance of light in film technique and further discussion of the matter is unnecessary. The possibilities of light are infinite. It can paint better than the greatest painter; it can give an impression of depth; if suitably employed, it can create the third dimension in space, give life to the stereoscopic cinema and, above all, perfectly reproduce movement.

Today all film manufacturers and producers are aiming at this and this only; they are daily endeavouring to free themselves from old methods and outworn formulas and to create new forms of art based almost entirely upon the element of light.

The modern conception of movement technique is also very bold. Herr Nagy refers — rightly — to Russian films. The Russian film is almost wholly devoid of those captions and explanations which impede the action, weary the spectator and are really only a survival in a different form of the written or
instead of pigment — but also in form — a kinetic projection in space instead of a static projection on a flat surface.

Painting will probably live as a manual activity or trade for some generations yet, as a preliminary stage (although its means are inadequate) in the direction of a new "art of light," but in order to curtail this period all that is needed is a correct visualisation of the problem, and this implies an organiser working by entirely new optical methods. One of the signs that painting is beginning to abdicate is the evolution of the Suprematist painter Malewitsch. His latest picture — a white square drawn upon a square of white canvas — clearly symbolises the projecting screen for photographs and films; a symbol of the renunciation of pigment painting in favour of the direct modelling of light: on the white surface light can be employed directly and in motion.

This capitulation is a signal victory for the new school, a victory over the cinema of to-day, which in the matters of composition, immobility and montage imitates as best it can the pictorial art of the past. Suprematist art reduces the tradition ad absurdum and makes a clean sweep of it; a fresh beginning must be made by a new method. Let us therefore hail the victory of the new "Lichtkultur," whose mission it is to progress beyond

spoken comments that in the Middle Ages accompanied pictorial representations of deeds of chivalry by knights and crusaders shown at annual fairs.

The meaning of the film should be conveyed by the facial play and gestures of the actors and by the play of light and colour, which can inform with meaning not only persons but inanimate objects.

In the Russian film "The Mother", work, child and adult life and old age are represented in pictures which powerfully grip the modern spectator. We see factories, chimneys and live machines tumbling over one another; we are shown distant bells sounding faint, and suddenly the whole screen is filled with enormous masses of bronze; we positively hear the clash and reverberation of the bells. We are shown streams rippling — between green banks with children playing in the meadows — all visions of life which are followed by the winter frost, the symbol of death. This is cine-pictorial expressionism, but full of movement, force and significance.

Herr Moholy Nagy makes only one statement that we are inclined to question, and that is when he says that the cinema's new "light" technique will kill painting, which will survive only as a trade. If this is so, why should not music in the same way be killed by the sound-film?

No doubt painting will be left behind, but not every art-form that is left behind becomes a trade. The idea of a trade implies accessibility to all and consequently the reversion of the art to essentially popular conceptions. It would, however, seem that, if the cinema develops, as it must, into the concrete expression of life for the mass of the people, then painting, like music, will enter the rarefied sphere of ideas and works accessible only to the initiated and to a
the pictorial and by new means to achieve something unknown in the whole history of painting. It must advance even beyond the point reached in Malewitsch’s picture.

The foregoing, however, is not a complete statement of the new optical principles. Cinetic and reflected projections, the direct manipulation of light call for further systematic investigation. Cinematography and photography are merely new optical systems, bridges leading towards a new optical understanding; both are still very far from complete.

II. Responsibility.

The responsibility for a proper programme of work will increase with the development of future technical devices, such as television, long-distance filming and projection, etc.

The technical problems and their solution for the most part follow prescribed paths. For the technicians the cinematography of to-day — that is the taking of photographs and the projecting of them — is the raw material from which they start.

If they proceed with quite different conceptions of form, they may very

few aesthetically minded people who wish to live in the past. Painting, like music, will become an essentially aristocratic art, divorced from the common herd and reserved for a limited circle of amateurs.

In our mechanical age do not the handicrafts exist for lovers of the beautiful and precious? Will rare china and precious jewels from the East cease to be appreciated because synthetic compositions will — presumably — surpass them in splendour?

This does not mean that the cinema must not seek to discover its own solutions to the problems of light and movement. In the same way machinery, even under mass-production, attains an ever higher degree of perfection, for the artistic satisfaction of the great mass of consumers.

After all, how should the mass of the people concern itself with an often morbid aestheticism, when the screen can reproduce for it life as it is lived, the life of action, light and movement? (1).

In any case, the columns of our Review are now open to a discussion of the cinema as an art-form. Film enthusiasts with advanced ideas will find in Moholy Nagy, if not an innovator, at any rate a bold partisan of their opinions, and the Review will be glad now and at any time to further the cause of the cinematography of the future.

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(1) With regard to the importance of light, colour and music in cinematography — we must remember that the sound-film also derives its technique from the use of light — compare the editorial note "The emotive influence of the cinema" published in the March number of the Review.
well reach quite other results. Their work will receive a new orientation and on the basis of a new programme they will become pioneers of a new "lightorial" in place of the old pictorial art (1).

III. THE LIGHT STUDIO OF THE FUTURE.

The preliminary conditions of a new Lichtkultur, working with sources of light that can be calculated and regulated, include high-quality artificial light, reflectors, projectors, physical apparatus, polarisation and interference of light, increased sensitisation of film and new optical methods of photography (2).

IV. IMPORTANCE OF THE STUDIO OF THE FUTURE.

In the present age of political and economic disturbance the chronicle of facts must necessarily figure prominently among instruments of education and propaganda. Nevertheless, the film, like all other forms of expression, can arouse emotions unconnected with any human or social relationships, and having roots in the inner recesses of our being. On this account the future of the cinema will remain closely bound to the studio, where such effects can be most successfully produced.

Obviously, the studio of the future will not aim at imitation, as it does in our day, when the highest ambition is to make trees from wood and sunshine from flashlight. The art of the future must be made up of elements to be found in life and nature.

The part played by the film architect will undergo a similar change. He will have to employ cinema architecture as a means of producing light and shade and as a combination of surfaces some of which will absorb and others reflect light (walls for the harmonious distribution of light).

Only a studio working on new lines of its own can create forms of light the effects of which are unknown to painting and have hitherto only been hinted at in photographs and films. Light can give life to inanimate objects. Material objects and incidents, the psychical element in the film,

(1) Theremin, the inventor of the new ether-wave music, is the best example of the wrong way of going to work. Starting from the old instrumental music, he tries with new material to imitate the old, instead of creating new pure ether-wave music. The use of old models for purposes of demonstration may do harm, for new material must meet new possibilities, and demonstration with the aid of old methods may prove inadequate and even misleading.

(2) The establishment of some such station for light experimentation — which could work independently of material considerations — would appear more practicable in Russia than anywhere else. To begin with, in all other countries cinematography is a purely business concern; it is only in Russia that films are regarded as cultural possessions and creations of the mind rather than as commercial commodities. Secondly, the requisite conditions of a drastic revolution in art obtain nowhere to the extent they do in Russia. In Russia the old idea of the "artist" is exploded; the old individualist conception of art is gradually yielding to a new mentality based on the idea of organisation. In Russia creative work is not confined to the detailed recording of the particular; thought is becoming universal and synthetic (mass-conceptions) instead of individual and local.
and the acting can be so vitalised by the intelligent use of light that the impression conveyed by the latter is as strong as or stronger than the impression of the events themselves.

Cinematography, however, is not only a problem of how to make use of light, but a problem of how to employ movement, and even then its functions are not fully discharged. A number of further questions remain, some of them arising out of photographic technique, others due to the fact that the cinema of to-day has become the art of the people.

V. Use of Movement.

In the employment and mastery of movement tradition can give us no help, and experience too is very recent. Creation must start in the rough, and this explains why the cinema as an expression of movement is still in a comparatively early stage of development.

Our eyes, for instance, are still unaccustomed to observe different simultaneous phases or currents of movement. In most cases a multiplicity of movement phases would be regarded as chaos and not as something organic. Attempts in this direction, therefore, will be mainly valuable as educational experiments — irrespective of their aesthetic value. Russian technique is so far the only attempt of this kind, and even that is open to criticism. Simultaneous cinematography has not yet progressed beyond the stage of preliminary talk.

VI. Projection.

The expanse of square canvas, the projecting screen of our time, is really no more than a picture painted by mechanical means. Our ideas of phenomena in space and of relations between space and light are of the most primitive. They begin and end with the familiar ray of light falling on space through a hole. Instead of which we can conceive of projection screens, lattices, netting, etc., distributed in space, one behind the other, and some of them transparent — all played upon by one projecting apparatus. We can also quite easily imagine in the place of a single flat projection screen one or more screens curved in cupola form, divisible and movable in parts; for example, all the walls of the studio could be subjected to a cross-fire of cinema cameras (simultaneous cinematography).

It is also perfectly conceivable that several projectors should be thrown simultaneously upon smoke-screens and that certain effects of light should be obtained at the points of intersection of the different beams; also — and not only for the purposes of luminous counterpoint, but for the representation of events — a development of plastic into stereoscopic cinematography.
VII. The Functions of Cinematography.

The experience and practice necessary to a solution of the two big problems of the cinema — light and movement — must be gained from a wide variety of modern sciences and techniques. The work involved is distinct from that of:

- the photographer (i);
- the physicist and chemist;
- the architect and operator;
- the producer and author.

It is concerned, but is not identical with problems of photographic technique, such as:

- optics: sensibility to light; hypersensibility (just as our eyes gradually become accustomed to the dark, so we shall one day have cameras which will be able to register even snapshots in the dark);
- colour-films;
- plastic films;
- sound-films;

and with problems of three-dimensional projection: screens arranged one behind the other and spaced out; projection surface obtained by smoke; concave or convex surfaces; simultaneous cinematography.

It is also concerned with problems of acoustics and montage all of which matters must be studied in relation to one another and combined under the synthetic term “cinematography”.

Moholy Nagy
Berlin

(i) The illiterates of the future are undoubtedly not only persons who do not know the alphabet, but who are ignorant of photography. It is owing to disregard of this fact that photography as an art has not been systematically developed in any country.

No wonder, therefore, that the Prussian Minister of Education, when officially introducing photography as a school subject, was unable — in spite of German thoroughness — to lay down any detailed plan. Nevertheless, the outline of an instructional and experimental programme could easily be drawn as follows:

1. Employment of light, with and without camera (photography, photogram, X-ray photographs, night-photography).
2. Concrete facts:
   (a) amateur photography;
   (b) scientific photography (micro-photographs, enlargements);
   (c) representation of incidents;
4. Various mechanical, optical and chemical reactions: distortion, blurring, trick-photographs, etc.
5. Simultaneity by the use of dissolving pictures, multiple impressions, etc.
FILM PROPAGANDA ON BEHALF OF COOPERATION AND AGRICULTURE IN THE FEDERATED MALAY STATES

Film propaganda has received considerable attention in India, and it was the perusal of an illuminating article (1) on this subject which planted the germ of the idea in the minds of Co-operative officers in Malaya.

India has recognised the educational value of film propaganda. The 1928 Report of the Royal Commission on Agriculture in India gives an account of the work done in this connection in the Punjab. The Eastern Bengal State Railway initiated a demonstration train which made a tour of Eastern Bengal lasting for about one month. The train was fitted up as a travelling exhibition by the Railway, Public Health, Agricultural, Industries Co-operative and Veterinary Departments and by the Indian Teas Cess Committee. Each Department was allotted a bogey carriage which was appropriately fitted up with pictures, models and samples illustrating its activities. Open air lectures, accompanied by films and lantern slides, were given at each stop. A similar train was arranged by the Government of the Punjab in collaboration with the North Western Railway in December last, and made an extensive tour throughout the Province. The Government of the United Provinces have provided a demonstration carriage for the use of Mrs. Pawkes, the Secretary of the United Provinces Poultry Association, to assist her in the work of popularising improved breeds of poultry.

In order to aid in their propaganda work, the Madras Agricultural Department has put on the road a travelling motor exhibition. This was considered likely to prove of more use than an exhibition train, such as that used in the Punjab, for the reason that in South India railways are comparatively few and they do not always pass through the densely populated districts. Moreover, it is only at big towns and centres that facilities exist for halting a big train in a siding without dislocating the traffic. It was, therefore, decided to try the experiment of a motor exhibition van which could be taken from village to village in the interior of the districts and brought to the very doors of the ryots.

The exhibits which the vans carry cover the whole range of the department's work. Each is fitted up in a small showcase with a glass front which fits into its own section and these can be changed at will depending upon the locality visited and the nature of the exhibition.

(1) "Films in the making. An Indian Adventure". London Times 23 August, 1928.
it is desired to give. A large number of posters are carried and these are displayed on boards on the roof and are attached to the front of the counters. Tables and benches are formed of the shelves in the centre of the van and these are arranged round it to display other samples, etc. The whole, therefore, spreads out into an extensive display and it takes approximately an hour to get it ready or pack it all up ready to move on as the case may be.

Ploughing demonstrations, etc., are given at the same time and in the evening lectures are delivered with the aid of the lantern. The caravan goes ahead and chooses a suitable site and makes the necessary arrangements, advertises the coming of the exhibition, and so on, and in due course the big van arrives and the display is spread out. Halts of one to three or four days are made depending on the size of the place visited and the occasion. Local fairs and festivals are attended and the utmost use is made of all shandais, conferences, and gatherings of all sorts. Two assistants at least accompany the vans and of course there is a reliable driver for each.

The sequel in this country was that the Co-operative Societies Department of the Federated Malay States has produced a film entitled "Thrift and Extravagance" — the story of two Malays, Mat and Idris. Wherever this film has been exhibited amongst Malay peasants a profound impression has been created, and the lessons taught have not been lost upon an impressionable people. It has also been well received by the Press. The film, which was produced in Malay, depicts some beautiful scenes of the countryside.

The story illustrates the fortunes of two care-free youths at school, who, growing up, arrive at the cross-roads of life. One path leads to a life of laziness and extravagance, the other to thrift and hard work. Mat chooses the former, and is seen rising late, employing coolies to tap his rubber, buying sarongs on credit, then jewellery, a bicycle and other things he could not afford, all on I.O.U.'s, eventually going to a chetty to whom his property is mortgaged. He refuses the invitation of the local co-operative society to join their ranks and, when the need arises, borrow from them. The result is that Mat's rubber land is put up to auction at the instance of the chetty, and he is driven to a life of hardship in the Ulu, and finds that, late in life, he is faced with the problem of having to start all over again.

The second part of the film deals with Idris, who took the path of hard work and thrift. He is seen tapping his own rubber and ploughing his own patch of paddy, while his wife employs herself usefully in making mats. He refuses the invitations of the "sarong" vendor to purchase sarongs on credit, and plods along perseveringly, becoming a member of the local co-operative society and paying his subscriptions thereto regularly. He one day hears of an adjoining piece of rubber land, which an Indian is willing to sell at a low price, and gets his local co-operative society to inspect the land, approve of its purchase and advance him the money to buy. Finally
at about the time when Mat is driven in desperation to the Ulu, Idris blossoms out into a man of some affluence, he builds a nice large house and spends the evening of his days in comfort in the bosom of his family.

In any effort directed to better the lot of the "kampong" dwellers the Departments of Co-operation and Agriculture are natural allies. A conference of Field Officers of the Agricultural Department and the Rubber Research Institute, and officers of the Co-operative Department held on 8th October, 1929, unanimously endorsed this opinion. The conference also arrived at a significant conclusion. It was of the opinion that tours by propaganda lorry or lorries should be organised for the display of suitable films, etc., and recommended the formation of a Committee to work out details of the scheme. The production of films by means of miniature cinema cameras only was envisaged.

It is as well perhaps to point out it is not suggested that the proposed travelling van should carry films alone. Exhibition samples prepared by the Agricultural Department and the Rubber Research Institute might be shown. Facilities might be afforded for the display of coloured posters, illustrating the control of disease, the larvae of pests such as attack rubber and coconuts, and other points of interest. Excellent posters, diagrams and illustrations of this nature are issued by the Department of Agriculture in the Dutch East Indies. Leaflets in Malay and Tamil might be distributed.

An aviculture film, such as was lately featured in Singapore by the Malay Poultry Farm Association, might be borne in mind. Experiments in the breeding of pedigree cattle have already been instituted at Fraser's Hill and Serdang by the Agricultural Department. It is not too much to say that wide possibilities are opened up by judiciously directed films and other propaganda for the breeding of better-class poultry, goats and cattle. The distribution by the travelling van of improved and tested strains of "padi" seed is yet another possibility.

Investigations of cost have already been made, with the result that it can be confidently claimed that compared with the results to be achieved, the cost would be infinitesimal. Films and, incidentally, wireless broadcasting — the inception of which in Kuala Lumpur is foreshadowed at the time of writing — are everywhere recognised today as most potent and helpful media of education. It is therefore to such means as these we turn, in order that the lessons to be learnt from science and economics may be brought home to the "rayat."

James Corrie
SCENARIO FOR TAMIL COOPERATIVE FILM

Scene I.
General village scene in India – Temples – village street – cattle walking about – blacksmith working, etc. – children roaming about.

Scene II.
Distant view of a small gathering of men and women with one man dressed in sarong sitting in the middle of them talking.

Scene III.
Close up of scene II.

Scene IV.
Close up of Muniandi sitting with Kuppan talking together, with their wives sitting behind them.

Scene V.
Muniandi and Kuppan talking to the Kangany asking him details of life on rubber estates in Malaya.

Scene VI.
Muniandi and Kuppan walking together: their wives behind them.

Scene VII.
Arrival at Muniandi’s house. Old man comes out – milking a cow in front of a mud hut – Muniandi turns and speaks to him – old woman comes out and Muniandi’s wife speaks to her.

Scene VIII.
At Kuppan’s house. Kuppan’s mother cleaning large brass pots – Kuppan and his wife speak to her. In the course of conversation Kuppan’s father arrives driving goats – goats are driven into the house – father comes out and joins in the conversation.

Scene IX.
The two women go into the house talking together, leaving father and son outside — after some talk they call the women out and announce that Kuppan is going to Malaya. Women try to dissuade them.

Scene X.
Munsiff’s Court. Kuppan and his wife and family, Muniandi his wife and family, arrive separately at Munsiff’s Court – sign certain documents and depart.

Scene XI.
Muniandi’s house – farewells – Muniandi his wife and family say farewell to old parents – tears – crowd of villagers in background.
Scene XII.
Kuppan's house. Kuppan, his wife and family set off with their belongings — old mother and father walk with them weeping copiously.

Scene XIII.
Muniandi and his wife and family, and Kuppan his wife and family with old parents meet in village street. Kuppans parents turn back — pathetic farewells.

Scene XIV.
Muniandi and Kuppan go off together — their wives and family following. Kuppan occasionally turns back and looks at his old parents in the distance.

Scene XV.
Scene on immigrant ship. Muniandi and Kuppan playing cards with two friends — their wives sitting apart chewing betel and washing babies.

Scene XVI.
Distant view of launch towing tonkongs with immigrant coolies.

Scene XVII.
Arrival at Port Swettenham. 1000 coolies swarming pier.

Scene XVIII.
Muniandi and Kuppan with their families — close up the view — coolies swarming all round.

Scene XIX.
Barangs are loaded into lorry. Kuppan and family, Muniandi and family with Kangany get in too. Lorry driven off.

Scene XX.
Arrival of lorry at Sungei Lumpur Estate outside factory.

Scene XXI.
Distant view of Estate factory and buildings.

Scene XXII.
Close-up of Muniandi and Kuppan lifting their belongings out of lorry. Manager comes out of office — Kangany introduces the coolies — Manager decides to take them on — each of them picks up his belongings and walks towards coolie lines.

Scene XXIII.
Muniandi and Kuppan walking into coolie line next door to each other.

Scene XXIV.
Next days work. Muniandi and wife, and Kuppan and wife weeding in a gang.

Scene XXV.
Pay day. Pay table with manager and clerk sitting at it with piles of money — beside them Panchayat of Co-operative society dressed in clean clothes — as each coolie comes to paytable Manager and chairman of co-operative society ask if
he will join a Co-operative Society – Muniandi after short explanation nods assent and gives $ 1 – Kuppan comes next and listens to what chairman of the society has to say – he shakes his head and refuses to join – his wife on the other hand, puts forward $ 1 – Kuppan leans forward and takes it from her hand.

**Scene XXVI.**

Meeting of Panchayat – Manager in the chair – Panchayat dars sit on the ground – Indian Officer speaking to Panchayat – 3 or 4 coolies including Muniandi standing behind Manager – after explanation by Indian Officer each coolie puts his thumb-print and is given a pass book.

**Scene XXVII.**

Kuppan in the coolie lines – 4 or 5 other coolies talk to Kuppan and induce him to go over with them to the toddy shop – scene in the toddy shop – drinking heavily.

**Scene XXVIII.**

Kuppan and 4 or 5 coolies leave the toddy shop drunk – Kuppan drunkest of the lot – staggers back to his coolie line.

**Scene XXIX.**

Kuppan trying to climb up steps of coolie line – rolls down drunk – at length manages to get in.

**Scene XXX.**

Next morning – roll call – beating of drums – coolies come out from coolie lines.

**Scene XXXI.**

Muster – Muniandi is present with his wife and Kuppan’s wife – Kuppan absent – a blank in the ranks – Kangany goes to coolie lines – calls out Kuppan – Kuppan comes out holding head and refuses to work – staggers back to coolie line.

**Scene XXXII.**

Kangany speaks to Manager.

**Scene XXXIII.**

Next payday – Kuppan still refuses to join co-operative society.

**Scene XXXIV.**

Outside toddy shop. Kuppan comes out of toddy shop alone – staggers violently – advances a few steps and falls – tries to get up but can’t – wife arrives and with difficulty helps him home.

**Scene XXXV.**

Morning muster. Kuppan missing – later in the day Kuppan summoned by Manager – Manager dismisses him.

**Scene XXXVI.**

Kuppan leaving Estate with his family carrying their belongings.

**Scene XXXVII.**

Another rubber Estate. Kuppan pleads for work at Estate office – refused.
Scene XXXVIII.
Another Estate — do.

Scene XXXIX.
Kuppan and family by the roadside — children crying — wife weeping.

Scene XL.
Muniandi is made a Kangany. Scene outside the office — Muniandi is detailed in charge of a gang — he goes off to the field with his gang.

Scene XLI.
Weeding. Muniandi giving his men work supervising the gang.

Scene XLII.
Kuppan arrives back on Sungei Lumpur Estate — meets Muniandi — asks him to intercede with the Manager.

Scene XLIII.
Next morning in office — Muniandi talking to Manager. Kuppan and his family in the background — after intercession by Muniandi Manager nods and agrees to take him on again.

Scene XLIV.
Next morning at muster — Kuppan in Muniandi’s gang and goes out to work.

Scene XLV.
Kuppan working.

Scene XLVI.
12 months later. Meeting of Co-operative Society — Manager sitting with Panchayat and Indian Officer. Muniandi arrives with another Tamil leading a cow — he asks Society to lend him money to buy the cow. Panchayat get up and feel the cow and value it for $50 — after deliberation Panchayat take money out of cash box, count it and hand it over to the vendor — Muniandi signs bond and leads off cow — Kuppan passes by and stands watching for a few moments.

Scene XLVII.
Outside toddy shop. Kuppan stands outside toddy shop for a few minutes fighting temptation — goes inside — toddy shop man on instructions of the Manager refuses to serve him. Kuppan stands undecided and stealthily walks off.

Scene XLVIII.
Kuppan walking through jungle paths — looks behind him stealthily.

Scene XLIX.
Chinese hut in jungle. Chinese comes out Kuppan gives him money and Chinese hands him a bottle of arrack — Kuppan drinks it and calls for another bottle and drinks it up — calls for a third bottle and staggers out with bottle in his hand.

Scene L.
Kuppan staggering along jungle path, stops occasionally as he is drunk.
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SCENE LI.

Arrival of Kuppan in coolie line, fighting drunk.

SCENE LII.

Scene in coolie lines. Kuppan abuses all and sundry — wants to fight and picks up stick — friends go up and remonstrate — he roughly shakes them off — Kuppan finishes the bottle and throws it away — one man goes up and remonstrates strongly and tries to hold him — he turns round and hits him on the head — a blow with a stick — the friend falls down — coolies rush and seize Kuppan and hold him whilst friend lies on the ground apparently dead.

SCENE LIII.

Coolies run off to call dresser — Kuppan's wife arrives and begs the men who are holding Kuppan to let him go — they brush her aside — dresser arrives — coolies pick up injured man — arrival of police with Manager — hand-cuffs are put on Kuppan and he is led away by Police — wife weeps after him wringing her hands.

SCENE LIV.

Scene in hospital — doctor examines injured man — he still lies like a dead man — bandages are put on him.

SCENE LV.

Court scene. Kuppan is charged with attempted murder. The injured man heavily swathed in bandages gives evidence against him. D. P. P. calls for defence — judge, etc., required. Kuppan is sentenced for 2 years r. i. — led away by Police.

SCENE LVI.

Gaol scene. Outside gaol — Kuppan led in by warders.

SCENE LVII.

Scene in cell. Kuppan behind prison bars.

SCENE LVIII.

Village scene in India. Muniandi's parents' house. They receive letter from son containing draft for money — registered joy.

SCENE LIX.

Kuppan's parents' house — received letter that Kuppan is in gaol — tears.

SCENE LX.

Scene of Kuppan behind prison bars.

SCENE LXI.

Village market — bullocks, goats, fowls, etc., being offered for sale — Muniandi's parents arrive well dressed and buy bullock — Kuppan's parents walk by in rags and look on enviously.

SCENE LXII.

Kuppan in gaol — remorse — determines to turn over new leaf.
Scene LXIII.
On Sungei Lumpur Estate – Muniandi is promoted to head kangany and chairman of Panchayat.

Scene LXIV.
Muster of coolies – Manager informs coolies that Muniandi is made head kangany

Scene LXV.
Muniandi supervising the removal of his belongings to separate house including half a dozen cows.

Scene LXVI.
Belongings being carried into new house – cows tied up outside.

Scene LXVII.
Kuppan arrives back on Sungei Lumpur Estate – is greeted by wife.

Scene LXVIII.
Kuppan goes to Muniandi’s house and asks Muniandi to intercede for him. Muniandi agrees.

Scene LXIX.
Outside office. Muniandi intercedes with Manager – after some hesitation manager agrees to give Kuppan one more chance.

Scene LXX.
Meeting of Co-operative Society – Muniandi draws out money to go to India on holiday.

Scene LXXI.
Outside Muniandi’s house. Muniandi giving instructions regarding looking after his cattle whilst he is away – sets off in motorcar with wife and family en route to India – Kuppan standing with changkol on his shoulder looking wistful.

Scene LXXII.
Kuppan changkolling.

James Corrie
With the present number the International Review of Educational Cinematography, which has previously published and annotated such socially important enquiries as those of Elkin, de Maday, Finegan and others, is inaugurating a new series of enquiries touching the social problems of the cinema, based upon the principle of investigating whether and, if so, in what circumstances the screen is an elevating factor — an asset — in our life or, on the other hand, a liability, exercising a lowering and devitalising influence.

These enquiries have been carried out either by the Rome Institute direct or by its collaborators. None have hitherto been published, but they are of undeniable documentary value. The Review reserves the right, if it thinks fit, to publish in this branch of its work enquiries conducted by others.

Theories have their uses and are often necessary. But they need to be supplemented by the practice of daily life; in other words, various important factors enable theories to be illustrated and exemplified through the first-hand evidence of persons concerned and through statistics.

This is the Institute’s aim and the Review has fallen into line from the formal and aesthetic points of view, by giving to its enquiry section a separate and distinct appearance of its own.

The enquiries will subsequently be incorporated in the Institute’s monographs, in one or more volumes according to their character and origins, and — without boasting — will constitute the fullest work of social documentation on cinema problems in the world.

We announce among others the following enquiries:

(a) into the phenomenon of fatigue in its various aspects (films and visual, moral, physical and cerebral fatigue). An investigation by the I. E. C. L., the first of the series derived from the Institute’s enquiries among schoolchildren, which will form the subject of further studies;

(b) an enquiry instituted by Mrs. Mary Allan Abbott, of the Hoover Committee for the study of social problems, on the impressions received by a number of American schoolchildren from a projection of „The Thief of Bagdad”.

(c) the opinion of young people between 10 and 18 on the value and influence of war films. An Institute enquiry.

(d) an enquiry by Dr. Leone Cimatti, Director of the Psycho-technical Laboratory at the „M. Fossati” Institute, Turin, among 2800 Piedmontese schoolchildren.

These will be followed by others. Already however, every reader of the Review, of any age and any social and intellectual category, has not only the chance but an imperative duty to answer and collaborate.

Silence signifies assent without discussion, and no one who adopts that attitude has the right to theorise. Answering and collaborating signify a personal contribution of life and thought to the social life of our world.
CINEMA AND VISUAL FATIGUE

Our study of "The Cinema and Eye-sight; Effect on Children's Sight", published in the May number of the Review, constituted the preliminary results of our analysis of the replies to the questionnaires issued by the I. E. C. I. to schoolchildren in Italy, Belgium, Roumania, Mexico and Uruguay. Since then, however, a great many more copies of the questionnaires have been distributed. The Institute was very glad to see the welcome accorded to its undertaking by the press and centres of social study in every country — an undertaking all the more venturesome because it followed and sought to improve upon many enquiries of the same kind. It was also pleased to find further countries agreeing to promote the distribution of its questionnaires. We use the plural advisedly, for in addition to the questionnaire to pupils, the Institute launched a second and strictly didactical set of questions intended for teachers only; these were published in our June number. As further proof of the interest roused by our enquiry, the Government of Uruguay, wishing to extend the investigation to secondary schools and universities, has recently applied to the Institute for 2500 copies of the questionnaire in addition to the 5000 already distributed.

This is a significant and most encouraging state of affairs. Up to the present, the Institute's enquiry among schoolchildren — the questions addressed to teachers will be dealt with separately — has beaten all records.

Pending the receipt of replies to the tens of thousands of copies sent out all over the world, more than 25,000 answers to questionnaires distributed in 27 Italian provinces with the active assistance of the Government and local educational authorities, have reached the Institute, been filed and are now being analysed.

The 27 provinces covered by the enquiry, with their total of 12,000,000 inhabitants, are representative of Northern, Central and Southern Italy and include all the physical, moral and cultural characteristics of the urban and rural populations and of the inhabitants of the mountains, the plains and the seashore.

This first batch of answers is now being sifted. As each questionnaire contains about a hundred questions divided into 33 groups, more than 2,500,000
have to be examined — to start with. This suffices to show the magnitude of the task and yet it has to be carried out quickly and systematically, since the value of any enquiry consists in its actuality, that is, in the speed with which its results can be set out and made available. In our busy modern world, anything that is long in making its appearance is likely to be out of date.

The sifting of the replies will be done by countries and taking questions and answers in groups. Each group will be separately studied and the separate studies published in the Review as they are ready; they will then be incorporated in a final synthesis which the Institute will publish in book form. The examination by countries will also be synthetised and account will be taken of the demographic, geographical and economic conditions of each country.

In issuing the final results for Italy, the I. E. C. I. publishes a complete table of the material which furnished the basis of the enquiry into the phenomenon of fatigue caused by the cinema among children and young people.

ITALY

Numerically, the results for Italy may be summarised as follows:
Provinces covered by the enquiry: 27.
Replies received: 25,042.
Eliminated as negative replies from children who do not visit the cinema: 5,381.
Wholly or partly positive replies, useful for our purpose: 19,661.
The positive answers may be classified as follows, according as they emanate from large towns or smaller localities, and according to sex:

<table>
<thead>
<tr>
<th></th>
<th>LARGE TOWNS</th>
<th></th>
<th>SMALLER LOCALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>9,234</td>
<td>Girls</td>
<td>5,515</td>
</tr>
<tr>
<td>Girls</td>
<td>5,515</td>
<td>Boys</td>
<td>3,230</td>
</tr>
<tr>
<td></td>
<td>14,749</td>
<td>Girls</td>
<td>1,682</td>
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<tr>
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<td>19,661</td>
<td></td>
<td>4,912</td>
</tr>
</tbody>
</table>

The answers may be further subdivided into three separate groups, according to the age of the children. Applied to the 27 provinces as a whole, this sub-division gives the following figures:

- From 10-12: boys 7,588; girls 5,635
- From 13-15: 2,948; 1,178
- 16 and over: 1,928; 384

The questionnaires were circulated to elementary and higher elementary schools, secondary schools and technical and vocational schools.
As regards distribution between large towns and smaller localities, the principle adopted was the official sub-division according to centres of administration, so that schools of every kind situated in provincial capitals are classified under "large towns" and all other under "smaller localities". This distinction seemed to us to take due account of the demographic importance of administrative centres, and even in provincial capitals with a population smaller than that of some other places, the presence of Government offices and institutions is a fairly safe index of a more active municipal life and a higher development of local cinematography.

Finally, it should be noted that the 19,661 replies of which use has been made emanate from 742 schools of the categories mentioned.

**VISUAL FATIGUE**

The following study, like all those arising out of the Institute's questionnaires, is essentially practical in character and scope. There has been much theoretical discussion on the different forms of fatigue that children sometimes experience after ordinary cinema performances, but such investigations and impressions were mostly the result of mere speculation and were based upon isolated cases too few in number to constitute a phenomenon.

It is important to consider the extent of a phenomenon before building up a theory upon it and, in the enquiry with which we are concerned, to consider "cinema patients" in direct connection with ordinary films, that is, films projected in public cinemas, films, in fact, which are the special target of those who would make the cinema responsible for all evil, but which are in reality capable of doing children and young people the greatest good as well as harm.

School films, owing to the special milieu in which they are shown and the special nature of such projections (short cultural or scientific films, sometimes containing a particular message or accompanied by the teacher's comments), would have elicited from the pupils opinions of very limited application, affording no general view of the cinema as a phenomenon. Confined to school films, the I. E. C. I. enquiry would have failed in its purpose.

For the 27 Italian provinces covered by the enquiry, the results in regard to visual fatigue — expressed in actual figures and as percentages — are shown in the following tables:
### ACTUAL FIGURES

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>229</td>
<td>152</td>
</tr>
<tr>
<td>From 13-15</td>
<td>678</td>
<td>299</td>
</tr>
<tr>
<td>16 and over</td>
<td>423</td>
<td>76</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>NO VISUAL FATIGUE FELT AT ALL</th>
<th>NO DEFINITE ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>4084</td>
<td>2734</td>
</tr>
<tr>
<td>From 13-15</td>
<td>1937</td>
<td>721</td>
</tr>
<tr>
<td>16 and over</td>
<td>1286</td>
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<td></td>
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PERCENTAGE FIGURES

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>30,30</td>
<td>32,87</td>
</tr>
<tr>
<td>16 and over</td>
<td>22,94</td>
<td>19,80</td>
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<table>
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<tr>
<th>AGE-GROUP</th>
<th>NO VISUAL FATIGUE FELT AT ALL</th>
<th>NO DEFINITE ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>53,82</td>
<td>48,52</td>
</tr>
<tr>
<td>From 13-15</td>
<td>65,92</td>
<td>61,21</td>
</tr>
<tr>
<td>16 and over</td>
<td>66,67</td>
<td>72,65</td>
</tr>
</tbody>
</table>
Summed up, and without distinction of age and sex, the results are as follows:

5627 children and young people, or 28.62% of the total number, normally experience visual fatigue after a cinematographic performance.

863, or 4.41%, experience this fatigue only occasionally, under certain conditions.

11,041, or 56.14%, state that they have never felt it.

2310, or 10.83% give no exact answer to the question asked.

These figures do not wholly tally with those we published in our May number; the May figures were only provisional and have since been revised and added to so as to furnish the present complete and definitive results.

If we include those who gave no definite answer among children who say they feel no visual fatigue as the result of the cinema, we are left with 33.03% who specifically acknowledge the existence, persistent or otherwise, of a locus minoris resistentiae in their visual organ subsequent to cinematographic projections.

Sub-dividing according to large towns and smaller localities and arranged according to age-groups and sex, we obtain the following actual and percentage figures (see page 1385 et seq.).

Before we analyse the causes of visual fatigue as shown in the replies of the children to our questionnaire, we may briefly summarise the views held by specialists whom the Institute has questioned on this matter and whose opinions were reproduced verbatim or in precis form in the May number of the International Review of Educational Cinematography and later in the special monograph dedicated to the effects of the cinema on children’s eye-sight.

Professor Arnaldo Angelucci, of Naples, honorary member of the International Association for the Prevention of Blindness, setting aside the special case of children whose sense organs are at the outset in an abnormal condition, bases his observations mainly upon the state of the cinematographic material (apparatus and films). In other words, films whose perforations are worn and projecting apparatus of which the rollers are worn, result in flicker during projection, and this may cause visual fatigue, apart from more serious consequences.

Professor Emile von Gross, of the Eye Clinic of the University of Budapest, agrees in principle with Prof. Angelucci that normally cinema projections are not dangerous to the eyesight of children and young people. He points out that as a rule school projections do not last for more than one or two hours and thus cannot cause injury or trouble of any kind to healthy and normal eyes.
### LARGE TOWNS – ACTUAL FIGURES

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
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<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>1.818</td>
<td>1.451</td>
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<tr>
<td>From 13-15</td>
<td>439</td>
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<td>1.741</td>
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<table>
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<tr>
<th>AGE-GROUP</th>
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<th>NO DEFINITE ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>2.870</td>
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<tr>
<td>From 13-15</td>
<td>1.301</td>
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<td>16 and over</td>
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<td>258</td>
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<td><strong>Total</strong></td>
<td>5.327</td>
<td>2.849</td>
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<td><strong>Grand total</strong></td>
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## PERCENTAGE FIGURES

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys and Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>32,37</td>
<td>33,77</td>
<td>32,96</td>
</tr>
<tr>
<td>From 13-15</td>
<td>22,94</td>
<td>25,20</td>
<td>23,63</td>
</tr>
<tr>
<td>16 and over</td>
<td>20,88</td>
<td>20,50</td>
<td>20,81</td>
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<th>NO DEFINITE ANSWER</th>
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<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys and Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>51,06</td>
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<td>49,66</td>
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<tr>
<td>From 13-15</td>
<td>67,97</td>
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<td>66,28</td>
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<tr>
<td>16 and over</td>
<td>68</td>
<td>71,47</td>
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## SMALLER LOCALITIES – ACTUAL FIGURES

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<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12.</td>
<td>481</td>
<td>401</td>
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<tr>
<td>From 13-15.</td>
<td>239</td>
<td>83</td>
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<tr>
<td>16 and over</td>
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<tr>
<td>Total</td>
<td>788</td>
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<table>
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<tr>
<th>AGE-GROUP</th>
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<th>NO DEFINITE ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12.</td>
<td>1,214</td>
<td>679</td>
</tr>
<tr>
<td>From 13-15.</td>
<td>636</td>
<td>185</td>
</tr>
<tr>
<td>16 and over</td>
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</tr>
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<td>Total</td>
<td>1,980</td>
<td>885</td>
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<tr>
<td>Grand total</td>
<td>—</td>
<td>—</td>
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### PERCENTAGE FIGURES

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<tr>
<th>AGE-GROUP</th>
<th>VISUAL FATIGUE EXPERIENCED AS A RULE</th>
<th>EXPERIENCED OCCASIONALLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>24.45</td>
<td>29.97</td>
</tr>
<tr>
<td>From 13-15</td>
<td>23.11</td>
<td>25.86</td>
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<tr>
<td>16 and over</td>
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<th>NO DEFINITE ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>From 10-12</td>
<td>61.68</td>
<td>50.75</td>
</tr>
<tr>
<td>From 13-15</td>
<td>61.51</td>
<td>57.63</td>
</tr>
<tr>
<td>16 and over</td>
<td>57.02</td>
<td>91.30</td>
</tr>
</tbody>
</table>
Professor F. de Lapersonne, of the University of Paris and President of the International Association for the Prevention of Blindness, who has had long professional experience, is also of opinion that the cinema can only be injurious to children's sight if the films are worn or damaged so as to produce flicker; or if the letters of the captions are illegible or unsymmetrical; or when the spectator is too close to the screen. No single projection, he says, should last for more than ten minutes or a quarter of an hour; the eyes should be allowed to rest for two or three minutes between one projection and another. Finally, harm may be done if the child's sight is abnormal or if children suffering from any degree of ametropia are not supplied with proper spectacles.

Dr. Park Lewis, of the University of Buffalo, Vice-President of the International Association for the Prevention of Blindness, made a close study of this question and came to the following conclusions:

(a) A review of existing literature does not show that cinema projections have ever caused serious injury to the sight and reveals but few complaints of inconvenience. Under normal physiological conditions, therefore, moving pictures do not cause serious eye-fatigue;

(b) Since viewing motion pictures is distance vision, it does not demand so great an ocular effort as the observance of a near object.

(c) Although the eyes are strained by watching moving pictures, even in the best cinema theatres, they are in all probability damaged little more than they are by reading for the same length of time under ordinary conditions of lighting;

(d) Eye-strain caused by motion pictures is due to one or other of the following conditions, each of which is avoidable: prolonged concentration of the eye; defective eyesight; position of the observer in relation to the screen; poor film, bad manipulation or faulty projection; faulty general illumination.

Professor Giuseppe Ovio, Director of the Eye Clinic of the University of Rome, mentioned as sources of possible injury to eyesight: over-rapid projection; too frequent captions, these being also more subject to "flicker" than the pictures and being shown on over-light backgrounds; panoramic movements of the background, which easily produce giddiness and compel the eyes to unwonted and always tiring effort.

Professor Van der Hoeve, Director of the Eye Clinic of the University of Leyden, declared that the few instances of visual disturbance caused by the cinema that had come to his notice had occurred in very nervous subjects. He recommended that performances for children should not last too long and that the hall during projection should not be absolutely dark, so as to avoid the sudden change from the brightly-lit screen to the darkness of the room and vice-versa.
The opinion of two experts working in different spheres, a teacher and an alienist, agree in the main with the views of the above specialists:

Signor Ettore Tosi, headmaster of a Government school in Rome, thinks that the retina and nerve centres are bound to be disturbed with every passage of a picture across the screen and he wonders whether beyond a certain point these disturbances are not calculated to produce a painful sensation similar to the effect, in the long run, of a drop of water falling continually upon the palm of the hand.

Dr. Fabio Pennacchi, of the Perugia Lunatic Asylum, in his article "The Cinema and Adolescence", which appeared in the September number of the Review, quoted the opinion of specialists that many young people had to thank their love of the cinema for the impairment of their sight — especially poor children, who occupy the cheapest seats nearest the screen: "It is true," wrote Dr. Pennacchi, "that in her writings Dr. Hein, a Danish lady oculist, inclines rather to blame the stress of school work for poor sight among children, but it cannot be denied that the speed of the impressions on the retina is a cause of marked ocular tension, complicated by difficulties of adjustment, especially with regard to the distance of the eye from the screen. Headache often ensues, sometimes giddiness; and, in the long run, the organ itself is weakened."

A book entitled "The Cinema. Its present position and future possibilities" (London, Williams and Norgate, 1917), giving summaries of the opinions of experts and of the conclusions of enquiries instituted by specialists in the different branches of screen activity, contains observations relevant to our question. Although thirteen years old, these remarks do not substantially vary from those recently made by oculists, scientists and others specially concerned with the physical and moral protection of the young.

We should like to summarise here what was written in 1917 concerning visual fatigue as a consequence of cinema projections.

Dr. Bishop Harman, Ophthalmic Surgeon to the West London Hospital and Belgrave Hospital for Children, attributed this fatigue to the following factors:

1. Glare.
2. Flicker.
3. Rapidity of Motion.
4. Concentration of Attention.
5. Duration of Exhibition.

These factors have the same effects upon children as upon the more impressionable adults, but owing to their lesser power of resistance, children succumb to fatigue more quickly.

1. Glare. — Projection rooms are made as dark as possible and all the light is thrown upon a very white screen and therefrom reflected into the
eyes of the observer. These necessary conditions of the show are the worst conditions for the eyes; they tend to produce the maximum of fatigue. Glare cannot be dissociated from the show, but it can be reduced by a suitable illumination of those parts of the hall removed from the screen and by moderate general lighting during the intervals.

2. Flicker. — This defect is generally due to bad films and is most evident in coloured films. Technique, however, has greatly improved in this matter.

3. Rapidity of Motion. — This is connected with the previous defect, since in order to reduce flicker, the film is moved through the machine at a greater rate than that of the progress of the event depicted.

4. The concentration of attention required by the cinema is greater than that necessary to follow any other kind of show and engenders visual fatigue, especially in children. Since the eye does not take in the whole of a scene at once, it has to move rapidly from one point to another, and this demands an excessive and exhausting effort.

5. Duration of exhibition. — Cinema performances commonly last from one and a half to three hours. A child is not capable of sustained attention for so long. Shows should therefore be much shorter.

The effects of the cinema on children's eyes are only momentary and cannot have serious consequences unless attendance is assiduous. In any case, the best protection for the child will be secured by the following measures:

A. The reasonable illumination of all parts of the hall not directly beside the screen;
B. The avoidance, as far as possible, of flicker and the withdrawal of damaged films;
C. The improvement in taking the picture so as to bring the rate of motion of the objects depicted nearer to the natural;
D. Increase in number and length of intervals;
E. Limitation of shows for children to one hour;
F. Reservation for children of the best places in the hall, that is, central positions as far away from the screen as twice its full height.

In contradiction to these conclusions, Dr. Saleeb, an English censor, who for four years has examined films on five days a week from 10 a. m. to 6 p. m., said that his eyes had never suffered. As Mr. Gaster points out, this statement is of very relative value, for in regard to fatigue in general and visual fatigue in particular, it is impossible to compare the resisting capacity of adults with that of organisms in the course of growth.

Mr. Leon Gaster, Hon. Sec. of the Illuminating Engineering Society, declared that:

1. In the darkened condition of cinema theatres the eye is very sensitive to light and therefore no source brighter than the screen should fall within the angle of vision of the audience;
2. An excessive contrast between the bright screen and the dark surroundings is trying to the eyes. The walls and ceiling might therefore preferably be light in tint;

3. To avoid excessive contrast between light and shade, and also for safety, a small amount of light should be maintained in the room during projections. In the intervals, too, full lighting should be provided and should be gradually dimmed so as to avoid the shock to the eye of sudden transitions from darkness to brightness, and vice-versa;

4. It is common knowledge that to be too near the screen is tiring to the eye. Children should therefore be given the best places and the front row should be at least twenty feet from the screen.

Such are the latest, most authoritative and direct indications with which science can furnish us on this matter. Let us now turn to the children and young people themselves, who, through the Institute's enquiry, supply us with practical information on the causes of the trouble.

***

First, a few statistics.

Taking the average for the 27 provinces, we find the highest proportion of those who normally or occasionally feel visual fatigue as the result of public cinema shows, among the youngest (under 12). The smaller localities report a larger proportion of eye-fatigue in young persons over 16 but, as this age-group includes only 251 out of 4,912, the fact is of no great importance. It is of interest to note that in the big towns, more children experience visual trouble than adolescents.

The average relations between each age-group are as follows:

<table>
<thead>
<tr>
<th>Age-Group</th>
<th>Large towns</th>
<th>Smaller localities</th>
<th>General average</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 10-12</td>
<td>35.35 %</td>
<td>29.40 %</td>
<td>35.30 %</td>
</tr>
<tr>
<td>From 13-15</td>
<td>26.38 %</td>
<td>28.93 %</td>
<td>27.22 %</td>
</tr>
<tr>
<td>16 and over</td>
<td>29.11 %</td>
<td>36.65 %</td>
<td>29.93 %</td>
</tr>
</tbody>
</table>

In relation to the sexes, statistics give the following averages:

<table>
<thead>
<tr>
<th>Age-Group</th>
<th>Large towns</th>
<th>Smaller localities</th>
<th>General average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>From 10-12</td>
<td>36.94</td>
<td>37.91</td>
<td>27.49</td>
</tr>
<tr>
<td>From 13-15</td>
<td>25.19</td>
<td>29.06</td>
<td>28.91</td>
</tr>
<tr>
<td>16 and over</td>
<td>29.70</td>
<td>26.32</td>
<td>39.47</td>
</tr>
</tbody>
</table>
Apart from the negligible number of girls in secondary localities (2 out of 1682), the highest averages of those experiencing visual fatigue are found among schoolchildren in large towns and the proportion of "eye-sore" girls is higher than that of boys.

Generally speaking, children are more sensitive to visual fatigue than adolescents.

Finally, if we sub-divide by kinds of schools, the replies show that fatigue is more evident among pupils at manual vocational schools than among those studying classics or engineering.

Let us now examine the causes of habitual or occasional fatigue as revealed by the Institute's enquiry. According to the statements of the subjects themselves, these are:

(a) projecting apparatus: use of old and worn machines producing flicker;

(b) films: damaged, worn or technically defective films, whether the defect is in the negative or in the printed copy;

(c) projection technique: flicker due to too slow a motion or other reason; insufficient distance of observer from screen; excessive speed with which the film is moved through the machine; if the film moves too quickly — about 10 children point out — the difficulty of following and discerning the stages of movement ends by tiring the eyes; bad projection technique in general is mentioned by many others.

(d) captions: these are complained of as being too numerous. About a hundred schoolchildren — mostly younger children and boys — say that the letters are too small and that they do not remain on the screen long enough: "We cant read them" is the gist of the complaint, "in spite of the fatiguing effort to read almost illegible writing in too short a time."

(e) lighting: a large number complain of eye-fatigue caused by the lighting conditions of the hall during and between projections. Criticism is directed especially against the too sudden transition from the semi-darkness during projection to the bright illumination in the intervals and at the end of the performance; also against the excessive whiteness of the pictures and flicker — a fault of the operator — the result of an irregular distribution of the source of light during projection, dazzling to the eyes.

(f) the seating arrangements of the hall and the position of the observer in relation to the screen: Hundreds of observations were made on this score, most, but not all, based upon economic considerations. Children go to the cinema either alone or in the company of friends or relatives. In the latter case, supposing the friend or relative has normal sight, the child will sit at a normal distance from the screen and the projection will not hurt his eyes. Often, however, the grown-ups accompanying children are short-sighted or can only afford the cheapest, i. e., the most crowded places, so that the child finds itself in the very front rows and close to the screen, where the defects of projection — flicker, dazzle, etc. —, which
are, as we know, more conspicuous near than from a distance, will be intensified and try the child’s eyesight, however good it may be.

Children who go to the cinema alone are usually of the poor class. They have somehow collected the small sum required to obtain admission, but only enough to pay for the worst places at the local picture-house.

On this point the children’s answers are often picturesque and illuminating: “How can I expect to see well,” one said, “when I can only afford the front rows?” “My father is a working man and doesn’t earn a great deal” is another answer. Two little boys wrote: “We are small, and always find ourselves behind taller people so that we have to crane our necks or shift our places, in order to see. The screen is often partly or altogether masked and one loses the thread. This is tiring and hurts the eyes.” Others, for similar reasons, complain that in some cinemas the floor has not a sufficient slope.

An interesting feature is the complaint by many children and young people of the grown-up habit of smoking in halls which are frequently ill-ventilated: “Smoke,” they say, “makes the eyes smart and prevents you seeing clearly.”

Others mention further causes of visual fatigue of a purely subjective interest.

The two categories of objection may be summarised as follows:

1. Undue length of projections: Many children refer to the excessive length of films or parts of films, and of the short intervals between one part and another. They say that too long a projection often makes them giddy and, still more often, makes their eyes smart.

Others add: “On coming out of the cinema after a long show, you can’t see anything”; or again: “You see everything red and it’s some while before the sight returns to normal.” Others again: “It’s all right at first, but in the long run the strain of watching becomes tiring.” “The constant moving of the eyes, with no rest, tries the nerves and weakens the sight.” “Over-long projections tire the eyes and make you sleepy.”

2. Subjective elements.

“ If the scene is touching, you cry, and that hurts the eyes.”

Short-sightedness.

“Evening shows are bad. In the day-time, you often open the windows or shutters in the intervals, and the light which enters does not hurt the eyes.”

“Boring scenes are tiring. For lack of other occupation, one looks at the screen and the eyes grow tired. The same applies to scenes indifferently acted.”

(This remark is psychologically interesting. Mental weariness is not the only cause of boredom from projections. Psychic resistance leads by reflex action to visual fatigue).

(To be continued)

G. d. F.
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(from the German)

We publish herewith the substance of an article we have received from Herr Arthur Lassally, an engineer, of Charlottenburg. Although it has already appeared in print (Die Kinotechnik, September 20th, 1930), we are glad to bring Herr Lassally's article to the notice of our readers, for this account of the aims and organisation of the Berlin Film- und Bildamt should be of interest to all who follow the progress of cinematography, and especially of educational and scholastic films. To all such the name of Dr. Walter Günther, creator and present Director of the Amt, is familiar as that of a strong champion of our common cause.

There has been a school for film operators in Berlin since 1915, founded and maintained by the Union of Berlin Cinema Proprietors. In 1921, with the assistance of the German Association of Motion Picture Engineers, a German Film School was established in which technical instruction was supplemented by training in production and acting; finally, the Berlin Technical High School maintains as a separate organisation an institution for tests and experiments in cinema technique (Prüf- und Versuchsanstalt für Kinotechnik). This might have seemed to exhaust the possibilities of technical training in cinematography, but since 1920 the scholastic profession, in connection with film-teaching, has organised training-courses, principally for the use of teachers; this body founded the Film- und Bild- Arbeitsgemeinschaft (Filmseminar), Grossberlin 7 W., which on September 8th celebrated its tenth birthday.

These endeavours to tackle the problem of cinematography and get to work on the right lines led to the creation of the Filmseminar der Stadt Berlin, now more correctly known as the Film- und Bildamt. The institution has developed out of practical work, the purpose of which was to impart to students the knowledge required to pass the prescribed examination as operator of cinema projections in schools and child welfare institutions. Thus 49 courses have been held in the last few years, each attended by an average of 24 participants, so that about 1000 teachers and child welfare workers have been trained in cinematographic work. Special courses are arranged for employees in administrative offices and industry, who organise film projections for professional purposes, but not in cinemas. As the work of teachers is not confined to films only, but covers all photography, there are also courses in elementary and advanced photography and microphotography; even the elements of filmmaking were practised at one time and it is proposed to resume this branch of the work.

The activities of the Filmseminar have been developed on paper since 1921, in practice since 1928. Thus, a Technical School of Cinematography has been added, where film operators and other technical personnel receive theoretical and practical training in addition to their practical studies outside the technical school. The occupation of cinema operator is in fact taking its place among skilled trades and the work of the technical school of cinematography is helping this development. What applies to film operators also applies to other technical cinematographic workers. Although the use of machinery in the cinema industry may be expected to increase, the need for a large number of unskilled workers will continue. There will, however, also be a demand for highly trained technicians and skilled masters and foremen — posts at present held by unskilled men who have been longest in the business. This development is now in full swing, and the Technical School of Cinematography is destined to be the nursery of a school of technicians, whose value to any industry must be placed very high.

A stepping-stone to the Technical School and to the Seminar is the Cinematographic Vocational School (Berufsschule). As every-
one knows, in Germany, nearly all boys between 14 and 18 who do not attend a high school or technical school, are required to attend vocational classes. The youths — messengers, odd-job boys, film-stickers, etc. — employed in the Berlin cinema industry, are also regarded as unskilled and attend the vocational school appropriate to their case. Since 1928 a praiseworthy attempt has been made to group them all within a single vocational school, which in addition to teaching the usual general subjects will impart special knowledge that the pupils can use in their trade and which will season instruction in general knowledge with examples chosen from their own occupation. The object in view is to implant an intelligent liking for their calling in young people, most of whom have found their way into it owing to the chance exigencies of the labour market, and further to endow them with the qualifications necessary to film workers and to pass the best of them on to the technical school, the training of which will raise them to the social status of technicians.

These very different purposes and the very variously constituted groups of participants naturally imply a corresponding variety in the curricula of all these courses. The subjects taught in the Filmseminar and the technical school are: general information concerning the vocation, chemistry, electricity, fire and accident insurance, motion picture technique, optics, photography, physics, projection, organisation, law (Reich Film Law, safety measures, fiscal questions) and scientific cinematography. Students enter the vocational school in the third semester, after they have spent a year in the vocational school for unskilled workers. Students in their second and third years at the vocational school are taught for 6 hours a week in separate classes. Here, in addition to what is called "Gemeinschaftskunde," the only subjects taught are technical subjects, divided into elementary: General cinematography, electricity, optics, principles of photography and projection, and advanced: apparatus, care of films, and law. All courses make generous provision for practical work.

Considering the large number of different subjects, the teaching staff is small: The Director gives classes in the general aspects of the vocation and in law, in addition, there is a technical director of studies and a separate lecturer in electricity, cinema technique, optics, micro-photography and photography. There are also a female assistant and a qualified engineer on the staff of the vocational school and outside lectures are given by representatives of the business world or cinema practitioners. This concludes our account of the instructional duties of the Film- und Bildamt. It is intended to extend instruction to include the training of cinema photographers and engineers for cinema theatres, but this will depend upon the demand. Already, however, the teaching work has been supplemented by certain administrative activities. The Berlin Film Archives are now worthily stored in the building and the necessary arrangements made for their care and use. The Central Photographic Collection of the City of Berlin, the Archiv für Lichbild- und Filmwesen — which contains several rarities and preserves everything worth knowing about photographs and films — a library, a collection of periodicals, an intelligence service for films, photographs and apparatus and, lastly, 20 district cinema offices, working locally under the patronage of the Bildamt, now supplement the purely instructional side of the work and serve to create a real Film- und Bildamt.

The fine building is divided into three parts. The left wing consists of the Kleist School, the middle block contains a gymnasium, the big hall, another gymnasium and above it a roof-gymnasium, and the right wing is the Film- und Bildamt itself. On the fourth floor of the latter is a photographic studio with a glass roof and walls. It is built for daylight photography, but admits of a certain amount of work in mixed light or — at night — by purely artificial light. In the front of the building are a number of smaller rooms where the various stages of film preparation are completed. There is also a caption-printing room and a table for trick-film work. The large lecture-theatre has 135 seats
arranged in tiers and is equipped with blackboard, screen, darkening facilities and an epidiascope upon an electric table, which can be lowered into the floor. The fourth floor further contains the big collection of periodicals and behind it space for an aerating machine, by which fresh or electrically heated air can be pumped up into the municipal film archives on the floor above. Here — where there is no heating apparatus — the Berlin films are kept in special safety cupboards variously constructed.

On the third floor is the mechanical workshop and next to it a chemical lecture room fitted up in the usual way. The physics room, with a preparing lobby, where the apparatus is also kept, is on the lines of the ordinary school physics laboratory. On the second floor is the high-tension laboratory with space for eight workers. The big projecting room, with two windows, has five machines arranged in a row along one wall.

Another room on the second floor is fitted up for micro-photography; nor should the optical laboratory be forgotten. The whole of its shorter side consists of a screen. The intelligence service of the Film- und Bildamts is also on this floor.

The big hall on the first floor accommodates 500. In addition to a stage, there is a movable directing stand, which can be placed anywhere in the hall and from which the light-signals in the big projection room can be seen and telephoned to the operator. The large lecture-theatre has a similar directing stand.

On the ground-floor is the so-called small lecture theatre and next to it another projection room. Here, too, is the municipal photographic collection. In the cellar is the engine-room.

The term “Filmseminar” for this educational establishment is only historically correct. Although we need not employ the term Academy of Cinematography, this institution will as time goes on furnish the film industry with a steady stram of well-trained experts and thus reflect credit upon the city of Berlin for having created it.

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CULTURAL FILMS IN THE U.S.S.R.

(from the French)

Thirst for knowledge and the growing cultural needs of the working masses have led to a substantial increase in the production of cultural and documentary films in Russia, and during the last two or three years the development of this movement has been particularly remarkable.

A typical example of a Soviet documentary film is "The Mechanism of the Brain," made by Pudovkin for the Mejrabpomfilm in 1926-27. This film expounds the materialist theory of Pavlov, a member of the Academy, concerning the higher nervous activity of animals and reproduces his celebrated experiments on the normal reflexes. Despite the extremely complicated scientific material, which made it very difficult to render the film generally intelligible, it aroused keen interest in wide circles and was greeted enthusiastically wherever it was shown.

Interest in cultural and documentary films is steadily growing and the number of cinema installations in clubs and villages has greatly increased. Documentary films are much in demand and the cinema public is to be counted in millions. Nearly all the Soviet film organisations show cultural films and the Sovkino has a special factory at Moscow for this kind of film. The Mejrabpomfilm, a cultural film organisation, has multiplied its activities and may very possibly be transformed into a factory for the production of these films.

In their programmes and production schemes Soviet film organisations allot an important place to cultural films, assigning to them 20-25% of the total resources available for film manufacture.

Among the most interesting cultural films of the last two or three years, in addition to "The Mechanism of the Brain," are the following: "A Sixth Part of the World" (Sovkino), "Earth and Heaven" (Mejrabpomfilm), "The Feeding Problem" (Sovkino), "Alcohol" (Sovkino), "The Eleventh" (Ukraine Cinema), "Fatigue and its Remedies" (Sovkino), "Home-treatment of the Sick" (Mejrabpomfilm), "The Scientific Choice of an Occupation" (Mejrabpomfilm), "Oil" (Sovkino), "Air Attack," (aviation in the service of culture) (Mejrabpomfilm) and "Love in Nature."

To this list should be added a number of films turned this year and already released: "The Forest Men" (Sovkino), "The Spartacists" (Sovkino), "The Fight for Health" (Sovkino), "Here's to your Health" (a Mejrabpomfilm temperance film), "The Glass Eye" (Mejrabpomfilm), "The Man with the Film Camera" (Ukraine Cinema). Announcement is made of the approaching completion of some ethnographical and travel films, which will excite lively interest. Among these are "The Unexplored Parts of the Pamir" (Mejrabpomfilm), "The Gates of the Caucasus" (Sovkino), "In the Taigna in Search of the Meteorite" (Sovkino), "Afghanistan" (Sovkino Leningrad factory), "Among the Votjaks" (Mejrabpomfilm).

Most of these films were made with the immediate assistance of Russian scientists or experts, who not only gave advice during montage, but in one case at least assumed the scientific direction. The results are correspondingly excellent and the films have aroused great interest both in the scientific world and among the general public.

By appealing for the more active participation of scientists and professors, the Soviet documentary cinema is helping to solve one of the most important cultural problems of the U.S.S.R., the problem of popular education.

The choice of subject is determined by the immediate requirements of economic and cultural education, by the more urgent problems of industrialisation, mechanisation in agriculture, care of public health, reorganisation of the national life, anti-alcohol campaign, etc.

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ing directly upon daily life and, as far as we can, to link up science with the life and work of the people. The more the spectator is interested, the better he understands the film, and we therefore try to introduce episodes and scenes of domestic life likely to arouse his attention.

The Institutes of Psychology at Moscow and Leningrad carry out enquiries into the reactions of the spectators and the results are then checked by comparison with theatre audiences. A special Scientific Institute is shortly to be opened in Moscow for the study of Soviet cinematographic problems.

Lastly, we should add that the production programmes of the three chief Soviet organisations — Sovkino, the Ukraine Cinema and Mejrabpomfilm — provide for the manufacture of about a hundred cultural and documentary films.

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This Review is recommended by the German Educational Authorities

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According to information kindly communicated by Madame Tilma Hainari, President of the National Council of the Women of Finland and Substitute Delegate for Finland at the League of Nations Assemblies of 1927, 1928 and 1929, there are two Finnish associations engaged in educational film work: The Kurki Joint Stock Company for Cultural Films, founded in 1926 and the Educational Film Union, founded in 1929.

The aim of the Kurki Company is to procure, especially for the needs of educational institutions, cinema machines and films as well as other suitable material for object lessons; and to organise instructive picture shows. Kurki recommends an American machine "Filmo" for special use in schools as it is light, weighing only about 4 kilos, and can easily be moved from one place to another, and especially because it uses 16 mm films which are not inflammable but are socalled safety films. This machine has also the advantage — an important feature in instruction — that the film can at will be turned backwards and the projection interrupted to give necessary explanations.

The Kurki Company has an archive of films containing about 150 educational films, mainly foreign. But there are already a number of good native educational films and new ones are constantly produced. The latter include: Finnish Forests, Finnish Agriculture, Finnish home-industries, the Care of the Labourers, etc., and many specially interesting films on natural science. The schools of the capital, Helsingfors, hire the film required for a particular class and engage an operator to come and project it. Mostly the 16 mm machine is used and as the classrooms for natural science and physics can readily be darkened, the projection is a simple matter. The films ordered for the country districts are sent on fixed days to schools and cultural organisations.

The purpose of the Educational Film Union is to secure films as aids in teaching in educational organizations and institutions, from elementary schools to the Universities. It has branches throughout Finland.

Educational work by means of films is carried on not only by schools and educational organizations, but also by the largest Co-operative organizations. The government has aided the activities of film education only nominally. The whole enterprise has depended up till now upon the initiative and self-sacrifice of private individuals. The Educational Film Catalogue has however appeared for the last few years at the expense of the government and been distributed free to all educational institutions and cultural organizations.

On the Expert Committee of the Kurki Company are represented: the Department of Education, the Universities, Elementary and Secondary schools, the Technical High School, the Ministry of Defence, film renting bodies, film producers and women's organizations. The Board of the Educational Film Union includes three women members.

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THE BYRD EXPEDITION TO THE SOUTH POLE.

The film of Admiral Byrd's expedition to the Antarctic regions is an example of a complete and perfect documentary film. This is no mere cinematographic record of episodes and facts, of interest possibly to the specialist but with little or no appeal to the ordinary cinema public. The Byrd film is a piece of real life, a chapter in history containing passages which border on tragedy but end in glorious victory. It palpitates with life, arousing a sense of the unknown and the dangerous and, in this age of materialism, compelling the most intrepid to pay his tribute to men of action and high endeavour.

Admiral Richard Byrd is so well-known the world over that there is nothing new to say about him. The reader hardly needs reminding that he was the first aviator to fly over the Arctic regions and the second to cross the Atlantic.

On August 15th, 1928, he again set out upon a bold venture, bound this time for the South Pole. Two ice-breakers, the "City of New York" and the "Eleanor Bolling", carried the whole of the material for the expedition, which included three aeroplanes fitted with skates, a hundred sleighs, two hundred pack-dogs, portable huts, tents, food and medicine in abundance and a complete wireless station. The crews numbered not more than 500, of whom only 12 belonged to the expedition proper; the rest were to remain at the base.

The object of the expedition was to continue the series of Antarctic explorations of Scott, Shackleton, Wilson, von Drigalski, Nordenskjöld, Charcot, Cook and Amundsen — names sacred in the annals of geographical research — which, although reaching the South Pole and discovering the shape of a number of bays, coasts gulfs and plateaux, had revealed only part of the secrets so jealously guarded by the formidable ice-barriers of the Antarctic. The task before the Byrd expedition was to study the nature of the soil; whether it contained precious minerals, volcanic activity; physical phenomena; meteorological and atmospheric conditions, a knowledge of which might lead to the discovery of the third and last factor in the atmospheric conditions of the globe; the fauna and flora; and finally all the elements needed to make a chart of the Antarctic regions. Big as was this task, it was carried out in its entirety, thanks to that tenacity of purpose characteristic of the born navigator.

In the course of the expedition more
In the Projection Hall of the I. E. C. I. during the projection of the Byrd film.

The « Floyd Bennet ».
than 240,000 square kms. were photographed and the area flown over was about 17,700 kms.

On December 2nd the two vessels reached the barrier of Ross Sea. The "City of New York" cast anchor there and the "Eleanor Bolling", after unloading, set out on her homeward journey.

On December 28th, near Framheim (the base of the 1911-12 expedition), the party set about constructing the Polar village of Little America in about 77° 25' latitude. It was built to accommodate 42 men — 42 heroes who knew that they would have to live there cut off from the rest of the world for months on end, their only connection with the outside world the wireless.

The first flights were made on January 15th, 1929, in the direction of Discovery Bay, which offered a large and completely unknown area for useful exploration. Many vessels had already pushed as far as Discovery Bay and Whale Bay, but none had ventured along the Barrier between these two points. A few days later Byrd espied and flew over the Rockefeller Mountains and, on February 18th, the land to which he gave the name of Mary Byrd.

After a number of mishaps, the most serious of which was the destruction by storm of a big Fokker — the geological mission very nearly perished and was only saved through Byrd's own heroism — the first flight of the new season had as its goal the South Pole itself. The undertaking was extremely difficult partly owing to the distance to be covered and partly because of the high mountains in the way. Towards the end of November a forced landing led to the discovery of the Charles Bob Mountains.

The flight to the South Pole started on November 28th at 3.29 p. m. on the three — engined "Floyd Bennet" — the name of Byrd's brave companion on his North Pole flight who met with an untimely death. The party were back in camp the next day after a flight of 17 h. 39 m. The goal had been reached, the Pole being crossed exactly at midnight. On its outward route, the "Floyd Bennet" flew over the Seir glacier, to the right of Axel Heilberg and then headed directly for the South Pole. On the return journey the machine was able to land on the Barrier at the foot of the mountains, near the petrol store.

Further flights followed. On December 5th the explorers discovered fresh mountain ranges and the existence of a tongue of land covered with a crust of ice between Weddell Sea and Ross Sea.

One of the highest mountains he discovered, Byrd christened Paramount to symbolise the alliance between two vital elements in modern life — aviation and cinematography.

Geological investigation resulted in the discovery of vast deposits of copper, radiological substances and other valuable minerals.

The filming and sound-recording of this voyage of discovery and exploration have
Transport of food to the camp.
been made by the Paramount and are technically perfect. No better selection could be made from material filmed with infinite patience in weak sunlight during the long stay in the Antarctic regions.

The scenes follow one another quietly and simply, as quickly as the incidents necessitate. The sobriety of the film as a whole testifies to the explorers' modesty. There has been no aiming at effect; the sole purpose has been to obtain what appears very simple, but what is perhaps the most difficult task of the cinema — documentary truth. The film begins at the moment when the "City of New York" sets out upon her brave voyage and ends as she leaves the ice-bank having on board the forty-two heroes of this magnificent exploit.

As the "Floyd Bennet" is about to leave Little America for her flight across the Pole, a pale sun illumines the horizon.

On board Byrd is at his post of command and observation, the radiotelegraphist and cinema operator at theirs. The machine takes off and cleaves the boundless air above the grey and silent plain. After a while Byrd takes his bearings 90° latitude, longitude nil; the Pole is reached. Byrd then performs a rite and drops the American flag wrapped around a stone taken from the grave of Floyd Bennet, the lost navigator.

We owe the film to the work of three men: Richard Byrd, the commander of the expedition, whose wish it was that the cinema should bear record of the enterprise, and Joe Rucker and Willard van der Veer, the Paramount operators, who followed the expedition in all its stages, recording its incidents upon the thin celluloid band that is now pursuing its triumphant course all round the world.

Joe Rucker and Willard van der Veer take their places alongside the Italian aviator Martelli, who in 1927, while flying over the tragic ice-packs in search of the famous red tent in which the shipwrecked crew of the "Italia" awaited rescue or death, filmed the desolate regions over which he passed. One and all are brave pioneers of modern cinematography, recognizing neither obstacles nor difficulties, strong in the assurance of their noble mission. The Byrd film will recall to countries who have lost their sons amid Polar solitudes the names of those dear ones, dedicated to the sacred service of Science and to the pursuit of the Ideal.

When the Byrd expedition left American waters for its distant goal, the tragedy of the "Italia" was still fresh in men's minds. On its return from the conquest of the Pole, the machine with its party of heroes was vanquished by the elements and fell, and among the many brave men who went to the rescue Amundsen, the great explorer, was lost for ever. As the Byrd expedition was on its return, news was received of the finding of the glorious remains of Andrée — the precursor of Polar air exploration — and of his companions.

Honour to one and all. Honour to those to whom fate was unkind and who sleep amid the eternal silence. Honour also to those who return victorious.

The Byrd expedition now takes its place among past achievements. To-morrow others may surpass it, for all that lives has movement and our world obeys the laws of change and development.

The act of courage, however, remains and the memory of it will survive as long as a single ray of sun warms men's hearts. The myth of Icarus finds authentic expression in these brave men who with firm grasp steered their winged craft over uncharted seas and land untrodden by human foot. It marks the triumph of aviation, which to-day dominates the world.

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Motion Picture with Sound by James B. Cameron. Cameron Publishing Company
Manhattan Beach, N. Y.

Mr. Cameron, one of the limited number of technical writers on cinematography really worth reading, has made an important contribution to the literature of the sound film. After a short account of the origins of sound cinematography, the author explains the system of sound transmission. A few paragraphs about the gramophone, the telephone and the telephone, and Mr. Cameron passes on to the basic principles of sound recording, concentrating, therefore, especially on the photo-electric cell.

The second part of the book treats of the organisation of sound-film studios, systems of lighting, cameras, optical devices, etc., and the third is devoted to illustration and explanation of various systems: R. C. A. Photophone, Movietyone, Bristolphone, Vitaphone, Cinephone, Simotone, Phonoilm, Western System, with its own specific applications, etc.

The last part of the book explains special screens, control devices, the film, methods of developing and printing — in fact, the numerous technical branches of sound-film photography and projection.

Mr. Cameron's book is of particular interest because, although essentially technical and based upon theoretic principles illustrated by suitable graphs and diagrams, it is nevertheless within the grasp of any reader wishing to acquire a knowledge of the sound-film in all its aspects.


This is not the work of a single author but a collection of excellent reports prepared by the members of the Cinema Commission of Enquiry instituted by the National Council of Public Morals. It is a positive mine of information, useful facts, results of experiments, etc., both in regard to the relations of the cinema to children and young people and as regards the influence that films may have on the eye-sight and mental and moral development of youth, censorship problems, etc.

The various applications of the cinematograph to education and all the moral and social problems raised by the cinema are the object of examination and appreciation in the numerous reports carefully collected by Sir James Marchant, who has preceded them with a short introduction and a statement of practical results.

This is a publication for all who are interested in the effects of the cinema on education and the safeguarding of culture and the race.

At a moment when all of us — producers, exhibitors and the general public — are interested in the sound-film, good technical books of this kind are bound to meet with a warm welcome.

Everyone knows that the famous "photo-electric cell" is one of the essential parts of sound-film apparatus, but few realise all the problems connected with this indispensable mechanism.

The authors of this book examine the three fundamental aspects of the question: the theory, practical use, and the applications of the photo-electric cell.

The book, which is of the greatest scientific value, is abundantly illustrated and contains graphs, tables and diagrams calculated to facilitate the production and use of photo-electric cells.

Electrical Condensers, by Philip R. Coursey, President of the London Physical Society, Member of the British Institute. Published by Sir Isaac Pitman and Sons, Ltd., London.

This is an interesting and compendious publication belonging to the special series published by Pitman's. Within the compass of some 650 pages, supplemented by 500 illustrations, diagrams and tables, Mr. Coursey describes electrical condensers, their function and their industrial use. After a short account of the discovery and early manufacture of electrical condensers, the author explains their specific properties, the theoretical formulae governing their construction, the different kinds of condensers, etc. Lastly, he gives a detailed description of their practical application and commercial uses.

This important scientific work is enriched by an enormous bibliography, mentioning the principal English works referring to the different aspects of electrical condensers.

Der Weg zum Film, by Max Otten, published by the Licht-Bild-Bühne, Berlin.

An interesting and thoroughly practical book, a manual for all who are attracted towards the art of the screen; in fact, a guide to cinematography.

The book deals with cinema schools, the differences between the theatre and the cinema, and the technical organisation of the latter. In the second part it explains, in an agreeable and readable form, what a film actor has to learn: how to pose in front of the camera; rhythmic sense; the need of physical training, the art of faking, etc.

The third part contains concise notes on stage-production, the camera, criticism and the different ranks — stars, minor parts and supers — in the film hierarchy.

A book, we repeat, which is well put together and bound to be popular.


A rather general but interesting work on the growth of the cinema. After a reference to the cultural and economic importance of the film industry, the author deals with the art of publicity, the essential distinctions between the theatre and the cinema, the art-film as a means of spreading ideas, the cultural film and the educational film.

This publication is important because it shows very clearly the place the film now occupies in general education. The author summarises the advantages and the dangers of the new industry and with conspicuous objectivity lays down the rules which the screen must obey if it is to further the cause of education and civilisation.

The Motor Generator by James W. Barber.

The author, who is already known from his previous books (The Bioscope Electrician's Handbook, Alternating Currents,
etc.), here sets forth, in a well-devised manual illustrated with graphs and diagrams, the principles governing the construction and use of motor generators. After examining the different kinds of motor and the theories on which they are based, Mr. Barber discusses their practical use and the system of lubrication.

This is a most useful book for cinema operators and for all who are interested in the electrical problems of the cinematograph.


A short and useful text-book for cinema operators and all who have to use projection apparatus. The book explains the different kinds of projector, the systems they are based on, the optical devices (lenses, condensers, etc.), electrical contrivances (lighting systems, rheostats, resistances, motors, etc.), the structure of the projection-box, etc. The second half of the book goes on to talk about cinema lorries, the systems of generating current, the various optical aberrations of lenses, screens, etc.

The book has a useful dictionary of essential terms in cinematography. A handy and thoroughly well-informed little book.


A short pocket manual explaining — more particularly to operators and projectors — the different systems of sound cinematography — especially from the point of view of projection. It is supplemented by a useful list of the chief electrical and mechanical terms met with in sound cinematography.


As its title shows, this book is intended to give the layman, who knows little or nothing of film technique, sufficient knowledge to make him a competent operator after a little practice. The author points out in his preface that he has tried above all to put his matter simply and intelligibly, since abstruseness, however learned, is less likely to achieve this object.

In the first thirteen chapters Mr. Bennett — addressing himself more particularly to cinema managers and operators — describes different forms of technical apparatus. The last chapter contains a full resumé of the laws passed in Great Britain between 1909 and 1923 to regulate the cinema industry.

*Television to-day and to-morrow*, by Sydney A. Moseley and H. J. Barton Chapple; published by Sir Isaac Pitman and Sons, Ltd., Parker Street, Kingsway, London, W. C. 2, 130 pages, 38 illustrations, 48 photographs, price 7 s. 6 d.

At the end of 1926, writes John L. Baird in an introduction to this book, the first experiment in television was made in London. At the time it was thought that television apparatus would very shortly be in general use, but it has required three years of practical study to reach the present degree of perfection.

The authors prophesy the day when it will be possible to detect every human sentiment, e. g., the impulses of love and hate caught, as it were, as they pass on their way through the nervous system to the brain. The authors start their book with an interesting account of the history of television, which, as an idea, dates back to 1876, the year in which Edison invented the telephone and in which for the first time scientists began to consider the possibility of transmitting images by electricity.

This first chapter is followed by ten of a more technical nature, containing a detailed description of the Baird system, the synchronisation of television, the photo-electric cell, colour and stereoscopic television, etc. The last chapter gives a rapid survey of the pioneers of television in France, Germany and the United States.
The first number came out in March 1929, in quarto format, and contained over 1,000 pages, numerous and beautiful text illustrations, and 200 coloured and black and white full page plates. Since that date one volume has appeared regularly every three months. As the work will consist of 36 volumes, the whole will be issued to the public in the course of not more than nine years.

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The International Review of Educational Cinematography, the official organ of the International Educational Cinematographic Institute, of the League of Nations, first saw the light of day in July 1929, after the Institute had been in existence for six months.

The Review is published monthly in five editions: English, French, Italian, Spanish and German, to which further editions will probably be added. The Institute has a single objective: to place an instrument of investigation, documentation, elucidation and propaganda at the disposal of all persons of science and learning and public or private institutions interested in the cinema as a medium of education or by reason of its influence on social life. At the same time the Review aims at promoting a widespread movement of public opinion throughout the world in favour of the educational film, at encouraging and assisting production on the one hand, and, on the other, at making known the wishes of the consumer.

The Review started publication in a format measuring 9×6 inches; after six months its size increased to 10 3/4×8 inches, and its appearance was vastly improved by illustrations and a new and artistically designed cover.

From the 1st July 1929 to the 31st December 1929 the several editions comprised the following aggregate numbers of pages:

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Notwithstanding the greatly increased size of the new format, the number of pages from 1st January to 30th June 1930 amount to:

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Two issues of the Review — those of March and May 1930 — have been brought out as "special numbers": the first dealing with the Social Aspects of the Cinema and the latter with Hygiene, or public health propaganda. Other special numbers are in course of preparation: the Cinema and Scientific Management; the Cinema and Accident Prevention; the Cinema and Agriculture.

The Review regularly publishes model scenarios from the pens of well-known authors of different nationalities, with hitherto unpublished or original illustrations.
Each edition or year of the Review represents 4 volumes, each consisting of at least some 400 to 500 pages.

The alphabetical list of our Contributors during the first year, a list of the several countries which they represent, and an index of the subject-matter dealt with, bear witness to the absolute impartiality, the range of subject-matter, the distinction of the writers, and the support that has up to the present been accorded the International Review.

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— The first English motion picture alphabet (1929).
— The cinema and eyesight; effect on children's sight.

ITALY

— Surgery and the Cinema (1930).
— The cinema and eyesight; effect on children's sight (1930).
— Consensus of expert opinion (1930).
— The cinema in the campaign against malaria (1930).
— An answer to Maurice Rouvroy's questionnaire.
— Consensus of expert opinion (1930).
— Consensus of expert opinion (1930).
— The Buddha on the Screen (1930).
— The Franchetti expedition in Ethiopian Dankalia.
— Some biological aspects of educational cinematography (1929).
— Hygiene and the cinema (1930).
— Consensus of expert opinion (1930).
— The cinema and eyesight; effect on children's sight (1930).
— Consensus of expert opinion (1930).
— Consensus of expert opinion (1930).
— The cinema and hygiene propaganda (1930).
— Educational film gleanings (1930).
— Colour cinematography (1929).
— Consensus of expert opinion (1930).
— The cinema in higher public health education (1929).
— Consensus of expert opinion (1930).
— The film and education (1929).
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MEXICO

— The cinema and hygiene propaganda.

NETHERLANDS

— The cinema and eyesight; effect on children's sight (1930).

POLAND

— Twardowski, the Polish Faust (1930).

ROUMANIA

— Problems of the cinematograph in Roumania (1930).

RUSSIA (U. S. S. R.)

— The documentary film: In the unexplored regions of Pamir (1929).

— The talking Film in U. S. S. R. (1930).

— The artistic activity of the Soviet cinematograph during the past ten years (1929).

— The documentary film: Afghanistan (1929).

— The gates of the Caucasus (1930).

— Cultural propaganda films in Soviet Russia.

— The documentary film: In search of the meteorite in the Taiga (1929).

SPAIN

— Films for children (1930).

— Pedagogy, education and poetry in the cinema (1930).

— Consensus of expert opinion (1930).
— The cinematograph and State control (1929).

SWITZERLAND
— Consensus of expert opinion (1930).
— Know thyself (1930).
— An enquiry respecting the cinematograph, made in the schools of Geneva, Lausanne and Neuchâtel (1929).
— « Non olet ».

UNITED STATES
— The beginning of amateur educational films in the United States (1930).
— International Film Censorship (1929).
— The results of experiment with Eastman Classroom Films (1930).
— The cinema and eyesight; effect on children's sight.
— Educational Films in the United States (1930).
— Consensus of expert opinion (1930).
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