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END OF THE LECTURES ON LANDSCAPE.
LANDSCAPE, LADIES and GENTLEMEN, is a part of the Arts of Design so very extensive and interesting, that it may be said to include most other branches of art. Equally delightful as deceptive, and, by the nature of its subjects, not only generally agreeable, but generally intelligible. Possessing unlimited powers of selection, not confined to particular spots, but collecting from every quarter, and combining beauties from all parts, Landscape is capable of endless variety, and furnishes perpetual successions of pleasure and satisfaction. Landscape has many advantages over historical painting; its subjects being more familiar to the spectator: consequently more impressive, and more immediately understood by him, and its errors are less apparent. The want of expression, or proportion, in a head, or a figure, is obvious; and not less offensive than obvious, because the forms proper to the part are regular and constant: whereas, branches of trees, or projections of buildings, are not in conformity to any certain regulations, neither are they of such importance (generally) as that a failure in expressing them perfectly, should ruin the piece. It is no wonder, therefore, Landscape should be greatly encouraged by the public, and readily pro-

B
fessed by Artists: but let it not be supposed, that to attain excellence in Landscape is without its difficulties: rather, perhaps, there have been fewer capital Landscape-painters than any others. Of the numerous tribe who have professed this branch of art, many have succeeded so far as a certain mediocrity; but the principles which conduce to excellence are not less profound in this, than in other studies, nor less concealed from the observation of inattentive negligence.

Our language affords no term adequately expressive of that department of Art which relates to the representation of Picturesque Views of Places, and delineations of objects: the word Landscape, ill denotes the unlimited variety of which this branch of art is susceptible; and even when employed in its most comprehensive sense, it excludes Marine subjects, if not rocks, buildings, &c. whose representations may have little or no land attached to them. Now, as these Compositions are regulated by the same rules, and conducted by the same principles, as Landscape subjects, properly so called, there seems to be no reason why we should forbid their introduction as respective distinctions in the general Study of this Art. The term Landscape, therefore, may be taken with great latitude, as expressing representations of natural objects of many various kinds, as they present themselves to general observation.

In a series of Landscapes we are occasionally delighted with objects extremely different in nature and appearance
appearance. In one, Genius, and Ability, render extremely interesting, the simple cottage, and its humble inhabitants: the dwelling overgrown with herbage, shaded by some tall tree, and reflected by the placid lake, or the winding brook: the inmates employed according to their age, and sex; the scene animated by children at their diversions, the rustic of riper years engaged in labour, or enjoying his interval of repose, while age with sedulous attention, watches the rising offspring, or employs itself in occupations suited to its powers. The Composition of this Picture, indeed, seems very confined, it includes but a narrow space of ground, yet within that space it comprises the utmost powers of Art, and the happiest exertions of Genius: Another performance offers a somewhat wider scope; not the cottage merely but many of its accompaniments, the heath, or the common, around it: increasing variety, by trees of different hues, by banks of earth, or other soil; by the opportunity it affords of introducing cattle, with their attendants; and enlivening the composition by the most pleasing representations of animated nature. The roaring water-fall, and the streaming cascade, the play of the waves, the dashing of the spray, the mist rising from the agitated element here attract us,—while there the smooth surface of an expanded lake, surrounded by tall groves and darkened by umbrageous foliage, reflecting the serenely variegated sky, and every leaf of every tree, furnishes a most delightful subject. These and a thousand diverse compositions of art, ori-
girative in Nature, whose immense stores of objects, interesting, and beautiful, defies the utmost reach of human skill, to imitate in their variety, or to equal in their delight.

In travelling through a well inhabited country, where the labours of man have been intermingled among the wildnesses of nature, what alternate pleasures strike the eye! The richness arising from advanced cultivation, or the diversity produced by the regularity and order of parts in progress toward further improvement, admirably contrast the yet remaining spots untouched by industry! If, in proceeding, the grateful change of hill and dale, of lofty trees and humble shrubs, of extensive plains and contracted glens meet our observation, the sight is almost enchanted, and, after exploring a view of many miles, gladly exchanges the expansive scene for roads narrowed by rocks, or enclosed by banks; perhaps, descending in some deep ravine, while high over head the tall trees wave their long branches, their shadows chequering the ground, or almost excluding the light, and rendering the gloomy road little better than a cavern. Here the way winds off, and deepens, till it produces a kind of melancholy, till it seems to have no termination, nor furnishes any indication of a probable exit, but—suddenly—it opens the prospect of some noble bay, wide-stretching its bold shores, of some capital city, the resort of the busy and laborious, its glittering spires, its noble palaces, its long ranges of buildings, each claiming first inspection, its numerous shipping, in constant motion, going or returning, and the
the sea completing the picture. Will not the contrast render this noble scene, yet more noble? this interesting composition yet more interesting? Enter this city, inspect its temples, its palaces, its dwellings, its streets, admire their symmetry and elegance, their richness and ornament, their neatness and comfort. Visit the Port, notice the various kinds of vessels, their various stages, states, and attitudes: reflect on the intercourse of nations, and the diversity evident among the natives of distant lands now before you; advance to the pier head, survey the rolling ocean, the white foam of its deep green waves, appearing and disappearing, as the surge breaks against the rocks, or glides along the beach. But now, the wind strengthens, the sky lowers, the heavy clouds blacken, the vivid lightnings flash, the waves rise into mountains; all nature feels the sudden storm, and waits impatient, till the sky clears, till the sun returns, till the waves subside, and fear gives place to joy. Turn now and say, if the study of Landscape be not extensive, if beside being extensive it be not delightful? Does it not solace the mind by its serenity, or agitate the soul by its terrors? Does it not amuse the imagination by variety, or captivate the fancy by simplicity?

But what if Nature produces objects no less captivating though of a totally different species: In proof of this, recollect the frozen mountains of the Polar sea, where without rival roams the Arctic Bear, and the unwieldy monsters of the deep spout the liquid element
element through their nostrils: recollect the vallies of ice among Helvetic Mountains, where fields after fields of ice beguile the traveller's hopes, where mountains after mountains seem to oppose barriers impenetrable to human power, and even boundaries to human curiosity; where nights and days are consumed in ascending, in defiance of penetrating cold, of bewildering snows, and of rattling hail: yet amid these mountains agriculture labours, and not without reward; strangely intermingling verdant corn among frozen fields! Elsewhere behold a contrary mixture: verdant corn and luxuriant vegetation bedeck the sides of Vesuvius itself: strange to reflect! that where entrails of fire furnish torrents of melted lava, and streams of sulphureous flame, where subterraneous thunders roll, and vivid lightenings play, where earthquakes overwhelm, and nature seems convulsed, there should be the seat of fertility, there should the vine flourish, and there should devastation be the parent of plenty.

Very different from either of these, are the scenes of African, or Arabian desarts; without a tree, almost without a shrub, without a rivulet, or a gentle stream, without verdure, a sandy plain! Can such a subject become interesting? perhaps, by its novelty, by its strong distinction from all others, by the singularity of its inhabitants, or its animals, or by some surprising peculiarity which decidedly marks it. A speck of flourishing vegetation amid a desart of sand, shrubs and plants tinging the rock into thinly-scattered
tered greeness, denote the *general* nature of these wilds: while elsewhere groves of high-rising palms, or forests of close-twisted mangroves, exhibit a luxuriance of growth, not easily paralleled in more temperate regions; and furnish, along the course of some noble river, scenes little coincident with our ideas of sultry Africa, and the torrid zone.

Wherever the nobler labours of civilized man have been employed, and monuments of those labours remain, a Landscape, which includes such monuments, has much to recommend it. There is a kind of pleasure, though a melancholy pleasure doubtless, in examining the remains of what once were noble structures, or elegant retreats: while thus engaged, we almost call up the long departed dead, and re-animate those who in distant periods trod the same steps: we reflect—what scenes of delight were these to past generations! where is now silence and solitude, except as interrupted by ourselves, formerly mirth rejoiced, and pleasure triumphed! Or, if such structures be commemorative, to behold them, revives in our minds the circumstances which occasioned their erection; we rank among the warriors fighting to defend their country, we survey the trophies of their conquest, or we encrease the multitude gazing on the triumphant victor in his glorious procession. The mind reverts indeed, to the plaintive remark, that ages have opened and expired, that many generations have lived and have ceased to live, during the interval, that if vanity purposed eternal renown by these supposed perpetual
perpetual regifters of important events, that purpose has been defeated:—the inscription is defaced, the ornaments are mouldered, the edifice is decayed: Time has laboriously corroded these tokens of his age, and awaits with impatience their total oblivion. But though decayed as memorials, they may ornament the Landscape, and enrich the Composition; whether by combination, or by contrast, while their history furnishes a few remarks to the man of taste, and their construction exemplifies the principles which ages and countries remote from our own have adopted as elegant, or selected as beautiful.

We are the rather interested in the taste of past ages and of remote climes, because in many respects, we adopt the taste, and study the construction of their works; directed not a little, by the rules and the specimens they furnish. Hence professors who seek eminence in their art, assiduously visit the remains of ancient skill, and for a time, forfake their country, desirous of importing ideas drawn from these sources; while those who are to be their patrons, inspect for themselves these very objects, and determine on what they will accept as excellent, by its conformity to opinions acquired in visiting such remains.

Places which have been scenes of events important in the history of mankind, interest us by our sympathy in the importance of such events; and we attribute to those places a thousand nobler circumstances than we find elsewhere. If this be a failing in the human mind, it is a failing received from Nature. Our country
country, in our esteem, possesses excellencies superior to others; the scenes of our youthful days are lovely beyond compare, what formerly yielded us pleasure, yields us a recollective pleasure still, and we willingly cherish the illusion, though riper years may long since have dispelled it. In recalling ideas of past enjoyments we naturally associate a recollection of the places where we received them, and in revisiting such places they revive ideas of those enjoyments. Hence we value our birth-place: and hence all men, even while sensible that elsewhere may possess beauties and excellencies fully equal, ever prefer those spots which have furnished their most frequent and familiar satisfactions.

In proportion as we become better informed respecting the productions of foreign parts, and more strongly convinced that Nature has not disproportionately loaded any country with her favours, to the exclusion of others, our minds become more liberal, and our curiosity becomes more extensive; we wish to behold what formerly we were ignorant of, or we flighted if we knew it; our desire becomes more stimulant, and we exert endeavours which we formerly declined. Curiosity, being a natural passion, has undoubtedly its beneficial tendency; but it cannot be entirely gratified: and the occupations of life forbid most persons from gratifying it in any considerable degree. While the duty of a settled station demands performance in a limited time, and in a fixed place, it would be deserting that duty to suffer any principle to lead us away from it, however attractive
be the object urged in excuse. Nor can we always command opportunity for more than a glimpse of what we are permitted to see, and many peculiarities escape the cursory inspection we are suffered to bestow on it, even if the time of our visit be that most favourable to the object seen. In these, and in many other respects, Art furnishes assistance; it can watch the most favourable aspect of an object, and catch its most fleeting beauties; these it fixes for our constant, or repeated investigation, it awaits our opportunity, and intrudes not beyond our leisure; it brings home what is too distant to be viewed abroad, and, by its extent, amply gratifies that curiosity, which, especially in liberal minds, is highly prevalent.

It is true, that in every country, and at all times, Nature exhibits abundant beauty to the eye which happily is capable of discerning it. To the inhabitant of the desert, the desert has its charms; to him the majestic decline of evening, the serene stillness of night, the brilliant glories of heaven, are eminently beautiful; and from among these his warm imagination has even selected objects of worship. In more verdant climes, green meads and flowery pastures, are our constant delight. It may be, the Arab wonders, how amid perpetual green we are not satiated; as on our part we are accustomed rather to pity than to envy the lot of those who wander from desert to desert.

But, though constantly exhibiting beauty, and in no despicable degree, Nature appears sometimes eminently beautiful: though we do not worship the rising sun,
fun, we acknowledge, and we enjoy, the glorious spectacle; and are ever alive to the beauty produced by his parting rays in all objects whereon they strike. Evening, gliding into night, has its beauties, sober beauties too, and especially, if as one luminary declines, the other rises. There is a solemnity in the blushing moon, half shewn, half concealed in clouds, and modestly obtrusive on the sight, which is highly grateful. Yellow now and broad, as seen through the misty horizontal air, gradually rising in the heavens, and brightening her light as she decreases her magnitude, whether she varies the light-flying clouds around her into tints of exquisite delicacy, or in the blue expanse majestic rides regent of night, whether she render solemnity still more solemn, by performing her course in a chariot of concealing clouds, or sheds her full beams around us as if emulous of day, in all she is eminently beautiful. Here she tips with silver every grove, varies the modest hue of the verdant plain, softens every asperity by day-light too prominent on the sight, and melts into one grand mass of dignified harmony, the broken, or scattered, or ill-formed, particles of distances, hills, or mountains: There she glimmers along the pointed waves, sparkling on their dancing tops, or gleams through the transparent billow, as it lifts its white head,—rolling—now along the shore, now among the rocks.

Whoever has accurately inspected the changing scenes of any country must have observed, that at
different times of the day, their effects have been diversified by the variation of light and shadow produced in them, which sometimes exhibits objects, at other times nearly obscured. Nor need we hesitate, in acknowledging rocks and mountains though awful in themselves, to be rendered yet more awful, by the gloomy magnificence of violent storms; or the laughing champaign to be touched into more joyous effulgence by the vivacity of solar light, and influence. To understand the principles of these changes, and to investigate their causes, is at once a source of the purest pleasure, and an employment worthy the application of a liberal and exalted mind.

Would it be refining too far, to enquire what sensations we receive from the different natural objects attached to this branch of art? on what passions of the human mind they are relatively most active? The thought may deserve at least a few words in elucidation. What are our natural feelings on board a vessel in distress, in danger of perishing on rocks, or foun-dering in the sea? Terror. What are they, when we behold such a circumstance? Pity. These are the two great ends of tragic composition; and this kind of subjects seems to be the Tragedy of Art. Sympathy is part of Pity; the triumph of Art is the transfusion of sympathy into spectators. The reasons wherefore such sympathy has its pleasures, are the same in painting as in poetry. When Art exhibits objects whose dangerous tendency is not immediately apparent, such as vast cataracts, or immense wilds,
Terror is moderated into Apprehension only, a kind of equivocal sensation, which while susceptible of fear yet indulges hope. Though a storm produces terror, a fresh gale has its pleasure; and being free from apprehension, it is usually beheld with complacency; a complacency heightened to satisfaction by the vicinity of a commodious harbour, or safe anchorage. Compositions including objects which furnish pleasure and joy, divert us from Tragic to Comic principles: and these are capable of many degrees, and of infinite variation. Gross Comedy is Farce: and whoever has seen the outré and exaggerated ideas indulged by some Masters, has no need to be reminded, that Art has its farce,—that burlesque and caricature, and heightened irregularities, like farcical incidents may raise our laughter, though alas! when laughter has subsided, Judgement may but too justly enquire what delighted us? May not these hints confirm that resemblance between poetry and painting which has procured them the appellation of Sister Arts?

It is impossible to describe the varieties of Landscape presented by Nature, since every change of situation in a spectator, by changing the point of view under which an object is seen, may be said to form a new Landscape. It is evident, therefore, that descending to minutia would be useless and perplexing. It is enough, if Art be aslifted in its study of Nature, by those larger and more conspicuous distinctions into which a subject so extensive may justly be distributed. The force of order is universally acknowledged;
acknowledged; we desire arrangement as the proper corrective of confusion: where objects by their number distract our attention, by being grouped they become more level to our conception, more readily attainable for our inspection, more impressively on the mind when inspected, and the impression they produce is much more abiding on the memory.

The shackles of system are justly thought uneasy: for as Nature is free and unconfined, confinement imposed by system must be more or less unnatural: but, because extremes are injurious, it does not follow, that a medium is not desirable, or because the utmost precision is (if attainable) burdensome, therefore that regularity is of no importance.

It requires very intimate acquaintance with natural objects, and their principles, accurately to arrange them, as Nature herself might have done, had such been her intention: nevertheless, artificial arrangement should always propose the most ready and apt relation of every object to its correspondent object in nature; and this is especially true in a science which draws from natural objects whatever merit it may possess, and which invites spectators to judge of that merit, by its resemblance to general nature. Art must expect applause in proportion to her imitation of Nature, and from Nature must procure all her materials: her highest glory is, to raise in the mind of the spectator the same sensations as the original objects themselves might produce if actually present. But though Art must ever draw her materials from Nature, she
she is not forbid to exercise her fancy or her skill in disposing them. Nature may sometimes be improved by Art, and Art may often exercise her own creative imagination with success. Though natural objects, or their combinations, when combined in Nature's best manner, can never be surpassed by the utmost exertions of Art, and even to imitate them, requires no common display of skill, yet, rarely do such perfect scenes occur; and usually, somewhat to be added, or somewhat to be retrenched, might improve the composition. Beside this, by engraving the beauties of one spot on those of another, or by recalling and accommodating striking and appropriate objects he has visited, or by recurrence to principles he has long studied, an Artist may introduce a new grace over the whole, and originate by composition of parts with parts, excellencies which exist in his mental conception only. When mental conception becomes the seat of Art, its combinations equal in extent to the faculties of the human mind, and what is their extent, none have yet been able to determine. Hence arise new and insuperable difficulties in relation to the classification of works of imagination: this single reflection may convince us, that a kind of general regularity is all we ought to expect, and all that can be useful to the purposes of Art.

Well-regulated performances must be conducted by principles established on just reasoning, and perspicuous analogy. To suppose the happy completion of a work unwisely begun, is to take chance or accident as a guide, in a path which requires consummate discretion.
creation; is to deviate widely from the wisest principles of human life, and to employ blind fortune on what requires the closest inspection of well-advised wisdom. It is true our best endeavours may fail, but what must be our fate without them! to facilitate which endeavours in relation to the study of Landscape, is the purpose of our present attention.

We proceed now, for the greater perspicuity, to divide our subject into those branches which appear to be most natural, and best adapted to convey distinct ideas to persons who have not studied this department of the imitative arts: commencing with the simpler style, and proceeding to the more complex. That we have named or described them in some respects differently from what has heretofore been customary, proceeds from no desire of innovation, but from a wish to render our work useful to every class of students. We desire to divide them into the Simple Style, the Varied or Ornamental Style, and the Historical or Sublime Style.

Of the Simple Style.

This Style may seem, at first sight, to be restrictively the beginning of Art, yet it must be acknowledged, its principles are no less profound than those of other branches. Many masters who have made considerable progress in seemingly more difficult undertakings, have failed in this Style; not that it has less resources than others, but that they are of a different
ferent kind, and of a kind which precludes many of
those meritricious ornaments, which the half-learned
tolerate elsewhere.

When one idea (or a few ideas so intimately com-
bined as to form but one idea) is to be represented,
it is necessary that one be happily chosen, forcibly
expressed, truly characterized, and exactly repre-
sented. If it be not happily chosen, whatever labour
it may cost is totally thrown away: if it be obscure,
or unintelligible, if it be dubious, or equivocal, if it
be singular, or extremely rare, the picture will re-
quire to be explained by description: as we are told
of a painter who wrote under his productions, "this
is a Cock," or, "this is a Dog," so will such a
Landscape require to be characterized by a "this
is..." Nevertheless, this must not be understood
as forbidding the introduction of customs common in
some places though rare in others; such instances
contribute essentially to characterize the spot repre-
sented, and are rather to be sought than avoided;
because when of a proper nature, they furnish oppor-
tunities of a happy choice. Suppose as an instance,
the Subject of a Horse feeding in a pasture: In some
places, horses are left free in the fields, the fields
being inclosed by hedges; in others to put a clog on
a horse's foot is common, hedges being rare; else-
where (whoever has been at Margate will bear me
witness) the horses are limited by a rope laid along the
carthy, fastened at each end into the ground, from
which rope goes another that tethers the animal. Nor
is this practice confined to horses only, the larger
cattle
cattle are generally thus secured; while every flock of sheep has its attendant shepherd-boy and dog, to prevent their trespassing on a neighbours' ground. Other places have other customs. The relation of a custom to that spot which is the scene of a Picture, demands the introduction of that custom. In Scotland the servants wash the linen by treading it in tubs with their feet, this custom introduced in a Landscape marks the scene to be Scotland: In France the women beat their linen with a broad flap, on a board by the river side; this would ill agree with English Landscape, but it is applicable in a French subject: We have no images of saints to worship in our highways, but in Italy nothing is more common than to see a travelling piper playing his tune before such an image. The happy choice of a subject, therefore, does not exclude the introduction of any appropriate custom, whose purpose may be easily comprehended by a Spectator; since such custom is rather the accompaniment of the subject, than the subject itself.

There are many simple subjects, which speak at once home to the heart: the Labourer going out in the morning, (e. g.) before sun-rise, affords an opportunity of expressing, not only the effect of the dawn, but, the nature of a country life, and the solitude and quiet of the time: his dog is now his only companion, and like the Master, just awake from sleep, has barely given himself the rousing shake. The Labourer, returning to his meal, is quite another subject; the family now is busy, the wife, the children, animals,
animals, all alert, and all in bustle. It is no pecu-
liarity of some specific spot, that

"Now for them the blazing hearth shall burn,

Or busy housewife ply her pleasing care,

Or children run to kiss their sire's return,

Or climb his knees the envied kiss to share."

There is no question on the propriety of introducing
such circumstances: all the world over, such is Nature; such we know it to be, and such may Art freely re-
present it.

The parent's first sight of his child; the child's last
sight of his parent; are subjects equally felt by all: no graceful turn of compliment can render the first
more interesting, no pomp of mourning can render
the latter more solemn. State, funeral state, may
accompany a lord to his tomb, and, perhaps, may
attract our notice till it exclude its subject; but a
single tear on a dejected cheek, raises more interest
in a spectator, than numerous attendants. He (or she)
who deposits another self in the grave, melts our hearts
in tender sympathy; we calculate the flattering hopes
of future years, and we participate the loss of endear-
ing friendship. These, and a thousand other subjects,
are level to the sentiments of all beholders; and free
to the introduction of liberal Art.

The necessity of a judicious choice in a simple
subject is enforced, by reflecting, that if this difficult
a spectator, he has no relief by turning to another; or
to another part of the picture. I have never thought
disease calculated to please in a picture, and though
many a picture on a mighty favorite Dutch idea (a
doctor
doctor inspecting a urinal) has forced my applause, as a picture, it has nevertheless excited my censure as a subject.

On the same principle as these instances of figures, there are instances in landscape, of well or ill-chosen subjects; those who will rake into dunghills, &c. &c. may infringe on their liberty as Englishmen, but let them know they have no such liberty as Artists, nor can well-regulated Taste tolerate their performances. If the mention of such incidents as I have seen introduced in pictures, (over which human life draws a veil of privacy) would exterminate, by exposing them, possibly I might wish that censure were inflicted: how heavy would it fall on many Flemish masters! may it never be deserved by an English professor!

Besides being happily chosen, a subject should be forcibly expressed, for as such a picture exerts its whole powers in one sole effort, unless that effort be considerable, the whole performance is useless. A weak, vapid, meritless, style, is a very nothing; an unmeaning exertion, an ambiguous, feeble, expression, is no expression at all. As in literary composition there is an order of words, which, without violating the rules of grammar, is but languor, and though it has nothing shocking yet has nothing smart, so in Painting, there is an insipid manner, which to inspect, produces no gratification; from which to turn away, excites no reluctance; and yet it cannot justly be condemned as contrary to any rule of Art, it is tolerably drawn, coloured, and adjusted, but to what purpose? Vigour of mind, energetic conception of the Scene should enforce a poignancy of expression, which
which the power of the pencil should transmit to the subject. What expression has a storm, if the trees are all still and motionless, instead of being incessantly and violently agitated; if the water be smooth, instead of boisterous; and the sky serene, instead of cloudy?—but neither a cloudy sky, boisterous water, or agitated trees, will make a storm: these it is confessed are some of the ingredients, but the composition, application, power, of such ingredients where are these principles? Since the mind of a Spectator is to be influenced by his eye, the eye of the Artist should be influenced by his mind: a production distinguished by mentality, will demonstrate the talents and genius of its author.

That every work of Art should be truly characterized, is a self-evident proposition: we mentioned dawn of day, this is very distinct from noon, as noon is very distinct from night. Fidelity is more consequent in subjects of small extent, than in others; as they do not offer that variety which amuses imagination, the eye seeks in them a truth, and correctness, whose absence is sure to displease. An ill-drawn, ill-painted tree, a building out of perspective, a light placed where light could not possibly come, false reflections, or contradictory indications, are certain to be discovered. I have seen in pictures— the wind blowing two ways at one time,—lights coming two ways,—the glimmering of the moon where it could not be visible, and many other ideas repugnant to common sense; these in simple subjects strike the eye at a glance.

There
There are many pleasing subjects in this style, drawn from the cottage; from rustics, from children, and their occupations; whether amusing themselves with contrivances, sports, or events, adapted to their years; or, by attentions to such creatures, &c. with whom they are familiar, carressing rabbits, puppies, or kittens; feeding poultry, or regretting the loss of their little favorites; and it must be owned, when well executed, these have no small interest, for with them all spectators can sympathize.

Though to the simple style may be referred many occupations of the lower class of people in all parts, when treated by means of single (or nearly single) figures, and their accompaniments, yet when numerous figures are introduced, the composition becoming more complex, is properly removed from this division of Art, to another which is more ornamental. It is evident, for instance, that a village festival, though a rural subject, may contain a great variety of objects, divided into numerous groups, and yielding abundant employ for prolonged inspection: so may a market, a fair, or other occurrence, which collects multitudes; not omitting the renowned and infallible quack doctor of doctors.

The Simple Style also includes, occasionally, the genteel subjects: modern philosophers study as much as ever did ancient philosophers; and those who investigate the productions of Nature in gardens, woods, or parks, may doubtless by such study furnish subjects for the pencil: LINNAEUS thus engaged were a subject worthy any pencil. Neither is the genteel lady,
lady, or her family, excluded from contributing to the embellishment of simple scenes, whether ornamented by cultivation, or more retired, or solitary; and indeed, such instances sometimes contrast in the happiest manner the rude intervals of nature, with the graceful refinements of Taste.

The Varyed or Ornamental Style.

THERE is a Style, which often departing from simple composition, yet not always including extensive prospects, and magnificent scenery, offers many ingredients in its productions, and includes many circumstances, and effects: this is the most common style in Landscape; if it has not fewer difficulties than than the former style, it has more resources; it exhibits, occasionally, great masses, and minute objects; it does not forego a rock, or a mountain, as too large, nor disdain an humble hillock as too small; it borrows interest from the employment of its figures, from the nature of its animals, its edifices, its trees, from works of art, or productions of nature, while with them it combines conceptions of grandeur, and instances of dignity. It must be owned, this style is very congruous to natural principles; for nature rarely confines us to the view of a single object; and equally rarely, at least, is the sublimer scenery of Nature submitted to our inspection. The medium, then, between what is too limited and what is unlimited, between what is too ordinary and what is too rare, may justly be esteemed as calculated for popularity, and adapted to
to the taste of many, perhaps of most, among all classes of mankind.

As ornament is a favorite quality, this style abounds in ornament; and by the multiplicity of objects it assembles, by their union, or their contrast, by their disposition, and arrangement, by their character, and fidelity, it seeks to amuse the mind, and to delight the eye.

It is admitted, that a single object, unless well performed, is of little value; the entertainment it affords, is neither great, nor lasting; whereas by the introduction of sundry objects, though each alone may not be exquisite, the effect resulting from the whole may be pleasing, and the amusement they furnish, may even be captivating.

There is a natural enjoyment in society; solitude has charms only occasionally; a hermitage may please, as a temporary retirement; but perpetual residence there, is banishment. The same scene, the same company, or the same no-company, the same course, constantly, is tiresome. To be able, after having inspected one object, to turn and enjoy another, greatly promotes our returning to re-inspect the first with pleasure. To maintain this pleasure a well-regulated union of objects is necessary; I mean, that they should not be such as cannot naturally associate (Europe and Africa, Summer and Winter, in the same piece, is shocking) but all objects introduced together, should be related to each other, and capable of forming one whole. Nevertheless, this union by no means implies sameness, and identity, or repetition of the same
same thought in the same manner. Let us instance a company of fishermen hauling their nets into a boat, each has his own way of doing this, his own attitude, his own mode of exerting his strength, and his own station, and duty in this business; though the action be one, the mode of the action is diversified. If we suppose, buildings,—they vary in form, and effect; all are not alike:—if trees, they also differ; but this difference would be shocking, if it suffered the introduction of trees from sundry parts of the world into the same composition; neither ought buildings to exhibit at once the style of Lapland and of Caffiraria, Tartar tents and European fortifications.

Disposition and arrangement, may naturally be esteemed important, where numerous objects are admitted; that the chief action should occupy the chief place, and not be embarrassed much less be hid, by minor accompaniments, is evidently just: that negligence, or confusion, should not entangle the composition, or perplex a spectator to discover the nature of the scene, or the business which solicits his attention. But on the other hand, equally improper, is that extremely precise regularity, which determines to an inch the station of its trees, or edifices, and renders a picture like one of those old fashioned gardens, where

"Grove nods to grove, each alley has a brother,
And half the platform—just reflects the other."

Artificial disposition is often different from artful disposition; hence we sometimes see, loop-holes cut
among trees, to exhibit some object which necessity exacts; but which skill would have disposed without such a force on the composition. Excellent composition, though really the offspring of much reflection, should appear like a mere happy freedom of ideas, and in this sense, the disposition of a picture may be referred to the general principles which regulate composition as a branch of Art.

Since all departments of Art profess attention to character and fidelity, it is clear those principles cannot be omitted in the subjects we are now treating: because confusion and embarrassment, is best avoided by vigilant attention to them. Nothing contributes more to the prolongation of a spectator's enjoyment, and to the impression designed on his mind, and his memory, than order and just arrangement, enforced by character and fidelity.

The Exalted or Heroic Style.

BESIDE attending to the necessary principles of Art, choice of subject, variety of character, force of expression, and happy arrangement, this style professes, rather to represent Nature as we conceive she is capable of appearing in her happiest periods, than as she really does appear, in her daily garb: full of noble ideas, it seeks noble prospects; and, being as it were, abstracted from common and ordinary things, it declines those more general and customary subjects, which to the major part of mankind are sources of delight: but whose frequent occurrence renders
renders them too familiar to engage the study of the Heroic Style. Extraordinary scenes of rocks and wildness, whose stupendous attitude or magnitude, whose cloud-top'd brows, overawe the spectator, solemn ruins whose noble remains unite ideas of former grandeur and present decay, deep glooms of lofty woods, melancholy lakes surrounded by overshadowing precipices, ideal images of famous cities, whose exalted imagination may freely suppose whatever is grand and sublime, heroic and affecting; these are among its favorite subjects.

I think it may be divided into two kinds; simple and magnificent.

Suppose—the once sacred tomb of some hero of old renown, now mutilated and almost destroyed; this one object well introduced, and characteristically marked, explained, and accompanied, affords opportunity of much sublime sensation. Suppose—a recluse, in the energy of devotion; the cell, and its accompaniments, may be rendered extremely affecting, especially if it represent some well known character, as Jerom and the Angel of death. Suppose—a king (as Alfred) divested of his dignity;—an unhappy Lover, seeking in despondency the darkest shade, or visiting in anguish the tomb of his beloved, and bedecking it with quickly-fading garlands, fit emblem of her he loves! Alexander at the tomb of Achilles is little less heroic than Alexander in the tent of Darius: Marius in deep reflection seated on the ruins of Carthage; Belisarius receiving charity from those he once commanded; Anti-
Octavius receiving impure water from a peasant; are not more remarkable as instances of Fortune's mutability, than as subjects adapted to a style of composition simply Heroic. These and many others equally affecting, equally simple subjects, furnish occasion of mature reflection, both to the Artist, and to the spectator.

The magnificent style takes a larger scope, and visits scenes of more extensive grandeur; the consecrated Temple, the royal Palace, the pathetic or pompous Event, and whatever Nature furnishes of vast and unlimited. It gathers over our heads tremendous clouds of terrifying storms, it rolls the thunder, it wields the lightning of heaven, it snaps the stoutest oak, and trembles the solid earth; the sea rolls in mountain-waves, obedient to its command, and the horrors of the deep obey its voice. It descends in imagination to Tartarus itself, sparkles in all the splendor of Elysium, drinks ethereal light, mingles with kings and heroes long departed, and ranges amid the ever-verdant heads, the ever-murmuring streams, the ever-fragrant groves, of that delightful state: or, deviating to Erebus, it presents horror upon horror, gleams of sickly fire, floods of liquid flame, barriers of eternal rock,flagrant waters of Styx, darkness visible, caverns of despair, shrieking ghosts, and yelling furies. Nature has bounds; Imagination has none: Thought transports itself to early time, sees infant creation rising into light, sees floods desolate the globe, sees cities erected and destroyed, sees tribes of men settled and dispersed; and springing forward with unrestrictable vigour, watches the
the first kindling of that destructive flame, commissioned to consume every memorial of past ages,—the labours of man, and the globe itself, the work of a Deity!

It must be owned, not every Artist has imagination to conceive such comprehensive subjects, or skill to manage them adequately. Bombast is too often mistaken for Sublimity, as well in Painting as in Poetry. Much is risked in this style, and not always with success: but there is in the attempt something noble and elevated, and often, where much may be doubtful, there may be a proportion justly entitled to applause. Those who will venture nothing, must be contented with ordinary merit, and be satisfied with ordinary commendation; while perhaps, would they encourage them, they possess abilities, which might do honour to their powers without derogating from their prudence. Others, who venture every thing, and listen to no consideration that should restrain their attempts, and moderate their ardour, must be content to suffer the scrutinizing remarks of criticism, to abide 'the pelting of that pitifuls storm' which unusual imagination is sure to encounter; in many a well-meant attempt, they must be satisfied with the praise of well-meaning; and must set against this, if highly favoured by capricious fortune, the gratification of being sometimes thought instances of singular excellence.

It is evident that Genius need not fight for other worlds to conquer, while the study of Landscape, in each of its divisions, is so ample, and extensive. While it affords so great variety, each branch of which
which is excellent, Genius may adapt itself to either, as inclined by native prepossession, or directed by contingent circumstances, may cultivate its powers in representing subjects agreeable and pleasing, or ornamental and amusing, or grand and heroic. Scarcely is it possible that the whole of this Art should be embraced by one mind, and performed by one hand: that in the same Artist, Composition and Ordonnance, Invention and Character, Fidelity and Effect, should combine in all their branches, and unite in rendering Simplicity interesting, Decoration amusing, and Grandeur sublime.

The Characteristic parts of Landscape.

Landscape is an imitation of Nature; in fact, an artificial view: but all views in nature are not equally good; some are highly beautiful, others are absolutely worthless, in respect of Art; they offer no subject worthy notice; their parts are choquant, irrelative, and mean. If it be thus in Nature, doubtless Art is exposed to the same imperfections, and they are more observable, because Art professes to choose the best, and has no actual fertility, convenience, or other estimable quality, to compensate for any ill choice.

The cite, or view, which a picture represents, should be well chosen, its parts well united, and well composed, so as to produce a neat, distinct, and unembarrassed, idea of the place designed: this proposition might be subdivided into numerous branches, according
according to the nature of a country represented; whether fertile or barren, mountainous or marshy, open or enclosed: but to pursue reflections on each of these, with their relatives, would be tedious, perhaps endless; a few general remarks may diminish them.

Extraordinary feats, please and amuse the imagination, by their novelty, as they transport a spectator instantly to a spot which he has never before beheld; ordinary feats, please by their veracity, and their accompaniments: what are ordinary feats in one country, are extraordinary in another; not all persons are capable of (justly) comprehending extraordinary feats, though they find something grand in them: and indeed, it were much to be wished, that as well observers, as artists, were better acquainted with nature, whose uncommon productions furnish the noblest opportunities for exertions of Art: or at least, that observers would not become critics till they possessed such an indispensable pre-requisite.

It is but rarely, that landscape composition comprises merely an assemblage of objects of one kind; more generally somewhat distinct, and even perhaps in contrast, from the principal subject of the piece is introduced. Trees alone, without buildings or other objects different from trees, such as rocks, or hills; buildings alone, without trees, or other associates, are seldom chosen, where choice is free. The general subject, or principal representation of the picture, must
must nevertheless be allowed to denominate, and classify the performance, in its specific character as a Landscape.

Among the first characters of Landscape, we place scenes drawn from the Forest, where the wildness of Nature, prevailing all around, combines various kinds of Trees, on nearly the same spot, and prompts each to expand its branches with unrestrained freedom and vigour. Forest scenes are either open, or confined: many extensive openings are found in some Forests, in representation of which, the Trees around are thrown into the middle distance of the picture: other spots are so confined, that a deep gloom impervious to the eye, surrounded by Trees of various hues, is all that offers. These latter are closely allied to Wood-Scenes, which strike by solemnity and repose rather than by sprightliness; though it sometimes happens, that the light enlivenes objects, plants, stems of Trees, or projecting branches, in a playful and pleasing manner.

These subjects are by their nature greatly confined, inasmuch, that it may often be advisable to an Artist, to gradate his depths, and to shew a succession of distances; not indeed remote from each other, but just enough to procure an opportunity of introducing a variety, which otherwise were absolutely unattainable. Neither should it be forgot, that the entrance of such scenes, (a wood, for instance) presents from the same spot, at least two ideas, either of which may be chosen.—A person entering a wood, sees before him its shaded recesses;—the same person by
by merely turning on his heel, or designing to quit the wood, sees, not only those commencements of the woody scene which are immediately adjacent to him, but also, somewhat of the distances he had formerly left; and according to the nature of these, the Landscape he beholds is varied: when looking out of the wood he views a spectacle entirely different from that which offers when looking into the wood, though he has not changed his station a single yard.

As wood scenes are naturally void of any great portion of sky, the management of light is of the utmost importance to them. Because solemn, they should not be heavy, neither need they be melancholy, because cool, and sober; the freedom of light striking here and there, wandering, as it were, among the branches, the leaves, the stems, and the dextrous supporting of one spread of light by others subordinate, contributes greatly to a pleasing, and sometimes even a lively effect. It is necessary to pay attention to the kinds of trees introduced in a wood, or forest scene, that such may not be mingled in Picture as never associates in Nature: this does not exclude a great variety of trees, whose different hues support each other, and diversify the scene. One tree is of a deep green, almost inclining to blackness, another is silvery, almost blue, another yellowish, or russet: these mutually improve the effect of their companions. If a light-coloured tree stand before a deep-coloured one, its whole form is thrown by its background; if a deep-coloured tree stand before a light-coloured one, it is relieved by its neighbour; it affords an opportunity
opportunity of gradation, its extremities become more agreeable, and are capable of more satisfactory management.

From trees majestic by their dimensions, their forms, their leafy honours, and venerable by their age, of which their deep-cleft trunks bear decisive evidence, whose almost above-ground roots winde in many a rugged convolution, and which have long braved the alternate rigour of the seafons, we turn to the humbler coppice and the lowly underwood: what this wants in dignity of form, it compensates by sprightliness of appearance; being young, healthy, vigorous, it offers, especially in spring, very interesting materials for Landscape. It is not, indeed, always well grouped, its forms are apt to be fragmenting, rather than free, and some management it undoubtedly does require in these respects; but then, a little imagination, and a little liberty, easily improve it, and these it readily admits. In treating, therefore, coppice-wood and its relatives, care should be taken that they do not disturb the harmony of the Piece; either in form, or colour; that they harmonize with the principal masses of the composition, and do not obtrude themselves on the eye beyond their just warrant and importance.

Parks and pleasure grounds, are artificial woods, and regulated forests: if not altogether the creatures of Art, they are instances of Nature controuled, improved, ornamented, or arranged, by human endeavours. When well composed, they have much less wildness than nature, but little less freedom,
freedom; they offer less obstruction to the sight, and permit a better choice of distance from whence to be viewed. The danger attending them is, the intrusion of a somewhat bordering on formality, a kind of primness, which hints at the interference of a power different from Nature, and not always in harmony with her: but when Nature has been happily directed, not over-rulled, assisted, not contradicted by Art, and when she has bestowed some of her interesting capabilities, it must be owned the Landscapes exceed those formed by this union. In treating them, little caution is necessary, beyond the regular precepts of Art, for which the scenes themselves are often happily prepared.

The Shrubbery is to the Park, what Coppice-wood is to the Forest: if it contain curious trees, they are lost unless specifically distinguished; if specifically distinguished, they risk the introduction of confusion, they break the general harmony and combination of the piece; each singly is trifling, altogether are a mob: add to this, their distribution in straight lines, or precisely winding walks, with equal intervals;—it will follow, that the introduction of a shrubbery, unless by the bye, and where unavoidable, has little to recommend it to the Painter’s judgment.

Heath, and Downs, are not always pleasing in themselves; but they please by adventitious circumstances, by the introduction of somewhat to attract attention: a bare common is poor; but add merely that very moderate composition the Starting-post,
Starting-post and Betting-box of a race-ground, it becomes capable of raising attention. On the same principle, the huts and cottages of a common interest us; and the rather, because by reason of the general plainnesses around them, the interest they produce is undivided, and enjoyed by them without a rival. Breadth of light and shade is of the utmost consequence to these subjects; if divided, and subdivided, they acquire a chequered and paltry appearance: and they possess no internal power capable of restoring them to dignity and importance. They show well some of the accidents of Landscape: a misty morning, yielding to the solar rays, a snow storm, or a tempest, is well seen on them, because capable of full display, without suffering by extraneous interference.

A CHAMPAGN open country, which has nothing particular to attract notice, is by no means a barren object in a Picture; as it affords such scope for the effect of light, and degradation of distances, that if there be but moderately abasing circumstances in surrounding objects, to diversify the Picture, it possesses a contrast capable of the greatest utility, and can scarce fail of a characteristic grandeur.

An EXTENSIVE, and CULTIVATED COUNTRY, is among the most difficult branches of Landscape: partly, I suppose, because the cultivated productions it includes are nothing unless well made-out, and distinctly represented; which practice, if followed too far, is in danger of obstructing the general and leading principles of the piece, in favour of those
those minutiæ, whose effect is always injurious. Un-
less a field of corn, for instance, be well expressed
and coloured, it may be mistaken for sand, or
gravel; it is true a field of corn may be grouped,
and gradated into harmony, but all objects of culture
are not thus compliant. What must we do with a
field of cabbages? or cauliflowers? or what with
that strange display produced by lines after lines of
bell-glases, and covers, which in the gardens near
London, have so singular an effect, especially when
the sun shines on them, and they reflect his spark-
ing rays? Art requires in thec instances some little
prejudice in her favour: permission to throw into
shade some of these importunate trifles, and to con-
ceal and soften others. An extensive country natu-
really includes an extensive sky; and from this we
draw no despicable assistance: the clouds being ar-
bitrary in form and disposition, afford a contrast with
objects on the ground, and a resource for distributing
more or less light, as convenient. Beside this, the
Artist, as soon as possible, contrives, that however
he may be forced to particularize his front grounds,
and their appendages, the grounds a little removed
into the piece may be massed, harmonized, united,
and deprived of those sharpnesses, and awkward-
nesses, which they expose. When this management
has procured breadth, if lively figures be added, and
their occupations well adjusted, these kinds of Pic-
tures acquire the property of pleasing in a high de-
gree: they exhibit Nature rejoicing, humanity re-
joices with her; they find the direct way to the
heart.
heart; the spectator sympathizes with the cheerful prospect of plenty, and the anticipated enjoyment of corn, wine, and oil. The off-scape doubtless is the chief beauty in these subjects; yet in the hands of some masters, there is a kind of magic, in the disposal of distance after distance, which attracts and long detains the eye; it wanders with great delight, from part to part, and seems to inspect much more than really is expressed on the canvas. The reason may be, that the eye is so gradually, and gently, invited from this object to the next beyond it, without any abrupt terminations, or leaps of interval, that it passes on, scarce aware of the progress it has made, or is making.

Rivers and waters in general, contribute so greatly to the flourishing of vegetation, that they seem naturally to follow the mention of cultivated country; and the rather, because, when the nature of such a composition includes them, it is among the happiest circumstances in the Artist's favour. The banks of rivers, are either high, and steep, or flat and level: when the former, viewed from a just distance, they furnish opportunity for pleasing scenes; and as they usually have something engaging, either knolls, or trees, or residences, they are by no means inferior articles of study. When their shores are low and sandy, we must look to the river itself for our opportunity of exciting delight; this it amply affords, by means of the extensive traffic ever in motion on it, by the various forms of vessels, the various employments of navigators of sundry sorts, which
which ply on a river; the ferries which cross it, the bridges thrown over it, and the reflections of all these objects in it, not to mention the dextrous representations of aquatic plants, which not seldom are very pleasing. Often indeed, the lopped heads of naked ozier trees, or the thick huddle of reeds, and rushes, deserve little praise; yet the bulrush, in perfection, is not without somewhat of majesty, and the water-lily prettily diversifies the limpid surface of the gentle brook.

Lakes and rivers are familiar to purposes of Art: so much of a river as can be seen, is usually little different from so much of a lake; but lakes are generally among mountains, and contrasted by their forms; whereas a river, when capacious enough to deserve the name, rarely occupies such a situation, but flows in a more level country.

Torrents and water-falls, are by their nature restricted to mountainous and rocky elevations; they rather contrast such scenes, than are contrasted by them; and rather contribute variety where they occur, than receive variety from surrounding objects. As these are some of Nature's grandest effects, impotent imitations of them are generally disgusting: they are a class of subjects which should be studied immediately from Nature; they should be portraits of certain spots, rather than produced by general fancy. In which case, the rocks, and hanging woods, the stones which half-way down receive the falling stream, and against which it dashes into spray, the rocky channel which it at length reaches
reaches, and its course, boiling as it proceeds, will certainly receive much of the Artist's attention. Fidelity will stand instead of rules, and will usually produce effects superior to rules, especially, if the colours of the rocks be happily adapted to relieve the falling sheet of water; and at the same time, contrast the trees, shrubs, bushes, and perhaps glooms, which overshadow the whole. The water should be clear, not dirty, touched with spirit, not laboured, transparent, not heavy, and its spray well indicated, yet uniting with the general tone of the piece. Great care is required left the froth, and agitated water in the canal, present the resemblance of soap-suds, or rather suggest the idea of a boiling pot, than of a continuing stream. Where the spray furnishes a rainbow across the fall, that circumstance ought by no means to escape insertion. neither ought any other striking, and pleasing peculiarity.

There is a kind of humble Cascades which cannot be called Torrents, which instead of issuing from mountains, and rolling in impetuous floods, originate from some narrow ravin, where further straitened by projecting points, they dash into the streamlet below; these are often happily composed, by the loose stones, the banks of earth, the shrubs, around them; the simplicity of the whole is kindly adjusted, and without pretending to the magnificence of the broad sheet of water, they are complete in their symmetry, and demonstrate, that the methods of Nature in producing beauty are unlimited. They play, they meander, in pleasing forms, and rather attach
A spectator by the delight they impart, than astonish
him by the grandeur they exhibit.

Whoever has been at liberty to enjoy the pleasure arising from inspection of Natural Landscape, has endeavoured to augment his prospect by ascending some rising ground, some eminence, from whence that pleasure might be more amply enjoyed. Though perambulating a green lane, a verdant meadow, or an extensive common, may be considered as contemplating Nature, and must be referred to the principles of Landscape, yet these content no one who has opportunity of further view, and within whose attainment is some more elevated station. To acquire this opportunity, is an article of much desire to any gentleman about to build a seat; and if Nature have refused it to the spot where he must build, the resources of Art are requested to supply, as far as possible, this deficiency. In Holland, &c, where the obstacles of Nature entirely prohibit the hopes, and frustrate the resources of Art, in this respect, every rising is esteemed a hill, and one (the only) hill in the country is esteemed a mountain; from hence they tell us may be seen so many capital cities, so many walled towns, fortified castles, and villages; it must be owned, the sight is rich, and entertaining, but it proves not the mountainous height of the elevation, though it demonstrates the absolute level of the country inspected. A Swiss, or a Welchman, would ask to be shewn this mountain, and when ascending it, might doubt its existence; yet
here the Hollander tarries, to prolong his prospect, and he mounts this hill, to extend his inspection.

Hills, and rising grounds, are found principally among lowland countries; they yield pleasing prospects, from them, but are rarely themselves pleasing; if they advance forward into the Picture, they terminate the view, while the eye supposes itself capable of further inspection, consequently, somewhat prematurely; but, when the composition advanced before them has nearly satisfied the eye, they furnish an agreeable close, and diversity, to the piece, and elegantly complete that previous satisfaction.

Mountains are scenes of grandeur, or they are nothing: they scarce admit a medium: they are bold, overbearing, awful, dreary, and solemn; or their effect is vapid, and inert, and themselves are puny, and spiritless. Being prodigious masses, to see them broken and frittered into minute particles, is contradictory to their very first principles: they should rather be kept broad, strong in effect of light and shadow, distinct in forms, and consonant to the dignity of their species.

Mountains are either barren, or cultivated more or less; they are susceptible of the most commanding effects in Nature: clouds hanging on their brow, and veiling the forms of their upper parts, mists rising into clouds, and other phenomena, diversify their appearance. If one of the principles of sublimity be a certain kind of indistinctness, rather
a suggestion than entire expression, leaving a portion to the imagination, rather than absolutely filling it, exciting the mind to muse, and to ponder, on the subject which engages it,—then we may affirm, that mountains and their effectspossess this grateful obscurity, in the most interesting degree. Their lofty tops receive a certain solemn dimness by their elevation and distance; their bold projections, by ample shadows, throw a veil of demi-tint over considerable parts of their surface; their clefts, and cavities, are so many concealments from inspection, as well as variations of appearance; and while by their masses, and forms, and general properties, they excite attention, they yet leave more to be supposed by the mind, than their representations express to the eye.

In treating Rocks, (or Mountains when seen near, if rocky or barren) the painter must endeavour by artful management of his light and shade, to render them accordant with the other parts of his composition: they must be boldly and truly coloured, with warmth and spirit. Rocks are of various natures, according to the strata which compose them; the happy imitation of which adds greatly to verisimilitude: the mosses which grow upon them, the injuries they have received from time, the shrubs which accompany them, and other particulars, tend greatly to qualify their barren aspect, and to render them pleasing, though at first they seem little calculated to please. The parts of rocks removed further into a composition, must be blended, and only...
their protuberances be distinguished. Mountains, (or Rocks) represented in a distant view, require much harmony, softness, tenderness of tint, a melted outline, a generalization of form, colour, and every other principle: directly contrary to such objects near at hand, whose parts cannot be too bold, prominent, and effective. As to mountains upon mountains, they are difficult subjects; no Picture gives ideas of the Alps equal to inspection: however familiar their representations may be to a traveller, the places, and situations, themselves, always exceed, by far, his previous conceptions of them. The very nature of such scenes is, to differ strongly at every point of view, and each, in succession, shews such bold features that it may be thought most striking, till another seems better entitled to that distinction. This infinity of change, of change strongly peculiarized, defies the labours of imitative Art.

A genuine and correct view from the top of a mountain, is what has been rarely attempted; it is, no doubt, laborious, yet as laborious Artists have not been wanting, and the singularity of the subject would ensure distinction, I rather wonder some ardent genius has not fought this mode of obtaining notice: a successful performance of the kind, would have a lasting effect on the public mind.

Arrived at length on the mountain's top, we must, like other travellers, think of descending; for a time we may enjoy the prospect, may see adjacent countries lying as in a map, beneath our feet; may behold
behold the situations of cities, of rising hills, and of level plains; may trace the courses of rivers, the coasts of the sea, its havens, bays, promontories, and their indentures; we may stretch our inspection across a sea, and behold distant, and foreign, shores—but we must forego the prospect, and wind our way down the steep-shelving sides of our elevated station: happy, if the dangers of the descent prove merely troublesome, and we arrive in safety among the residences of mankind. In such a course, we gradually exchange barrenness for partial cultivation, and partial cultivation for important enclosures; the goat-track yields to paths, the paths to roads; leaving the goatherd's lodge behind us, we advance to the village, and from the village to the town, and the city.

Villages are a favourite part of the study of Landscape; by their variety, their simplicity, and often by their beauty of situation, and of verdure, they justify the partiality in their favour. On the mode of treating them little need be said; they have already occupied us somewhat; and they do not require additional precepts.

Towns and Cities may be referred to the principles of views.

We repeat now our early observation, that rarely is any Landscape wherein choice was free, entirely confined to one distinction of these characters: it is much more usual to combine several of them, and by harmonizing the contrast which arises from their introduction,
introduction, to procure a scope to the Artist's abilities, and to vary the spectator's enjoyment. It is true, each by itself is capable of exciting sensations suited to its nature, but, as these sensations are not always such as may please general spectators, or any spectator long together, it is esteemed better policy to combine that variety of which they are susceptible, and to relieve the eye by leading it from one part to another; yet always without interrupting its attention to the whole. Herein Art doubtless follows Nature; who rarely confines a view to one determinate kind of object, but varies the scene, by offering combinations of several; and in several states, in several points of view, and under several distinct effects; as the influences of light, of seasons, or of accidents, happen to combine them.

LECTURE II.
LECTURE II.

LADIES and GENTLEMEN,

We have treated in a former discourse on the Nature of Landscape in general; and have suggested those distinctions and branches of the Art, which we supposed might contribute to our better understanding of its relations, and importance; we shall now engage our attention on the Component objects of Landscape, and proceed to examine the nature and the appearance of those objects, whose imitation offers us a fund of inexhaustible delight.

THE general character of a Landscape, may justly be denominated from the nature of the principal object, or objects, it contains: but, to purposes of Art, it is often necessary, that these objects themselves should be more intimately inspected, and resolved into their component parts, in order to estimate justly the cause of that agreeable effect which pleases us. For instance, in a forest scene,—what is the composition, and what the nature of the trees we behold?—All trees are not alike, in form, or in manner; to subdivide a forest into trees, therefore, with design to consider each separately, might be very instructive. To accomplish this, on a large scale, would lead us no trifling distance; and to do it justice,
justice, perhaps, might occupy no inconsiderable portion of a life: we are accordingly limited to brief observations on this instance, and for more must refer to the inspection of Nature. I propose, nevertheless, to mention as distinct objects, sundry of those which we have already attended to in groups, or combined with others, whether of their own, or of a different species.

In treating of the human figure, we always begin with a single figure, its parts, proportions, &c. before we proceed to groups: for if any one, incapable of well representing a simple figure, should attempt a composition of figures, what is the probable consequence? If the simple subject exceed his powers, whence has he abilities for a complex subject?—On the same principle,

A Tree equally exacts correct proportion and drawing; for, unless every tree represented, differ in representation, according to its nature, from others around it, what mortal shall divine its intention?—A Poplar, whose stems and branches shoot upward,—a Fir, whose branches expand laterally,—a Willow, whose branches bend downward,—surely these require different drawing from each other. To comprehend this principle more fully, take advantage of that season when Nature strips the trees bare of their foliage: in this skeleton state, observe the various inclinations of the stem, the branches, and even the twigs, of a tree; how its parts are set on, their motion, as agitated by the wind,
wind, and other particulars. In Spring, observe how that same tree shoots its buds, or leaves, as well at what time, as in what manner: afterwards, when the leaves are full grown, compare its general appearance to itself when bare, and to others when full, by thus forming several times, and points, of comparison, a distinct, lasting, and correct, knowledge of that tree's general appearance may be obtained.

Trees are among the greatest ornaments of Landscape, because, by the variety of their species, their verdure, and freshness, and especially by their lightness, and agitation, they impart great life and motion to a composition.

The various species of trees demand much attention, and very intimate acquaintance: for how shall an artist describe by his pencil to the view of others that particular species of which he is himself ignorant? and to suppose that random attempts may transmit equal beauties as cultivated skill, is to esteem the weeds of a desert equal to the vegetation of a garden.

The spectator, who himself understands their appearances, should be at no loss to determine between an oak or an elm; a fir, or a poplar; an apple-tree, or a weeping willow. The particular proportions, manner of branching, and of leaving, whether compact or light, whether determinate, and, as it were, heavy, or agile and volatile; add to this, the colour of their leaves, above, below; of the branches, of the
the bark, of the mosses which surround the bark; the plants which usually grow at the bottom of the stem; the situation such trees delight in; whether open and airy, or closer and more confined; whether by the water-side, or on the thirsty heath: all these particulars should be familiar to that artist who wishes to rival those masters who by such attentions have risen to excellence.

Besides the peculiarity of appearance which belongs to each species of tree, there are many differences in trees of the same species; whether healthy and strong; or diseased and infirm; whether young or old.

Young trees are generally distinguished by long and thin branches, aspiring upward, and not very numerous, but well clothed with leaves, well spread, vigorous, and well formed: the branches of old trees, on the contrary, are short; thick, close, and numerous; but their leaves unequal, and their general aspect thin.

The barks of trees also contribute greatly to their character, and must be attended to; in general, older barks are fullest of crevices, &c. which are also deeper than those of younger trees. As to the leaves of trees, the broadest and largest are usually at bottom; those at top begin soonest to decay and wither, becoming, as it were, sun-burnt; whereas the leaves of plants which are but little raised above the earth commonly begin their decay with the lowest.

A few hints on the various species of trees usually introduced
introduced in Landscape, may contribute to a better understanding of their respective characters.

The Oak is a very beautiful and noble object, of venerable aspect; and, if appearance might justify the distinction, entitled to all the honours once lavished upon it. Its stem and branches are grand, and its colour firm and stable. The oak of the forest differs from that in a hedge; is abundantly more stately and romantic, and divested of those lукers which give somewhat of commonness to that in the hedge, even while they increase its verdure.

The Chestnut is rather a heavy tree, yet has more majesty than many which are preferred before it, either for the canvas, or the park: when in flower, its flowers being large, remarkably distinguish it.

The Willow has a very agreeable and stately appearance when perfect; it has also a very pleasing variety in the lengthened shape of its leaf, and by its contrast to other trees in this instance, often has a very happy effect; which the water, on whose banks it chooses to flourish, increased by reflection. Willows cut and lopped, as they usually are by the sides of water-courses in England, are no specimens of this tree.

The Elm is a stately tree, tall, but does not very much extend its foliage: this also suffers considerably in its picturesque appearance from its loss by lopping.

Firs and Pines contribute greatly to variety;
their forms usually contrast well with surrounding objects; they are often happy in scenes where wildness and romanticness is necessary. As they grow on rocks and precipices, they contribute an ornament which in such compositions is very acceptable.

The Cedar may perhaps be the most majestic of trees when in perfection; as on Mount Lebanon, where are some amazingly large, and very ancient: but in England we have little or no opportunity of introducing it into pictures.

The Ash is a fine sprightly tree, light in its leafing, agitated by every wind, and displaying great difference of colour in the upper and under surfaces of its leaves: its branches are slender and elegant, and its bark brilliant; it admits of neatness and freedom of pencil remarkably well, and though not gay is graceful.

The Beech is a tall and majestic tree, and, together with the Birch, has a beautiful stem, and a light, spirited character, in its branches and foliage.

These trees, and others which might be named, receive peculiar beauties when happily contrasted, or grouped; their various colours and manners contribute much to general effect. But it is evident, that the Seasons produce great difference and dissimilarity in trees of every kind: young leaves and shoots have a very distinguishing yellowness, which heightens their green; but having passed the vigour of their maturity, they become reddish or brownish; they
they gradually wither and decay, till the sap, being
retired from the stem to the root, leaves them with-
out moisture or nourishment, and they assume an ap-
pearance totally unlike their former verdure.

The same attention as is required by trees of the
forest, which display the wild luxuriance of Nature,
must be employed on those of the park, or pleasure-
ground, as also on the coppice, or other nurseries of
trees. It is remarkable, that scarce any fruit-trees
are picturesque in their appearance, their stragling
branches start off from the trunk at awkward angles,
and this awkwardness they preserve throughout their
whole extent. In blossom time, they contribute
greatly to diversify a composition, and to express
the season; and when viewed at a proper distance,
have a determinate effect, however they may be pro-
hibited in front. The blossoms of some trees cover
their branches as white as snow, and require dex-
trous management to avoid confusion.

Nothing enriches a wall, whether alone, or as
part of a cottage, &c. equally to a Vine running up
its surface; the broad leaf, the variety of its tones of
colour, the freedom of its festoons of fruit, contri-
bute to this ornamental effect; no less than the
richness of its produce, which usually is suggested by
its luxuriant appearance.

On the same principle, the various Shrubs which
bedeck the ruins of desolated buildings, contribute
to render them interesting. The Moss on the walls
has this effect, no less than the mantling Ivy; and
though
though Broom, and Ferns, on the heath, being redundant, are little laudable, yet in the area adjacent to some lofty tower they have their use. The rank funitory in a church-yard denotes somewhat relative to the scene, and as well as by its colour, in common with all kinds of verdure, diversifies the general aspect of the composition.

Herbage, viewed from a little distance, loses its distinctness of parts, and merely retains a general resemblance of colour to itself when near at hand: in turf, or meadows, it should be varied, yet broke as little as possible by opposition: distinction of parts it may claim; but this too strongly expressed is injurious.

The larger kinds of Plants, when introduced on the foreground, require some attention; and indeed, though it seems rather descending to minutiae to direct their being well drawn, yet certainly we have seen pictures which for want of this correctness had a slovenly appearance, while others by possessing it, with little or no more labour, seemed enriched, finished, and by very much the neater for such attention. When Plants of any remarkable nature, or form, or proper to the spot represented, occur, especially on the foreground, where only the judicious Artist will particularize them, they may without offence exact a correct veracity of representation.

This remark, applies to those compositions of cultivated lands where distinctness of vegetation is necessary
necessary. Lands under culture, i. e. while ploughing, for instance, have a determinate aspect by means of their furrows, which is pretty enough, and being expressive, contributes much to interest. A ploughman, or a company of ploughmen, with their horses and accoutrements, is far from being a despizable subject, and if enriched by the addition of a family, or the jug of ale at whistling time, is capable of much beauty in its composition. Lands whereon particular plants are cultivated, have in some periods of their culture a picturesque appearance, which they lose in other periods: and this relieves us of some of the difficulties which attend them. Broad masses, tenderness of tone, and mellow harmony, are however at all times their best friends.

High Roads, though seemingly void of ornament whereby to become interesting, yet sometimes by the contrast of their colour with the verdant plain; by their broken, but not scattered parts; by the idea of population, and utility connected with them; and, above all, by the opportunity they offer for lively movement and decoration by figures, passengers, animals, &c. they become most entertaining and captivating objects.

Water contributes much to the apparent truth of a picture, by its splendour, and especially by its reflections; they are in nature a kind of picture, and we know it; we consider them as such: we therefore expect them to be so wherever we see them, and we come ready prepared to be deceived: a deception which
much completely takes place, if they are judiciously introduced, and happily treated. Like the feigned play in Hamlet, which realizes the main action valtell; so these feigned pictures, by their application and relation, give to what is meant for reality an almost magical veracity and existence.

By the variety of forms of which water is capable, it diversifies the scenery more than any other ingredient whatever; whether compressed by a rocky channel, it foams into a cataract, or slowly gliding along its capacious bed; whether opening in the wide extended river, or contracted in the humble brook, it is still various, still pleasing, and entertaining. But let its reflections be true and genuine; let them be natural and just; touched with harmony, yet distinctly, and with spirit, but likewise delicacy. And since water is in its nature the freest of all objects, since it always seeks its level, let it not be otherwise represented; nor situated where the wind-ing element would refuse to be confined.

Water is capable of diversity united to breadth; whence, if well introduced, it imparts a toberness, a stillness, to a picture, which is highly favourable. If breadth of light be wanted, water will reflect a light cloud without hesitation; if tenderness of tint be wanted, water reflects the blue sky at command; if deep gloom must be somewhat varied, still retaining its gloominess, water just indicates a separation of parts, yet preserves every depth without abatement. Water affords employment for figures: in boats
boats, on the shore, rowing, angling, musing, &c. It creates a totally different class of buildings: bridges, from the humble plank supported by posts, to the noble arch; locks and dams of various kinds, whose forms diversify the scene, and from whence the falling stream sparkles into effect: mills, whose rolling wheels afford opportunity to the Artist's pencil, well to express the waters they agitate. Indeed, the great water-wheel of a mill, has usually no little success in picture; it contrasts the forms of parts around it: the stream, the mill itself, the mill-dam, and herbage, compose a very respectable variety.

Of Rivers and Lakes we have treated. Canals are now so common in our country they add another to the branches of Water representation; their dead level water, indeed, is not in itself prodigiously beautiful, but the animated commerce they support contributes much importance to them; their turning and winding courses, afford stations from whence to choose favourable views; and where they run by any remarkable objects, they add a variety, and improve the general effect: where canals run over roads, over rivers, under tunnels, &c. they have an expressive character peculiar to themselves. A towing path, well employed, occupies respectfully its place in picturesque management. Water is capable of so much variety, being now smooth, now ruffled, now clear, now turbid, that it usually has a beneficial effect.

I Having
Having mentioned a Water-mill, let us just hint, that a Windmill is often advantageous in representation: partly, by reason of its peculiar form, and the appropriate ideas connected with it; partly, by reason of the adjacencies, houses, stables, &c. and the opportunity of figures, whose employment is not made on purpose for them, but arises naturally from connected circumstances.

Buildings are of great importance in Landscape: they should be well placed in a composition, well proportioned to objects around them, especially to the figures; and may, generally, claim no inconsiderable proportion of the light admitted into a piece. They require great truth of colouring, and to be kept warm in their tone of colours; on this principle, they admit evening effects well: a white house among green trees, has usually a sprightly appearance; but white may sometimes include the idea of coldness;—yet when varied by the reflection of the setting sun upon it, it harmonizes pleasingly, and produces a modest conspicuousness, which is highly grateful to the eye. Few objects are more attractive than a white country Church, by sun-set: indeed, churches in general, have something interesting, though their forms be mean; but when they possess the advantage of symmetry, and variety, few objects exceed them.

Buildings contribute much to enrich a composition: their forms are infinite, according to their uses, to the caprice of their creators, or occupiers; and
and hereby they afford the utmost liberty for lights and shadows; for projections and recessions; for smaller parts, or for larger divisions.

Buildings contribute much to discriminate the styles we formerly remarked: they are objects of our perpetual inspection in nature, and therefore we become capable of determining upon them instantly when offered us by Art. Moreover, as the ranks of mankind, their riches and opulence, or their poverty and want, are no where more apparent, or more clearly indicated, than in their buildings; they become, as it were, a kind of index, which at once relates the circumstances of their owners, their abilities, and their dispositions.

The Rural style, delights in cottages and barns, in hamlets and villages; nor thinks the meanest erections beneath its regard, not even those deserted and almost ruined buildings, whose tottering walls, and falling roofs, produce a variegated richness in a Painter's eye, however they may speak poverty to the owner of the soil. These exhibit effects in the ravages of time on their materials; in the greenness of the mortar, occasioned by the moss; in the discolors of the beams, and their irregular forms; all contrasted by ridges of red tiles, and scattered distributions of brick-work, which no modern building can pretend to: nor is it, thank Heaven! in this country every day to be met with.

The Ornamental style, composes its buildings of various materials, and selects their forms from various quarters:
quarters: in this respect, it challenges great liberty; but terri-

tuous care should be taken, that liberty does not degenerate into licentioulsfes. We but too
	often see prodigious masses of marble buildings on

the very edge of a shore, where no rational Arch-

itect would place even a hut; and but too often we

see in picture handsome houses on barren spots, or

without those correspondent conveniences, which

the owners of such houses would naturally procure.

Though this style claims the privilege of mingling

barren rocks and noble dwellings, sea and land,

riches and poverty, yet its efforts succeed best,

when most correctly regulated by strict attention to

Nature.

The Hislorical style, seeks in superb magnificence

for objects congenial to its sentiments; the arched

roof, the long-drawn aisle, the pomp of pillars and

orders, or the monuments of superflitious veneration:

the painted window, the decorated frieze, the

enriched cornice, the elevated arch, and the

supporting buttres. But in composing architectural

ruins, let great attention be paid to their correctness,

that the parts remaining entire may correspond to

those thrown down. Let not the spectator be shocked

by Corinthian columns, or capitals, fallen from

Doric buildings; nor be suffered to enquire, to what

invisible fabric such or such a fragment belongs. On

this rock many Artists have split; nor is less fatal that

thoughtless inattention which places marble columns

on
on foundations of reeds, and represents a whole arch consisting of many stones as supported on one side only, and that by a single pillar.

Towns, seen at a distance, must obey the general laws of composition, and harmonize with their neighbours around them: if too well made-out, they can scarcely avoid coming too near the eye, and appearing hard; but this by no means justifies slovenly neglect of so much of them as is requisite to express their just character. It frequently happens that, seen from some proper station, Towns are among the most picturesque of objects; in such cases and especially if they include remarkable buildings, they often require all the attention an Artist can bestow on them.

Cities, are compositions so important, and distinct from all other, that they absolutely come under the principles of Views: unless they are correct, and authentic, they are gross and injurious deceptions. Even Poussin's ideal representations of ancient cities, being incapable of verification, have always appeared to me uncertain, and this uncertainty has impeded the satisfaction arising from viewing them. Doubtless the entrances of famous cities of old, might have been magnificent, and their aspects might have glittered with sumptuous edifices; nevertheless, it might be, that they, like cities of the present day, were a mixture of good and bad, of splendour and obscurity, of pride and poverty, of show and misery.
If times long since departed allow free scope to liberal exertions of fancy; and if in adverting to them, an Artist may laudably choose the better and leave the worse; an elevated style of treating them certainly ought to be preferred, as the most judicious: but, this liberty is withheld from representations of modern cities; views of London, of York, of Bristol, &c. must either be accurate, or be censured.

Of Views in General.

THE difficulty of Views in Cities, is, to select the proper objects for representation, and to give them only their just importance; so many, and so various, usually obtrude themselves, that some resolution is necessary, to decline those less connected with the principal of the piece, in order to do that full justice.

Views are confined to fidelity and resemblance: the portraits of places. An Artist, therefore, recurs to the happy application of scientific principles for that variety, and, that interest, which the objects themselves may not afford: but which, if Nature has bestowed on the subject of his picture, impart to his production an importance superior to every effort of creative imagination. Nevertheless fidelity does not always bind Artists to minute punctuality of resemblance; we do not expect in the trees that every branch should be precisely a portrait, though we will
will not allow a change in the kind of tree, or the substitution of an oak for an holly: nor do we expect that buildings should be so minute as an Architect ought to shew them, or that they should afford geometrical measurement; but it is, nevertheless, forbidden to place windows or doors where there are none, or to vary the heights of stories by departure from truth.

What licences a View requires, must be introduced with discretion; a very remarkable object must not be omitted, because the trees around conceal it, if it be of a nature that permits a little elevation, or if the trees may be a little thinned, or opened in that place. A canal may be represented somewhat broader than it really is, if it thereby form an agreeable object, and is otherwise in danger of being overlooked. Whatever may contribute to the expression of the piece, to the purpose intended by a view of that particular place, and to the ideas connected with that view, must be admitted: on this principle, that their admission is a less evil than their absence. Or, if the objects introduced are likely after a few years, to be more picturesque, better grouped, or in superior condition, an Artist will do well to look forward, and to give them advantages which their present appearance may not altogether justify. An Artist would be blameable who did not choose the most agreeable aspect of his object, in which it offers the greatest variety of forms, and is most picturesque: he may also choose to see it from the best station and distance,
and take every method of setting it off. Nor let him be sparing of accidents of light and shadow; as they are too numerous to be limited by rules, they become arbitrary, and no one will call him to account for a happy effect produced by their means: but I repeat, that this requires discretion, and should not be forced on the composition; the artifice must be so concealed, that the whole may appear extremely natural.

Sea Views come under the same principles as Landscape in general: character here must supply the place of that variety of objects and distances which Land Views afford; and as the objects are not so numerous, the truth and nature of what are introduced should make amends for their smaller numbers. The clouds should be kept rather lighter than in a Landscape; because, there is little opposition to be procured by objects around them, and they naturally include a very great proportion of the picture. The water should be touched with spirit; the lights on the risings of the waves distinctly and justly treated; and the free, unconstrained play of the liquid element be carefully expressed. The offscope requires great attention; and to impart an idea of interval and distance is very important, and, indeed, indispensable to happy success.

Views of remarkable objects, such as Monumentary Erections, Pillars, Tombs, Obelisks, &c. or Temples, Classical, Gothic, or Druidical; Crosses, &c. or Fountains, Boundaries, Fields of Battle,
Battle, &c. require not only veracity but a kind of punctuality, and explicitness, which may recommend them to general spectators. Even in ruins, if their history be known, it is advisable to introduce such indications of that history as may elucidate, and determine the subject, provided they be connected gracefully and without force on the composition.

A remark on the nature of smoke as connected with buildings, and cities, will close this branch of our subject. Smoke, in small quantities, as from a cottage chimney, seldom does more than imply that the house is inhabited, and the pot boiling; smoke in London, absolutely dims the atmosphere, and produces a brownness in the sky, which in winter is peculiar. I have thought the mantle of smoke over London ample beyond compare, but I learn, that some of our manufacturing towns, Liverpool, &c. have a still thicker, and darker, if not a more extensive covering. Smoke issuing from a chimney often takes very elegant forms, and moves in graceful bendings, till it becomes too much attenuated to be visible: yet when it issues in vast columns, as from some of the steam-engines, and other fire-machines, its density and compactness, render it heavy, ill shap'd, and almost motionless; it maintains its figure for, perhaps, half a mile together, and when the wind is not brisk enough to disperse it, it streams in a low long parallel to the horizon, indicating its insalubrious influence over all exposed to it. The shadow of smoke is extremely feeble, and ill defined; when the
fun shines on it, it is rather embrowned than gilded; when between the eye and the sun, it seems thinner than when otherwise viewed; when against a light sky, it seems darker than usual; when among dark objects, as deep green trees, it is apparently whitened. No doubt, also, the different qualities of the materials burned, vary its nature and colour. Smoke issuing from cannon, or from a lime-kiln, might be adduced in confirmation of this remark.

Of Figures.

FIGURES are of much greater importance in a Landscape than is commonly supposed; and many a Landscape otherwise pleasing, have I seen injured, if not spoilt, by the introduction of bad, or improper figures. I know not wherefore the figures should generally be made to the Landscape: in those instances which I have observed to the contrary, the picture has lost nothing by an inverse mode of procedure. The danger indeed lies on either side, left the composition instead of being simple, compact, and united, should be split into parts, equally blameable, whether Figures and Landscape, or Landscape and Figures. But, unhappily we often find, that figures are the last ingredient thought of, and rather filled to fill up a picture, than suited to it, and forming part of it. Many compositions, doubtless, require merely simple figures; whose employment
employment is of little consequence, or perhaps passengers, or figures walking, reposing, &c. and these may be suffered, occasionally; but to be content with these, is to flop far short of that perfection which is in our power, and of which this part of painting is capable: why should not figures be so adjusted, and predetermined, as suitably to fill up their places as parts of the same whole? Let not their difficulty be urged in excuse; a little thought, and some small trouble to study them, would banish those herald-like drawn figures, which disgrace the abilities of the Landscape painter. I would have them neither insipid, nor indifferent; let them contribute to raise an interest in the spectator, whether by relating some familiar history, or some distinguisihing and analogous incident.

In endeavouring to appropriate figures to a Landscape, it may be advantageous, to recollect those departments into which we divided this study; the Simple, the Varied, and the Exalted. It strikes us, at first sight, that the figures proper to each of these Styles would ill suit with the other: heroic personages in a cottage, would be ridiculous; pastoral occupations in a royal gaden, under a palace window, or beneath marble arcades, would surely be intolerable: as would a company of sailors, or fishermen, among cloud top'd mountains, or in flowery meadows.

Figures should be suitable, and allied, to the general scope of the picture: in the Simple Syle, they
they should be simple; rustic persons, and events, agree well with this Style, and often form its principal ornaments. They should be correctly chosen, according to the time of day, to the season of the year, to the nature of the site, and to the general habits, and customs of the parties. Poetry furnishes hints for figures of this description, because it has already drawn its ideas from Nature, and as it professes, like the imitative Arts, to divest its subjects of their gaudiness, and of whatever is mean, base, low, unfit, and unworthy, it coincides in these general principles with the Artist’s advantage. In fact, it can never be too positively insisted on, that rural, or common-life subjects, should be entirely divested of whatever is offensive to better-bred people than they exhibit. A company of gypies, though ragged, must not be nasty; and beggars themselves may exhibit poverty, and even distress, without the smallest hint at their too usual animalcula-companions. Figures in simple subjects, should exhibit one simple thought; the spectator should have no occasion to revert to a long previous story, in order to understand the incident related. I say, to a long previous story, for that a previous story may occasionally be hinted to advantage, is evident: a man returning with game, hints at his labours in their pursuit: a fisherman bringing home a basket of fish, accords well with a hut by the sea side, and affords room for relating the incidents of his capture, such as broken nets, &c., which are former and previous
vious occurrences: going to market, may express clearly the concern of children at losing their favourite chicken; returning from market, may display cash brought home, or the goods bought there. Why should not a labourer be traced in a set of pictures, from his birth, and boyish days, to his first attempts at cultivation, or business? his early embarrassments at the plough, or the hatchet, his subsequent successes, his mature age, his family, and his past-labour state, the incidents of seventy years, would furnish numerous subjects for the pencil, and exhibit a variety, of day and night, of storm and fair weather, of summer and winter, of youth and age, of profit and loss, of anxiety and satisfaction, which might be infinitely diversified to maintain interest, yet be very highly improved by their relative unity.

There are sufficient numbers of daily matter-of-fact occurrences, which, improved by dextrously dropping somewhat of grossness, and adding somewhat of sentiment, become very suitable, and entertaining on the canvas. Under this Style may be included, the numerous artisans in a great city, whose occupations furnish us accommodation,—why not also amusement? The cries of London we know to be various, and some of them have their characteristic beauties, such as they are, very strongly marked. Under judicious management, we have seen a "fruit-barrow" become interesting, not indeed so much from the seller, as from the buyers of the
the fruit; we have seen "flower girls," not without merit; and under the name of "Sir Joshua's Frolic" a strawberry girl is likely to descend to posterity. It must be owned artisan subjects require more intimate acquaintance with them, than may at first be thought, because, unless the various habits of these persons, and their adroitness in their occupations be well expressed, they are nothing: an awkward, or left-handed or clumsy, workman, is shocking: genius and attention must be combined; but that they can succeed, is evident, by the "Smith's Shop," and the "Iron Forge," which rank among our most deservedly popular productions.

Figures adapted to the Varied, or Ornamental Style, are infinite: because this Style admits a mixture of all kinds of incidents, and often of various incidents in the same composition; against which if well placed, and judiciously introduced, criticism has nothing to object. Even figures doing nothing, are not always useless, but contribute to the general embellishment of the scene; nevertheless, when one chief incident is related, and others kept subordinate, such management has undeniable merit. The extent of this Subject, prevents enlargement: it is impossible to determine rules for all occasions. Many figures are lively, too many are a mob; many occupations of figures amuse a spectator, too many distract him; too many are apt to speckle the ground they occupy, to violate harmony, and keeping, and to clash with each other by their multifarious, and discordant effects.
The Simple division of the Sublime Style, admits of few figures; commonly a single one is sufficient: but if it be the nature of the story related to exact more, they should all contribute to harmonious solemnity of effect. Tragic subjects are applicable: but tragedy is not at this moment extremely popular; and historical-pastoral requires very good management to preserve dignity.

The Historical Sublime Style of Landscape, requires a correspondently sublime style and management of figures. Historical events are of great use: these must be happily suited to the scene of the picture, the country, and the age, it represents. They must be fought in the stores of learning; yet should not be so recondite as to be unintelligible. A single allusion in some rare author, a fact hardly known in the usual course of historic reading, is a hazardous subject; it may be well received, as an instance of learning: it may be exclaimed against as pedantic. Ideal history has been much practised in this Style; but is full as likely to be unintelligible as the other. It is wonderful, some well-known subjects should be so little attended to as they are: Hannibal's passage of the Alps, has not yet been done justice to among us, though our Artists, in travelling to Italy, may acquire an accurate idea of the very spot. (The Cork-tree at Hannibal's Gap has, however, been exhibited). Cincinnatus at the Plough, might suit a champaign country, the funeral pile of Pompey's Body, might suit a sea shore;
shore; the Death of Cicero, might suit a cultivated scene; a rocky tea view, might include the Death of Egeus; and an open country that of Eschylus. Our own history, as a nation, furnishes many Landscape histories: for a forest scene, William Rufus slain; for rosalie bowers, fair Rosamond; for sieges of castles, we have plenty of incidents; and from the solemnity of religious houses, either their foundation, or their demolition, usually furnishes a history. After all, the Bible yields the noblest subjects: I have never seen the first Sacrifice (by Adam), the first birth (of Cain), the first Death of Abel), in Landscape; the Deluge, indeed, I have seen: Poussin's Deluge is noble; the finding of Moses is common; but accurate attention to the nature of the country where he was found, is not common: the Flight into Egypt is frequent, as is the Repose in Egypt, but many of these as Landscape subjects, are below criticism. These subjects are often painted as histories (usually for churches), but the Shipwreck of Paul, though as good a Landscape marine form as any other, is overlooked; the Whirlwind of Elijah in the mount, that which removed him from earth, are good Landscape incidents: the giving of the Law is tremendous; the story of Boaz and Ruth is charming, that of David and Abigail interesting; the Transfiguration is sublime, and, in short, with some intention to find and some invention to adapt, and execute them, these well-known occurrences add additional interest to the most interesting Landscape.
Great care must be taken to proportion figures to the Landscape; if they are too large, the weaken other parts of the piece; if too small, being always regarded as a kind of scale the Landscape becomes gigantic. It is less hurtful, to represent them small rather than large; but let them always be touched with vigour and spirit; placed where they may seem of most consequence, as well as most a propos; and be coloured with vivacity, but not so as to disturb the general union of the piece. Since figures, by their variety, their movement, and bustle, are naturally inspected with pleasure, it is not advisable to be sparing of them, under proper restriction, if the subject permit their introduction.

The Divisions of a Landscape.

A Landscape, as a picture, may be divided I apprehend, with propriety, into four parts; first, the Sky and its appendages; secondly, the Distances; thirdly, the Middle Distance, or Offscape; and fourthly, the Front of the picture. A few remarks on the different requisites of these divisions will, I hope, enable us to form a pretty just and applicable estimate of the treatment proper to each.

The Sky is that immense canopy, which, extended all around us, is perpetually within our notice, and constantly forms a part of that picture which
which Nature exhibits to our inspection. Being originally intended for this purpose, it is happily adapted by sobriety and moderation of colour, to be surveyed without pain; and without inditing the organs of sight. Had it been a glaring yellow, or a fiery red, we could not long have borne to inspect it; had it been a sombre brown, or melancholy black, farewell the cheerful mists of human life. This observation may be proved every day, since every day Nature suffers not the brilliancy of the more vivid colours to continue longer than necessary; and moderates the gloom of night by the tranquil radiations of innumerable stars. The most prevalent and constant colours in Nature may be denominated the *demi-tints*: not white, it is too powerful; not black, it is too mournful; but the delicate and simple blue; the lively, but not immodest green.

Though I am well aware that philosophy has, in many cases, an intimate connection with painting, and renders many services elsewhere fought in vain, I shall not here endeavour to account for the azure colour of the sky, I content myself with hinting at this connection of philosophy with art, and recommending becoming attention to it. We formerly hinted, and now repeat, that according to the various parts of the globe, the principles of Landscape require accommodation. This is too obvious to need enforcement.
In some latitudes, the article which at present engages our attention, (the sky) is blue throughout; and even at the horizon is little changed in its tint from what it is in the zenith: but in a climate so moist as that of our own country, the quantity of vapours which are constantly rising, falling, or floating, interposed between us and the horizon, has very sensible power and effect. They whiten the colour of the sky adjacent to the horizon; so that, at its apparent union with the circumference of the earth, it possesses a much greater share of white than of blue; and this effect is produced in proportion to the humidity of the air, or to the particular situation from whence we inspect it: on the contrary, the drier, purer, and less vaporated the air is, the more the sky retains its native blue.

But, beside that this gradation of blueness in the sky is a considerable object of attention to an Artist, the sky affords in the infinite variety of its Clouds—in their forms—and colours, very extensive scenes for observation. Sometimes, as it were, heavy laden, and scarce able to remain in the air, the Clouds, incumber the heavens, as if they were solid masses of vaporous condensations; their skirts appear hard against their neighbours around them, and they assume the approximating colour of a heavy grey. At other times they seem truly the fleecy clouds, wanton in every imaginary shape, and float in transparent thinness: as at other times, they speckle the heavens, and distribute themselves
in airy films throughout the celestial expanse. The motions too of clouds occasion a thousand compositions of one against others; and, as they float at different heights, and often pursue different courses, they introduce an infinite variety into the moving picture.

Nor less extensive is the range of variegated colours, which are reflected from every quarter by the wandering clouds: blues and greys in every commixture; reds, from a slight tinge to a threatening scarlet; sometimes a union of both, in a heavy purple; sometimes the most lively yellow, streaks their edges, and brilliant with resplendent gold, they reflect the vivacity of the heavenly orb with almost equal brightness.

We now consider the second division into which we distributed a Landscape:—its Distances. On this part of our subject, we notice the evident diminution of objects, in size and dimensions, as also in force and colour, their approximation of tints, to each other, by means of the air which discolours all, and which imparts a blueness to the extremes of distance. Parts most elevated, are more distinctly visible than those beneath, since the vapours which surround them are most abundant near the earth, and do not rise to great elevations: we observe too the indistinctness of their parts, the melting of intervals into each other, so as to lose the extent of separation between them; and the artifice of Nature by which we are enabled to perceive them. As the sky is the source of light, it has very great influence
on the distances; in many cases imparting its own light to them, and tinging them by reflection with its own colour. As the distances are usually in, or near, the centre of a picture, they should never be heavy, nor should they be dark, unless it be necessary to keep them down, and to moderate them, in order to assist the splendour of some more principal and favourite part of the composition, which is necessarily predominate, as being most interesting in its nature. Least of all, should they, by the hardness of their outlines, appear as if pasted on the picture, or, as if placed there by mischance; since if the distances do not seem to retire, in vain may the other parts of a picture be charming.

In advancing from the extremes of a prospect to the front from whence we survey it, we observe a considerable portion which is neither distance, nor front; neither indistinct, nor palpable; not confused, nor yet made out: under the term off-scape we shall bestow a few remarks on this medium-distance; which forms our third division.

In proportion to the nearness of objects to our view, they become more sensible and intelligible; we more readily distinguish their parts, and we better discern their combinations: it may therefore happen, in the nature of an Artist's composition, that it may be requisite to enrich this part with more than ordinary attention, while the front is kept abroad, and that decoration which it usually challenges is withheld from it. He may, without offence, conduct the eye to this part principally, and spread here
here his most captivating lights, his most harmonious and brilliant colours: he may adorn it with stately trees, whose groups would be impervious near at hand, and conduct the capacious river, whose streams would occupy too much space in front: he may here introduce objects, whose magnitude, if near, would be injurious, whose disposition, or whose parts, would be too choquant, or disagreeable; but let him ever remember, that Keeping must regulate the whole; nor let him, place his hares running and frisking, at a distance where oxen would appear but hares; much less distinguish his insects, place them on plants of which they are particularly fond, and shew the parts and members by which they are arranged in classes.

The front or fore-ground of a picture, generally affords most occasion for finishing, and particularity; for here a spectator may well expect to distinguish one kind of tree from another, and one kind of cattle from another; here may an Artist exhibit his skill, in the truth and facility of his pencil, in the lightness and appropriation of his touch: but let him keep it modest; no glare, nor unbecoming levity; no frivolity, nor embroidery; let him adjust part to part with discretion, and parts to the whole with prudence: always determinately preserving in front a breadth and majesty, which suffers no intrusion of slender streaks, or false lights, or favourite herbage; to distinguish which, objects of greater importance must be sacrificed.

Accident
ACCIDENTS OF LANDSCAPE.

I HAVE thought that the term ACCIDENT, has hitherto been taken in a sense too restricted, being generally applied to those diversity of lights and shadows, which are caused by flying clouds, or other non-permanent objects of a like kind, but I rather wish now to consider it as including effects which arise from non-permanent objects in general. To explain this idea, I say, the dawn of day is a transitory and fugitive picturesque effect, which may clear and brilliant, or grey and hazy, or cloudy and obscure: *e. g. it may accidentally be either one or other. Moreover, as the phenomena which Nature from time to time exhibits, may or may not happen, they seem to me to be properly classed among accidents: a shower, a storm, a rainbow, each has its peculiar effect, and each is attended by peculiar accompaniments: the seasons of the year, as they differ from each other, and impart to the same objects very different appearances, might, I apprehend, be included under this term, with great propriety.

Accidents of light and shadow, are usually caused by flying clouds, whose forms and density being reducible to no fixed principles, the effects they produce are varied beyond calculation: these effects Art seizes, and applies to her own purposes. As light
light is what sets off objects and shews them to advantage, it must be preserved and even embellished on whatever objects as are to be raised into peculiar notice; this can only be effected, by lowering, obscuring, or concealing parts around them, in such degrees that, instead of disputing with them in brilliancy, they shall rather contrast and heighten their effect. If we suppose our object thus distinguished to be on the front of the picture, the middle distance, and of course the further distance, is kept moderate, perhaps gloomy: if we suppose it removed further into the picture, then the foreground is moderated, and divested of whatever might intrude on the spectator's eye, and prejudice the object intended to be principal. Now, as the method of effecting this must be submitted to the Artist, prudence forbids him from employing any direct and predeterminate forms of shadow, unless they can be justified by probability at least, if not by veracity. The shadow of a building, if no building be near, would be a direct falsity; the shadow of a rock, unless such rock existed, would be the same. This principle is not confined to positive views: though the landscape be ideal, the nature of the site represented is equally subject to its power. If the scene be a wild heath, whence can originate the shadow of a house? if it be the flat sandy shore of a river, whence can the shadow of a rock originate? But the shadow of clouds, as being in nature of all forms are of no form, and clouds being
being thicker or thinner, their shadows are blacker, or paler, and variable to any degree of strength required by the artist. The effect of this principle is further augmented by the choice of objects, and is varied by placing those of a dark (or light) hue in the front, or further distant, where, combined with judicious accompaniments, they may best answer the artist's purpose.

It must be owned that perpetual recourse to this artifice is no proof of superior genius; for like all others, whenever it appears to be the result of contrivance, and art, not of nature and accident, it yields a spectator little pleasure; and this appearance it acquires by too frequent introduction. Some of the best landscape-painters have almost banished this artifice from their works, or have very rarely admitted it; and none are obliged to use it, who understand their art thoroughly.

It is impossible that language should accurately and adequately describe the effects of Nature: words are neither so determinate in their meaning, as to exclude the danger of being understood by different persons in different senses; neither are they so descriptive of colorific combinations, as to speak to the mind what at a glance is beheld by the eye. All that is possible to effect by precept is, to point out to the inspecteur of nature some of those more useful and striking particulars, an acquaintance with which may lead to the intelligent appropriation of others.

A description of Morning has ever been among the favourite themes of poetry; and many pretty Landscape quotations
quotations might be introduced on the subject; but
the reasoning we have adopted is conclusive against
their validity: ocular inspection alone is to be
trusted in the imitative arts. It may be sufficient
therefore, if we hint at the gradual conversion of
the darkness of night into a lesser degree of ob-
curity, by the first dawn of day in the east; which,
glimmering in the sky, after a manner enlightens
that, some time before it enables us to distinguish
objects on the earth: the clouds are first varied in
colour, from black to purple or grey, which often
is cold and heavy. As morning is usually ushered
in by a breeze, the clouds have correspondently
some motion among them, and are in some degree
thinned by it. If the sun rise without clouds, the
breeze is sensible, only, or principally, by an agita-
tion it occasions among the trees. As this breeze
decreases, morning assumes a stillness which has its
share of solemnity, augmented by the uncertain ill-
defined light and shadow of objects; the utter in-
distinctness of remote objects, and the all-envelop-
ing greyness of the scene. As the sun advances the
sky and the clouds become tinged with the most
glorious colours, reddish, purple, orange, yellow,
white, and these being reflected on the earth, the
enlightened parts of objects are slightly tinged with
correspondent colours, while the unenlightened parts
retain much of that greyish hue which the whole
but lately exhibited. At this time, the vapours de-
scended during night being exhaled by a small de-
gree of warmth, they begin to rise, first from pools
and stagnant waters, then from lower grounds, and vegetation, and these vapours confusing and blending all things where they prevail, and being of no decisive colour, they contribute to maintain the general greyness of the scene. These ultimately form clouds: I have seen them in the course of a couple of hours raised in the sky, and afterwards serving as a canopy from the sun, or descending in abundant showers on the earth, from whence they had recently arisen.

Morning advances to Noon, but I am not aware of any peculiarity which marks the hours, except the elevation of the sun: however, as the heat of the sun increases, the feelings of animals, and the occupations of mankind, denote the intensity of heat attendant on Noon: the general glow of the scenery, the breadth of light, imparting no longer a greynefs but a yellowishness to objects, the paucity of shade, the cleanness and sharpness of objects, every minutia being distinct, and the forms of their shadows, accurately correspondent, leaf for leaf, of a plant or a tree,—these seem to be expressive indications of Noon.

Evening partakes much of the principles of Morning: it changes the glare of mid-day into soberness and moderation; it is clearer than morning, for the vapours usually do not descend so soon (meaning relative to the angle of the solar station) as they rise in a morning, the warmth of the air maintaining them buoyant for a time. The same cause, I suppose, spreads somewhat more of an orange tint over the lights of objects, and renders it more sensible;
sensible; moreover, the air being replete with light, probably, prevents much of that blackness which accompanies early morning. Evening is not upon the whole so dim as Morning, at least until it advances pretty forward toward Night. As to the lengths of shadows, and their general appearances, they are entirely the same in both, and depend on other principles.

After all that can be said with intention to distinguish Evening and Morning (and these only are liable to be confounded, for Noon and Night distinguish themselves) Genius will find full exercise for its talent, in the application of those thoughts, occurrences, and accompaniments, which may be applied to determine the subject. Natural Philosophy may furnish some: we never see the star Venus to the right of the sun, (i. e. rising before him) in an evening: nor to the left of the sun, (i. e. setting after him) in a morning: to place this star therefore high in the heavens preceding the faint traces of the solar light, is a positive appendage of morning. The same principle applies to the moon; which, being always enlightened on that side next the sun, when new the crescent is illuminated on the right side, and is at no very great distance from the horizon: this must be Evening. The contrary is Morning; i. e. the crescent is illuminated on the left side. Animals may furnish some additional indications: the bat flies only in an evening, the cock is stirring early in the morning, but goes to roost soon in the evening; this is true of birds in general.
—Are not plants which have sustained the heat of the day less vigorous, and their leaves more flaccid in the evening, but firmer in the morning? Some plants close in the evening and open in the morning.

As to the occupations of mankind, they must be well studied, well marked, and well applied: under these circumstances they contribute much to express and determine the times of the day.

Since the principles of philosophy as well as observation, assure us of the truth of these remarks in respect to the appearances of the moon and of Venus, they should be attended to by engravers, &c. when treating such subjects; since in vain may a painter have introduced them as marks of time, if they are reversed in the prints engraved from his pictures, and distributed to the world.

Night is so determinately marked by nature, that rules or suggestions are in a manner superseded; without light objects are invisible, therefore light of some kind or other art must have; the brightest star-light that ever was, though highly delighting to the mind, and extremely beautiful to the eye, furnishes no light for the purposes of art; being universally spread and diffused, and offering no center or body of light, nor yielding sufficient light to be collected, and distributed to specific objects near the eye, this kind of night must be relinquished to astronomers. Moon-light is the study of landscape: and this is so strongly contrasted with any, and every, kind of day-light, and has such peculiar and appropriate beauties, that art studies it with pleasure.
The general cautions to be adopted in respect of moon-light are, to place the luminary well in the picture, to mark the time of her period carefully, and very carefully to proportion to that period the quantity of light she yields. It is not uncommon to see a crescent placed in mid-heaven, and almost emulating the sun in splendor; but what says Nature to this? The article of water-reflections by moon-light, which being highly pleasing, are frequently introduced, requires no little jealousy; they demand also great accuracy of gradation, tenderness, and distance. The general whiteness of the moon's light is proverbially silvery, and though shadows by moon-light are of necessity cool, care should prevent too-prevailing coldness. The size and colour of both sun and moon at the horizon, differs greatly from that of their meridian station: even their forms are altered by the vapours through which they are seen. It may be thought trivial, to remark, that the line of shadow of the half-moon, as having a constant reference to the ecliptic, varies with the seasons of the year.

The Seasons are, I think, properly reckoned among the Accidents of Landscape; and happily, they furnish much more distinguishing peculiarities than some we have mentioned. As the progress of Nature is more important, it is more strongly marked, and becomes of proportionate consequence in the studies of Art. The seasons differ in various climates, according to the peculiarities and temperature of the climate. Sir William Jones tells us of the six Indian
Indian Seasons, which he names: four Seasons are usually noted in Europe; three Seasons are all that are felt in Judea, or Egypt; and two Seasons only (the rainy and the fair) are discoverable in countries subject to the periodical rains. It is evident, that this diversity implies equal diversity in the appearances of natural objects. Where a sudden variation of wind exchanges in a few days, atmospheric humidity for sultry heat, Art has little opportunity for studying the beauties of Spring; but where the interval is considerable between winter frosts and summer suns, the observable gradations of change in trees and plants, in meadows and fields, is subject to the inspection, and representation of Art. Whoever has watched this gradation, has seen, the trees from seeming deadness shoot out numberless buds and buttons, variegating their yet leafless branches with a tint of reddish or of yellowish hue; which buds, expanding, shoot out yellow-green points increasing to leaves. Young plants, or parts of trees, &c. which are afterwards to become green, are usually, at first, very pale, and acquire their full colour only by time: so far then as these are concerned in suggesting the idea of Spring, a light yellow greenness becomes one characteristic of that season. That this has many shades is certain: the first greenness of a corn-field differs from that of many kinds of trees, as both trees and corn according to their kinds differ from each other: nevertheless, this tint of verdure is justly reckoned among the natural indications of Spring. I think I have observed a difference
ference in the seemingly more humid state of the atmosphere in Spring than in other Seasons, but this is somewhat equivocal, and not easily described. Natural History assists in denoting this Season, according to the animals which breed in it. While the proverb is just, "one Swallow makes no Summer," we are sure that to represent a number of swallows in Spring, must be premature; nevertheless, as many animals have young about this time, to introduce them contributes to mark this season. There is usually, also, in our country, a mildness in the sun's rays, which is highly pleasing; insomuch, that it is no sin against probability (as in Summer it would be) to represent animals of all sorts enjoying even his meridian beams. Spring is the parent of flowers; and highly favourable to profuse, though perhaps short-lived, vegetation. As to the employments of mankind, they are in Spring sufficiently numerous to afford ample choice; they therefore need not here to be particularized.

Summer is drier than Spring; in consequence, many vernal productions, of which water is the chief principle, are now decaying, while others of more exalted juice or firmer nature are ripening apace. In countries where the vine flourishes, the vintage is regarded as Autumn, and corn is said to be cut in Summer; but in England, we have no vintage, and corn is gathered in Autumn. Fruits belong to Summer. Summer has perfected those shady groves which were but forming in Spring; not that it has augmented the number of their leaves,
leaves, but it has increased their size, while advancing them to maturity: as this season closes, the augmented deep green of the trees hints at their approaching brownness: the corn, &c. as yet unripe, is verging from greenness to yellow; the insect tribes are multiplied; their food is abundant, and their enemies are active and numerous.

Philosophy instructs us, that the sun is low in the heavens in Winter; consequently, the ground shadows of objects are long, and extensive: in Summer, on the contrary, the sun is high in the heavens, and about noon especially, no long shadow is perceivable: this remark has its use, and is obvious to all. The contrary is observed of the moon.

In this climate, Nature has distinctly marked Autumn: there is a fervor, a glow, visible throughout the whole of its landscape scenery, which is too evident to need description; the groves, arrived at maturity, exhibit symptoms that their maturity is not permanent, but inclines to decay: their greenness becomes brown: the meadows seem parched, the corn, &c. ripened, claims now the fickle, and the joys of harvest accompany this season. As all kinds of grain, and other productions, do not become ripe together, Autumn has several parts, according to the order of such ripenings, and after they are mostly gathered, an interval of fine weather usually precedes Winter. As heat contributes to characterise Autumn, shade is desirable to all creatures capable of seeking it.

*Landscape.*

N

*Winter.*
Winter strips the trees of their leaves, and lays bare their branches, thereby favouring the studies of that Artist who wishes to examine the dissimilar directions of their members: for, as no two kinds of trees are alike in form, direction, and manner of shooting, now is a good time to know wherein they differ. This season is marked by severity, the atmosphere exhausts its heavy clouds in torrents of rain, and thick and long continued showers of snow; and the waters are consolidated into ice by frost. So far as regards Landscape, the atmosphere and its meteors are the chief objects of study, the darkness of the night, the haziness of the day, mists and fogs, hoar frost, &c. &c. are so many accompaniments of Winter. The sun's rays are less powerful than in the former Seasons: while the moon's radiance is much brighter than before.

The occupations of men and animals are, as much as may be, within doors; at least they seek shelter from surrounding inclemencies. As there is no possibility of studying these effects, unless by examination of Nature, and natural objects, it is vain to attempt their description, under the profession of accuracy; and it would be labour lost, to endeavour by rules to direct their application or introduction, because, after all that can possibly be said on the subject, that must be left to the genius and judgment of an Artist. Nature is so various, and the requisitions of Art are so indeterminate, and multiplied, that what may be highly advisable
adviseable in any one case, may be very injurious in another, unless accommodated with great dexterity.

Among the Accidents of Landscape, we ought, certainly, to reckon those phenomena which from time to time Nature offers to our inspection: such as the Rainbow, and its relatives, the Halo round the moon, the Iris, the White Circle, the Aurora Borealis, and other celestial lights. Why not also Eclipses?—also Fogs, Mists, and other exhalations? Objects of these kinds well introduced, are extremely pleasing, and are sure to embellish the picture wherein they appear. Mr. Wright of Derby has distinguished himself greatly in this respect; and it must be acknowledged, that the truth and nature of his imitations have added prodigiously to the value of his performances. I should like to see a competent idea of a volcano, near, and remote, (this Mr. W. has accomplished); of a hurricane in the West Indies, as distinct from an ordinary storm; of a Water-spout, accurately represented; of a Typhon (Tuffoon) in the Japanese seas; of the Samiel or Purple Hot Wind of Arabia; of the Whirlpool, called the Maelstrom, on the coast of Norway; and of many other curious phenomena, which introduced into correspondent and accurate landscapes, would impart a specific and singular character to the composition, and would furnish triumphs for the imitative arts. It is true, these are strictly subjects of Natural Philosophy, but as they are objects of vision, they are certainly objects of imitation; and where is the harm, if they at once interest,
interest, and instruct, the spectator? I cannot describe what I have never seen; the distant and foreign phenomena, therefore, I pass, with this expression of my wishes: but those which occur in our native land may engage a few words, by way of exciting the attention of Artists, and directing the choice of patrons of Art.

The Rainbow is never seen but when the sun shines on falling drops of rain; usually at some distance from the spectator, who must be situated at a suitable angle to view it. It is most lively, when the cloud which yields the rain, or one behind it, is very black; then, if the sun be brilliant, there is not only a Rainbow, but a secondary bow, or what is frequently called a water-gall; it is evident, that an opportunity of introducing the sun's light contrasted by deep dark clouds, furnishes a happy capability of a striking effect. Notwithstanding this advantage, the opportunity is seldom seized; and yet it is well known, that the Rainbow is no rarity, but in spring is frequent, and in summer is not uncommon. Observe, however, that at mid-summer, during some weeks, there can be no Rainbow at noon: the situation of the sun forbidding its visibility. But the Rainbow is not always generated, or attended by dark clouds; it often appears, when a dissolving cloud, passing, contributes to the cheerfulness of the sky, and then it forms only a partial bow; but whenever this splendid light occurs, it forms an interesting and sublime object.

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The Lunar Halo, in a sense, holds the place by night, of the Rainbow by day; this is usually brightest and most frequent in winter; partly, perhaps, because the moon is then most splendid, and partly because the clouds wherein it is formed are composed of principles best adapted to its production. This phenomena I have seen several nights successively; and why should it not attract attention, as well in Art, as in Nature?

The Lunar Iris is more rare: a sight of it is partly an instance of good fortune; it follows, that it is more difficult of study, but not that it is less interesting when represented.

The White Circle, or Wheel, is common enough in London; as its principles seem to be mists which occupy the lower regions of the air (whose greater or less elevation determine its size) or scarcely-formed clouds, it can hardly be rare wherever mists are frequent.

As the Aurora Borealis commonly attracts the notice of the gazing crowd, and sometimes produces effects surprisingly beautiful, it is somewhat wonderful that hitherto Art has neglected it: that it is best seen in a dark night is certain, but it is certain also, that sometimes in the dusk of the evening, and by moon-light, its coruscations are very vivid.

I do not know that I ever saw a picture representing an Eclipse of the Sun: yet as Eclipses happen at all times of the day, and at all times of the year, they become arbitrary, and certainly might vary a composition to advantage. There is a kind of
of sickliness, and paleness, of light during an Eclipse, which though not sufficient to alarm, or to attract, a casual spectator, yet is favourable to that Artist who could employ it advantageously: no doubt it would require a happy distribution of clouds, &c. to contribute to distinct expression, but this might be overcome by skilful and patient observation.

Fogs and Mists, I have seen attempted, and with more or less success; the best have, in my judgment, left room for improvement, while the worst have had something rather interesting than otherwise.

In regard to the principles of these Accidents, it is evident, that each has its own principles, and that all must be studied from nature: the general rules are, certainly, to attend to the seasons when such occurrences are most common; to the composition of the picture, so that distinctness and perspicuity may not suffer, nor an air of frivolity spoil the performance by introducing a gaudy effect; to the keeping necessary according to Art; and to the general variety, fidelity, and result of the whole.

Storms and Tempests, as well on land as on water, are among the favourite introductions of Landscape: they require a vivacity and animation which when well executed is extremely striking. A land-storm offers the rudiments of great effect;—in the darkness of its clouds, and the splendor of its lightning, and of the parts it illuminates. In representing lightning, care should be taken that its form and course be natural; if its consequences be
be introduced, (such as setting a place on fire) that they do not appear before the flash strikes the place ignited, and that the fire be not arrived at any great height while the flash continues visible; these errors are but too common: the first is an absurdity, the latter in moderation is a liberty, but immoderate is a falsity. Care should be taken to maintain an uniformity of general expression throughout the piece: the clouds must drive the same way: also the trees, and the waters, the smoke, linen exposed to the blast, draperies of figures, &c.

A Sea-Storm is tremendous indeed! though a violent wind may be dreadful on land, yet the danger is less than at sea: the mighty waves rolling and pitching the noblest vessels, covering them with foam, and almost hiding them from sight, is a spectacle more affecting than a Land-Storm offers.—There are many good representations of these subjects, and their usual ideas are not uncommon.

Storms may be divided into three periods of time: advancing, raging, abating:—the first becomes interesting by the obscuration of the light, and the progress of gloomy clouds, fraught with devastation: the contrast of the remaining light with increasing darkness is a source of much attraction. The general expecation of all intelligent beings, I had almost said of every individual existence (for both trees and plants await a coming storm, and certain kinds of plants absolutely close their leaves, and shut themselves up) at this period, rises into solemnity; and this solemnity is greatly augmented by
by the mistiness of the atmosphere, and the hazy indecision of objects, especially of those somewhat removed, and enveloped in the coming storm.

A storm while raging, requires dextrous management of light, a happy choice of objects, and much good thinking, to rouse and repay attention: for this subject having been long a favourite of the pencil, without some vigorous energy of sentiment, it will be said that one storm is but another repeated.

The abatement of a storm is interesting, inversely from its advancing; the light of day augments, and with it is augmented an opportunity for whatever piquancy the artist chooses: it is a very powerful agent on the spectator's mind, in the hand of a capable master. The effects of a storm, such as broken trees, plants overloaded with rain, inundations of water, &c. and, in Sea Views, shipwrecks, passengers saved with difficulty, half dead; the agitation of the waves not yet subsided, and numerous other circumstances, accompany and express this period.

Of the METHODS of STUDY.

This division of our subject relates to the observation of Nature, by those who wish an intimate acquaintance with her. An imitative art must have constant recourse to the subjects of imitation; but as these are too extensive, too cumbersome, and their effects too fleeting, to be brought by the artist into his closet, the artist is under a necessity of going out
out to them, and of treasuring up his observations made upon them for future service. It is true, that a well situated mansion possesses perpetual landscapes from its windows, and without venturing abroad, the effects of palling clouds, their forms, and motions, may be studied within doors; so may some effects of light, glancing on the objects around, but, beside that this scene is ever the same, and the objects are unvaried, we know that yet more striking effects, differently combined, more piquant, or more magnificent, may be seen elsewhere. All kinds of plants do not grow under the inspection of one window, or of one house; all kinds of sites do not compose the picture which appears from one situation; it is therefore necessary that an artist should visit other scenes, study other trees, plants, verdure and buildings, other water, other traffic, and their various accompaniments and compositions.

Painters usually denominate Studies, those sketches, copies, hints, or memoranda, which they gather from nature, whatever they be, Figures, Heads, Hands, Feet, Draperies, Animals, Mountains, Trees, Plants, Flowers, Fruits, or any other articles which they mean occasionally to introduce in their works: the use of these studies is, to refresh the memory in point of accurate representation, and to contribute that fidelity of which otherwise their imitations would be destitute. Nature is inexhaustible: an artist cannot study without discovering something new, perceiving something in a clearer light.
light than he ever did before, or fortifying his memory so that hereafter he should be able more correctly to represent that object.

Nothing is more advisable than order in study, and order in preserving studies after they are made; for it signifies little to have procured the finest original from Nature, if when wanted it is not to be found. On this subject many artists are extremely careless, but surely they are blameable in being so: since a similar occasion to that which now requires the study may return, and then their present labour must be repeated, perhaps under circumstances of less advantage.

It is evident that the component parts of a picture may each require distinct and careful study: the sky for instance;—in a morning—at noon—in the evening—at night: the distant, or horizontal, part of the sky,—the medium-distant—that over head;—the teint of the blue, in these parts, respectively, as more or less vaporated, and blended, or pure and distinct: the forms of clouds, their colours, the composition of one against others, their manner of moving, &c. &c. and the courses of lights breaking through them, or reflecting on them.

In studying trees, several of the same sort should be separately studied, and the general character of each be noted;—in its trunk—its branches—its foliage; in their sizes, and proportions, their colours, their bearings to each other, their lights and shadows; their general habits, and various states—young, or old—shooting their leaves, or dropping them.
them. These are distinct particulars in the same sort of tree; and in the same tree, at different periods.

Observe also, the several sorts of trees; their appearances as they grow together; how they relieve each other; how they differ from each other; how they appear against a light sky, against a dark body, against an earthen bank, against a brick wall, &c. &c. Observe the situations, soils, and exposures, which they naturally delight in, and note their most advantageous appearance in groups,—distant, or at hand, &c.

Observe, the several sorts of plants; near what trees they naturally grow; their proportions; that of their leaves, their manner of spreading their leaves, the seasons when they flourish, or when they decay; how their colours best agree with their neighbours, how they are varied by light, and whatever other particularities come within observation.

In studying rocks, observe their various strata, their order and appearance; the effects of light, darkening some parts, enlightening others; observe their forms, and how they compose with objects around them; observe the plants they yield, and if water be found among them, observe its appearance, its course, and its effect as combined with surrounding projections, recesses, &c.

Water is varied by reflections of the sky, and clouds, of objects on its banks, by the colour of the lands through which it passes, by the motion it derives from the wind, and from many other causes which agitate or diversify its surface; the transparency
rency of water, which differs according to circum-
fstances, and on which the light has great influence,
should be carefully regarded.

Buildings are infinitely various: observe their
colours, their lights and shadows, and the broad
effects of light which they occasionally present. Ob-
serve, their effect, when among trees of various
kinds, when on the level green, when against a sky,
and when among others of their own kind. Ob-
serve, the differences of thatch, tiles, slate, stone,
bricks, mortar, wood, clay, and every kind of mate-
rial.

Observe also, in general, the accompaniments of
these and other subjects: in a park, or an embel-
lished residence, there are many ornamental circum-
fstances, lodges, pillars, temples, perhaps,—or the
necessary appurtenances, styles, gates, &c. are better
in form and materials, or in better order than in
common fields. In common fields, the utensils ap-
pertaining to them require notice—ploughs, har-
rows, carts, &c. In towns, if a manufacture be
carried on, consider its nature, and whether it may
not be expressed; in villages, the same, or what-
ever is the usual employment of their inhabitants.
Cottages and huts have commonly some attendants
which denote the interest taken in them by their
owners; and these, with whatever else they furnish,
are very proper articles of remark and attention.

After being habituated to making these and simi-
lar reflections they will become perfectly easy, and
pleasant: there remains yet one difficulty, which is,
to select the noblest effects, and to prefer such only as are really preferable. To accomplish this is the office of Taste and Genius. Industry, however, may do much; the habit of noticing will be rewarded with the sight of many novel and beautiful effects, which escape common observation, these by degrees will direct and guide to a good choice: they will open the mind to circumstances calculated to interest and improve it, and this at least may be safely asserted,—if the habit of picturesque perception had no other reward than the spectacles of beauty which it beholds in Nature, where ignorance beholds nothing, that gratification alone were sufficient recompence for every trouble bestowed in acquiring it.

In making those designs which are called studies, different masters practice different methods; some carefully copy after Nature in the open fields, what pieces please them, without adding colours to their drawing. Others, absolutely paint what they want (so that at home they have merely to copy this original) sometimes on canvas, sometimes on strong paper, which, imbibing the colours, affords opportunity of putting colour upon colour. Both these modes require some little preparation, a box for colours, &c. and have the inconvenience of carrying these articles annexed to them; but for accuracy and permanent good effects none can exceed them. Certain painters lightly tint with water colours what subjects they design, to assist their memory, and certify their recollection; this mode is convenient, as all the materials may be carried in the
the pocket without incumbrance: while some there are, who trust entirely to memory, and after having studiously inspected the article they want, suppose they can carry it away with sufficient fidelity in their imagination.

It is not always that an artist can repeatedly inspect the subject he studies; but when he enjoys this advantage, he is blameable if his works are not distinguished by veracity. At any rate, the table-book for rapid hints, is not to be forgot; this, containing outlines of a subject, with notices, or marks of any kind, so they be but intelligible, for ascertaining the colours, &c. is of great use. There are many beautiful effects so transitory that they elude being copied: but if a sketch of them be made with a black-lead pencil, and just directions added, they may be reserved pretty faithfully for future service. To conclude these hints; an artist should accustom his eye to see beauties however fleeting, these his memory will retain, more or less: but his hand also should be ready to take advantage of such instances, and to treasure them up in a permanent form, for future recurrence: beside this, where leisure and circumstances permit more intimate acquaintance with, and more accurate imitation of, striking, and elegant objects, this should be esteemed a happiness, and improved to the utmost; such industry being the most immediate and certain source of veracity, and sure to contribute greatly to the interest, the excellence, and the value of subsequent performances.
ADVISER COURSE of PRACTICAL STUDY.

After proposing a course of Principles, to direct the studies of those who incline to this elegant art, what remains is, to direct the hand and eye in their application to Practice.

Where any subject is liable to intricacy, simplicity and ease are peculiarly desirable in its first principles: to attempt too many things at once, almost forbids success in any of them; whereas by regular divisions into parts, by attention to one part at one time, and that offered in the simplest form, a progressive and gradual improvement may enable the student to proceed with pleasure and advantage, till the whole is familiar, and level to his talents.

With this design, our first ten Plates offer those necessary outlines, which cannot be too frequently repeated: some persons will think it strange, that the Author should value himself as much on these seemingly rough ideas, as on any part of this work; but the fact is so; and competent judges will admit its justice. The branches, &c. which begin these plates, should be repeatedly copied with a pen (not a neat smooth pen, but a coarse, bold, one) or with a pencil, or with chalk, in order to acquire a freedom and command of hand, and a readiness in expressing the courses of lines, branches, objects, &c. and of perceiving their relative bearings to each other. It is also to be observed; that though
though one way of laying the strokes (or grain) of the chalk is undoubtedly most convenient, yet the strokes are in some of these examples laid back-handed, in order to accustom the learner to overcome that inconvenience when necessity admits of no other direction. As these sketches contain a great variety of subjects, whoever duly copies them can scarcely fail of acquiring somewhat of masterly freedom in handling the pen or the chalk.

The second series of Plates are simple and pleasing rural subjects; studies from Nature chiefly; and adapted to exhibit a combination of country objects.

Plates D, No. 11, and E, No. 12, are tinted to express the mode of drawing in Indian ink: copies from them, may either be left as the Plates are, or be further finished, by being lightly tinted in colours, over the Indian ink. The sky and distances which in the Plates are marked by lines, should be left in black lead pencil very lightly touched in; this is necessary to be attended to, because otherwise the outlines will appear hard instead of tender, and will advance instead of receding.

No. 13. The general scene of this Picture is greatly diversified by the introduction of the fir-trees, whose rising lines gracefully contrast the level lines which prevail throughout.

No. 14. A kind of hazy sunshine, somewhat of a gloom spreads over the whole piece, yet without materially depriving it of light in any part.
No. 15. An effect allied to that of morning; the scene extremely simple, enriched by the great tree, to much advantage.

No. 16. A much more early morning than the foregoing; and occupied accordingly, by hunters; the scene a wild heath.

No. 17, 18. Shooting. These Plates add very much to the variety of the collection; that they are faithful copies of English Nature, is evident at a glance.

No. 19, 20, 21, 22. Are scenes pretty much composed of water; which in these views is seen under very different aspects—as agitated by wind—in falling—by its natural course,—and by impediments—or quite still and quiet. The bold and free handling of the trees on the right-hand in the view of the Bridge deserves notice; as does the serenity of the morning effect of Snowdon, Plate I.

No. 22. This Plate has prodigious masses of rock, rising very high, and floods of sparkling water, issuing from them: these afford a brilliancy, and animation, which in fact stands in little need of other accompaniments to render it lively.

No. 24. This second Plate of Snowdon attempts to shew its "cloud capp'd brow:" the scene is wild, but varied by some vegetation, and the dim view of the mountain is highly characteristic.

No. 25. A scene composed wholly of trees: including a remarkable object, itself covered also with trees.

Landscape.
No. 26. *Ruins* are in general apt to occasion an idea of gloominess and desolation, but this picture is remarkably cheerful; the breadth of shadow which occupies the front ground, and the proximate part of the building, contributes greatly to that brilliancy of light which strikes on the central objects; and as the part which casts this shadow appears well entitled so to do, the eye takes no offence at that circumstance. The brilliancy of the center parts is further heightened, by a plantation in the offscope, which also *contrasts* them, as exhibiting the effects of modern taste and attention.

No. 27. A pleasing Landscape—including a View of a Gentleman's Seat: entirely occupied by objects which have been directed by the hand of elegance; the lawn here is smooth; the temple and the plantations are extremely picturesque.

The former subjects are all represented by common light, or day-light; it was therefore thought proper to include an instance or two of extraordinary light; and this the rather, because, perhaps, the principles of effect may in these be more open to inspection than in the former, especially as consisting in union of light to light and shade, to shade, thereby acquiring breadth.

No. 28. The haziness and mist in the Ice-field appears at the first glance entirely distinct from the coolness, and obscurity of Moon-light; and besides being interesting as a very remarkable object, this plate has the merit of being so far as I am able to judge, a faithful copy of Nature.
Moon-light best exhibits the effects of additional lights, when the chief luminary is beclouded, or when its brightness is diminished by that flight veil of haze which often accompanies the finest nights. The motion of those heavy clouds from which the moon is just liberated, and her peeping through a break in others somewhat lighter, is extremely natural: the relief of the objects enlightened by the secondary lights, and their reflections, deserves notice; as well as the occupations proper to the time, and to the scene.

Our last series of Plates is a selection of the most curious, or striking, or elegant objects, which could be procured.

No. 30. Of a very desolate appearance is the bleak barren top of Etna, whose fiery crater is strongly contrasted by abiding snows: the general blackness of its aspect, its waste, desart look, is in perfect unison to the remnants of a demolished building. As a very strong wind always reigns in these elevated regions, the artist has expressed it, by the driving of the columns of flame and smoke, by the agitation of the garments of the figures, and the difficulty they find to secure them; they seem also trembling with cold, while enjoying the view of very distant objects.

No. 31. Altogether different from any of the former is this view of the Peak; which though in itself barren enough, yet is rather solemn than gloomy; and by means of its accompaniments, which demonstrate the attention of taste, and the labours
labours of industry, it becomes interesting. It is not so desolate, or forfaken, as those we have passed, but amid all its sterility, has in its aspect a nearer relation to the "cheerful haunts of men."

No. 32, 33. Nothing can be more faithful than these two representations of Vesuvius; nor more singular than their fire-light effect. In Plate I. the height of the column of fire, and the cloud of smoke shooting its lightning, is tremendous; and the lesser pillars of smoke, rising as from so many immense furnaces, give the most lively idea of the devastation they occasion: while the divided currents of lava, in apparent progress to the cultivated plains, are altogether terrifying. The reflection of the fire in the water, and the manner of its relieving the castle, deserves attention. In the second Plate, the Lava issuing from the chasm, its glittering effect on the stones, and trees, and its inclining course, are extremely singular.

N. B. To see these two subjects accurately, the fire parts should be slightly tinted with vermillion.

No. 34. This piece has but one uniform effort; it is not contrasted by plantations, or other lively objects, but is merely an assemblage of diversified Ruins; in consequence, it possesses a solitariness, which might seem inconsistent with its nearness to the gate of a great city. The contrast arising from the forms of the arches, &c. in the wall, with the lines of the pyramid, should not be overlooked.

No. 35. Shews the effect of a round object; and is an instance of rich simplicity; the parts of
the whole being large, and, except under the gateway, solemn and undisturbed.

No. 36, 37. The effect of tall insulated objects: these pillars are among the noblest objects of antiquity remaining.

No. 38. A rich composition: there are in this piece neither figures, nor actions, to render it lively; but this quality it obtains, from the vivacity of its lights. If the number of lesser objects which appear in it, could have been diminished, perhaps, its general effect might have been kept more still, and tranquil, without injury.

No. 39. The Temple of Faunus: including ruins of an aqueduct.

No. 40. The Arch of Titus. This shews the nature of such objects when seen very near; its internal decoration exhibits the Triumph of Titus, and the spoils of Jerusalem; the sacred Candlestick, Table, &c.

No. 41. The Arch of Constantine, is an instance, that it is not always necessary to set a full strong light on an object to be shewn; where its parts are of a nature to admit of being shadowed, sometimes, a very pleasing effect may be gained by shewing them by reflected light; and generally, the variety it promotes when introduced in a series, renders this mode of conducting such objects free to choice on just occasions.

No. 42. This is the most difficult subject in the collection: whether we consider its general form (an oval) or its multiplicity of parts, or its condition,
as exhibiting part standing, part in ruins: the difficulty also of exhibiting the internal passages is not small; nor that of making the lights on objects so divided by arches and breaks. In fact, to combine distinctness of parts with generality of effect, always requires very diligent attention; but in such extensive subjects as this, it is truly an arduous undertaking.

The following Plates of Figures, are such as may with propriety be adopted in landscape: but this, always with a proviso, that no others would be more appropriate to the scene. English landscape should be enlivened by English figures, whose employments and manners are certainly most congenial to such representations: and other national, or local, figures, in like manner.
Further description of some of the most remarkable subjects; inserted for the better understanding of the representations given of them.

**PLATE XXIII.**

**VIEW of SNOWDON,**

*from the LAKE of LLEWHELLIN.*

The distance from the extremity of this lake to the highest peak of SNOWDON, is about two miles, in a direct line, and three times that distance when you are conducted by a guide, through difficult goat-tracks, and over prodigious rocks.—It has every appearance of having been formerly a volcano. The fissures and perpendicular craigs that present themselves on every part of it, confirm this opinion. The distance from the spot whence our view was taken to Caernarvon is about seven miles.

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**PLATE XXIV.**

**VIEW of SNOWDON,**

*from the Road leading to BEDDKELEERT.*

The spot from whence this view is taken, was at one time of the utmost consequence, as it commanded a pass, and prevented any irruption into the vale of Caernarvon.—SNOWDON, formerly called by the ancient Britons *Eyri,* was the subject of long among all the bards, during their times.

**EXTRACT**
EXTRACT from PENNANT's TOUR to SNOWDON.

The top of Snowdon, which by way of pre-eminence is styled Y WYDDEA or the Conspicuous, rises almost to a point, the mountain from hence seems propped by four vast buttresses; between which are four deep cwms, or hollows: each, excepting one, had one or more lakes, lodged in its distant bottom. The nearest was Ffynnon Las, or the Green Well, lying immediately below us. The waters of Ffynnon Las, from this height, appeared black and unfathomable, and the edges quite green. From thence is a succession of bottoms, surrounded by the most lofty and rugged hills, the greatest part of whose sides are quite mural, and form the most magnificent amphitheatre in nature. The Wyddfa is on one side; Crib y Diftill, with its serrated tops, on another; Crib Coch, a ridge of fiery redness, appears beneath the preceding; and opposite to it is the boundary called the Lliwedd. Another very singular support to this mountain is Y Clawdd Coch, rising into a sharp ridge, so narrow, as not to afford breadth even for a path.

The view from this exalted situation is unbounded. In a former tour, I saw from it the county of Chester, the high hills of Yorkshire, part of the north of England, Scotland, and Ireland: a plain view of the Isle of Man; and that of Anglesea lay extended like a map beneath us, with every rill visible. I took much pains to see this prospect to advantage; sat up at a farm on the west till about twelve, and walked up the whole way. The night was remarkably
ably fine and starry: towards morn, the stars faded away, and left a short interval of darkness which was soon dispersed by the dawn of day. The body of the sun appeared most distinct, with the rotundity of the moon, before it rose high enough to render its beams too brilliant for our sight. The sea which bounded the western part was gilt by its beams, first in slender streaks, at length it glowed with redness. The prospect was disclosed to us like the gradual drawing up of a curtain in a theatre. We saw more and more, till the heat became so powerful, as to attract the mists from the various lakes, which in a slight degree obscured the prospect. The shadow of the mountain was flung many miles, and shewed its bicapitated form; the Wyddfa making one, Crib y Difiill the other head. I counted this time between twenty and thirty lakes, either in this county, or Meirionyddshire. The day proved so excessively hot, that my journey cost me the skin of the lower part of my face, before I reached the resting-place, after the fatigue of the morning.

The reports of the height of this noted hill have been very differently given. A Mr. Chafwell, who was employed by Mr. Adams, in 1682, in a survey of Wales, measured it by instruments made by the direction of Mr. Flamstead; and afferts its height to have been twelve hundred and forty yards: but for the honour of our mountain, I am sorry to say, that I must give greater credit to the experiments made of late years, which have sunk it to one thousand one hundred and eighty-nine yards and one foot, reckoning from the quay at Caernarvon to the highest peak.

*Landscape.*

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PLATE
The ENTRANCE of the PEAKE, in DERBYSHIRE.

The Peake is a range of elevated hills in the county of Derby, which are reckoned among the highest in England: the rivers Dove and Derwent, rise in the Peake; and the whole district contains mines of lead, iron, antimony, and coal; also mill-stones, and grindstones. The air is sharp and cold, notwithstanding which, the vallies, among the hills, maintain numerous herds of black cattle, and sheep.

The immediate subject of our print, is, the entrance to a cave under the highest hill (or Peake) near Castleton: about six miles from Buxton, and nine miles from Chatsworth. Castleton derives its name from an old castle adjoining, on the top of the rock, to which there is but one ascent, and that so winding and intricate, that it is said to confume two miles in its course.

The opening into the cavern, is in form almost like a Gothic arch: about thirty feet in perpendicular height, and above twice that breadth at bottom. A dwelling, or two, adjacent, is occupied by cottagers, who, in great measure, subsift by the gratuities of those whom they conduct into the cavern: though indeed the cavern is also used by them as a rope-walk. Close by the rock runs a small stream, composed of two waters mingled together; one hot, the other cold; these are, in parts, so distinct, that a person may keep his fingers in one, and put his thumb into the other.

The Rock is in color, greyish; the trees seen in a line on its top, are part of a plantation.

The dimensions of the opening decrease quickly, on entering it; and, after crossing a stream of water, the roof gradually lowers, till a man cannot stand upright under it; passing here, by stooping, and having crossed another rivulet, the roof becomes more lofty. In proceeding, a third rivulet offers, to which the rock descends, almost to the surface, and here, usually, the examination terminates.

The vault, in several places, makes a noble appearance; and being chequered with variously coloured fossils, stones, &c. and of various fanciful forms, its beauty is admired by every spectator.

* * * This Cavern is known by a much grofter name.

PLATE XXX.
A considerable space of the interior part of Sicily is covered by mount Ætna, now called Gibello, an inflated mountain, the largest volcano in the world. It is about two miles in perpendicular height, and above one hundred miles in circumference at the base; some make it considerably more, but it has never been measured with accuracy. It is divided into three circles or zones, the largest and lowest of which is called Piemontese, "the foot of the mountain," and occupies a breadth of eighteen miles of rich cultivation: the second, Regione Sylvia, or Nemorosa, the "woody region," six miles: and the third, Regione deferta, Netta or Scopetra, the "barren region," also six miles, always covered with snow, but the lower part of it only in winter. Thus the whole ascent is about thirty miles. It appears at a distance like a vast regular tapering cone or sugar-loaf terminating in a point. The present crater of this immense volcano is a circle of about three miles and a half in circumference, as it was in the time of Pliny, iii. 8. It goes shelving down on each side, and forms a regular hollow, like a vast amphitheatre. Near the center of the crater is the great mouth of the volcano, whence issue volumes of smoke, and sometimes fire.

The appearance of the rising sun from the top of Ætna is esteemed one of the grandest objects in nature. The extent of the prospect is immense. Several smaller mountains of considerable bulk rise on the sides of Ætna, in different parts, and from some of these the great eruptions have burst forth, and not from the opening at the top.

The first ancient author who mentions an eruption of mount Ætna is Pindar. From the silence of Homer concerning it, it is supposed that either there had never been an eruption before his time, or at least not for many ages. The first eruption is said to have happened in the time of Pythagoras. From that time till the battle of Pharsalia were reckoned one hundred eruptions.

Q 2 ERUPTION
ERUPTION of MOUNT VESUVIUS.

No. XXXII. No. XXXIII.

On the 26th of October, 1751, a cleft was perceived a little below the summit of VESUVIUS, and a stream of ignited matter gushing from it like a river of flame; next day the appearance was quite tremendous, the inflamed torrent making a channel which impetuously continued its course among the fields, farms, and vineyards which lie betwixt the mountain and the sea. The channel which it has made is above 500 feet in breath, and the sediment left in it is of sulphureous substance, which dries into the hardnefs of a stone. It extended itself about five miles, and caused an incredible damage to the towns, villages, and houses thereabouts; there were felt several shocks of an earthquake in all the parts adjacent to the said mountain. The 10th of November, the top of the mountain seemed to be all in a flame, and there proceeded from it abundance of sulphureous matter—All the wells near it were dried up. In the valley of CASTAGNO, the sulphur and bitumen were heaped to the height of 27 feet.

*Copy verbatim of the inscription on the back of the original view of VESUVIUS, Plate I.*
Relation of the Course of the Lava, that issued from Mount Vesuvius, A. D. 1751. By Father D. J. Marca de la Torre. Correspondent of the Academy of Sciences.

The father relates, that he visited the mountain October 19, without perceiving the smallest signs of an approaching eruption; though in his ascent he repose himself on the very spot from whence eight days afterwards issued a torrent of lava.

On Saturday, October 23, in the evening, some shocks of an earthquake were felt at Naples, &c. accompanied by dreadful noises in the entrails of the mountain, which lasted several days. In the night of Monday 25th (or the morning of Tuesday 26th) issued from Vesuvius, about half a mile below its summit, eastward, in the Atrio del Cavallo, a fluid mass like melted metal; one stream of which, descending the side of the mountain, inclining toward the Torre del Greco, ran through a valley, towards Le Mauro, a piece of ground covered with wood belonging to the prince of Ottajano. On the 26th, at noon, it had run four miles, to the valley of Fluscio: being arrived at a part where the valley is above thirty yards wide, it ran fifty feet of ground in five minutes: it was here, in front, at this time, little above two feet high, of a thick consistence, covered with pumice stones (which generally fall to the bottom as the Lava advances) flints, earth, sand, parts of trees, and other adventitious substances.

When this Lava is obstructed in its course, it turns aside; meeting with trees, it surrounds them, rises against them, and turns away; these trees subsist for some time, without apparent damage, but, that part of the trunk which is surrounded, being reduced to charcoal, they fall, and float on the surface; till being thoroughly dried, they kindle, and are consumed. Care is generally taken to cut the trees in all places where it is supposed the torrent may pass: but when their trunks are left, the Lava sets them on fire; so that a flame is seen to issue, but not violently, from among the pumice-stones, and from other parts of its surface.

The Lava in running makes a continual noise. A person may go before it, at the distance of ten or twelve feet.

The Lava which was at one time only two feet and half
half high in front, and about 140 feet broad, by increase of matter from Vesuvius, became three and half, and then four feet high, and in 12 minutes ran above 100 feet of ground: then it became nearly seven feet high; having met with a space about 160 feet in breadth, it ran 100 feet in 16 minutes. About eight o'clock in the evening, having run half a mile since noon, it precipitated itself into the valley of Buonincontro, about 70 feet deep, and above 40 wide. It did not fall like water, but like a soft paste, detached in different pieces: nor did it make an excesive noise in its fall. Having filled the whole valley, it continued its course, advancing towards a small village, in the territory of Sta. Maria Salone; extending itself till near midnight, then contracting itself, and settling at the road leading to Poggio Marino. Its impetuosity was moderated by meeting here with a plain where it might extend its superficials; also, by the stones that had floated on its surface, falling continually from its anterior part, and rising some feet above its level, which greatly retarded its course; and as it cooled by degrees, its fluidity diminished, it became more con- sistent, and made slower progress. Where it stopped, the Lava was in front, 1600 feet wide; in height 9, 10, or 12 feet, according to the elevation of the ground. It formed in its whole course a hill of matter as high as the poplars growing on the spot. The principal stream detached several little rivulets.

The mountain continued to emit Lava from the opening for several days; with great quantities of very large black stones: these accessions, forced several parts of the almost settled Lava to advance by different courses, nor was the whole finally stopped till near the end of November. In the night a fulphureous kind of flame, of short duration, was visible on the surface of the Lava. When the Lava was about to advance, the heaps of stones which preceded it, began to fall, and the fire to appear underneath. Some of the torrents of this eruption were kindled, and flamed throughout their course; others did not flame, but resembled melted metal. Also, from openings in the Lava ran streams of matter upon the middle of the former half-cooled Lava. Oct. 29. It rained: which formed a kind of crusti over the Lava. Nov. 16. Vesuvius and the mountains around were entirely covered with snow, but the Lava was not thereby cooled, for parts of it were in motion till Nov. 20.

PLATE
PLATE XXXIV.

SEPULCHRAL PYRAMID OF CAIUS CESTIUS, AT ROME.

This pyramid is about one hundred feet high; by eighty-five at the base; faced entirely with marble, but internally being a mass of flints, lime, and sand, called Pozzolana. It has within it a chamber nearly thirty feet long, by twenty feet high, which doubtless contained the urn inclosing the ashes of Caius Cestius; this is coated with stucco; and was decorated with paintings of vases, arabesque ornaments, and single female figures about a foot high, one on each of the four sides of the room; and in each of the four angles of the ceiling, a Victory holding a crown and diadem. These are now nearly obliterated; and no wonder, when it is recollected that the inundations of the Tiber frequently fill this chamber with water and impurities.

On the face of this structure are two inscriptions: the upper and largest is thus:

C. CESTIVS. L. F. POB. EPVLO. PR. TR. PL.
VII. VIR. EPVLONVM.

Indicating that “Caius Cestius, was the son of Lucius, of the Poblilian tribe; he was pretor, tribune of the people, and one of the seven men who were Epulones.” These Epulones were persons appointed to feast the gods when their aid was required; at which time the public were at the expense of festivals called Letiifernia. A college consisting of seven of the most respectable Romans had the charge of preparing the viands, and conducting them to the temple as deputies of the citizens, doubtless also of terminating the repast as deputies of the gods. The lower inscription is in smaller letters:

OPVS ABSOLVTVM EX TESTAMENTO DIEBVS CCCXXX.
ARBITRATU
PONTI. P.F. CLA. MELAE HERDIS ET POTHI. L.

Informing us that this work was performed according to the will of the deceased, in three hundred and thirty days, by order of Pontius Mela, son of Publius, of the Claudian tribe, an heir, and of Pothus his freed-man.

Pope Alexander VII. having dug round the base, made the little door way, and did sundry reparations; as we learn by the lower inscription:

INSTAVRATVM. AN. DOMINI. MDCLXIII.
On the ancient Via Appia, not far beyond the church of St. Sebastian, rises a very large, round, tower, built of stones of enormous magnitude; this tower is the tomb of Cecilia Metella, daughter of Metellus, who was surnamed Creticus (the Cretan) because he had conquered the island of Crete (the same as is now called Candia, and subject to the Turks). Below the frieze, and on the body of the work, on that side of it next the Via Appia, is still legible the following inscription:

**CAECILIAE
Q. CRETICI F
METELLAE CRASSI.**

Informing us, that she was the wife of Crassus, who erected this monument to his deceased spouse. It was of two orders, or stages; the lower one square, and faced with large stones, of which it is now totally deprived; this served as a base to a second story, which was a round superstructure, faced also in a like manner, which yet remains. Within the edifice, is a chamber, destined, no doubt, as a sepulchre, to contain the ashes of the deceased; which were enclosed in an urn of white marble fluted: which urn was taken away during the pontificate of Paul III. and is now in the court of the Palazzo Farnese. The chamber itself is extremely plain: the roof decreases gradually, in form of a cone.

The singularity of this structure consists in the beauty of the workmanship, the imperceptibility of the joints between the stones, and in its being raised during the latter days of the republic, and by so rich a man as Crassus; who, doubtless, on this occasion employed the best artificers; so that it may be considered as a favourable specimen of the state of art at that time.

The walls are eighteen feet thick; externally composed (as was said) of large stones; internally, filled with layers of lime, small stones, mortar, &c. according to the manner called *opera incerta*. Had the ravages of time only, been employed against this sepulchre, it might have been in substantial preservation at this day; but during the barbarous ages it was used as a fortress; in consequence, it was likely to suffer both from those it protected, and those who attacked them. The walls seen on its top, the gate-way, and the distant structures, are remnants of such fortifications, which though not so old, by many ages, may probably perish before the original, whose beauty they disfigure.

This structure is commonly called by the inhabitants of the neighbourhood, *Capo di Boce* (Ox's Heads), on account of the number of heads of oxen which compose part of the enrichments of the festoons which adorn the frieze.
PLATE XXXVI.

TRAJAN'S COLUMN at ROME.

This column was erected to the memory of the emperor TRAJAN, by ADRIAN his successor, by the Senate, and people of Rome: it subtends till entire; and is near one hundred and twenty feet high, not including the pedestal whereon it stands. The pedestal was formerly covered by the ground of modern Rome (so much is it raised above the level of the ancient city) but from this incumbrance it was freed by pope SIXTUS V. One side of the pedestal has a door, which admits to a stair-case, hewn out of the blocks which form the column, having 185 steps, enlightened by 45 small windows, placed on different sides. This stair-case conducts to the top of the column; whereon anciently stood the statue of TRAJAN, of bronze gilt, holding in his hand a golden urn, wherein ADRIAN enclosed his ashes. But now his place is occupied by a statue of the same metal, representing ST. PETER, placed by SIXTUS V. A. D. 1589.

This pillar is striking by its masts, and materials, but infinitely more by the beauty of the bas-reliefs with which it is ornamented, from bottom to top, in a spiral line. On the pedestal, besides an inscription, are bas-reliefs, trophies, sundry figures of Victory, and a Fame blowing her trumpet. The spiral line of bas-reliefs, contains more than two thousand five hundred figures of men, besides animals, machines, &c. the whole treated with the utmost intelligence and art. They are as distinct, as such an assemblage can possibly be, and that the upper figures may not be left to the spectator below, they are larger than the lower ones; whereby they seem about the same size. The subjects of these representations are, the wars of the emperor against the Dacians, and they include most events of such a calamity, and the ravages of devastation in its various forms. They are valuable, for the information they afford us relating to the military dress; and customs of the Romans; the general habits of the Dacii, and the nature of their towns, &c. and being extremely well executed, they are in all respects worthy of being studied.

On the pedestal, besides an inscription, are bas-reliefs, trophies, sundry figures of Victory, and a Fame blowing her trumpet.

To conceive the true effect of this column, we must imagine it standing in the center of a vast square, surrounded by the most magnificent porticoes, basilicas, and temples; ornamented with statues of bronze gilt, as well pedefrían as equestrian; among the latter, that of TRAJAN himself. These buildings served for courts of law, and for worship; for the busy, and for the idle. Now their only remaining monument is this column; which indeed may justify the relations of history respecting the others, while it excites the most lively regret at the devastations of barbarous fury and savage manners, which, insensible to their magnificence, have levelled them in the dust.
PLATE XXXVII.

VIEW OF THE HISTORICAL COLUMN OF ANTONINUS, AT ROME.

As this and the former are the only specimens of the kind remaining (except one inclofed within the feraglio at Constantinople, and consequently not free to inspection) we have given a view of each: the better to exhibit their effect.

Titus Aurelius Fulvius Antoninus, surnamed Pius, was emperor of the Romans from A. D. 138 to A. D. 161. This pillar was erected to his memory by his successor Marcus Aurelius Antoninus, surnamed the Philosopher, who had married his daughter. The athes of Antoninus Pius were inclofed in the pillar; and his statue, of bronze gilt, was placed on its summit; whereby it is evident that this monument was at once honorary and sepulchral. This structure was an imitation of that erected to the honor of Trajan, A. D. 117. Whatever might be the reason, there were never many similar; probably their expence was excessive; nor was the difficulty small of procuring competent artists.

This column stands in the center of a considerable square, to which it gives name (Piazza della Colonna); is in height from its ground line to the gallery on the capital about 160 feet. On the summit stands the statue of St. Paul, bronze gilt, placed there by Sixtus V. A. D. 1589. The same Pope caused many repairs to be done to the column, which had suffered greatly by the injuries of time, and by the ravages of fires. The whole shaft of the column is ornamented by a spiral line, which divides it into so many compartments, and these are filled by historical figures relating to the wars and victories of Marcus Antoninus the Philosopher. This mode of decoration imparts peculiar richness to the column, which becomes further interesting from its allusion to historical events.

The base of this pillar is cased by Sixtus V.; the shaft is hollow, and has a stair-case, whereby to ascend to the gallery on the capital; it has forty windows for admission of light, and is composed of twenty-eight blocks of marble.

4
The TEMPLE of FORTUNA VIRILIS, and that of VESTA, at ROME.

This edifice is situated in a low, and formerly perhaps marshy, spot, near the river Tiber. The manner of its building, and its little elevation (though much greater originally than it now appears), seem to agree with the earlier times of Rome, before the immensity of magnificence was introduced and maintained by superfluous wealth. These considerations favor the general opinion that this temple was erected by Servius Tullus to Fortuna Virilis, i.e. to Manly Fortune: not that supposed goddes, whose favours were scattered, or withheld, at random, and who often distinguished the undeserving by her capricious liberality; but rather to a deity, or power, who exercised observant choice, and determinate judgment, in rewarding virtuous and active merit; Servius himself being raised from a low degree to regal dignity. Whether that chief was its erector or not, this temple is universally considered as among the most ancient structures in Rome.

The temple is quadrilateral, and surrounded by fluted columns of the Ionic order, which have ever been esteemed models of that part of architecture. They are of Tivoli stone, but the ornament of the building are of stucco; and being much defaced by time, have given no little trouble, not without confusion, to those who have studied their measurement. Not long since, the columns of the front and of the left side of the building were standing; and elevations of the front so ornamented have been published, and are preferred to us; by which it appears that, instead of descending to the entrance, as now, a flight of ten or a dozen steps formed an ascent to it; so greatly is the ground of modern Rome raised: and this is confirmed by remarking, that at present the very bases of the columns are not seen, much less the parts which support them. The frieze is decorated with boys holding fettoons; the cornice with the regular enrichments of the order, and lions heads in its upper member, or cyma.

Dionysius of Halicarnassus reports, that in this temple was a statue of gilt wood of Servius Tullus, which escaping damage, when every thing else within the temple was consumed by an accidental fire, afterwards received the highest honours. The festival of Fortuna Virilis was celebrated on the 1st of April, annually; the women, particularly, offered incense, made libations, and bathed themselves in baths near the temple, which Ovid mentions.

At present this building is used as a church by the Armenian communion, according to their ritual, being granted them by Pius IV. and is dedicated to St. Mary of Egypt: their dwelling is close adjoining.

On the left extremity of the print is seen the remains of some ancient erection, vulgarly called the House of Pilate; for what reason is not known, as probably Pilate, the procurator of Judea, had no house in Rome, being banished into Gaul, where he died.

On the right side of the print is seen, at a little distance, a circular temple of Vesta.

R 2 PLATE
PLATE XXXIX.

TEMPLE OF FAUNUS, &c. at ROME.

This plate contains three distinct objects, which may require separate notice, viz. (1) The Temple of Faunus, now St. Stephen the Round.—(2) Ruins of part of the Aqueduct of Nero.—(3) The Navicella, or Little Bark, which stands somewhat beyond the temple.

The church of St. Stephen the Round is generally supposed to have been dedicated to Faunus, god of woods and forests; but the antiquary Ficoroni thought it might pertain to Jupiter the Stranger; which opinion he adopted, on account of certain vows to the honour of that god, found engraved on stones; and because the camp of foreign troops was at no great distance. Pope Simplicius, A.D. 468, purified it, and dedicated it to the protomartyr Stephen.

This temple was among the most considerable circular edifices in ancient Rome, being about one hundred and twenty feet in circumference. The entrance is by a portico, supported by four columns of granite; within is a double range of large pillars, to the number of sixty, placed circularly, all of granite, except six fluted pillars which are of Parian marble. The construction of this edifice furnishes not only a centre, under a kind of dome, where stands the great altar, but also a colonnaded circular walk surrounding the centre.

The construction of the Aqueduct of Nero is not so clearly seen in this, as in some other points of view: it is however apparent, that two rows of arches, one over the other, rising about seventy-two feet high, carried the stream of water in a kind of hollow canal near the top: this canal emptied itself into a reservoir on mount Celius within the city; from whence water was distributed on mount Celius itself, the Palatine mount, the Aventine mount, and even beyond the Tiber.

The Navicella, or Antique Bark, is shown at a distance, a little varied from its true position, in order to include so curious an object. It gives to an adjoining church the name of Sta. Maria della Navicella. The prow represents the head of a wild boar; and the whole of its construction is considered as highly interesting. An exact model of it has been taken, and now stands in the vestibule which leads into the refectory of Greenwich Hospital.

Ficoroni conjectured it to be the vow of some foreign soldier, to which the proximity of the Cajira Peregrina seems to give support; but its real history is unknown.
PLATE XL.

ARCH of TITUS, at ROME.

At the extremity of the Campo Vaccino, at a small distance from the Coliseuim, built by Vespasian and Titus his son, is a triumphal arch erected by the senate in honour of the latter, who from his goodness and liberality was named the delight of mankind. The inscription is thus:

SENAIUS
POPVLVS QVE ROMANVS
DIVO TITO DIVI VESPASIANI F.
VESPAStANO AVGVSTO.

Its chief design appears to have been, to commemorate the conquest of Judea, and the destruction of Jerusalem; and it should seem to have been erected after the death of the prince it celebrates, whose reign was not long; as well by the title Divo (Divine) given to Titus, as by the subject of the vault under the center of the arch, which is the apotheosis of Titus. There is some reason to guess it might be finished by Trajan; at least, it is known that he erected a monument of some kind, to the memory of Titus.

Although this arch is smaller than others of the kind, and it has greatly suffered by the injuries of time, yet the workmanship appears to be excellent. It is of the Composite order, and is esteemed the best model of that order. On its frieze is represented, the course of the triumphant procension of Titus, including a figure of the river Jordan, with captives, and with animals designed to the sacrifice. On the sides of the arch, within, are two bas reliefs, one of which represents the Emperor riding in his triumphant chariot, drawn by four horses, and accompanied by his victors, &c. behind him is Victory, holding in her left hand a palm-branch, in her right hand a crown of laurel over his head. A figure representing the city of Rome, with a helmet and spear, conducts the horses; she is followed by magistrates, &c. bearing branches of laurel. The other bas relief, which is on the side we have chosen to represent in our print, exhibits the spoils of the temple of Jerusalem, among others, the golden candlestick with seven lights, the tables of the law, the ark of the covenant, the table of shew-bread, the jubilee trumpets, and some other things which by time are obliterated, to the great regret of the curious.

This structure, though now greatly damaged, yet is an undeniable evidence to the truth of the historic relations, which describe the dissolution of the Jewish state and government; and, by its being made the subject of eulogy in this monument, it confirms the account of the danger and magnitude of that conquest.

PLATE
ARCH of CONSTANTINE, at ROME.

Is among the most remarkable edifices of ancient Rome, now remaining as ornaments or curiosities in modern Rome. It is situated near the Flavian amphitheatre, commonly called the Coliseum.

After the famous victory of Constantine over Maxentius, A. D. 312, this arch was dedicated to the victor, by inscriptions in the central passage; on one side, FVNDATORI, QVIETIS; on the other, LIBERATORI, VTBIS. The inscription in the north front, which is represented in our print, is thus:

\[ \text{IMP. Cæs. Fl. Constantino; Maximo} \]

\[ \text{P. F. Avgusto. S. P. Q. R.} \]

\[ \text{QVOD. INSTINCTV. DIVINITATIS. MENTIS} \]

\[ \text{MAGNITVDINE. CVM. EXERCITVS. SVO} \]

\[ \text{TAM. DE. TYRANNO. QVAM. DE. OMNI. EVS} \]

\[ \text{FACTIONE. VNO. TEMPORI. IVSTIS.} \]

\[ \text{REM. PUBLICAM. VLTVS. EST. ARMIS} \]

\[ \text{ARCVM. TRIUMPHIS. INSIGNEM. DICAVIT.} \]

Under the architrave

\[ \text{V OT I S . X.} \]

\[ \text{Alfo} \]

\[ \text{V OT I S . XX.} \]

Elsewhere under the architrave

\[ \text{S I C . X.} \]

\[ \text{Alfo} \]

\[ \text{S I C . XX.} \]

This edifice is of the Corinthian order; divided into three arcades; the north and south fronts are adorned by four infaluted columns, with their accompaniments; their pedestals ornamented with bas reliefs of trophies, soldiers, and prisoners; over the center arch are also winged victories with trophies. These performances are of inferior execution, and correspond to the state of the arts in the time of Constantine, which was much below their former merit. The sculptures which enrich the upper parts are in a style far superior; and every way worthy that masterly hand which decorated Trajan’s pillar. It is therefore generally concluded, that the Roman senate, willing to render an early tribute to whichever of the combatants should defeat his rival, detached from an arch of Trajan which stood in his market place (Forum Traiani) such sculptures as might suit their new erection; among which are eight colossal statues on the entablature of the columns, and a variety of bas reliefs, representing actions, not of Constantine, but of Trajan.

This monument has suffered much from time, neglect, and robbery, which has purloined several heads, &c. from the figures.

PLATE
PLATE XLII.

FLAVIAN AMPHITHEATRE, called the COLISEUM at ROME.

An Amphitheatre was an edifice complete in its figure, which was round, or elliptical; it contained different ranges of seats, and was destitute of the purpose of accommodating spectators during public games, which were always represented in the central space surrounded by the building: this center was called the arena, because of the sand with which it was strewed. The games usually exhibited in amphitheatres were, combats with wild beasts, and gladiators; of which latter, the number produced, and occasionally killed, is almost incredible.

The Flavian Amphitheatre, which takes its name from its creator the Emperor Flavius Vespasian, was the most magnificent in Rome. Its solidity is astonishing; it has suffered little by age, and not so much as might be expected from the repeated fires to which it has been exposed. Gothic fury has been its greatest enemy; unless we except the barbarity of those who have granted, and those who have taken away, its materials, to employ them in the construction of other buildings.

It is almost all built of Tivoli stones, in very large blocks; it is in figure oval, and its walls are prodigiously high. Four grand stories having very large arcades and windows, form the exterior body of the building, whose circumference is upwards of sixteen hundred feet. The arches of the windows of the three lower stories are ornamented each with two columns: the lowest order being the Doric, the second the Ionic, the third the Corinthian; the fourth story has a very high wall pierced with windows, and is adorned with Corinthian pilasters. Between each of these four stories are grand cornices, which run all round the edifice, and contribute greatly to its beauty. The height of the whole is about an hundred and fifty feet; the internal circumference, i.e. around the arena, is about eight hundred.

Vespasian began this building, but it was finished by Titus, his son; after having expended ten millions of Roman crowns, and employed twelve thousand captive Jews in its construction. Titus was so well pleased with it, when complete, that he kept the feast of its dedication during one hundred days; and each day he exhibited a new spectacle. Twenty thousand wild beasts of different kinds perished in the combats. Domitian afterwards added some ornaments. To much cruelty, also, has it been witness, for many were the Christians which perished in it on the arena, especially under Diocletian, after they had completed his baths. Hence a chapel is now erected in it, and it is considered as consecrated by the blood of the martyrs.

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PRINCIPLES
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To be Drawn with a Pen.
To be Drawn with a Pen.
Principles of Landscape.

To be Drawn with a Pen
To be drawn with a Pen.
Lessons in Landscape.
Lessons in Landscape.
Lessons in Landscape.
Legions in Landscape.
Lessons in Landscape.
Lessons in landscape.
Lessons in Landscape.
Lessons in Landscape.
Landscape Plate X

Effect of Wind

Principles of Landscape.
RURAL SUBJECTS, N.° E.

View of the ROUND HAUGH: a remarkable hill on the Banks of the SWALE, in Yorkshire.
View of part of the Ruins of the Abbey of St. Agatha: near Eastby, Yorkshire.
View of Ask, near Richmond, Yorkshire, the seat of Sir Thomas Dundas, Bart.
VIEW of the ENTRANCE of the PEAK in DERBYSHIRE.
Distant View of Mount Vesuvius in Eruption. A.D. 1751.
View of the LAVA of MOUNT VESUVIUS in its Course. A.D. 1751.
VIEW of the SEPULCHRE of CECILIA METELLA
VIEW of TRAJAN'S COLUMN at ROME
View of the Historical Column of Antoninus at Rome
View of the Temple of Fortuna Virilis; and that of Vesta; in Rome.
View of the Sepulchral Pyramid of Caius Cestius at Rome.
View of the Temple of Faunus, and part of the Aqueducts of Nero, at Rome.
VIEW of the ARCH of TITUS at ROME
The Arch of Constantine.
View of the FLAVIAN AMPHITHEATRE, commonly called the COLISEUM, at ROME.
A COMPENDIUM OF COLORS, AND OTHER MATERIALS USED IN THE ARTS DEPENDANT ON DESIGN, WITH REMARKS ON THEIR NATURE AND USES: INCLUDING THE METHOD OF DRAWING IN CHALK, CRAYONS, &c. OF PAINTING IN WATER COLORS, CRAYONS, &c. OF ENGRAVING IN STROKES, CHALKS, MEZZOTINTO, AQUATINTA, &c. OF MODELLING, AND OF SCULPTURE, &c. &c.
perties were more satisfactory understood, or if better methods of managing them were discovered, which can only be the result of experiment. Moreover, we know, that foreign countries afford a variety of materials different from our own, which are used by the artists of those countries; it would be a desirable acquisition, as well to the study of natural history in general, as to the arts, if gentlemen who have opportunity, would inform themselves on such subjects; of their origin, their manner of treatment; and their mode of preparation for use; of their natures and their effects; and, if they could import samples for examination by our own artists, not only those artists, but, perhaps by some happy discovery, the nation, might become obliged to their laudable endeavours.

Our own kingdom and its dependencies afford a variety of substances which we now receive from foreigners: it would be well worth while to examine our native productions with reference to their further utility; not to mention the pleasure arising from investigation of every part of the works of nature. It is submitted to gentlemen, and to artists, who reside in various parts of the kingdom, that such intelligence of British productions might be very acceptable to artists in other parts of the kingdom, whose situation detains them from such knowledge: and in particular, it is submitted to artists, that, as the perfection of art is only to be attained by liberal communication of improvements which occur to individuals; by such generous behaviour, and by such only, can the arts attain that excellence which is the earnest desire of every genuine artist.

Such
Such information would be valuable to the public, since thereby many expensive materials might be superseded, by others equally serviceable, at a much less price; or improvements on those now disregarded, might render them objects of greater attention; whereby, not unfrequently, our manufactures, as well as the arts, might derive great advantage. In some degree, on this principle, a few articles not in general use are admitted into this collection; for, though their own services are but small, they may afford hints to aid the discovery of others more valuable; it has indeed been our endeavour, to insert chiefly those articles whose utility may be depended on; for it seems injudicious to burden this part of science, especially in a work like the present, with numerous recipes, even while we have endeavoured that nothing really worthy our reader's attention should be omitted.

The intent of this work is not to instruct masters, but learners; nor can much novelty be expected on the subject, though there are many original recipes; but let it come from what quarter it may, information is equally useful, and valuable, to the student.

To close these remarks:—it should be recollected, that some colors, &c. are dangerous to health, without due circumspection in preparation, and management; to guard against accidents from such is very desirable, and is sufficient to prove the utility of the present work, in which somewhat of their natures and effects are explained.
**The prices marked to many of the following articles, may serve as useful hints in purchasing Colors, &c. but must be taken with some liberty, according to the quality of the article, and of the state of the wholesale market, &c.**

**Those under a shilling per pound are marked cheap.**
A

COMPENDIUM

OF

COLORS, &c.

ACACIA: The flowers afford that bright yellow which bears washing in the Chinese silks, &c. and is used by them in painting on paper. The flowers are gathered before they are fully open, then put into a clean earthen vessel, and kept over a great heat (stirring them continually) till they become dryish and yellow. Then to half a pound of flowers, they add three spoonfuls of fair water, or just enough to hold them incorporated. This they boil, till the water has extracted the juice from the flowers; then strain it. To the liquor they add half an ounce of allum, and one ounce of calcined oyster-shell pulverised.

It is not impossible that Great Britain (or very probably some of its tropical dependencies) may produce a vegetable similar in its nature, or that may serve
serve the same purpose, at a small expense. The process to obtain its color, would most likely be much the same.

ANACARDIUM, or CASHREW-NUT: From the sweetish liquor contained in its shells, the Indians extract an oil, said to preserve wood from putrefaction, and to render black colors lasting.

ACHIOTE, called by the French Roucou, by the Dutch Orleane, is the flower, or seed, of a tree which grows chiefly in very hot countries. The grains of Achiote, are soaked in an earthen vessel, and repeatedly washed in warm waters, till they have discharged their vermillion colour, the sediment is formed into cakes, &c. which when pure is much valued. Some boil the grains to obtain a greater consistence of colour.

Some use it to compose CARMINE, but it gives too much of an orange cast. It is used to dye wax vermilion colour.

ALLUM, a mineral chrysalizable salt, of an austere taste; dissolves in cold water, but much better in boiling water. It is obtained abroad from sundry kinds of earth: in England from a whitish bluish kind of stone called Irish slate. It is a principal ingredient in dying and colouring. Its styptic astringent quality binds the finer parts of the colors together, and prevents their exhaling. Hence it preserves paper impregnated with a solution of it, from sinking when wrote upon.

ALLUM WATER is made by dissolving four ounces of allum, in a pint of boiling water: filtre it through brown paper.
Rock Allum, or Roche Allum, is prepared from pyritous stones, cut from quarries, and is distinguished from the common allum extracted from earth, &c.

Purified Allum, is prepared by dissolving it in hot rain water, and evaporating it, till it shoots again into chrystals.

Roman Allum, is of a red color, not superficially but throughout; by breaking it, it may be distinguished from counterfeits dyed red.

Price ad. per lb. Rock Allum 1s. per lb.

Aqua-Fortis, is a corrosive liquor, prepared from nitre and vitriol; it dissolves all metals except gold. It is made by distilling purified nitre, with calcined vitriol, or rectified oil of vitriol, in a strong heat: The vapour, which rises in blood-red fumes, is the Aqua-fortis.

If to the liquor thus procured, be added sea-salt, or sal-ammoniac one-fourth of its weight, it becomes Aqua-Regia, and ceases to dissolve silver, but will now dissolve gold.

The chief use of Aqua-fortis in the arts, is in facilitating the progress of Etching. Being poured of a proper strength on the copper-plate previously prepared, it corrodes the lines drawn through the ground, or varnish, on the copper. See Etching.

Aqua-fortis as sold in the shops, requires no very considerable addition of water, to decrease its strength; but smoking Spirit of Nitre, which is the strongest kind of Aqua-fortis, must be reduced to a proper strength for use, by the mixture of four times, or at least three times, its quantity of water.
The temperature of the weather, has a great effect on its operation.

*Price about 4s. 6d. per pound weight.*

**ARCHILL**, is a white moss, which grows on the rocks in the Archipelago, the Canary Islands, and Cape de Verd Islands; it is said by LINNÆUS, to be found on the western coast of England. Prepared Archill will yield a violet color to water, which stains marble deeply, and renders it more brittle.

LINNÆUS thinks many common mosses might yield colors; at least, the experiment on the most promising is worth making.

**ARSENIC**, native, is called ORPIMENT. It is of a yellow, or orange, color. Though always yellow, its color admits of different shades and mixtures, golden, reddish, or greenish.

*The fatal effects which may by accident arise from this substance, will justify our forbidding its admission into the collection of colors, of our young friends.*

**ASPHALTUM**, is a solid, brittle, black, inflammable, bituminous, substance, resembling pitch.

It is chiefly found swimming on the surface of the Lacus Asphaltites, or DeadSea, where anciently stood the cities of Sodom, &c. being thrown to the surface of the water, it there swims like other fat bodies, and gradually is condensed by the heat of the sun and its own salt. It burns with great vehemence, in which it resembles naphtha; but it is firmer in consistence. Genuine Asphaltum has no smell, is not acted on by water, by aqua-fortis, or by olive oil. It is a principal ingredient in etching ground: and is used in oil painting, but must not be too much trusted.
trusted to; it gives the appearance of age to pictures, &c. Price 6d. to 1s. per ounce.

Asphaltum is excellent in the shadows of flesh, draperies, fore-grounds, &c. and particularly in scumbling, but when used alone it is apt to turn black; it is therefore necessary to mix it with lake, or blue, or terra de Sienna, any of which colors mix well with it, and effectually prevent its changing. This color being now much in use, perhaps too much, we give the following receipt for making it.

Receipt for making Asphaltum.

Put two ounces of balsamo de capivi, into a peal, or pipkin, over a slow fire until it boils, then put in one ounce of asphaltum, and as much oil of turpentine as will make it liquid; care must be taken to prevent its taking fire. This receipt, with the method of using the asphaltum, was communicated by Mr. Mengs, and is used with success.

N. B. After glazing, it will be proper to put the picture in the sun, in order to hasten the drying of it.

Another Method of preparing Asphaltum.

Melt two ounces of oleo d'Abezzo, or Venice turpentine, over a slow fire in a glazed vessel, then add one ounce of asphaltum a little bruised; when melted, thin it properly with oil of turpentine.

N. B. When you add the turpentine, take it from the fire.

The best method of preparing asphaltum is to melt it over a slow fire in the clearest bal-
samo de capivi, observing it continually until it is quite melted: and never to use it before the picture is very dry, then rub the part which you design to glaze with a little of Mengs' varnish, which must also be dry before you attempt to glaze it; mix the *asphaltum* with a little oil of poppy, to prevent its being too sticky in glazing. This is the best method of preparing and using *asphaltum*, for which we are obliged to Mr. West.

AVIGNON-BERRY, called also *French-berry*, and *Yellow-berry*, is the fruit of a shrub, growing plentifully in the neighbourhood of Avignon, and elsewhere, in the south of France.

The berry is somewhat less than a pea; its color is green approaching to yellow; its taste is astringent. Dyers make a yellow of it. A tincture for wash colors is thus extracted:

Put a pound of berries to a gallon of water, with half an ounce of allum: boil them in a pewter, or earthen, vessel; filter them, and evaporate the fluid. Or more simply: into a small earthen teapot, or other convenient vehicle, put a small quantity of berries, pour on them boiling water, and let them stand by the fire side till the tincture is strong enough; add allum in proportion. When meant to be kept, some add a small quantity of spirits of wine. The tincture may be drawn very deep.

*Price 2d. per ounce.*

BICE, is a blue color, prepared from the *lapis armenus*, formerly brought from Armenia; but now from the silver mines of Germany.
It bears the best body of all bright blues, used in common; but is in its color the palest. It requires good grinding to prepare it for use, being inclined to be sandy, and should be well washed. It works indifferently well. Green Bice, is made by adding orpiment to the Blue Bice.

Price 1s. per ounce.

Bistre, is composed of the most glossy, and highly burned soot, finely pulverized, and sifted, then baked with a little gum water, and made into cakes. The best is prepared from the soot of dry beech wood, by grinding it with urine, or with water, into a smooth paste; then diluting it with more water: after the grosser sediment is settled, pour off the liquor, and let the finer particles, which are the bistre, sink to the bottom. The best is of a warm, deep, transparent brown, when moistened with water.

This color may be used in the same manner as Indian ink, and is warmer in its appearance.

Price 6d. to 1s. 6d. per lb.

B. L. A. C. K. S.

Blue Black, is the coal of burnt vegetables; the best is said to be procured from vine-stalks, and tendrils. Price 3d. to 1s. 6d. per ounce. Kept in the color-shops in bladders ground in oil, at 3d. each.

Lamp-black, originally perhaps the soot collected from lamps, is, generally, prepared by melting rosin, or pitch, in iron vessels; then setting it on fire under a proper receptacle for the smoke; which is the lamp-black. It is brought chiefly from Sweden.
Sweden and Norway, where it is frequently obtained from the refuse of the tree, left in preparing rosin, or pitch. It is the basis of the ink used by letter-press printers. The black takes fire very readily; the best method of extinguishing it, is by linen, hay, or straw, wetted; water alone will not succeed. This color is not much in request for oil pictures, as it requires forcing to make it dry.

**Ivory-black**, is made of ivory burnt, or charred, between two crucibles well luted; being thus rendered perfectly black, and in scales, it is ground and made into cakes, &c.

The goodness of *ivory-black*, may be known by the fulness of its color, free from any blue cast; and by its fineness. A little white sugar-candy prevents this color, when used in water (and others), from cracking.

It is used in painting in oil: but is commonly rejected from use in water, **Indian Ink** answering much better.

*Price 1s. 6d. per lb. Bladders 3d. each.*

**Horn-black**, is inferior to ivory-black; it is made of bones burnt.

**German, or Frankfort, Black**, is made of the lees of wine burnt, and washed: and afterwards ground in mills on purpose, with ivory, or with peach stones, burnt. It is a principal ingredient in the ink used by rolling-press printers. The French is superior to the German. To try its goodness, it is put into the mouth; if free from grit, and of a deep black, it is good.

**Earth**
Earth Black, is a kind of coal which well pulverised, is used in fresco.

Burnt paper, ground finely, is said to make a good black.

Peach stones burnt, make a very fine black of a bluish cast, much used in France. Cherry stones may be substituted.

Indian-ink is an admirable composition, not fluid like our writing inks, but solid like our mineral colors, though much lighter. It is made in all figures; but the most usual is rectangular, about a quarter of an inch thick. Sometimes the sticks are gilt with various devices.

To use this ink, there must be a little hollow marble (to be had at any color-shop) or other stone, with water in it, on which the stick of ink must be rubbed, till the water becomes of a sufficient blackness. A Dutch tile, or piece of ivory, or other neat substance, may serve as a substitute. It makes a very black shining ink; and though apt to sink when the paper is thin, yet it never runs or spreads; so that the lines drawn with it are always smooth, and evenly terminated, how large soever they be. It is of great use in designing, because its tone of color may be augmented or diminished at pleasure. It is imitated by mixing lamp-black, prepared from linseed oil (by hanging a large copper pan over the flame of a lamp to receive its smoke), with as much melted glue as is requisite to form it into cakes; these cakes, when dry, answer well enough in regard both to color, and to freedom and smoothness of working. Ivory black
black and other charcoal blacks, levigated very
fine, have the same effect with lamp-black.
It is not easy to distinguish the best Indian-ink
from the inferior; the usual manner is by rubbing
the stick on the back of the hand, or any other
place previously wetted; but, frequently the sticks
are coated with a fine sort, and the part within is
worthless. The makers generally scent the best
ink with the best musk.
In using Indian-ink it should always be remem-
bered, that a light color may be darkened by addi-
tional washing; but that which is too deep cannot
be lightened; the safest and best way is, to proceed
gradually from a weak tint, to a stronger, till the
various parts obtain the force intended.
*Price, per stick, from 6d. to 5s.*

**BLUES.**

**Bice. See Bice.**

**Blue Ashes, Cendres bleu,** corruptly *Sanders blue*; are used in water colors; some are very live-
ly: but in oil they become dull. They are found
among copper mines; water only is used in levigat-
ing them, to reduce them to a fine powder. This
blue ought to be used in works to be seen by candle
light (as scene painting) for though mixed with
much white, it retains its beauty.

There is nothing to be found in the shops under
this name but common *verditer,* or some species
of it.

**Blue, Prussian,** is a modern invention, conside-
really in use among painters, though inferior to
ultramarine
ultramarine blue. It was discovered by accident, about the beginning of this century. A chemist of Berlin, having successively thrown upon the ground several liquors from his laboratory, was surprised to see it suddenly stained with a most beautiful color. Recollecting the liquors he had thrown on each other, he made a similar mixture in a vessel, and produced the same color. He did not publish his process, but prepared and sold his blue, which was substituted for ultramarine. The account of it was first published in the Berlin Memoirs, 1710; but without a description of its process.

In a paper of Dr. Woodward's, communicated to the Royal Society, 1724, there is given a short way of making *Prussian Blue*, which was found to answer perfectly well; and occasioned several experiments, whereby was discovered the nature of the substances used in that preparation.

The method was this: Four ounces of bullock's blood dried, and four ounces of salt of tartar, prepared from four ounces of crude tartar, and as much nitre, were calcined together; two hours after which, a black spungy substance remained in the crucible; weighing four ounces; a solution of which, being made in boiling water, and afterwards filtered, left a remainder which, when dried, weighed nine drams. An ounce of English vitriol was dissolved in six ounces of rain water; and eight ounces of crude allum was also dissolved in two quarts of water: These, being mixed hot with the blood, became green; but on adding two, or three, ounces of spirit of salt, they became of a fine blue:
which subsided, and left the water clear: The product was an ounce of very fine color, fit for the palette.

Among the experiments made by mixing, in different manners, and proportions, the several liquors of which this color was prepared, all produced a blue; but in different degrees, some being deeper, others paler. In one experiment, the allum was wholly left out, and a very pale blue was produced; in another, the allum and vitriol were used in equal quantities; then the blue was extremely deep.

In all receipts given for making Prussian Blue, the liquors are ordered to be mixed together boiling hot, except the spirit of salt; and the color is most readily, and beautifully, made this way.

The method of making Prussian Blue in perfection, has been purchased as a very valuable secret. Its process is very extraordinary, and could scarce be derived a priori, from any reasoning about the nature of colors. It is allowed to be an excellent blue pigment in point of color; but its durability is justly suspected: It should not, therefore, be used in works of consequence.

The goodness of Prussian Blue must be distinguished by its brightness, deepness, and coolness.

Four different processes given for making the finest sort of Prussian Blue with quicklime, are given in the Hist. of the Acad. of Sciences at Paris, for the year 1756.

Process I. Take 3 lb. of ox's blood, dried and reduced into a kind of small scales, an equal quantity of
of quick-lime newly baked, 2lb. of red tartar; and 1lb. 8oz. of saltpetre; pulverise the whole grossly, and put it into a crucible, placed in the midst of a great furnace, and give it a gradual fire. After four hours, when the matter is reduced into a kind of paste which emits no more smoke, and is equally red, throw it by spoonfuls into two pails of boiling water; and, having filtrated the lixivium, mix it with a solution of 6lb. of allum, and 1lb. 8oz. of green vitriol. This operation will yield but 7oz. of \textit{fecula}; but its beauty will make sufficient amends for the small quantity, as it will surpass, in this respect, all \textit{Prussian Blues}, prepared by other methods. It has also as good an effect as the finest \textit{ultramarine}; and has, besides, the advantage of resisting the impression of the air.

Process II. Take 3lb. of dried ox's blood, an equal quantity of quick-lime, 2lb. of red tartar, and 2lb. of nitre; let them be calcined and lixiviated, as in the former process; pour the lixivium into a solution of 4lb. of allum, and 1lb. of green vitriol. This operation will yield more of the \textit{blue fecula} than the other, but the color will be less beautiful.

Process III. Take 3lb. of dried ox's blood, 4lb. 8oz. of quick-lime, 2lb. of red tartar, 1lb. 8oz. of saltpetre, proceed as before. This operation will produce a most beautiful \textit{blue}; but the quantity will be only about 8oz. and 4 drams.

Process IV. Take 3lb. of dried ox's blood, 6lb. of quick-lime, 2lb. of red tartar, and 1lb. 8oz. of nitre. Calcine and lixiviate as before; pour the warm lixivium into a solution of 4lb. of allum, and 1lb. of \textit{green}. 


green vitriol; the fecula precipitated in this way will be as beautiful as those of the first process, and the quantity nearly 26 ounces.

The price of that kept in the shops is from 8d. to 2s. per ounce. Bladders, ground in oil, 6d. each.

Indigo. Vide Indigo.

Verditer. Vide Verditer.

Ultramarine. Vide Ultramarine.

Blue, powder, or smalt: This is a troublesome color, not much in request. Price from 1s. 6d. to 12s. per ounce.

Blue, turnsol, is made of the seed of that plant, by boiling four ounces of turnsol in a pint and an half of water, in which lime has been slacked.

Mr. Boyle has given us the following method of making transparent blue, nearly equal to ultramarine. The principal ingredient is the cyanus, or blue corn-bottle-flower; which may easily be procured during the summer months.

This flower has two blues in it, a pale color in the large outer leaves; and a deeper blue, in the middle of the flower: these produce much the best color. This may be observed by rubbing the leaves, while fresh, on a piece of writing paper, so as to express the juice, which will yield an excellent color; that, by the experience of two or three years, has not been found to fade.

A sufficient quantity of these middle leaves being procured, let the juice be pressed from them; to which a little allum being added, will give a lasting transparent blue; scarcely inferior in brightness to ultramarine.
It is very probable, that if the chives of these flowers were cured in the same manner as saffron, they would produce a much greater body of color, from which a tincture might be drawn with more ease than when pressed fresh from the field.

Mr. Boyle also recommends another fine blue, produced from the blue leaves of rue, beaten in a stone mortar with a wooden pestle, and then put into water for fourteen days, or more, washing them every day, until they are rotten. These, beaten up at last, water and all, until they become a pulp, and then dried in the sun, will make a fine blue for shading.

Blue, transparent, for washing maps, &c.

Take half a pound of the best French verdigris, add six ounces of red argil: let them soak together about six and thirty hours, in about two quarts and a half of fair water: then boil them till the ingredients are dissolved, let the liquor settle and pour it off.

United with the tincture of Avignon-berry, it makes an excellent green, and will keep well; to secure which you may add a little spirits of wine.

It is necessary to caution our friends against moistening the pencil used in this color, with the tongue; or by any other means admitting the color into the mouth, as the verdigris is apt to occasion a disagreeable sickness.

Brazil-wood, is a South American production, variously denominated according to the places from whence it is brought; as from Fernambuc, Japan, St. Martha, &c.
The tree grows in dry, barren, places, or on rocks; is very thick and large, usually knotted, and crooked. The thickness of the tree is chiefly owing to a gross coat of bark, which when removed, reduces the trunk to less than half its former size. The flowers, which are of a fine red, exhale a very agreeable scent.

This wood is very heavy and dry; that of Fernambuc is the best. It should be chosen clean, close, sound, and free from bark.

From the best Brazil-wood, is procured a kind of carmine, by means of acids. A tincture is drawn from it thus:

Infuse a quarter of a pound of Brazil-wood (which may be bought in chips, or shavings) in about two quarts of water; when it boils, add nearly an ounce of rock alum powdered. Strain the liquor when of the strength desired. This may be evaporated to a very deep color: or, the wood once boiled, may yield a weaker tincture. It requires no great skill in using.

Red Ink, is made of it, by boiling a quarter of a pound of the raspings, in vinegar, wherein it has been infused two or three days; then, while hot, filtering it through paper, in an earthen cullender; then heat it again, and add half an ounce of gum arabic, and, when that is dissolved, of allum, and of white sugar, half an ounce each.

Acids turn a solution of Brazil-wood yellow, alkalies change it to purple; so that lemon juice, or spirits of vinegar, render it yellow; oil of tartar, violet.

Price of the raspings about 1s. per lb.
BRONZE PAINTING, is used to color plaster figures, &c. and is of two sorts: Yellow, which is merely the finest copper dust applied with varnish: and Red, which is a little red ochre well pulverised, added to the former. The work is dried as soon as bronzed.

B R O W N S.

Brown Ochre, is a cheap color. Vide Ochre.
Brown Pink. Vide Pink.
Cologne Earth. Vide Cologne Earth.
Spanish Brown, a coarse dull color, chiefly used by house-painters, but may be employed in some parts of landscapes, for variety, &c.
Spanish Liquorice, diluted with water, makes a brown color useful for variety among water colors.
Terra di Sienna, in its native state.
Terra di Sienna. Burnt.
Umber, in its native state.
Umber. Burnt.

BUCKTHORN BERRIES, furnish three kinds of colors. Being gathered green, dried, and steeped in water, a yellow; when ripe, a sap-green (vide sap-green;) when fully ripe, and ready to drop from the branches, a purple.

BOXES FOR COLORS, are of many various contrivances, according to the purposes of those who use them.

The general principles to be regarded in constructing Boxes, are, that all articles of a similar nature should be collected nearly together; colors in oil by themselves; colors in water by themselves, &c.
Boxes complete to hold a variety of colors, varnishes, &c. are sold from 2l. 2s. to 2l. 10s. each. Portable boxes are much cheaper, but are usually contrived by their proprietors.

CALCINATION, differs from mere burning, in that the latter leaves the substance burnt, of a black color, the former leaves it white. Calcination increases the weight of lead, which thereby becomes red (i. e. Minium) almost one-fourth.

CALQUING, is a term used where the back of any design is rubbed over, or coated with a fine powder, such as black lead, red chalk, &c. and the lines of the drawing by a point traced over them, are transferred to a paper laid beneath the back so coated. This operation is useful where an original is to be copied of the same size: care must be taken, that neither the original, or the copy, be moved, from their exact situation with respect to each other, during the operation; lest the parts transferred should be false.

Drawings intended to be made in red chalk, should be calqued by red chalk: not by black lead, as that has a greasiness which refuses to cut chalk properly; nor by black chalk, since the lines may then injure the drawing by their different color from the rest of it.

CALQUING, is likewise used to signify the taking an impression from a drawing in chalk, by passing it through a rolling-press, with a sheet of wet paper upon it. The use of this procedure is to transfer on the wet paper the powderly particles of the chalk used in drawing, and to fix those remaining in greater
greater security from their being rubbed, and smeared. The tone of the drawing is rather deepened than lightened by this operation; the copy on the paper will be an exact reverse of the original. Several drawings laid on each other, may be passed at once; but if they are passed more than one way, there is a hazard of their being moved and misplaced in their passage back.

Sometimes prints are calqued by dissolving part of their ink, by means of soap, and transferring it to a fresh ground; or, white paper, &c.

A drawing in water colors may be calqued by passing over the outlines with a good black-lead pencil, them warming the plate on which the ground is laid, so as hardly to melt the ground; and, laying the drawing on it, pass them through a rolling-press properly adjusted. This method succeeds very well for landscapes. Or, if a tracing be made with red chalk, ground with water only, the colors will, when passed through a rolling-press, be transferred to the ground on the plate.

CAMPEACHY-WOOD, is nearly related to Brazil, and by no means superior for its utility in the arts; but it furnishes a good purple.

CARMINE, is a bright, deep, rich, crimson color, bordering something on purple, used constantly in water colors, but very rarely in oil; because it will not mix kindly in oil, as well as because of its high price. It is a color which spends well. Carmine is the most valuable product of the cochineal mescal, it is a fecula, or sediment, of water wherein is steeped cochineal, &c. thus:

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To rain water, wherein thirty-six grains of chouan have been boiled three times, and strained, are added five drams of cochineal, and this likewise is boiled three times; then add eighteen grains of Achiotte, or roucou (if thought proper), and the same quantity of rock allum; this liquor is boiled once; then filtered through a linen cloth, and suffered to stand till it has deposited its sediment; which, when dried, is the carmine.

The additional ingredients are perhaps better omitted (and we believe at present generally are omitted), since carmine is nothing more than the coloring particles of cochineal dissolved in an alkaline lixivium, and precipitated by allum.

Some give the following process to obtain carmine from scarlet wool; Boil the wool in a strong ley of pot-ashes till it has lost its color; then filter off the ley, with which incorporate a sufficient quantity of allum, and filter the liquor: the carmine will remain in the filter.

An inferior kind of carmine is made of Brazilwood, by steeping one pound of raspings in white-wine vinegar, during three or four days, with some gold leaf beat fine in a mortar: boil the liquor about half an hour, and strain it through a coarse sieve, temper in another vessel eight ounces of allum, which add to the crimson liquor, stir them well together, the scum is the carmine.

An extempore carmine tincture is made by putting thirty, or forty, grains of cochineal bruised, into a gallipot, with as many drops of tartar ley as will just moisten it, then add as much fair water as you desire
desire the color to be deeper or fainter: it is now purple, but by adding a small quantity of alium very finely pulverized, or scraped, it will become crimson. Strain it, and use it speedily, for it will not keep.

Cochineal tincture is heightened in its color, by spirits of urine; is turned purple by saccharum saturni; and by quick-lime is rendered fading, though extremely beautiful.

In no commodity is a purchaser more likely to be imposed on than in carmine; its brightness of color and fineness as a powder, should be attended to.

Prices, 16, 20, 24, 28, to 32s. per ounce. None good under this price, some higher; up to two guineas per ounce.

CHARCOAL, is an artificial coal, or fuel; being wood half burnt, and then extinguished. It is an excellent material to sketch with in beginning a design, as it may be brushed out even by a feather. The softest kind is preferred, which is that made of the willow.

CHALKS, are very useful in the art of design, being usually put into the hands of beginners. We have white, red, and black chalks.

White chalk, of the best quality, is usually brought from Italy, which country does not possess our common chalk, but a distinct species. Italian chalk is in its texture more firm and compact, its touch is much smoother and neater than any other, consequently it may be used on smaller subjects. The same remark is just on the black chalk of Italy.
French white chalk, is soft, and adapted only for large subjects, as are all the chalks of France; its black chalk is only fit to be used where expedition admits of stumping. Considerable quantities of Spanish chalk are imported; which is in texture between the foregoing, but not very smooth.

Red chalk, is very much used in design; it is in general of a kind and moderate temper, and readily forms a grain. It is, however, very far from cleanly in its nature, and is apt to smear, and stain, whatever it touches; the precautions necessary to guard against this quality, in fact, contribute to its usefulness, since whoever having been habituated to red chalk can draw clean with it, is secure from injury by using other materials.

Red chalk is best used simply on white paper, but some shadow it with black chalk; or, stump in black chalk first, into the shades, and relieve with red.

Black and white chalks mutually assist each other, on a paper whose color serves for a demi-tint. The bad is quite worthless. Chalk to be good, should be free from grit, and not too hard. Price varies according to quality, from 6d. per ounce to 1s. 6d.

Cochineal, is a drug used by the dyers in dying red, especially crimson and scarlet; and, it is the basis of that excellent color carmine.

It is brought from the West Indies; and said to be produced by an insect which inhabits the leaves of certain plants of the opuntia kind.

The finer sort, which is gathered from trees planted and cultivated on purpose, and managed with great care, is called mestique; the other is named wild,
U'il, being found on uncultivated plants, and is very much inferior in beauty.

Some are of opinion there is yet another sort, which is not an insect, but the seed of a tree; of which Dampier speaks in his voyages.

In the state it is brought to us, Cochineal appears to be small bodies of irregular figures, but usually convex, ridged, and furrowed on one side. The color of the best is a purplish grey powdered with a kind of white dust.

COLOGNE EARTH, is of a deep brown color, is used in oil, but more in water colors.

It is a very singular substance, reckoned by the colormen not a little troublesome to manage. It has been, and still is by some accounted a genuine earth; but others say it contains a great proportion of vegetable matter. It does not form, like other earths, a regular, or entire, stratum where it is found, but is gathered in large flat separate masses, from among other strata.

It is moderately dry while in the earth, and of a texture soft and crumbling, when dried it becomes more compact, and united; it is very light, smooth, and easily reduced to pieces, adheres firmly to the tongue, and is very astringent, and austere, in its taste, resembling the taste of oak bark; from these criteria it seems to be the produce of wood, perhaps of oak, long buried in the earth.

It is principally procured from near Cologne, in Germany, (whence its name) but is found near Birmingham, and in Mendippe Hills, in Somersetshire, but not perfectly pure.

COPAI.
COPAL, is a shining transparent, citron-colored substance, in smell allied to that of frankincense, it melts easily. It is a production of New Spain, where it ooses from incisions made in the bark of a tree, much the same as wine is drawn from some trees, or, as many kinds of trees yield their sap, in the spring of the year, when cut.

Genuine COPAL is very rare; but in default of this, is brought from the West India islands, another kind, which is the only one to be procured from the druggists.

From this gum, as it is called, but improperly, is procured a varnish, which being digested in oil, is esteemed friendly to oil pictures, and is in request.

A proper quantity dissolved in linseed oil with nearly heat enough to boil, or discompose, the oil, is diluted with oil of turpentine, and forms a transparent varnish, which when slowly dried becomes very hard; so hard indeed, that, it is said, if the picture underneath it wants alterations, they may safely be inserted on the varnish, instead of first clearing the varnish from the picture. Price of the varnish, 1s. or upwards, for a vial of two ounces.

CRAYON, is a general name for all colored earths, or other substances, used in drawing, or painting dry, i. e. without oil, or water, &c.

CRAYON substances are either natural, or artificial; natural, when the material is of a proper color, and consistence, and admits of being cut into a convenient size and form; such are chalks, whose uses we have noticed, such are black lead, charcoal, &c. but, in general,
General, *crayons* are compositions of colored pigments previously reduced to powder, and re-composed into proper mixture and form.

The art of composing *crayons*, depends principally on the mixture of the component colors, and on the adaptation of the vehicle by which they are held incorporated. This is evident, if we consider, with respect to the brilliancy, or the truth, of the tone of color, that it depends on the admission of more, or less, of any certain pigment; and that all compound colors, by possessing too much of any one color which enters into their composition, may prove, when used, unfriendly to their neighbours.

That the vehicle is of importance, appears from the consideration that scarce any two earths are equally tenacious; whence it follows, that as some naturally of a loose texture are not without difficulty held by strong binders, others naturally compact, would be rendered, by such binders, almost stones; and, indeed, these are the prevailing faults among those usually offered for sale.

It is perhaps proper to remark, that, although soft *crayons* are preferable generally, yet *crayons* may be too soft, even for large works; and that for smaller works they may be never the worse if a little firmer; yet preserving the utmost distance from *hardness*.

Soft *crayons* may, however, be used in large performances; but those which are too hard to give their colors freely, or without wetting, are to be rejected, as totally useless.

For smaller works, *crayon pencils* have lately been composed; whose utility depends, like that of the
the former, on their temper; they have unquestionably an advantage in neatness, and a security from being broken by accidents. *Price about 1s. each.*

Many very different vehicles have been suggested to *bind* the colors which form *crayons*: oatmeal boiled thick, milk, ale-wort, gums, glues, &c. Without entering into the merit of their various pretensions, we believe that pale ale-wort, as a vehicle sufficiently strong to hold the tender pigments, which yet may be weakened to accommodate the firmest, has been most used. But, as this has some color, which is most sensible in the higher tints, others prefer spirits of wine, which has no color in any tint.

*Crayons* must be made in a great variety of tints, to supply readily what tone of color may be required; this variety is obtained by mixture with each other; hence it follows, that according to the judgment of the composer, their tints will vary.

Though we do not suppose that many of our readers will take the trouble to make sets of *crayons*, yet as it may happen that some acquaintance with the manner of proceeding for that purpose, may be of use occasionally, we shall offer some notices of the mode best esteemed.

Procure a large flexible pallet knife, a flat stone of a proper size, and a smaller, with which to grind the colors: also two or three large flat pieces of chalk, whose use is to absorb the moisture from the colors after they are ground (or from the *crayons*, after they are made): a piece of flat glass, which covering the colors, &c. will prevent them from drying too
too fast; while other parts of them are under operation, rolling into form, &c. Also proper vessels to hold spirits, water, or other liquids, as they may be wanted.

White chalk is so readily offered by nature, that it seems perfectly adapted, without receiving any labour, to be used as a crayon of the first order; but, as chalk is rarely so free from grit, or small stones, as might justify our placing any confidence in it, to purify and improve it is the province of art.

Purified chalk is whiting; and as whiting is extremely cheap, we consider this material as most convenient for our purpose: Yet as whiting may be capable of still further purity, we proceed to recommend the washing of it in the following manner;—Take a large vessel of water, put the whiting into it, and mix them well together; let this stand about half a minute, then pour off the top into another vessel, and throw the gritty sediment away; let what is prepared rest about a minute, and pour it off as before, which will purify the whiting, and render it free from all dirt and grittiness. When this is done, let the whiting settle, and pour the water from it; after which, lay it on the chalk to dry, and keep it for use, either for white crayons, or for the purpose of preparing tints with other colors, for, with this, all other tints may be safely prepared. If the student chooses to make crayons of whiting immediately after it is washed, it is not necessary to dry it on the chalk, for it may be mixed instantly with any other color; which will save considerable trouble.
trouble. All colors of a heavy, or gritty nature especially blue verditer, must be purified by washing after this method.

We observe that if crayons are too thin, i. e. if they have too much moisture in proportion to their quantity of color, they will dry too flat; if they are too thick, i. e. if they have too much color in proportion to their moisture, they will occasion a waste of color, by their adherence to the palette knife, &c. The general rule is, when the crayon is made, to lay it on the chalk, that its moisture may be absorbed to a proper degree; that degree is determined by the feel of the crayon in the hand; if it lose the greater part of its adhesive quality, and seem of a proper consistency, then it may be laid on the glass; which will not dry it so fast as the chalk would have done, but will allow time for rolling it into crayons. Otherwise the crayon when completely dry would be brittle, and full of cracks, which is a great inconvenience to the artist in using it.

We have now got a body of white crayon which will serve to lighten all others that are to be made; for, as we have already observed, crayons are compositions of different colors; now if to a portion of this body of white we add a portion of black, we shall compose a grey; if we add a deep blue, we shall compose a light blue; if a brown, we shall produce a brown so much lighter, as corresponds to the quantity of white which we have admitted into the mixture; upon this principle, varied according to the taste, the judgment, or the skill, of...
the composer, are all crayons made; and an endless variety of shades results from their different combinations.

The different compositions of colors must be cut into proper lengths, after they are prepared, in order to be rolled into pastils for use. Each crayon should be formed by being rolled in the left hand with the ball of the right, and be formed first cylindrical; then taper at each end. If the composition be too dry, dip the finger in water; if too wet, the composition must be laid on the chalk again, till more of its moisture is absorbed. The crayons should be rolled as quick as possible; and, when finished, must be laid upon the chalk again, to lose all remaining moisture. After the gradation of tints from one color are formed, the stone should be well scraped, and cleansed with water, before it is used for another color.

It is impossible to lay down rules for mingling of every tint necessary in composing a set of crayons, there being many accidental compositions, entirely dependant on fancy and opinion. The student should make it a rule to save the leavings of his colors, for of these he may form many various tints, which will occasionally be useful.

We suppose now, that we desire to make crayons of any color: In this case, we first prepare the simple color, grinding it with spirits of wine, till it be perfectly smooth, fine, and even; then, taking a proper quantity of it, we lay it on the chalk, till somewhat advanced toward dryness; then we roll it, and form it, and return it to the chalk to be finished.
by drying thoroughly. Of the color which remains ready ground we proceed to compose tints of various shades, by mixture with the purified chalk, or whiting, already mentioned,—as thus:

Take some of the simple color, and levigate it with spirits of wine, adding about one part of washed whiting to three parts of color, of which, when properly incorporated, make two parcels. The next gradation should be composed of two equal quantities of color and whiting, of which four crayons may be made. The third composition should have one fourth color, and three fourths whiting, of this make six crayons, which will be a good proportion with the rest. The last tint should be made of whiting very faintly tinged with color, of which make about eight crayons, which will compleat the above-mentioned proportion. As these compound tints are levigated, they are to be laid immediately on the chalk, that the moisture may be absorbed to the proper degree for their formation into crayons. If its consistency be right, the composition may then be laid upon the glass, which will prevent it from becoming too dry before it is convenient to form it into crayons.

Crayons when complete should be kept in a box by themselves, each suite of colors distinct, to prevent injury from its neighbours; in the order—from lightest to darkest; and, if numerous, the lighter ones separate from the darker of the same color,

Crayons should be pointed, if requisite, by drawing the knife from the point of the crayon upwards.
WHITE CRAYONS

Are made of the best tempered chalk, sawed into convenient lengths.

YELLOW CRAYONS

Should be divided into several degrees of color.
I. Mix flowers of sulphur, in due proportion to produce the color desired.
II. King's yellow makes a fine bright color—but, remember it is of a poisonous quality.
III. Naples yellow, in various tints.
IV. Reduce yellow ochre to powder by very fine grinding; mix with it, purified white chalk to your mind.
V. Yellow ochre simply, ground very fine.
VI. English pink, mixed with chalk, to form a proper gradation to the preceding color.
VII. English Pink, simply.
VIII. Dutch Pink.

It is easy to perceive from the foregoing specimen, that the principles on which crayons are composed, are, the heightening a certain color, by means of one somewhat lighter, and deepening the same color, by one somewhat darker; by gradating the colors according to their natural tones on a general scale; and by composing the requisite variety of tints, by reciprocal mixtures of the original pigments.

As the variations from any fixed scale of colors are infinite, and only to be regulated by the fancy or inclination of the composer; we shall content ourselves
ourselves with hinting at their general mixtures, and shall leave their gradations ad libitum.

**ORANGE CRAYONS.**

I. Yellow orpiment, mixed with vermilion.
II. Orpiment and red lead.
III. English pink, mixed with vermilion.
IV. English pink, with red lead, finely ground.
V. Dutch pink mixed with red lead.

**REDS.**

I. Red lead, finely ground; also varied by chalk.
II. Red ochre, used as chalk; also varied.
III. Vermillion, ground fine; also varied with chalk. The best vermilion is inclined to the carmine tint; nothing is required to prepare this color more than to mix it on the stone with soft water or spirits, after which it may be rolled into crayons. The different tints are produced by a mixture of the simple color with whiting, according to the proportions already given.
IV. Lake, finely ground; also varied with chalk. Lake is a color very apt to be hard; to prevent which, observe the following particulars:

Take about half the quantity of Lake intended for the crayons, and grind it very fine with spirits of wine; let it dry—then pulverize it, which is easily done if the lake be good; then take the other half, and grind it with spirits, after which mix it with the pulverized lake, and lay it out directly in crayons on the chalk. This color will not bear rolling.
The simple color being thus prepared, proceed with compound crayons, as directed before, and in the same degree of gradation as the carmine tints.

V. **Indian Red**, finely ground; also varied with chalk.

VI. **Carmine**, is so very dear that a small crayon of it costs five shillings. Carmine crayons are thus prepared: As their texture is inclinable to hardness, instead of grinding and rolling them, take a sufficient quantity of carmine, lay it upon the grinding-stone, mix it with a levigating knife with spirits of wine, till it becomes smooth and even. The chalk-stone being ready, lay the color upon it to absorb the spirit, but be careful that it is laid on in a proper shape for painting. It has its advantages; but for ordinary works, instead of it, may be used,

VII. **Rose pink**, simply, which indeed is not-durable; but it is much cheaper for ordinary uses.

**Purples.**

I. **Rose pink**, finely ground, mixed with *cendres bleu*; for ordinary use only, as it fades.

II. **Lake**, with blue *bice*, simply; and heightened by white, in several proportions.

III. **Lake**, with *Prussian blue*, simply, and in several proportions.

Now, as all purple colors are mixtures of red and blue, it is evident, that, by inserting a greater proportion of one than of the other, a variety is obtained, which inclines toward that color of which there is the greatest quantity, a red purple, or a blue purple,
is therefore easily produced, by admitting more of the color desired.

The same remark applies to greens, which being composed of yellow and blue, may incline more, or less, to either of those primitive colors.

**B L U E S.**

**I. Bice** is the lightest blue used, finely ground, simply; also heightened by white, in several proportions.

**II. Verditer,** simply; and heightened in various proportions. It is a color naturally gritty, and therefore it is necessary to wash it well. Its particles are so coarse as to require some binding matter to unite them, otherwise the crayons will never adhere together. To accomplish this, take a quantity sufficient to form two or three crayons, to which add a piece of slack Plaster of Paris about the size of a pea; mix these well together, and form the crayons upon the chalk. This blue is extremely brilliant, and of great use in heightening draperies, &c. The tints must be formed with whitening as directed in the former instances, and are highly serviceable for painting flesh, to produce those pearly tints so beautiful in crayon pictures. It is not necessary to mix the compounds with spirits, as clear water will be sufficient.

**III. Prussian blue,** simply; and heightened in several proportions. This color is very apt to bind, and is rendered soft with more difficulty than carmine and lake. The same method of preparation must be followed with this as is directed with respect to
to lake, only it is necessary to grind a larger quantity of the pure color, as it is chiefly used for painting draperies. The different tints may be made according to necessity, or to the fancy of the painter.

IV. **Indigo**, heightened in several proportions, and simply; mixed as Prussian Blue.

**B L A C K S.**

I. **Charcoal**; the softest is the best.

II. **Ivory Black**, ground very fine.

III. **Lamp Black**. It is the only black that can be used with safety, as all others are subject to mildew. Good **lamp-black** is scarce; for the process of making it, see **Blacks, Lamp Black**.

It is obvious that black heightened in several proportions with white, will make a grey; and this grey may be varied at pleasure, by admitting a little blue, brown, &c.

**B R O W N S.**

I. **Fuller’s Earth**, ground finely, in several proportions.

II. **Fuller’s Earth**, mixed with **Spanish Brown**, heightened.

III. **Spanish Brown**, simply.

IV. **Spanish Brown**, mixed with **Indian Red**, heightened variously.

V. **Cologne Earth**, is a fine dark brown. After six or eight of the simple crayons are prepared, several rich compound tints may be produced from it, by a mixture of carmine, in various degrees.
Black, carmine, and this color, mixed together, make useful tints for painting hair; several gradations may be produced from each of these by heightening, &c.

VI. Roman, or brown ochre is an excellent color, either simple, or compounded with carmine. Whiting tinged, in several degrees, with either of these, will prove very serviceable.

VII. Umber, may be treated in just the same manner, only it is necessary to levigate it with spirits of wine.

GREENS.

I. Verdigris, boiled in sharp vinegar, add to it while boiling, a little powdered tartar; evaporate the moisture, the color will then become solid; this dissolved, mix with white chalk, as required.

II. Verdigris, ground with vinegar and repeatedly washed.

III. Verdigris, prepared as above, mixed with Prussian blue in several proportions. These mixtures may be heightened as usual.

IV. Indigo, mixed with English pink.

V. Bice, mixed with Dutch pink, in several proportions.

VI. Rock indigo, mixed with flowers of sulphur; in several proportions.

VII. Indigo, mixed with Dutch pink, in several proportions.

OTHER COMPOUND COLORS.

Vermilion mixed with carmine.—This is a composition of great use, and tints made from this with whiting will be found very serviceable.

Carmine
Carmine and black is another good compound, of which five or six gradations should be made, some partaking more of the black, and others having the carmine most predominant, beside several tints with a mixture of whiting.

Vermilion and black is also a very useful compound, from which several different tints should be made.

Prussian blue and black is another good compound, and will be found of singular service in painting draperies.

By the combinations to be gathered from these hints, may be composed an inexhaustible variety of tints. It is seldom that an artist procures a complete set of crayons (price not less than three guineas) but selects what he chooses from among others, to form his collection, which is more or less numerous at pleasure.

When the set of crayons is completed according to the rules prescribed, they should be arranged in classes for the convenience of painting with them. Some thin drawers, divided into a number of partitions, is the most convenient method of disposing them properly. The crayons should be deposited according to their several gradations of lightness. The bottom of the partitions must be covered with bran, as a bed for the colors, because it not only preserves them clean, but prevents their breaking.

The box made use of, when the student paints, should be about a foot square, with nine partitions. In the upper corner, on the left hand, (supposing the box in the lap) let him place the black and grey crayons,
crayons, those being the most seldom used; in the second partition, the blues; in the third, the greens and browns; in the first partition on the left hand of the second row, the carmines, lakes, vermilions, and all deep reds; the yellows and orange in the middle; and the pearl tints next; as these last are of a very delicate nature, they must be kept very clean, that the gradations of color may be distinguished. In the lowest row, let the first partition contain a piece of fine linen rag to wipe the crayons with while they are using; the second, all the pure lake, and vermillion tints; and the other partition may contain those tints, which, from their complex nature, cannot be classed with any of the former.

PORT-CRAYON, is a convenient instrument for using chalks, &c. It is made of brass, steel, or silver; price, in brass, 6d.; in steel, from 1s. 6d. upwards.

DISTEMPER, is a mode of painting, wherein the vehicle used to compound and fit the colors for application, is size, white of eggs, or some similar gluten.

The best method of compounding colors in distemper, is, to mix the size in water, to a proper strength, then to grind the colors in part of it, putting each color separately in a proper pot, &c. Add a sufficient quantity of size to allow for the diminution of its strength by a subsequent addition of warm water, as wanted, either to grind the color, or in the working of it. The pots should be securely tied with bladders.
It is evident that distemper paintings will not abide the injuries of the weather; their utility is confined to internal decoration, and to spacious areas, where the eye may be deceived by the perspective, without coming sufficiently near to scrutinize the handling, &c.

The scenes at the theatres are painted in distemper.

To make Size for painting Scenes, and other Candle-light pieces.

Steep a quarter of a pound of the cuttings of white glove-leather in water for some time; then take them out, and boil them in three quarts of water till it is wasted to a pint, and strain it through a cloth into an earthen pan. When the size is cold, if it feels firm under your hand, it is sufficiently strong. You may prepare any colors with this size while it is warm, and it will take off the glare which would appear upon them by candle-light, if mixed with gum-water.

DRIERS, are used to those colors which when alone are long in drying: Those chiefly used, are drying oil, (vide oil) and oil, or spirits of turpentine; the latter from its clearness, is less likely to injure the lighter colors.

DUTCH PINK, is the coloring particles of the Avignon-berry, procured by reducing the berry to powder, and boiling it till the color is extracted.

Price 1d. per ounce, bladders 3d. each.

EGG-SHELL WHITE, is used in water colors, with success,
At is prepared by washing the shell very carefully, and peeling off the thin film on the inside, then grinding the shell to an impalpable powder with gum-water, or about a twentieth part of white sugar-candy. Some order it to be washed before the gum is added, by rectified spirit of wine.

This is said to be of great service as a white, and with the oyster-shell powders, will contribute to the security of colors with which they are incorporated.

**ENGLISH PINK**, is of the same nature as Dutch pink, being obtained from the same substance.

**ENGRAVING**, is an art of which we shall treat by itself; also of

**ETCHING**; and of

**ENCAUSTIC PAINTING**, by means of wax.

**FLAKE WHITE**, is lead corroded by the vinous acid. The purest and best is brought from Italy. It is very useful in oil, and varnish painting; because those vehicles prevent the access of the air so as to act upon the lead; for, it is to be observed, that however prepared, lead constantly retains a disposition to recover its natural color. Hence, in water colors, the air to which it is liable, injures it, as also does every ferruginous mixture. Water, impregnated with iron, will in time turn the white, with which it is used, into a dirty black: and will even hurt the lighter colors, into mixtures of which the white has been admitted.

To prevent this in part, some use distilled water; others, content themselves with grinding the white lead first in vinegar, till it becomes thoroughly black;
black; then washing it with water, till it returns to whiteness: and this they think will maintain its color.

It is a commodity very liable to be adulterated: What a person grinds himself, from the lumps in which it is brought over, he may best depend on.

Price 2d. per ounce, in bladders 6d. each.

FRUIT.—As many of the colors used in the arts are extracted from vegetables, it should seem by parity of reason that many might be procured from fruit: but all endeavours to this purpose have hitherto failed; for however bright the colors thus extracted may seem, they quickly fade. It is true, the juices of currants, mulberries, elder-berries, morello, and black cherries, may be dried, and if worked up again, they give nearly their first color, but it cannot be depended on, especially if exposed in the open air.

It might, nevertheless, be worth while to examine the juices of fruits natives of warmer climates, which require and receive most solar heat to bring them to perfection: since those juices which are naturally most exalted, are usually most durable, and best admit of extracting in tincture. The bright red fruit of the opuntia, or prickly pear, is said to furnish a durable red.

GALL STONES, are concretions of earthy matter, found in the gall-bladders or bile ducts, of beasts, especially of oxen.

When moistened with water, and treated as gamboge, gall stones yield a deep, and very warm yellow,
yellow, verging toward orange; which is serviceable on account of its brightness, and durability, and, especially, because it is a very applicable shade to other colors. It is of different degrees of goodness. *Price 1s. 6d. per dram.*

As the quantity of this substance is but small, not being generally found in the bodies of beasts, a substitute, more readily procured, and much cheaper, is thus obtained:

Boil a quart of the fresh bile of oxen, with a quarter of an ounce of gum-arabic, in a pewter vessel, suspended in water; evaporate the mixture to about an eighth, which remove into a cup, or basin, and let it become dry, collecting it into a mass as it hardens. This, if not equal to the natural concretion, is yet very useful where that cannot be had.

Or, the tincture from the Avignon-berry, may be drawn so deep as to serve for an occasional substitute.

GAMBOGE is a very useful color; its appearance in a lump, is of a fine orange color (the deeper the better) but when softened in water, and used, it is of a bright yellow. It requires no preparation, but may be bought at the chemist's, being sometimes used in medicine.

*Price 6d. or 8d. per ounce.*

GLAIR, or white of eggs, is sometimes used as a varnish for pictures. It is beat with a spoon to an unctuous consistence, till it rises in froth; then by standing all night, it becomes clarified into a good GLAIR, and to make it work freely, is mixed with a little brandy, and with a lump of sugar, to prevent its
cracking; which, however, it very imperfectly performs, so that it is apt to crack the colors of the picture it covers, and therefore should not be used to pictures of value.

GOLD SHELL, is used to write gold letters in mottos, &c. It is made by grinding very finely gold leaves, or gold-beater's fragments, with a little honey, and afterwards washing the honey from the gold by water. The gold thus procured, may be transferred by a little gum-water to the shells for use.

Another process is thus given:—Grind the finest leaf-gold with strong gum-water very fine, adding, as you grind it, more gum-water as you see necessary. When you have ground it as fine as you can, wash it in a large shell; then temper it with a little mercury-sublimate, bind it in the shell with a little dissolved gum, shake and spread it equally all over the shell, and use it with fair water only.

Price 6d. per shell.

GOLD-LEAF, is used by washing the part on which it is to be retained, exactly with gum-water, on which, while drying, must be laid the leaf of gold as evenly as possible, pressing it down close with cotton. To make the gold leaf take the colors wherewith it is to be shadowed, stroke it over with a weak liquor of ox-gall.

The proper shadows to the gold itself are gall-stone; or, a deep tincture from the Avignon berry.

In some manuscripts may be seen golden letters which rise above the surface of the vellum: To imitate them: beat up vermilion very strongly with the white of an egg, into a kind of paste; this paste
is fixed in its proper form on the vellum by gum-arabic, and secured by a strong pressure; on this figure wash some strong gum-water with a pencil, then lay on the gold leaf as before. When dry it will bear polishing, which is always performed with a dog's tooth. This manner of gilding has a good effect in coats of arms, &c.

It should be observed, that base gold, or gold leaf, will not answer when used in water, but will change color quickly. In varnish, it is said, to stand well enough.

*Price of gold leaf about 1s. 8d. per book.*

GUMS are very useful materials in the arts, whether we consider them, as in water colors, the vehicle of the application of colors; or as varnishes to secure oil pictures.

Those used in the arts, are in their nature greatly similar; and chiefly vary as they are more or less compact in texture.

**Gum-arabic**, is of a moderate and friendly temper, to bind and apply water-colors. *Price 2d. per ounce.*

**Gum-sandarac, price 2d. per ounce, and Gum-mastic, are yet stronger; the latter is used chiefly in making varnish for oil pictures. Price 6d. per ounce.*

There are other gums occasionally used by caprice, the softest of all is **Gum-tragacanth**.

**Graver**, is a steel instrument, useful to engrave on metals. It consists of four sides, the two which form the belly are polished very smooth; their declination is more, or less, angular; the point is formed
formed by the two inferior sides. When ground, the breadth of the end of the tool is termed its face.

Gravers should be made of the best steel; they are usually too hard as sold in the shops; the best way of tempering them, is, by infusing into them gradually a quantity of heat (which is readily done, by holding them on a red hot poker, or other heated body, &c.) till they change to a light straw color, or deeper, according to their previous hardness, then, dipping them in oil. The graver which yields to a file, is too soft, and worthless. If the point breaks often, it is too hard. Gravers are made of various forms, and more or less lozenge in shape, for various services.

For more of their management vide Engraving.

GREEN is very rarely a simple color; but is compounded of blue and yellow.

A mineral green is said to be brought from Hungary.

Verdigris, and Sap green, are the greens most used in water colors.

GROUND for Etching. The importance of this article to engravers is very considerable. There are several compositions which have been employed as grounds; (called varnish by some) as for instance:

Rembrandt's ground. Take half an ounce of asphaltum burnt, and gum-mastic the same quantity, one ounce of virgin wax; beat, or grind, the mastic and asphaltum very fine; melt the virgin wax, in a new earthen pot, over a gentle heat, add to it, when melted, the mastic and asphaltum, by degrees, stirring the mixture till they are thoroughly...
ly incorporated; when intimately compounded, pour the whole into clear water, and make it into a ball. In using this ground the plate must not be too hot, and the thinner it is laid the better.

Callot's Ground. Take a quarter of a pound of virgin wax, and half a quarter of a pound of asphaltum, the same quantity of mastic, one ounce of rosin, one ounce of shoe-maker's pitch, half an ounce of common pitch, half an ounce of varnish; melt the wax, and add the other ingredients gradually, as before, and, when incorporated, pour it into water.

If the quantity of mastic be greater, it renders the ground softer; which, if the quantity of mastic be less, will be proportionally harder.

Another ground is made thus; To a quarter of a pound of virgin wax, add, half a quarter of a pound of asphaltum, one ounce of amber, one ounce of mastic, grind the asphaltum and mastic very fine, melt, &c. as above.

Grounds have been composed, among other ingredients using nut-oil, &c. but these are obsolete. Some proportion the ingredients thus: virgin wax six ounces; mastic four ounces; asphaltum two ounces.

Ground is sold in balls, price 1s. or 2s. each. The French make very good ground.

Hortus Siccus is a name given to a collection of dried plants. As the manner of preserving specimens of this kind may occasionally prove very serviceable to artists; we shall transcribe the process from Dr. Hill:

Take
Take a plant in flower, with one of its bottom leaves on it, if it have any; bruise the stalk, if too rigid, or slit it if too thick; spread the leaves and flowers on paper, as nearly in their natural order as may be, cover them with more paper, on which place a sufficient weight. In a day, or two, or whenever perfectly flat, lay the plants on a bed of dry common sand; sift over them more dry sand, and let them lay three weeks, or a month. After they are perfectly dry, and hardened, they are placed in books by the following cement: Infuse for a considerable time before it is wanted, two ounces of camphor in three quarts of water, shake it from time to time: add, when the plants are ready, two ounces of carpenter's glue, and two ounces of isinglass, to a pint of water; let them stand a day or two, then boil the liquor, and strain it through a coarse cloth. Smear the backs of the plants with this cement when warmed; lay them on paper, and gently press them; then expose them to the air a few minutes, and finally lay them to dry under a small weight.

To preserve flowers perfectly; we are told, to gather them when not yet thoroughly open, in the middle of a dry day; put them into a good earthen vessel glazed within; fill the vessel up to the top with them; and when full, sprinkle them over with some good French wine, with a little salt in it; then set them by in a cellar, tying the mouth of the pot carefully down. After this, they may be taken out at pleasure, and on setting them in the sun, or within reach of the fire, they will open, and retain not only their color, but their smell.
Sir Robert Southwell has communicated a method of drying plants, by which most of them preserve their proper colors. Two plates of iron of a proper size, must be made so thick as to prevent bending, and must have a hole near each corner for the reception of a screw.

These prepared, lay in readiness several sheets of paper, gather the plants with their flowers, when quite perfect, in the middle of a dry day; lay them on one of the sheets of paper doubled in half, spreading out the leaves and petals nicely. If the stalk be thick, it must be pared or cut; lay several sheets of paper over and under the plant, then put the whole between the iron plates, screw them close, and put them into an oven after the bread is drawn, during two hours. After this, mix equal parts of aqua-fortis and brandy, and rub the flowers lightly over with this liquor; then lay them on fresh brown paper, and press them gently till the wet of these liquors is dried away. The plant thus prepared; put the quantity of a nutmeg of gum dragon, into a pint of fair water cold, and let it stand till dissolved; then with this liquor daub over the backsides of the leaves, lay them carefully down on white paper and press them lightly. Care must be taken, that the heat of the oven be not too great.

Another way of keeping both flowers and fruit the whole year, by the same author. Take salt-petre one pound; bole-armoniac, two pounds; clean common sand three pounds mix all well together, then gather fruit of any kind, that is not full ripe, with the stalk to each; put these one by one into a wide-mouthed
mouthed glass, laying them in good order; tie an oil-cloth over the top, carry the glass into a dry cellar, and set the whole upon a bed of this prepared matter four inches thick, in a box; fill up the remainder of the box with the same preparation, and let it be four inches thick over the top of the glass and round all its sides. Flowers, thus preserved, may be taken up after a whole year, as plump and fair as when buried.

**INDIAN RED**, is an earth of the ochre kind, of a fine compact texture, very heavy, and of a purplish deep red. It is said to be, while in the earth, of a deep blood color, and so hard as to resist a spade. It is of a rough dusky surface, and abounds in glittering particles, it adheres firmly to the tongue, is harsh to the touch, and stains the hands deeply. It is so strong a color in oil, that it overpowers those with which it is mixed, unless cautiously used.

*Price 1s. per ounce, bladders 3d. each.*

**INDIGO**, is the product of a plant cultivated in the hot countries of America, the West Indies, &c. It is procured by rotting the plants in water, by a subsequent fermentation, &c.; the very best is said to be brought by the Portuguese from Brazil.

It is the deepest of blues, and is a soft pleasant color, after it has been finely ground. In using indigo, try its tone first, lest it should prove stronger than is supposed. *Price 8d. to 1s. 6d. per ounce.*

**INK**, Indian, the best is brought from China, but the makers are such cheats, that it is not to be known whether good or bad, but by breaking.
It is sold in little square cakes, price from 6d. upwards to 5s.

**ISINGLASS**, is one of the purest animal glues, being the product of certain kinds of fish.

It is used in the arts much on the same principle as gums are used, *i.e.* as a proper vehicle, where-with occasionally to apply water colors; and being of great strength, it is of much service. It dissolves in brandy, or in spirits of wine, better than in boiling water.

**ISINGLASS size.**—To half an ounce of beaten isinglass add a pint and half of water, to be boiled until the isinglass is dissolved, and strained through a piece of fine linen while warm; Let it be divided into two equal parts; to one of them add an equal quantity of warm water, this keep in a vial for use, the other keep undiluted, that you may be furnished with a strong, as well as a weak, size.

**IVORY** furnishes the tablets used in miniature-painting.

To prepare them for receiving the colors, *i.e.* to take off the greasiness which injures their superfi-
cies, some only rub them with a fine piece of pu-
mice stone, or scrape them with a fine-edged knife; others wash them over with ox gall; and others, prefer as the best method, the rubbing them over with the juice (or a clove) of garlic. This last article has been kept as a secret.

**IVORY BLACK.** Vide **BLACKS**.

**KING's YELLOW**, is a very bright yellow, used sometimes in oil; it is a preparation of arsenic, *Price 1s. to 2s. per ounce.*

LACCA,
LACCA, stick-lac, improperly called gum lac, is a red, brittle, transparent substance, brought from Malabar, Bengal, and Pegu, used in painting, making varnishes, &c.

It is a kind of comb, such as bees, and other insects, make. On being broke, it appears divided into many little cells, of a uniform figure, containing little bodies, or other parts, of the insects that produced the lacca. These little bodies are of a beautiful red; and, when broken, make a powder as fine as cochineal. It is most probable they are the embryos of insects, or, perhaps, their skins.

To obtain the fine red lac used by painters, boil the stick-lac in water, filter the decoction, and evaporate the liquor to dryness over a gentle fire.

This being the first bright color obtained by this process from similar materials, has given the name of lacques, or lakes, to several pigments not otherwise related to it.

LAKE, is drawn from several flowers; a yellow lake from flowers of juniper, a red lake from the poppy, a blue lake from the iris, or violet, &c.

The tinctures of these flowers are extracted by digesting them several times in aqua vitæ, or by boiling them over a stove fire in a lixivium of pot ashes and allum.

An artificial lake, is made of Brazil-wood, boiled in a lixivium of the branches of the vine, adding a little cochineal, turmeric, calcined allum, and arsenic; it is incorporated with the bones of the cuttle-fish, pulverized, and made up into little cakes, and dried.
To render it very red, add the juice of lemon; to make it brown, add oil of tarrat.

Dove-colored, or columbine lake, is made with Brazil of Fernambuc, steeped in distilled vinegar for the space of a month, and mixed with allum incorporated in cuttle-fish bone.

Yellow lake, is made by the following process: Take a pound of turmeric-root in fine powder, three pints of water, and an ounce of salt of tartar; put them into a glazed earthen vessel, and boil them over a clear gentle fire, till the water appears highly impregnated. Filtre this liquor, and, gradually, add a strong solution of roch allum in water, till the yellow matter is precipitated; this, filtered again, will leave the yellow matter behind. It is washed repeatedly with fresh water, till pure. In this manner may lake be procured from any of the tinging substances that are of a strong texture, as madder, log-wood, &c. but it fails in the more tender species as the flowers of roses, violets, &c.

A yellow lake is also made from broom-flowers, thus: make a ley of pot-ashes and lime; in this, boil over a gentle fire, fresh broom-flowers till the ley has extracted all their color: then boil the ley in earthen vessels, adding as much allum as the liquor will dissolve; empty this liquor into a vessel of clean water, and the yellow color will fall to the bottom. Let all settle, and decant it; wash the powder till the salts of the ley are washed off; then separate the yellow matter, and dry it in the shade.
Red Lake is at present seldom prepared from any other substance than scarlet rags, cochineal, or Brazil-wood. The best of what is commonly sold, is made of the color extracted from scarlet rags, and deposited on the cuttle-fish bone; it is prepared thus:

Dissolve a pound of the best pearl-ashes in two quarts of water, and filter the liquor; add to this solution two more quarts of water and a pound of clean scarlet shreds; boil them in a pewter boiler, till the shreds have lost their color; take out the shreds, press them, and put the colored water yielded by them to the other: in the same solution boil another pound of shreds; and likewise a third, and fourth pound. While this is doing, dissolve a pound and a half of cuttle-fish bone in a pound of strong aqua-fortis, in a glass receiver; adding more bone, if it produces any ebullition in the aqua-fortis. Pour this strained solution gradually into the other. The crimson sediment deposited by the liquor is the Lake: pour off the water, and stir the lake in two gallons of hard spring water, and mix the sediment in two gallons of fresh water; repeated four or five times. If no hard water can be procured, or the lake appears too purple, half an ounce of allum should be added to each quantity of water, before it is used. Having freed the lake from the salts, drain off the water through a filter, covered with a worn linen cloth. When it has been drained to a proper dryness, let it drop through a convenient funnel on clean boards, and
the drops will become small cones or pyramids, in
which form the lake must be suffered to dry.

Red lake may be prepared from cochineal, by
gently boiling two ounces of cochineal in a quart of
water; filter the solution, add two ounces of pearl-
asashes dissolved in half a pint of warm water, and
filtered. Dissolve cuttle-fish bone as in the former
process: and, to a pint of it add two ounces of allum dissolved in half a pint of water. Put this
mixture gradually to that of the cochineal and
pearl-ashes, as long as any ebullition appears to
arise; and afterwards proceed as above.

A beautiful red lake may be prepared from
Brazil-wood; by boiling three pounds of it, during
an hour, in a solution of three pounds of common
salt in three gallons of water; and filtering the hot
fluid through paper: add to this a solution of five
pounds of allum in three gallons of water. Dissolve
three pounds of the best pearl-ashes in a gallon and
a half of water, and purify it by filtering; put this,
gradually, to the other, till the whole of the color
appears to be precipitated, and the fluid be left col-
orless. But if any appearance of purple be seen,
add a fresh quantity of the solution of allum, by
degrees, till it becomes scarlet: treat the sediment
as before. If half a pound of seed-lac be added to
the solution of pearl-ashes, and dissolved in it
before its purification by the filter; and two pounds
of the wood, and a proportionate quantity of com-
mon salt and water, be used in the colored solution,
a lake will be produced: that will stand well in oil
or water, but it is not so transparent, in oil, as
without the seed-lac.
The lake from Brazil-wood may also be made by adding half an ounce of anatto to each pound of the wood. The anatto must be dissolved in the solution of pearl-ashes.

**LEAD, Black,** is used to make pencils; not being fusible, it is cut into form. It is a mineral *sui generis.*

*Price in powder 1d. per ounce. Pencils 6d. each.*

**Red Lead, or MINIUM,** is a calx of lead, of a vivid orange colour, or yellowish-red; which colour it acquires by the very slow calcination to which it is exposed. It is chiefly brought from Holland.

This colour would be very valuable, if it was durable; but, like every preparation of lead, it is liable to become black. It is used in water colors, and requires a moderate proportion of gum-water, and to be frequently stirred up while using, as its weight inclines it to settle.

*Price 6d. per ounce.*

**White Lead** is kept in the colour-shops under the name of *Nottingham,* and is used in oil for coarser purposes.

*Price in bladders 3d. each.*

**LITMUS,** is a blue pigment, procured from archil, by adding to the archil (previously bruised by grinding), quick-lime, and spirits of urine; the mixture being evaporated becomes at length of a due consistence. It is chiefly brought from Holland. This colour is liable to change towards crimson, by the least approach of acids.

Litmus may be thus prepared for use: boil an ounce in a pint of small-beer wort till it acquires a proper colour; then pour off the liquor, and let it cool:
cool: by degrees it will become solid. This may afterwards be liquified by water, for use.

LOGWOOD furnishes an excellent purple tincture, to obtain which some proceed thus:

Boil together Brazil-wood and logwood, till the liquor is of a due colour. More logwood makes it more purple; more Brazil-wood inclines it to red.

Or thus:—

Boil two ounces of logwood in three pints of water; it is now brown, but by the addition of roch allum one ounce, it becomes purple.

MASTICOT is lead gently calcined till it becomes more, or less, yellow.

METAL, Dutch, is used where genuine gold would be too expensive. It is kept in leaves, in books.

Shells 1d. each.

MILINUM, famous for being the only white of the ancient artists, is a fine white marley earth of a compact texture, and remarkably light. It is found chiefly in the East, or the Levant.

Since white lead is so very deceitful, especially in water-colours, might not this, or an earth of the same species, well supply its place?

OCHRES are an extensive genus of earths. The most common are, yellow and red: but there are likewise blue, brown, and green, ochres: and of these several distinctions. Dr. Hill describes of red, eleven sorts; of yellow, the same number; of blue and green, one each, and of black two.

There are several kinds dug up in England, and it is probable, more might be found on examination.

They are cheap colours; from one penny to two-pence per ounce, and are divided in the color-shops
shops into yellow, brown, red, roman, stone, bright, &c. Their hues are varied by burning.

OILS are very principal objects of a painter's care, being so intimately mixed with the colors; on which they have unquestionably much influence.

Oil, Linseed, is used to colours of deep shades, but injures the lighter: it is sometimes rectified by exposing it in a bladder to the sun, &c. which renders it more transparent. Some painters reject it totally, notwithstanding such rectification, which they regard as of little use.

*Price 6d. per pint.*

Oil, Nut, is very much in use; it is not so subject to change as linseed oil is.

*Price 2s. per pint.*

Oil, Poppy, is by some preferred above all, as being very clear and transparent.

*Price 4s. per pint.*

Drying Oil, is linseed oil boiled with sugar of lead, litharge, or red lead, &c.

As these substances are by no means of any benefit to the oil, we advise a very cautious use of drying oil. In general, it is used to pictures painted in haste, or in damp weather, &c. which we have remarked to be deficient in durability.

*Price from 7d. to 2s. per pint.* Small bottles of oil may be had at 3d. or 4d. each.

The following has been recommended as a useful recipe to make a strong and colorless drying oil:

Take of poppy, nut, or linseed oil, one quart, put it in a deep glass bottle; put to it one pound of the best litharge in the gross; shake these well together two or three times a day for a week, then let it settle
settle clear, and pour it off for use, taking care that none of the tallow-like grease thrown down by the litharge comes off with it, it will be found a good strong drying oil, with very little alteration in the color; the longer it is on the litharge the stronger it will be. The oil designed for grinding up the white, &c. must have only half the quantity of litharge, and be only half the time upon it, with the same shaking, &c.

N. B. The litharge will do several times, after draining the grease from it.

ORPIMENT, is a color, whose properties, as we have before observed, require great care in the using of it: and, in fact, rather prohibit it.

PALLETTES, are of various shapes, held on the hand while painting, by passing the thumb through a hole near the front. Their use is to contain the colours, which are to be applied to the canvas.

*Price from 8d. to 2s. 6d. and 3s. each.*

PALLETTÉ-KNIFE is a thin, well-tempered blade, to grind and mix colors, &c. on the palette.

*Price 9d.*

PAPER, various sorts, for various uses, and of various prices; which are best known at the stationer's.

PINKS, are a class of colours of several hues.

**Brown Pink**, is a transparent colour, used in oil, and pretty much to glaze with.

It is the tinging part of some vegetable, of a deep yellow, or orange color, precipitated much in the manner of *lakes*; it gives a deep color if good. *E. gr.* It is procured from Avignon berries, by boiling them with fustic wood in chips, and pearl-ashes, equal
equal quantities, in a tin boiler; strain the tincture when strong enough, and add alum-water. When filtered, the substance is the color.

**Price 1s. to 1s. 6d. per oz. in bladders 6d. each.**

**Dutch Pink**, is made by boiling Avignon berries one pound, and turmeric root four ounces; strain it; add alum one ounce, and boil it, till evaporated to a quart. Prepare in the mean time four pounds of chalk, by washing it, and let it dry; grind the chalk and tincture together, and dry the color.—It should be a full gold-colored yellow, and very bright.

**English Pink**, differs from Dutch pink, only in the greater proportion of chalk.

**Rose Pink** is procured exactly in a similar manner, only changing the Avignon berry, for Brazilwood; it is a mighty pretty color, but fading.

**Price 2d. per oz.**

**PENCIL.** Under this title we shall notice the various sorts mostly in use.

**Camel's-hair pencils**; to choose this kind of pencils, draw them through the lips, moistening them a little; those are good which terminate in a true and complete point. **Price 1d. to 2d. each.**

**Fitch pencils** are used, by some who wish for a smoothness in their pictures, to scumble the colors, after their being laid on with a camel's-hair pencil, and to drive them into each other; while those who wish to impart a bolder appearance to their works, paint wholly with fitches.

**Price 2d. each.**

**Tools** are a larger kind of pencils, not inserted into a quill, as the foregoing, but bound round a
stick, and stronger in their nature. Some painters use them constantly.

*Price from 2d. to 1s. each.*

**Badger tools** are the largest in common use, and are longer in the hair than the former.

*Price from 8d. to 2s. each.*

Besides these, there are other kinds of pencils—such as, those for shipping painters, very long in the hairs, and slender; useful to insert the ropes, &c.—Those for miniature painters, very delicate and small, &c.

**Picture cloths**, are of several sizes, enlarging progressively, and are kept in the shops at the prices of 6d. 8d. 10d. 1s. 3d. &c.

The regular sizes commence at

**Kit-cats**, 3 feet high, by 2 feet 4 inches wide.

*Price 2s. 6d.*

**Three-quarters**, 2 feet 6 high, by 2 feet 1 wide.

**Half-lengths**, 4 feet 2 high, by 3 feet 4 wide.

*Price 5s.*

**Bishops half-lengths**, 4 ft. 8 high, by 3 ft. 9.

*Price 8s.*

**Whole-lengths**, 7 feet 10 high, by 4 feet 10 wide. They may be made yet larger if bespoke.

*Price 1l. 2s.*

A sort of ticking is made by Mr. W. Middleton, of St. Martin's Lane (colorman to artists, and who furnishes the necessary implements to artists), at the following prices:

**Three-quarters**, price 4 or 5s.

**Half-lengths**, price 7s.

**Whole-lengths**, price 26s.
In general, landscape-painters choose their cloths of a smooth surface. Portrait-painters choose a very thin priming. Perhaps cloths are yet better without priming.

PRIMING is a colour laid on the cloth, &c. previous to those which are to form the picture, and should be chosen of a tint rather light than dark.

PLASTER OF PARIS is a very useful commodity in the arts, as it not only receives impressions from copper-plates, &c. but, being cast into molds, affords copies of any piece of sculpture whatever, at a very reasonable rate; and, perhaps, nothing more contributes to the acquisition of knowledge in design, than a careful study of excellent Plasters; since they are, in some respects, superior even to a living model, always retain their situations and attitudes, and greatly assist an artist in the projection of shadows, &c.

Plaster of Paris is dug out of quarries in a substance like a stone, and is then termed crude: To prepare it for use, the stone is calcined thoroughly, then pounded and very finely sifted.

This powder mixed with water, quickly sets, or hardens into a solid consistence; and, when setting, increases in bulk, which property renders it so highly and singularly applicable in forming casts, &c.

To take an impression off a plate, by means of plaster of Paris, nothing more is requisite, than after having prepared the plate with ink, and cleaned the surface, to mix the plaster with water, and pour it on the plate; in a few minutes it will dry, and easily part from the copper, extracting the ink with it.
Casts are taken from a mold, previously well oiled, and thereby rendered impervious to the water with which the plaster is mixed. The plaster in its liquid state being poured into the mold there sets, and takes the form of the mold.

Plaster will sink to the bottom of a quantity of water, and will harden even there. After having been once used, it has lost its valuable properties, and no grinding can restore them. Being very long kept in powder injures it.

**RED, LIGHT,** is of the ochre kind, and very powerful, it is much used by some painters, even in flesh.  
*Price 2d. per oz. Bladders 3d. each.*

**RED, BROWN,** is kept in bladders at 3d. each.  
**RED, INDIAN,** vide *Indian Red.*

**RED, VENETIAN,** is a cheap color, used to print copper plates in imitation of red chalk. It should be finely ground. Mixed with black it forms a brown.

**SAFFRON** affords a yellow orange-colored tincture, to obtain which, it need only be steeped in boiling water in a tea-cup.

As it is probable that many vegetables, if treated in the same manner as saffron, might afford permanent colors, we shall transcribe from the Philosophical Transactions an account of the method of drying it.

The styles, or chives, being separated from the other parts of the plant, are dried on a kiln of a proper construction; over which they lay a net-work of iron-wire, or a hair-cloth, and over this five or six sheets of white paper; upon which they spread the saffron two or three inches thick. They cover this with other sheets of paper; over the whole they lay
lay a coarse blanket, five or six times doubled, or a canvass pillow filled with straw; when the fire, which is made of charcoal free from smoke has warmed it, they lay on the whole a board, having a large weight. When the chives have been sweated and dried, for about an hour, they turn the papers and saffron cakes, and treat the fresh side as the other. The cakes are repeatedly turned, till thoroughly dry, which usually takes about twenty-four hours. English saffron is the best in Europe.

SAP-GREEN is furnished by buckthorn berries, which being gathered when ripe, are bruised and put into a brass kettle, with some pounded alum, where they are suffered to remain for several days; they are then pressed, and the liquor hung up in a bladder to dry and harden. This is afterwards dissolved in water or wine, (Canary is said to be the best to preserve it from starving), this again consolidated, is sold in the shops.

*Price from 8d. to 1s. per ounce.*

TERRA SINOPICA, by many called blood stone, is an earth of a purple color, varying in tone, and depth of color, found in plenty in the Jerseys in America, and probably elsewhere. Its color renders further acquaintance with it highly desirable. Its texture is close and compact: its weight considerable. It is not very hard, melts slowly in the mouth, is perfectly pure and fine, and retains its color in the fire. Why should it not be brought into further use?

Terra di Sienna, like other earths, is denominated from the place where it is native. It is of a warm
Warm brown color; pretty much used in landscape, in oil, for roads, buildings, &c. as well burnt as unburnt.

Price raw 4d. per oz. bladders 6d. burnt 6d. per oz. bladders 6d. each.

Terra-verte, is found in the earth, not in strata, but in large-lumps. It is fine, regular, and smooth; when scraped, and the finer parts separated, it is ready to be ground in oil for use; it makes the best standing color of any simple green; but is a tender color, easily overpowered by any stronger color.

Price in bladders 3d. each.

An earth is dug up in Mendippe Hills, which is very closely allied to terra-verte; why should it not be examined and tried?

Troy White is a native chalk, found near Orleans in France, which is finely powdered, washed, and tempered for use.

Artificial Troy white, called also Spanish white, is chalk washed repeatedly, and its finer particles united to alum-water, frequently stirred, then filtered and dried; it is used sometimes in water-colors.

Turpentine. Oil, or spirit, of turpentine is used in oil painting, as a drier to the clearer colors, and to fit some colors for use in spirits of wine; to clean pencils from their colors, when they are to be quitted, &c.

Price 6d. or 8d. per pint—sometimes much more.

Colors ground in spirits of turpentine, after being thoroughly dry, may be used either in oil, or in water.
TURMERIC ROOT is in form not much unlike ginger: as it grows old, it becomes brown. To extract a yellow tincture from it:

Put two ounces of proof spirit, and one ounce of water in a phial, with two drachms of powdered turmeric root; let them stand three or four days, shaking them often. It is brighter, and cooler, than the tincture of Avignon berry.

TURBITH, or TURPITH, MINERAL, is a yellow precipitate of mercury. It is of a great body, like vermillion, a very bright, true, and lasting yellow; works in oil or water; is cooler than king's yellow, and not so bright. It makes a good green; it must be previously well-ground.

VARNISH is used to give a gloss, and lustre, to works. Also to defend them from the weather, dust, &c.

There are divers kinds of varnishes; some of the principal are as follow:

Amber varnish is prepared in the following manner; put four ounces of amber into a crucible, and melt it with a small degree of heat; pour it out upon an iron plate; when cold, reduce it to powder, and add to it two ounces of drying oil, i.e., linseed oil, thickened by being boiled up with litharge, and one pint of oil of turpentine; dissolve the whole together into a liquid varnish.

This simple amber varnish is of great use for many purposes; and is said to be the basis of the fine varnishes which we see on coaches, and might be applied to pictures with good effect.

COPAL
Copal Oil Varnish, called in France vernis Martin, is made by pouring into a strong well-glazed earthen pot, in shape resembling a chocolate pot, and in size large enough to hold about a gallon, and made warm, four ounces of Chio or Cyprus turpentine, and when this is dissolved, eight ounces of finely powdered amber; mingling them well, and setting them on the fire for a quarter of an hour: take off the pot, and pour gently into it a pound of copal, finely bruised, but not powdered; stir the mass, and add four ounces of Chio turpentine, and a gill of warm turpentine oil; then set it on a brisk fire for about half an hour, and taking it off, stir the contents well, and add two ounces of the finest and whitest colophony. Let the pot be put on a very brisk fire, and remain till the whole is dissolved, and become as fluid as water; let it be removed from the fire, and remain for a few minutes, and then gradually pour in twenty-four ounces of poppy, nut, or linseed oil, made drying and boiling hot, and stir the mass with a deal stick. When the gums and oil are thoroughly incorporated, set them over the fire for a few minutes, still stirring them about, and let them boil once up; and having taken off the pot, pour into it a quart of hot turpentine; stir them together, and give them one boil up; take off the pot, and pour into it a pint more of hot turpentine, still stirring it well. If the gums are thoroughly melted, and well incorporated, the varnish is made; which, being cool, is strained through a close cloth into another vessel, and if it be too thick, thinned with oil of turpentine, till it becomes
becomes of the consistence of linseed oil: strain it a second time, bottle it for use, and let it stand a month, at least, before it is used. This varnish is used for coaches, cabinets, &c. as well as for pictures. Used also sometimes for prints.

*Price 1s. or 1s. 4d. a phial of two ounces.*

*A finishing varnish for paintings in oil:*—The finest and clearest coach varnish, made of copal one quart, (the Birmingham varnish is yet better, there being no oil in it) put it into an earthen pipkin, set it over a very gentle fire, it need not boil, if pretty hot it is enough; at the same time set another pipkin over the same fire, containing three half pints of turpentine and half a pint of strong drying oil mixt together; when hot take both pots off, and pour the varnish in very small quantities into the turpentine and oil, every time replacing the pots on the fire to preserve the heat; repeat this several times, a dozen at least, till the whole is mixt, keep it continually stirring to incorporate them well; take it from the fire as soon as possible, lest it brown the varnish.

N. B. Were they put together cold, too hastily, or in too large a quantity at a time, the copal would be precipitated to the bottom.

Let it stand to clear, well stopped in a bottle for use. So much oil being thrown into it, prevents its cracking, and makes it more proper for oil paintings; it is long in drying, and must be kept free from dust; after two or three days it sets, and retains no stickiness, as mastic, &c. always does.

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Very small pictures may be neatly painted with this varnish alone.

This varnish hardens so strongly on the picture, that it cannot be taken off again, but must be painted over if any alterations are intended.

A varnish that may easily be removed is made of isinglass diluted with water, with the addition of one-fourth or one-fifth the weight of the isinglass, of sugar, or honey. A sponge and hot water will readily remove this from the picture, &c. over which it is used.

Mastic Varnish is made by putting five ounces of powdered mastic into a proper bottle, with a pound of spirit of turpentine, and setting them to boil in balneo Marine, till the mastic be dissolved, and straining the solution through flannel. This varnish may be converted into a varnish for painting with, by grinding one ounce of gum anime on a stone with water, till it becomes an impalpable powder; then drying it, and grinding it again with half an ounce of turpentine, and afterwards with the proper colors, and moistening it with the mastic varnish, till the mixture be of a due consistence for working with the pencil. It must then be kept in phials or in vessels, and diluted, as there may be occasion, with spirit of turpentine.

Price 4s. or 5s. per pint.

Others recommend the following mastic varnish, as very useful for glazing:—Twelve ounces of pure mastic put to one quart of spirit of turpentine in a glazed earthen pot, (for safety have a large iron heater made nearly red hot, on this set the pot in some
some open place, where free from danger) let it boil very gently about a minute, it is easily dissolved even without boiling; keep stirring it with a stick, when melted set it by to clear itself. Keep it in a bottle well corked for use.

To make the Varnish recommended by Mengs.

To two ounces of the finest mastic in powder add four ounces of *aqua di Rhasa*, mix them in a glazed pot, which must be set in a pan of boiling water, and there continue over a slow fire for one, two, or three hours, as shall appear necessary to bring it to a proper degree of consistence for drying in a short time after it is laid on the picture. This varnish may also be prepared by being dissolved in the sun. In using this varnish great care must be taken that the picture is quite dry, and has been painted five or six days at least, even then it will be proper to let it stand for a short time, either before the fire or in the air, but the varnish must not be laid on before the picture is quite cold. After the picture is varnished, it will be proper to let it lie for a day or two free from dust, after which you may work upon, re-touch or re-paint it as often as you shall think necessary: but it will be proper to re-varnish the piece when you have completely finished it. N. B. *Aqua di Rhasa* is spirits of turpentine.

To make white or re-touching Varnish.

Mix one ounce of gum-mastic with half an ounce of nut oil, and a quarter of an ounce of spirit of turpentine, dissolved in the same manner as in Mengs' masti: varnish.

Varnishes
Varnishes for preserving paintings.

For this purpose some have recommended the following composition: viz. half a pound of gum sandarac; an ounce and a half of Venice turpentine; three quarters of an ounce of each of the gums anime and copal; half an ounce of mastic; benzoin; gum elemi, and white resin, each two drachms, and one pound of rectified spirit of wine. The benzoin and gum anime powdered, are put with the Venice turpentine into a phial, with eight ounces of the spirit; the copal and resin powdered are also put in a phial with six ounces, and the powdered gum elemi with two ounces of spirit of wine. The several phials are frequently shaken, till the gums, &c. are dissolved; then the solutions are strained through a fine linen cloth into one bottle, and when the mixture has stood some days, it is decanted off clear, and kept in a separate bottle for use. Some have substituted sarcocolla for the copal.

Another composition is formed, by dissolving mastic and sandarac, grossly powdered, of each six ounces, and Venice turpentine half an ounce in a quart of highly rectified spirit of wine, and straining off the solution. If it be required harder, an equal weight of the gums anime and copal may be added, and the quantity of spirit of wine doubled. In the use of this varnish, the painting should be thoroughly dry, and it should be spread very gently with the pencil. The varnish should be laid on in a very warm place, or the picture itself warmed to a moderate degree, in order to prevent the chilling of the varnish; in which case another coat should be
be added. And, indeed, two or three coats are necessary to preserve the painting, and to bring out a due effect of its colors, if they are in that state called *sink in*, occasioned by the attraction of the cloth on the oils mixed with them.

An oil of turpentine *varnish* may be made by grossly powdering mastic and sandarac, of each four ounces; two ounces of white resin, and sarcocolla, anime, copal, and olibanum, of each one ounce, and putting them into a phial with two pounds of oil of turpentine, stopping the phial lightly, and placing it in any gentle heat, so that the mass may not boil, and straining off the solution for use.

Or, a *varnish* more simple, and equally good, may be made by powdering two ounces of sandarac, mastic and olibanum, of each an ounce and half; or three ounces of mastic and Venice turpentine half an ounce; and dissolving them in half a pound of oil of turpentine, and proceeding as before.

*White Varnish* is usually made of gum sandarac and gum mastic, dissolved in spirits, left to settle two days; then strained through a linen cloth, and, after standing some time, the clear poured off, and bottled for use.

The more curious artists dissolve the two gums separately; and, having made a separate *varnish* of each, mix them occasionally, as their work requires a stiffer or a softer *varnish*.

But for the *best white varnish* more gums are required; viz. Venice turpentine, gum copal, elemi, benzoin, anime, and white resin.

**Varnish**
Varnish for prints:—Take isinglass four oz.: separate it into small pieces, boil it in a quart of brandy, or other strong spirit; when it becomes the consistence of a strong glue, by being a little exposed to the air, it will answer the purpose. With this glue, while hot, wash over the print as quick as possible, and let that stand for a day or so, to dry well; wash it over again in the same manner, and afterwards brush it over at such a distance from the fire that it may not blister; do this also, two or three times. Varnish it with white varnish, and let it stand; afterwards varnish it again. If it should at any time be soiled by flies or the like, you may wash it with a sponge and water, to clean it.

The print should be previously mounted: i.e. pasted on a cloth, and secured by a straining frame.

VERDITER ought to be procured from the lapis armenus, prepared by grinding and washing; but this kind is very rare.

VERDITER is obtained by adding chalk to a solution of copper in aqua fortis. It is prepared by the refiners of silver, which metal is thought to assist the copper. Some say pearl ashes would produce a blue superior to chalk. When good, it is a cool, full blue, but must not be greatly trusted to for durability, either in oil, or in water.

*Price per ounce 6d. or 8d.*

VERDIGRIS is a kind of rust copper, i.e. copper corroded by vegetable fermentation into a blueish-green substance. Generally, it is obtained by corroding plates of copper by the vinous acid. The crystals of verdigris distilled, make a very good blue-
blue-green tincture, which mixes well with yellow
for a green; or, if dissolved in the juice of rue,
makes a green at once; with a decoction of log-
wood it strikes a black, which diluted, is a fine blue.

*Price of distilled Veridigris per oz. 6d. or 8d.*

VERMILION, natural, is found in some silver
mines in the form of sand: this requires good
grinding.

VERMILION is a mercurial production, made of
artificial cinnabar, ground up with white wine, and
whites of eggs repeatedly; the more it is ground,
the finer and paler it becomes.

*Price from 8d. to 2s. 6d. per ounce.*

ULTRAMARINE is procured from the lapis lazuli,
by a tedious process of calcination, grinding, &c.
It is the first and prince of blues, warm, rich, and
noble—but very dear.

*Price from three to ten guineas per ounce.*

King Charles I. presented to Mrs. Beale, the
paintress, 500l. worth, which he held in his hand.

ULTRAMARINE-ashes are of a similar nature.
These are usually sufficiently good for most pur-
poses to which they may be applied.

*Price from 18s. to 2l. per ounce.*

UMBER, is a dark brown earth of the ochre kind;
when burnt, it is considerably deepened in its tone;
it is used chiefly in oil; is *cheap* in its price.

*Bladders 3d. each.*

NAPLES YELLOW was formerly thought to be a
species of yellow ochre; it is very beautiful, of a
bright yellow, of a loose, porous, spongy, and shat-
tery texture: remarkably heavy, of a dusty surface;
gritty
gritty to the touch, breaks easily between the fingers, and stains the hands; adheres but slightly to the tongue; ferments briskly with aqua fortis.

It has lately been demonstrated to be the production of art: on mixing together intimately twelve ounces of ceruse, or white lead, one of alum, one of sal ammoniac, and three ounces of diaphoretic antimony, in an unglazed earthen pot covered over; and exposing the mixture to the heat of a moderate fire, during seven or eight hours, a substance is obtained, possessing all the properties of Naples yellow.

It makes in oil a very useful, mild, and lasting color: it should be very well washed for use in water colors. Price 6d. per ounce. In bladders 6d. each.

YELLOW BERRY, vide Avignon berry.

YELLOW is obtained from the plant Celandine, by infusing it in water, and pressing it gently; then boiling the liquor with alum. Also, from the roots of Barberries cut, and put into a strong ley of pearl ashes: From the roots of the mulberry tree; and probably from many other roots.

Zedoary root affords a fine yellow, by boiling an ounce in a quart of water, till the infusion is highly colored, then strain it. It is as bright as saffron, and cooler, being excellent for painting of flowers.

ZINK, has lately furnished an elegant white, which, if all said of it by the French, who prepare it, be true, is a noble production; as it stands perfectly, both in oil and water. It is not yet used in England—it is said to be deficient in bearing a body.
The foregoing list contains those colors which are generally adopted into use: every master has some method peculiar to himself in their management, as well as a certain set of colors which may be termed his favorites. Some, indeed, so perpetually resort to the same combination of colors, that their performances strongly evidence the mannerist; a character to be avoided by all who desire excellence.

The minutia of many articles we have omitted, supposing the leading ideas to be sufficient: and the same in the preparation of certain colors—no doubt, by similar methods many additional pigments might be procured.

In marking the prices to many articles, we suppose we have done service to those who choose first to count the cost: it may perhaps obviate objections in the minds of some, to observe how reasonable are the principal requisites for attempts in most branches of the arts.

We shall now proceed to offer a few hints on the management of these materials; advancing from the simple to the more complex methods of application, in the following order:
INTRODUCTORY REMARKS ON THE USE OF COLORS IN GENERAL.

WATER COLORS.

OF COLORING OR WASHING MAPS, &C.
OF COLORING PRINTS.
OF TINTING DRAWINGS.
OF PAINTING IN WATER-COLORS.
OF PAINTING IN MINIATURE.

CRAYONS.

OF CRAYON DRAWINGS FINISHED WITH CHALKS.
OF CRAYON PICTURES.

OIL COLORS.

OF BACK-PAINTING PRINTS.
OF PICTURES IN OIL.
OF CLEANING PICTURES.
OF TRANSFERRING PICTURES.

ENGRAVING.

OF ETCHING.
OF ENGRAVING IN STROKES.
OF ENGRAVING IN CHALKS.
OF ENGRAVING IN MEZZOTINTO.
OF AQUA TINTA.
OF PRINTING IN COLORS.

SCULPTURE.

OF MODELLING.
OF SCULPTURE.

REMARKS
Instructions
in the Use of Colours.
REMARKS

INTRODUCTORY TO THE

USE OF COLORS IN GENERAL.

Before we proceed to explain the use of colors, and the materials for practice, it may be proper to premise a few observations, as introductory to the application of them.

In general the more simply, and distinctly, colors are used the better; they are not only more easy to work, but they are also brighter, and more durable. Of colors produced by composition, such as green, and purple, those tints which contain the fewest ingredients are usually to be preferred.

Some colors very necessary in painting in oil, are entirely useless in water; others, of great service in water, agree not with oil; and some which in appearance promise well in other manners, are found deficient in effect and durability, when used in either.

Few colors are, in their natural state, fit for immediate use, but must undergo previous preparation, according to their texture or temper—of these preparations, the principal are Washing and Grinding; but some require Calcination.
OF WASHING COLORS.

Colors are washed, by being mixed with, and strongly stirred about in, a proper quantity of fair water, till the water having dissolved them, is thoroughly colored by them; if the surface of the water appear greasy, take off that scum; then pour the colored water into a clean basin, leaving the grosser sediment behind: the water thus poured off, will in a little time deposit a quantity of color. This operation may be repeated, till the color obtained is sufficiently pure, which appears by its fineness, and its brilliancy. The use of vinegar, of milk, or of other liquids, is occasionally adopted by some artists, for certain colors.

OF GRINDING COLORS.

Colors are ground by means of a large muller, on a flat stone: this operation requires strength and care; they are occasionally collected together, as the muller spreads them, by means of a large knife; the oil, or other vehicle, with which they are ground, being added as wanted.

In grinding colors the motion of the muller should not be too swift, but gentle, lest the color by being heated, lose part of its lustre; especially, if it be a color of no great body. In grinding white, observe to cease, before it becomes greasy, or dirty.

Colors are liable to injury by being ground on a stone not thoroughly cleaned from the color which preceded: many persons who are curious, grind their
their own (at least the finer colors) that they may depend on their purity.

The Grinding of colors should be continued, till they are capable of uniting so intimately with the vehicle they are compounded with, as to seem only a liquid of that color, (which is termed bearing a body): and those colors which permit this, are always most agreeable in using; whereas, some will not embody, but are apt in working to separate, and disperse. This remark chiefly concerns colors intended for oil; many of the best water colors are fit for use by being dissolved in gum water.

Colors ground in oil can be used only in oil. Oil colors kept too long grow fat, and become useless.

Colors united with gums, for the purpose of water colors will not readily mix with oil.

Colors ground in spirits may be preserved after grinding, and used either in oil or in water, being capable of mixture with either.

OF CALCINING COLORS.

Some colors require calcination, to render them fit for use; some are burnt, merely by putting them in the fire till thoroughly red hot; others, are rather dried than burnt, being placed in an iron ladle over the fire, and kept there, till the smoke they emit ceases. Ivory, is burnt between two crucibles, well luted together, and covered with coals.
OF TEMPERING WATER COLORS.

The colors being free from those impurities which are natural to them, to temper them, take a small quantity of any color, put it into a clean shell, or cup, &c. add to it a few drops of gum water, and incorporate them, by working them about the shell; let them dry, and when dry, touch the color with your finger; if any of it comes off, it requires a stronger gum water; if the color shines, and glisters, when dry, the gum water was too strong, and must be qualified by lowering it with fair water. Always let it dry before you use it; then, having wetted it, take a proper quantity in your pencil, transplace it on the pallet, and mingle such colors as the subject requires.

Gum water is made by dissolving a quantity of gum arabic (the clearer the better) in fair water. The strength of the gum water required must determine the proportion of the ingredients. Take a quarter of an ounce (or, perhaps, half the quantity) of gum arabic, and pour boiling water on it in a teacup, when dissolved it is fit for use. A little coloquintida added to the solution, will prevent flies from injuring the work if exposed.

The water with which colors are united, is of more consequence than is generally imagined; and, unless limpid and pure, contributes to their fading. Flake white, used with water containing particles of iron, soon becomes black, and disagreeable. To remedy
remedy this evil, the curious use only distilled water, which is easily obtained from a common tea-kettle, by condensing the steam; which, if the kettle be not too full of water, may be done, by binding round the spout, a cloth wetted in cold water; or, by the addition of a tin spout to fit the kettle, wetting, and cooling, the cloth occasionally. There are mineral waters, &c. which produce very singular effects with some colors.

But beside the colors which require the use of gum water as above described, there are several useful colors (extracted chiefly from vegetables) in the form of tinctures; to obtain which, the customary method is, to boil the ingredients, with the addition of alum, in a quantity of water, till the water has acquired a sufficient strength of color: sometimes the mixture is boiled yet stronger; and sometimes, but not often, the sediment of the mixture after boiling is of use.

To use a color in tincture, (generally called a wash color) try first whether its strength be what your subject requires; if it be too deep, it may be lightened by the addition of fair water; if too light, it may be deepened, by setting a saucer of it to simmer over a gentle fire, till it acquires the strength desired. The watery part may, by this means, be nearly, or even totally, evaporated. Red Brazil wash, for instance, will hereby take a solid form, and afterwards work up pretty enough.

Body colors (as they are called, to distinguish them from washes) may be lightened by being diluted with water, but cannot be deepened beyond the natural
natural state of the original material; to shadow which, when used of its full color, recourse must be had to a darker color, of a similar species.

Care should be taken to keep the drawing, &c., flat, and free from sinkings, lest the colors, if thin, should run to those parts, and there make patches of darks, &c.

If the paper will not readily take the colors, a little fish-gall, or ox-gall, mingled among the colors, will help them.

To prevent colors from sinking in, take roch alum two ounces, and boil it in a pint of spring water; wet the back of the paper with a sponge dipped in the water while warm. Some use starch applied at the back. A yet stronger mixture, which will prevent the color from sinking not only on paper, but likewise on sattin, is made, by boiling isinglass in water, brandy, or spirit of wine, till the liquor is strong, and clammy, then, after your outlines are drawn, wash them over with this solution while hot. Repeat it if wanted.

**OF OIL COLORS.**

A principal advantage of oil colors is, that after they are dry they afford a constant opportunity of being retouched, or even changed, either in whole, or in part; thus, black may be re-colored white, or brown, blue, &c.; but, though this be undoubtedly a great advantage, yet it is only to be used when required by necessity: for, the under color, if allied to the superficial, promotes both force, and harmony; and it sometimes happens, that if the under color
color be cold, and powerful, it tends to injure the tone of the upper.

Oil colors, are not, in usual practice, heightened, by being diluted with oil, as water colors are with water; but, by being mixed with any color, or pigment of a lighter tone—as, light red upon dark red; yellow upon light red; white upon yellow, &c. or, simply white. But if a part should be heightened beyond its due force, it may be lowered, by diluting some similar color with oil, and (as it is termed) glazing it over till it is brought to the tone required. Glazing is sometimes used on a more important, or at least a more extensive plan; as when great richness is wanted in some particular color, as crimson, &c. after having painted and finished it, as highly bright as he can, the artist glazes it over with a coat of lake. Sometimes this is repeated, and the lights re-touched; and instances have been, where an artist has glazed a bright white into a crimson, by means of carmine and lake, &c.

Glazing is best performed with colors naturally transparent, such as lake, &c. but, after all, it is not applauded by those whose skill enables them to produce equal effects without this practice.

Those painters who have attained nearest to a just representation of nature, have usually composed on their pallettes, a great number of tints related to the subject on which they were about to employ them; and, by mingling these tints; they have approached nearer to truth, than those who mingle the secondary colors of the pallette in their pencils, and immediately apply them to the cloth; for by this latter manner...
(which yet is too common) the colors are not only less incorporated, but they are apt to become dull, and dirty.

The usual way of painting in oil, is to lay on the colors with one pencil, and then soften them into each other, with a clean tool: this is termed *scumbling*; but whether scumbling be really beneficial to a picture, is much doubted; certainly where strength is desired, it may well be omitted, as also in the finishing touches.

A pencil for each color is necessary, where clean tints are desired.

The smell of oil colors would not be bad (as it sometimes is) were the oil of the best quality.

Colors are ranged on a palate, beginning with white on the front, then yellow, &c. according to the darkness of the color, ending with black.

**OF DISTEMPER COLORS.**

Colors incorporated with size, are useful, in works required to be free from glistening that they may be seen to advantage in all situations, such as the scenes of a theatre, &c. but they are not used for pictures. Of late, fashion has introduced them into apartments, instead of wainscoting, &c.

They are likewise used in Fresco-paintings in warm countries, but these are very rare in Britain.

Fresco-paintings are performed on the mortar of a wall while wet, and dry with it; which circumstance totally prohibits the use of oil.
The incorporation of colors with wax is very rarely practised: for the method of procedure, *vide* Encaustic.

**OF RANKING COLORS.**

Colors are ranked as follows, white, yellow, orange, red, purple, blue, black. White, and black, are the extremes of color; yellow is the color next to white; then green; then blue; green is composed of a mixture of yellow and blue; orange of a mixture of yellow and red; purple of a mixture of red and blue; these compound colors admit an infinity of tints, as they incline most to either of the primary colors of which they are compounded.

Some persons divide colors into dark, and light; including among the first, black, umber, bistre; among light colors, white, and those which approach it.

**. . . . . .**

Having thus given some general hints on the nature of colors, by way of introduction, we proceed to notice, more particularly, the various manners of their applications.
OF COLORING MAPS, &C.

THE colors fittest for this purpose, are those which are perfectly thin and fluid, usually called wash-colors, or tinctures; they should be diluted with water, intimately mixed with them, by their being well stirred together. When the desired tint of color is thus obtained, with a brush proportioned to the size of the space intended to be stained, briskly apply the wash; always endeavouring to avoid—

1. All passing over the proper limits of that color;
2. All runnings of the color into spots, or parts of a deeper tint than the rest; occasioned by the settling of a greater quantity of color in some places than in others: or, sometimes, if one part of the space be dry before the rest, by a second coat of color passing over it. Begin the boundaries of your space first, that you may not exceed them.

Be careful that no two limits, which touch each other, are of the same color; since the prime intent of this business is distinction.

Distribute your colors, if practicable, so as to produce a pleasing effect in the whole.

After the various divisions are faintly washed, the boundary lines should be very neatly colored with a much stronger color of the same kind.
OF COLORING PRINTS.

In this business regard should always be had first to the paper on which the prints are printed; if it sinks, it may require the assistance of roch alum, or other strengtheners.

The body of printing ink, which remains on the surface of the paper, should proportion, in many cases, the strength, and consistence, of the color to be used, according to the effect required. If it be intended only to stain the print, the effect of the engraving will be useful as forming shadows, and as keeping the drawing. If it be proposed to color the print highly, as advancing towards a picture, the engraving, although it must be attended to as the regulator, and guide, of form, and of effect, yet may be concealed by a surface of color.

Omit white color wherever you can do without it: e. g. in the lights, or parts approaching to lights, let the thinness of color supersede the admission of white.

Omit black color on the same principle: if you cannot do entirely without it, take especial care to use as little as possible, that it be not heavy.

In the broad lights, rather mingle colors of nearly a similar tone, to produce the effect required, than admit white; the same principle adopt in the shades.

Take great care that the outlines of all objects are mellowed, sweetened, and softened; and neither sudden, nor rugged, nor cutting to the eye.

Sometimes a print may be washed, and afterwards finished with body colors to good effect.

Harmony and tenderness of color should always be much attended to: then distribution and warmth.

The proper colors are those for water colors.
OF TINTING DRAWINGS.

Drawings are tinted on the following principles:

I. Sometimes after being outlined with a black-lead pencil, they are stained; the sky and distances in landscape with a thin wash; the ground and front objects with body colors, then wrought up to effect with stronger colors alone, or united with Indian ink.

II. Sometimes they are more perfectly outlined, and washed with Indian ink; then the colors are added afterwards to finish the whole.

Drawings done in colors only, seldom look well, being usually deficient in effect and repose; for be it always remembered, glaring colors are hurtful. The best way for slight drawings, is to procure an effect with the Indian ink, and then a brilliancy, and variety of tone, &c. with colors.

Flesh colors should be very tender—the less the flesh is loaded with color the better.

In general, the lights require more finishing than the shades; in which a breadth of pencilling has usually an excellent effect. Warmth is very necessary in all drawings; opposition of colors should be carefully attended to—a heavy effect in a drawing is very bad.

The middle tint is the beauty of all drawings, and should predominate throughout the whole.

The proper colors are those for water colors.
OF PAINTING IN WATER COLORS.

This part of art is seldom practised in historical compositions, or figures, they being generally treated in oil; yet it has both its uses, and its beauties: The colors are free from smell, and often rich, and pleasing; they are mixed on the principle of oil colors, not rejecting white where proper.

As it is impossible to convey by words exact ideas of the numerous combinations, tones, and variations of colors, it is evident, that the following directions must be understood with great latitude. They may serve to impart the rudiments of a principle, to be varied according to the effects desired; but the same proportions of colors will not serve every occasion equally well, nor produce the same harmony, or even appearance, if surrounded by different neighbours. Directions, therefore, are, at best, but very imperfect; and, though we think it to the advantage of students to insert these directions, yet we are aware of their imperfections to many purposes which may be required in treating of different subjects.

The materials are gum-water, pencils, a pallette (of ivory, if thought proper; but a Dutch tile, or any glazed surface of a light color will serve the purpose); a pallette-knife of ivory (steel is injurious to the colors); a pen-knife, &c.

The colors to be used are:

Whites. Flake white, Spanish white, Troy white, Egg-shell white, &c.

Blacks.

Browns. Spanish brown, Spanish liquorice, Umber.

reds. Burnt ochre, Carmine, Indian lake, Indian red, Red lead, Vermilion, &c.

Yellows. Gall-stone, Gamboge; Masticot, dark and light; Pinks, yellow, dark, and light; English Ochre, Roman Ochre; Saffron, &c.

Blues. Blue Bice, Verditer, Indigo, Litmus, Smalt, Ultramarine, Prussian blue, &c.

Greens. Green Bice, Green pink, Sap green, Verdigris, Verditer, &c.

Directions for making a Variety of Colors by Compound.

Ash-color. White and Lamp-black; Indigo and Black; Cherry-stone and White, shaded with Ivory-black.

Bay-color. Vermilion, with a little Spanish brown, and black.

Bright Red. Indian Lake and native Cinnabar, or Vermilion.

Carnation. Lake and white, shaded with Lake.

Cloud Color. White, light Masticot; Lake and White shaded with blue Verditer.

Crimson. Lake and White, shaded with Lake.

Flame Color. Vermilion and Orpiment; Red Lead and Masticot, heightened with White.

Flesh Color. White, with a little Lake, and Red Lead; add Yellow Ochre for a swarthy complexion.

French Green. Light Pink and Dutch Bice, shaded with Green Pink.

Glass
Glass Grey. Ceruse, with a little Blue.

Hair Color. Masticot, Umber, Yellow Ochre, Ceruse, and Cherry-stone Black.

Lead Color. Indigo and White.

Light Blue. Bice, heightened with Ceruse.

Lion Tawney. Red Lead and Masticot, shaded with Umber.

Murrey. Lake and Flake White.

Orange. Red Lead and a little fine Masticot, shaded with Gall-stone and Lake.

Orange Tawney. Cinnabar, light Pink, and a little Masticot, shaded with Gall-stone and Lake.

Purple. Indigo, Spanish Brown and White; Blue Bice with Red Lead and Flake White; or Blue Bice and Lake.

Russet. Cherry-stone Black and White.

Scarlet. Red Lead and Lake, with or without Vermillion; Carmine and Indian Lake; native Cinnabar and Red Lead, shaded with Indian Lake.

Sea-green. Bice, Pink and White, shaded with Green Pink.

Sky Color. Light Masticot and White, for the lowest parts; Blue Bice and White for the next degree; Blue Bice alone for the highest part: all softened into one another at the edges, where they unite, so as not to appear harsh.

Sky Color for Drapery. Blue Bice and fine Ceruse; or Ultramarine and White, shaded with Indigo.

Straw Color. Yellow Masticot, and a very little Cinnabar shaded with dark Pink.
Violet Color. Indigo, White and Cinnabar, or Lake; or fine Dutch Bice and Lake, shaded with Indigo; or Litmus, Smalt, and Blue Bice; the latter most predominant.

Water. Blue and White, shaded with Blue, and heightened with White.

It is evident, even on a slight inspection, that the proportions of the several ingredients in these compound colors must vary the tint, the tone, and the effect of them when used: as no general rules can be laid down which shall suit every subject, we leave to the accuracy of the student's eye and judgment the making of those peculiar variations, which every different composition requires.

Directions for laying on the different Colors.

Before you begin, have all your colors ready before you; a pallette for the conveniency of mixing them; a paper to lay under your hand, to keep your work clean, as well as to try your colors on; also a large soft brush, or fitch, to wipe off the dust when your colors are dry.

Lay your colors on very thinly at first, deepening them and mellowing them, by degrees, as you see occasion. The quicker you lay them on, the evener, and cleaner, your drawing will appear.

Take care to preserve all your colors from dust; and before you use them, wipe your shells, and pallette, every time with your fitch.

When you have done your work, or, would lay it aside, be careful to wash out your pencils in clean warm water.

For
For face-painting, mix up carnation, or flesh color, with gum-water, in a shell by itself. For a fair complexion mix vermilion and flake white; for a swarthy one, add a little masticot, English ochre, or both.

Let your flesh color be always lighter than the complexion you would paint; for, by working on it, you may easily lower it, but you cannot readily heighten it.

For the cheeks and lips, use a mixture of lake and red lead, or carmine, as occasion requires; and for blue tints, (as under the eyes, and in the veins) indigo, or ultramarine, and white.

In coloring landscapes, at first only lay dead colors, smooth, all over the piece, leaving no part uncovered; use a masterly freedom; and the work, though seemingly rough at first, will have a good effect when finished.

Let not the roughness of the color discourage you; for, it is easy to soften it by degrees, with the other shadows, observing only to sweeten, and heighten, them, according as the light falls.

In some places lay on strong touches, and in those places bring your work up together to an equal strength; tempering, and sweetening, your colors, with a sharper pencil than the first, that no lumps, or harsh edges, be left, but that all your shadows may be soft, and smooth, and gliding gently, as it were, into one another.

You are not to finish any part before another, but work up all the parts gradually alike, that you may judge of their effect on each other, and on the whole.

Having
Having laid your dead colors, begin first with the distances, and lighter parts, as the sky, sun-beams, &c. then the yellowish beams (which are to be done with masticot and white); next the blue of the sky (with ultramarine, bice, or smalt alone); making your colors deeper as you rise upwards from the horizon, except in tempestuous skies. The tops of distant mountains must be worked so faint, that they may seem to lose themselves in air.

All distant objects must be made imperfect as they appear in nature: and all distances must be finished with colors laid as thin, or in as small quantities as possible.

Bring your colors forward as you advance to the front; till you come to the fore-ground itself: where you may employ not only stronger colors, but a greater quantity of them, and in a bolder manner.

In coloring trees, boughs, and branches, touch in all the dark shades first, raising the lighter leaves above the darker; the uppermost of all are to be done last; touch lightly the extremities of the leaves, and set off the darkest shadows with sap-green and indigo: or other strong colors.

The intent of every picture, &c. is to imitate nature; therefore, where nature indicates different compositions of colors, from what we have given above, compose them as near as possible; if you fail at first, you may succeed afterwards. It is not to be supposed that the real effect of colors in combination, can be understood or attained till after the hand and the eye are matured by practice and re-consideration.
OF PAINTING IN MINIATURE.

Painting in miniature has many advantages over other branches of art. It is neater, and not so incumbered with materials; as you may easily take with you all that are necessary, and entertain yourself wherever you please, quit and resume it when you will, without such a variety of preparations as are necessary in oil coloring.

The colors are those used for water colors; they must be of the best quality, finely ground, cleanly washed, &c. and mixed in the shells with gum water; which must be reserved in a phial kept corked, and observe never to take any out with a pencil that has color on it, but with a quill cut for the purpose in the form of a scoop.

To know whether your colors are properly gummed, draw your pencil when filled with color on your hand, which dries immediately, and should you perceive that it cracks or shines, it is then too highly gummed; but if it rub off, by lightly passing your finger over it on your hand, it has too little gum in it, and must have an addition put into the shell, taking care not to use too much gum, which makes the color hard. Gum adds strength to dark colors; and when you choose to give a greater force to any color than it naturally bears, increase the quantity of gum.

To correct the greasiness of dark colors, mix a little of the gall of an ox, carp, or eel, particularly
the latter, dried and diluted with brandy for use; this makes the color work free, and prevents its scaling.

Ivory is generally used to receive the colors, but a card is very useful, and may be sufficient for slight subjects.

The choice of good pencils is a great matter, therefore wet them a little as you draw them through your lips, and if the hairs keep close together (as you turn them on the back of your hand) and make but one point, they are fit for use; but if they make several points some longer than others, they are useless. When they are too sharp pointed, with only a few hairs longer than the others, they must be trimmed with a pair of scissors, taking care not to clip away too much. It is necessary to have different sizes, the larger for laying grounds and dead coloring, and the smaller for dotting and finishing.

To bring the hairs of your pencil to join close together, and make a fine point, just put it between your lips, moistening and pressing it, leaving only so much color on it as is sufficient to give fine and equal touches. None of the colors used in miniature painting are poisonous, or prejudicial, except king's yellow, and orpiment, which are seldom, or never used. This method is particularly used for dotting and finishing the naked parts of a picture, that the touches may be neat, and not too much charged with color. As for draperies, and other large masses; it is sufficient to draw the pencil over the edge of the shell to unload it, giving a few strokes upon a card, or paper, before you use it on the picture.

The
A north light is desirable for the painting-room, as by that light we view objects most truly, and without glare; it is necessary to admit the light at one window only, and that confined to your work, placing your left side next it, and your desk on a table, just high enough to work at, in an easy and graceful manner, without stooping, or crampness, &c. which is very detrimental to health.

Sketch the outlines of the picture with thin carmine; this being finished, proceed to dead color; making the shadows tender, that they may afterwards be heightened by dotting, and brought to proper color, and spirit.

There are several methods of dotting, and every painter has that peculiar to himself; some make their dots perfectly round, others make them long, but the best and most expeditious manner, is by little strokes that cross each other every way, till the work appears as if it had been dotted; softening them, so as to give your picture a fleshy mellowness, and avoiding all dry, or hard touches.

After you have dead-colored a picture, begin the back-ground. First, lay in a light tint of the proper color, then pass a layer of the same color over that; laying it as smooth as possible with large strokes of the pencil, i.e. not with dots.

Dark back-grounds are composed of bistre, umber, or Cologn earth, with black and white, others more yellow, with a great part ochre. Black, white, and a little indigo, for grey back-grounds: Dutch pink, white and black, make a greenish, or olive ground, which makes the naked part of a picture appear very
very fine, and gives by contrast, a warmth to the coloring.

Having drawn the outlines of your picture very correctly, begin the shades with vermilion and carmine; giving the strongest touches at the corners of the eyes, next the nose, under the nose, the ears, and under the chin; the fingers; and in every part where you would mark out separations in shades that are obscure.

Next lay in the blueish tints with indigo, on such parts as go off, or turn from the light; as the temples, under, and in, the corners of the eyes, on both sides of the mouth, a little on the middle of the forehead, between the nose and eyes, on the side of the cheeks, the neck, and such other parts as nature indicates.

Yellow tints are composed of ochre and vermilion, and are given on the sides of the nose towards the bottom, under the eye-brows, a little underneath the cheeks, and on the other parts which rise, and come forward, to the sight. It is particularly in these tints the complexion is to be observed.

When you have done your dead-coloring, and laid in the several tints, proceed to finish, by dotting over the shadows with greenish tints, and finishing the yellowish and blueish tints before directed. Soften the extremity of your shades on the light sides, preserving the color of the ivory for a middle tint, which adds a fine softness to a picture. Finish your strong shadows with bistre and vermilion, or terra di Sienna, and in some parts with pure bistre, according to the subject you are painting, laying on your colors as clear as possible.

Dot
Dot the clear and bright parts, with carmine and a little vermilion, using a very little ochre, to lose, or blend, them, in the shadowy parts, and make the tints die away insensibly into one another; taking care as you dot, to round the parts, by giving your strokes the different turns of the flesh.

The whites of the eyes are shaded with blue; the corners next the nose with vermilion and carmine; the sight of the eye (or the iris) with indigo and white, adding bistre if it be brown; or black if it be grey; the pupil with pure lamp-black. Shade the sight with indigo, bistre, or black, according to its color; the marking of the eye-lids shadow with carmine and bistre, which must be softened with the other tints; this done, give the little touch of light that falls on the chryystal with pure white. This gives a brilliancy, and life, to the eye.

The lips are dead-colored with red lead, or vermilion, and shaded with carmine, or lake. The markings, or dark touches, with bistre and carmine.

The hands are colored as the face, observing that the joints, and ends, of the fingers, are a little redder than the rest. The markings, as directed for the eyes, lips, &c.

Hair is dead-colored with bistre, ochre, and white, or black, according to its different colors; and finished with pure bistre, mixed with ochre or black; the lights with ochre. The roots of the hair next the face must be softened into the blue tints; and great care must be taken to paint the hair light and soft, and to avoid a hard, wiry, manner. The eye-brows are done as the hair.
Colors composed for Draperies, Lace, &c.

For blue drapery.—Prussian blue, or ultramarine and white, shaded with indigo.—Verditer, shaded with indigo.

Red drapery.—Red lead, or vermilion, shaded with carmine, or lake.—Carmine drapery. Form the shades with vermilion, and finish with carmine, the dark touches with bistre.

Purple drapery.—Lake, blue and white, finished with lake and indigo. Varied—by adding more blue, or more lake.

Yellow drapery.—Yellow ochre, Dutch pink, gamboge, or Naples yellow, shaded with terra di Sienna, and bistre.

Green drapery.—Prussian blue, or verditer, and Dutch pink, shaded with sap green. Remember, different greens are mixed by using more, or less, of blue, or of yellow.

Black drapery.—Lamp-black and white, shaded with pure lamp-black. To give the lustre of velvets, &c. use indigo in the dark shades.

White woollen drapery.—White, and a little ochre, or gamboge, to give it a yellowish tint; shade with bistre.

Draperies should be done with broad strokes of the pencil, as the backgrounds. Several other kinds of draperies may be painted, according to what is desired, always taking care to preserve harmony in the coloring.

Lace.—Dead color with blue, black, and white, finish with pure white: when it lies transparent over draperies, or carnations, finish the under parts first, then
then paint your lace over them with pure white, and shade with the first color.

Gold lace.—Dead color with ochre; and finish with Dutch pink and red lead.

Silver lace.—Blue, black, and white, finished with pure white.

Pearls.—White and a little blue for the dead-color, shade with light blue; the speck of light in the middle with pure white, and a little yellow transparent tint on the shadow side, to round them.

Diamonds.—Lamp-black, the lights touched with pure white. All other jewels are painted in the same manner, only changing the dead-color.

It is a frequent over-sight in artists to think when they have completed the head of a portrait, which being drawn from nature, possesses in consequence a considerable degree of truth and force, that the picture is finished, and their work is done; whereas much of the grace of the picture, and very much of the general effect of it, depends on the addition of accessories, which are to complete it; these, if well disposed, and apply suited to the main subject, not only embellish that subject, but confirm and invigorate its effects, by imparting a splendor and brilliancy throughout the whole:—whereas if unsuitable and unfit, they enfeeble what has been already well done, and spoil that which in itself had spirit:—In short, for these also consult Nature.
OF CRAYON DRAWINGS.

The following article will furnish much information in the manner of using crayons, which may with propriety be adopted in drawings, intended afterwards to be finished with chalks; to that article, therefore, we refer, as illustrating the present.

The procedure, in this instance, is, by preparing the masses of light and shade with crayons, either lightly touched with the finger, or more accurately defined with a stump, according to the size of the subject. The drawing being thus inserted in proper colors, the chalks (chiefly red and black) are very neatly stippled into every speck, or interstice, agreeably to the color of the part, i.e. using red chalk, where the flesh inlines to red, and black chalk in the shadows, or, in the parts inclining to blue, &c.

In working some subjects, it is a good way to scrape a little powder off each crayon that may be requisite, and to lay the several little heaps of color in order on white paper; then (the outlines being previously drawn) with small rolls of paper carefully made, rub in the colors; and finish with chalks.

Stumps made of kid-leather (gloves, if not soiled in that part, serve very well) rolled up tightly, will answer the purpose yet better. Some use stubbed camel's-hair pencils.

Several crayons made of earths, when thoroughly dried, then gradually warmed, or rather heated, and dipped into linseed oil, till saturated, may be sharpened to a very fine point; and the lines drawn by them, will not be injured without violence. Perhaps, by judicious experiments, a complete set might be composed.
OF CRAYONS.

The perfection of crayons consists much in their being kindly tempered; for it is impossible to execute a brilliant picture with them if they are not; on which account great care should be used in forming them, to prevent their being hard. We have already forbid white lead in their composition, because it will certainly turn black; which white chalk, tobacco-pipe clay, or whiting, well washed, will not do.

Whether a painter works with oil colors, water colors, or crayons, the grand object of his pursuit is still the same—a just imitation of nature: But each species has its peculiar rules, and methods. Painting with crayons requires, in many respects, a treatment different from painting in oil; because colors used dry are generally warmer than when wet with oil.

The proper paper for crayons is a strong paper, either brown, or blue; the thicker the better, if not too coarse and knotty. The knots should be levelled with a pen-knife, or by hard rubbing; then paste the paper very smooth on a linen cloth, previously strained; but, some artists reckon it most eligible to delay pasting the paper till the subject is dead-colored. The method of doing this, is by laying the paper thus dead-colored, on its face, on a smooth table, and pasting the back of the paper; the frame, with the strained cloth, must then be laid on the pasted side of the paper, after which turn the painted side uppermost, and lay a piece of clean paper
paper on it to prevent injury: this done, it may be stroked gently with the hand, by which means the air between the cloth and the paper will be forced out.

Sitting, with a box of crayons in the lap, is the most convenient posture to paint in.

The box made use of, when the student paints, should be about a foot square, having nine partitions in it. In the upper corner, on the left hand, (supposing the box in the lap) place the black and grey crayons, those being the most seldom used; in the second partition, the blues; in the third, the greens and browns; in the first partition on the left hand of the second row, the carmins, lakes, vermilions, and all deep reds: the yellows and orange in the middle; and the pearl tints next; as these last are of a very delicate nature, they must be kept very clean, that the gradations of color may be easily distinguished: In the lowest row, let the first partition contain a piece of fine linen rag to wipe the crayons with while they are using; the second, all the pure lake, and vermillion tints; and the other partition may contain those tints, which, from their complex nature, cannot be classed with any of the former.

That part of the picture which is immediately painting, should be rather below the face of the painter, for, if it be placed too high, his arm will be fatigued. The windows of the painting-room should be darkened, at least to the height of six feet from the ground (as before directed for miniature) and the subject to be painted should be situated in such a manner, that the light may fall with every advantage.
PROGRESS OF A PORTRAIT.

The features of the face being correctly drawn with chalks, take a crayon of pure carmine, and carefully draw the nostril, and edge of the nose next the shadow, then, with the faintest carmine tint, broadly lay in the highest light upon the nose, and the forehead. Proceed, gradually, with a second tint, and the succeeding, to the shadows, which must be covered brilliant, enriched with lake, carmine, and deep green. This method will, at first, offensively strike the eye, from its crude appearance, but will be a good foundation to produce a pleasing effect, in finishing; colors being much more easily sullied, when too bright, than raised to brilliancy. The pearly tints of fine complexions must be imitated with blue verditer and white; but if the parts of a face where those tints appear, are in shadow, crayons composed of black and white must be substituted.

Though all the face should be laid in as brilliant as possible, yet each part should be kept in its proper relation of tone, and of color, to the others.

Touch in the eyes with a crayon inclined to the carmine tint, brilliant, not loaded with color, but lightly: incline the light of the eye very much to a blue cast, cautiously avoiding a staring white; preserving a broad shadow occasioned by the eye-lash. Avoid a heavy tint in the eye-brows; treat them like a broad, glowing, shadow, on which afterwards the hairs of the brow are to be painted; by which method the former tints will shew through, and produce a pleasing effect.
Begin the lips with carmine and lake; the strong vermilion tints should be inserted afterwards. Mark the corner of the mouth with carmine, brown ochre, and greens, intermixed. If the hair is dark, preserve much of lake, and deep carmine, therein; this may be easily overpowered by the warmer hair tints, which will produce a rich effect when finished.

Having dead-colored the head, sweeten the whole together, by rubbing it over with the finger passed very lightly, beginning at the strongest light on the forehead, uniting it with the next tint; and, so on till the whole is sweetened together, often wiping the finger, to prevent sullying the colors. Be cautious not to smoothen, or sweeten, a picture, too often, because it will produce rather the appearance of a drawing, than of a painting. To avoid this, replenish the picture with crayon wherever, and as often, as necessary.

When the head is somewhat advanced, let the back-ground be laid in; which must be treated in a different manner, covering it as thin as possible. Near the face, the paper should be almost free from color, for this will do the head great service by its thinness. In the back-ground, no crayon that has whiting in its composition should be used, but chiefly such as are least adulterated. The ground being thin next the hair, will give an opportunity of painting the edges of the hair in a light manner, when finishing.

The face, hair, and back-ground being covered, carefully view the whole at some distance; remarking what
what parts are too light, and what too dark; being particularly attentive to white, or chalky, appearances, which must be subdued with lake and carmine.

The next step is to complete the back-ground and the hair; because the dust, in painting these, will fall on the face, and would much injure it if that was completed first. From thence proceed to the forehead, finishing downward till the whole picture is completed.

In painting the forehead the last time, begin with the faintest vermilion tint, in the same place where the faint carmine was first laid, keeping it broad. In the next shade work in some light blue tints, intermixing with them somewhat deeper vermilion tints, melting them into one another. Some light yellows may also be used, but sparingly; toward the roots of the hair, strong verditer tints, intermixed with greens, will be of use. Pearly tints, composed of verditer and white, are to be preserved beneath the eyes, under the nose, and on the temples; beneath the lips, tints of this kind are proper, mixing them with the light greens and vermilion.

In finishing the cheeks, let lake clear them from any dust contracted from the other crayons; then, with the lake intermix bright vermilion; and, last of all, (if the subject should require it), a few touches of orange-colored crayon, but with extreme caution; after this, sweeten that part with the finger as little as possible, for fear of producing a heavy effect.—

The beauty of a crayon picture consists, in one color shewing itself through, or rather between another; this being the only method of imitating beautiful complexions to advantage.
The eye is the most difficult feature to execute in crayons, as every part must be expressed with the utmost nicety, to appear finished; at the same time that a painter must preserve its breadth, while particularising the parts. To accomplish this, it is a good general rule to use the crayon in sweetening, as much, and the finger as little, as possible. When a point to touch a small part with, is wanted, break off a little of a crayon against the box, which will produce a corner. To dark eye-lashes, use some of the carmine and brown ochre, and the crayon of carmine and black; and with these touch the iris of the eye (if brown, or hazel). Red tints of vermillion, carmine, and lake, will execute the corners of the eye properly; but if the eye-lids are too red, they will have a disagreeable appearance. The pupil of the eye must be of lamp-black; between this and the lower part of the iris, the light will catch very strong, yet it must not be made sudden, but be gently diffused round the pupil till lost in shade. When the eye-balls are sufficiently prepared, the shining speck must be made with a pure white crayon, first broken to a point, and then laid on firm; but, if defective in neatness, it may be corrected with a pin, by taking off the redundant parts.

The difficulty, with respect to the nose, is to preserve the lines properly determined, at the same time so artfully blended into the cheek, as to express its projection, and yet no real line to be perceptible on close examination. In some circumstances it should be quite blended with the cheek, which appears behind it; and determined entirely with a slight touch of
of red chalk. The shadow caused by the nose is, generally, the darkest in the face, partaking of no reflection from surrounding parts. Carmine and brown ochre, carmine and black, and such brilliant crayons will compose it best.

Having prepared the lips with strong lake and carmine, &c. with these colors, make them completely correct, and, when finishing, introduce vermilions, but with great caution, as they are extremely predominant.

In coloring the neck, preserve the stem of a pearly hue, and the light not so strong as on the chest. If any part of the breast appears, its transparency must be expressed by pearly tints; but the upper part of the chest should be colored with beautiful vermilions, delicately blended.

It is evident, that the foregoing principles are applicable only to the finest complexions; it would be absurd, to treat the portrait of a sea-officer with transparent blues, and pearly tints. A variation of colors, according to the subject, is indispensable; but such variety is not difficult to whoever reflects on what has been already hinted. Crayons usually appear to greatest advantage, in the tender blendings of their tints, in female countenances: the warmer and bolder colors succeed best in oil.

*** We have been particular in noticing the places of the colors, because the same rules apply in many other subjects, and are drawn from nature itself.
OF DRAPERY IN CRAYONS.

Dark blue, purple, black, pink, and all kind of red draperies, should be first tinged with carmine, which will render the colors more brilliant than any other method; over this, should be laid the middle tint, except the masses of dark shadow, which may be laid on deep.

With the light and dark tints, the smaller parts are to be made with freedom, executing, as much with the crayon, and as little with the finger as possible: in each fold touching the last stroke with the crayon, which stroke the finger must never touch. In reflexions, the simple touch of the crayon will be harsh, therefore, fingering will be necessary. With respect to reflexions, in general, they must always partake of the same color as the object reflecting; but in the case of single figures, of whatever color the drapery is, the reflexion on the face must partake thereof, otherwise the picture, like paintings on glass, will have but a gaudy effect.

Linen, lace, fur, &c. should be touched spiritedly with the crayon, fingering very little, except the latter; and the last touches, even of this, should be executed by the crayon, without sweetening with the finger.

The coat of crayons should be but thin on the shadows, but in the lights a body of color will contribute to force, and to durability.
OF PAINTING ON GLASS, OR BACK-PAINTING.

This manner of painting is executed with great facility: it gives all the softness that can be desired, and is easy to work; there are no outlines to draw, nor shadows to insert, but the colors are put on without the trouble of either.

The prints for this purpose are done in mezzotinto, but many of those well-finished, engraved in the manner of chalks, are very proper; for, their shadows being blended together, when rubbed on the glass, appear soft, and united, as drawings in Indian ink.

From such prints, cut off their margin, then on a piece of fine crown-glass, very clean, the size of the print, and free from knots and scratches, lay some Venice turpentine on one side, quite thin and smooth, with a painter's brush. Lay the print flat in water; when thoroughly wetted (which requires four-and-twenty hours for some sorts of paper, but other sorts are ready in two hours), take it carefully out, and lay it between dry papers, that the superfluous water may be absorbed.

Next, lay the damp print flat on a table, with its face uppermost; then, holding the glass over it, without suffering the turpentine to touch it till it is exactly even with the print, gently press the glass down in several parts; and turning it, press the print with your fingers, drawing them from the centre to the edges, till every part is quite smooth, and free from blisters.
This done, wet the back of your print with a sponge, till the paper will come off with your fingers; then rub it gently, and the white paper will roll off, and leave behind it only the ink which formed the impression. When dry, with a camel’s-hair pencil dipped in oil of turpentine, wet it all over, and it will be transparent, and fit for painting on.

A sheet of white paper placed behind, will contribute to its transparency, and assist in determining the coloring, &c.

Lay the lighter colors, first, on the light parts of your print, and the darker over the shadows; and, having once laid on the brighter colors, it is not material if the darker sorts are laid a little over them; for the first color will hide those laid on afterwards.

The glass, when painted, must stand three or four days to dry, and be carefully covered from dust.

The proper colors are those used in oil; for their management take the rules laid down in the following articles.

Some years ago, the ingenious Mr. Vispre exhibited a number of paintings on glass, the subjects, Fruit, Flowers, &c. As in this kind of painting the lights must be first inserted, the pictures are apt to suffer by a coldness; which is evident in the performances of those who are not perfect in the principles of their art. This must be guarded against; and care must be taken to give spirit to the pencil; otherwise the smoothness of the glass will impart a tameness to the picture.
GENERAL ELEMENTS OF PAINTING IN OIL.

Notwithstanding the predilection of many persons for pictures in miniature, or in crayons, there are scarce any who are not sensible of the superiority of oil pictures: their more accurate coloring, and their greater force, as well as their services in subjects of considerable dimensions, render them principal objects of attention.

Of the cloths necessary for this kind of painting, also of the pencils, tools, pallette, and pallette-knife, &c. see the respective articles in the Compendium of Colors.

To these utensils most painters add, what they term a mall-stick; which is a slender rod, or stick, at one end of which is tied a ball of soft rag, cotton, &c. to prevent bruising, or hurting the picture, against which it rests. This stick is held in the left hand, and its use is, to support the right hand while at work, keeping it steady, and firm: but many artists who possess command and freedom of hand, decline the mall-stick as a bad custom.

Easels are of various forms, and contrivances, but generally composed of three uprights or legs, the longest behind. In the two which are in front are a number of holes, corresponding in height to their opposites in each leg, so that when a peg is placed in them, whatever is laid on these pegs, is kept even. It is usual to place a slight piece of board (termed a shelt) on these pegs to support small pictures.
The colors proper for painting in oil, are usually kept in the color shops in bladders, at certain prices; and this is the best method of purchasing small quantities of them, except ultramarine, carmine, and vermilion, perhaps also the lakes and Prussian blue, which should be bought in powder, as in that state they will be best preserved; the least touch of these will give the picture a cast: mix up no more of these colors than you want for present use, which must be with a drop, or two, of nut-oil on the pallette, with the pallette-knife.

To get the color out of the bladders, prick a hole in the side of each, and press it, till you have sufficient for present use; as what remains will dry and skin over, and so become useless.

A great variety of colors are used in oil; the following is a list of the principal:

1. **Flake White.**
2. **Fine Nottingham Lead.**
3. **Naples Yellow.**
4. **Patent Yellow.**
5. **Yellow Lake.**
6. **Yellow Ochre.**
7. **Ditto Burnt.**
8. **Red Ochre.**
9. **Light Red.**
10. **Fine Red Lead.**
11. **Vermilion.**
12. **Indian, or Chinese Vermilion.**
13. **Pale, or Bright Vermilion.**
14. **Indian Red.**
15. **Scarlet**
15. **Scarlet Lake.**  
16. **Purple, or Deep Lake.**  
17. **Carmine.**  
18. **Brown Ochre.**  
19. **Sienna Earth.**  
20. **Ditto Burnt.**  
21. **Antwerp Brown.**  
22. **Brown Pink.**  
23. **Umber.**  
24. **Umber Burnt.**  
25. **Ultramarine.**  
26. **Prussian Blue.**  
27. **Lamp Black.**  
28. **Ivory Black.**  
29. **Bone Black.**  
30. **Blue Black.**

1. **Flake White**, when pure, is the very best white; though it has not the body of Nottingham White Lead. This color should be ground with the finest poppy oil.

White is a very friendly working color, and comes forward with yellows and reds—but retires with blues and greens. It is the nature of whites to *sink* into whatever ground they are laid on; therefore they should be laid on white grounds to preserve their brilliancy: or, a considerable body of the color should be laid on to allow for sinking in.

2. Of **Nottingham Lead** there are two sorts; the best is little inferior in whiteness to the best flake white; it will stand well.
3. **Naples Yellow** will not bear iron to touch it, without altering its tint. It should be a clean tender color.

4. **Patent Yellow**, a new invented color, very bright and durable—dries very well.

5. **Yellow Lake** should be used sparingly; time will deprive it of its beauty, unless it be well secured by varnish—it is a bad drier.

6. **Yellow Ochre.** The best stone ochre is very difficult to procure genuine; but the want of it may be supplied by Sienna earth and Nottingham white; which will produce pretty much the same tint, or rather brighter, with this advantage, that it is deeper in its tone, with less of the lead in it: the great body of the lead supporting the Sienna earth, which alone is semi-transparent.

8. **Red Ochre** is a valuable color, when prime and genuine, for though cheap, it is often to be had only of an inferior quality. The best is that which is very hard and stony, difficult to grind, more difficult to procure in perfection; this, with a little deep lake, is not inferior to the best Indian red, in many effects that may be produced by it. It is a friendly mixing color, of great use—should be ground with nut oil, though linseed oil is commonly used for it.

9. **Light Red** is fine light ochre burnt: this mixes very agreeably with white, and produces a flesh color of great use.

10. **Fine Red Lead.** By an improved method of purifying it, is rendered very bright, and stands well.

11. Of
11. Of **Vermilion** the true native cinnabar is, by some artists, reckoned the best. It will not glaze, but is a fine color when glazed. It is ground with linseed oil, and should be used with drying oil.

13. **Pale, or Bright Vermilion**, is esteemed much the most useful of the vermilion; as the effects of the others may be produced with this and good lake: but they cannot equal the brightness of this, by any mixture whatever.

14. **Indian Red**, is a strong, pleasant working color; but will not glaze well, and when mixed with white falls a little into the leaden tone. It is ground and used as lake; a mixture of red ochre and lake is occasionally a substitute for Indian red: nevertheless this is a useful and powerful color—indeed it is often rather too powerful, and especially while wet, in which state it differs from itself when dry: experience alone can justly foresee its true effects.

15. **Lake** is a tender, sympathising deep red, but of no strong body, therefore it should be strengthened with Indian red. It is the best glazing color. It is ground with linseed oil, and used with drying oil.

17. **Carmine** is a most beautiful crimson between lake and vermilion, is a fine working color, and glazes. It should be ground with nut oil, and used with drying oil.

18. **Brown Ochre**. A color allied to this may be made from yellow ochre, and other mixtures of the ochres.
19. **Sienna Earth.** A fine color, but little in use, except for landscape: in which this color burnt is of considerable service.

20. **Sienna Earth Burnt,** mixed with dark yellow and Indian red, makes a fine tint. The best sort burnt mixed with white and a little ultramarine makes an exquisite flesh color for skies, &c.

21. **Antwerp Brown.** This brown is not always kept in the color-shops, we shall therefore give here the manner of preparing it: it is valuable from its great depth of tone; it has great body, and will stand well, being produced by fire:—Put some good asphaltum into an iron ladle, set it over a very slow and feeble fire, taking care it does not boil over; keep it there till it will boil no more, but is become nearly a cinder; when cold, put to it the proportion of half an ounce of sugar of lead to half a pound of the calx, grind it in the strongest drying oil. It will work free, and dry well. N. B. This operation is called *burning* of asphaltum: asphaltum thus *burnt* is used in some compositions of etching ground—vide **ground**.

22. **Brown Pink** is a fine glazing color, but of no strong body; in the flesh it should never join or mix with the lights, because this color and white are enemies, and mix to a warm dirty hue; for which reason their joinings should be blended with a cold middle tint. In glazing of shadows it should be laid before the other colors, that are to enrich it: it is one of the finishing colors, and therefore should never be used alone in the first painting. It is strengthened with burnt umber, and weakened with terra verte.
is ground with linseed oil, and used with drying oil. A better color (in the opinion of some artists) and more certain, may be made from Antwerp brown and patent yellow.

23. Umber, burnt or unburnt, is especially useful in dead-coloring; it forms outlines, &c. well, or washes in a subject, &c. to advantage.

24. Burnt Umber is a very quick drier—is a fine warm brown, and a good working strong color: it is of great use in the hair, and mixes finely with the warm shade. It is highly commended by some artists, and highly blamed by others, as a sullying color.

25. Ultramarine is the finest blue known in the world: it stands even in the fire; it is tender, glazes beautifully, and never glares—it is a retiring color. From its great value should be used with the purest oils.

26. Prussian Blue is a fine blue, and a kind working color; but apt to be cold, and rarely or never stands well: it should be ground in nut oil, as grosser oils injure it. It should only be ground as wanted.

27. Lamp-black is a troublesome color, and should be burnt in an iron box till red hot; being a greasy color, and when mixed with the strongest drying oil, still requiring the assistance of a little sugar of lead, to force it to dry.

28. Ivory Black is far preferable to lamp-black, as it mixes much better with other colors; it is a good shade for deep blue. Ivory black and a little Indian red make a good general shadow color; it is ground with linseed oil, and requires the assistance of
of drying oil. Black is in its nature a cold and re-
tiring color, except where by the force of contrast it comes forward, in which case it has great power.

TO SET A PALETTE.

A quantity of color being squeezed out of its blad-
der, on the centre of the palette, work it into a proper form (with the addition of what oil is requi-
site) by the palette-knife, and transplace it into its station on the upper part of the palette, beginning with the lighter color, placed next the hand. From these originals compose a row of secondary tints, by mixing them together, in such proportion as appears most likely to suit the subject to be treated. A third row, still nearer to the subject, may easily be formed from the former.

To be somewhat more particular: We suppose the original colors placed in their order on the upper part of the palette: To compose a second row of colors; take, for example, Lake and Naples yellow, to these we imagine white to be added; this compo-
sition we place in the second row, and so of the rest. If we wish for a lighter tint of the same colors, this is produced by an addition of white; or, perhaps, we want a red somewhat different, varying to light red, or to vermilion; these united, form a compound, admitted lower on the palette: or, the secondary color, instead of red, requires yellow, or a different kind of yellow; or, in short, any other color which may be a departure from the first mixture. This combination is termed breaking the colors; its use is, to
to prevent glare, and rawness, and its judicious exercise is a principal token of a masterly hand.

Nature never presents a pure, unmixed, strong, color, of any cast: but every color has an inclination to, or a tinge of, some other. A blue sky seems at first an exception, yet it is not so in fact; nor the color of the sea, nor the green of a field; for an innumerable variety of lights, reflexes, &c. are perpetually playing upon it, and thereby diversifying, debasing, and confusing, the original color. Even draperies vary in the colors of their lights and shades: the yellow light of the sun, the red light of a fire, a white light, &c. alter their appearances; and the deprivation of light in the shades, as the parts are more or less retired, is too obvious to need explanation; yet, even shadows are altered by reflexions from their neighbours.

It is evident, from this mode of reasoning, that to set a pallette well, requires no mean skill; and perhaps, if those who consider it as labour lost were to bestow more attention on it, their pictures would not fare the worse for it, we shall therefore give a variety of modes, as practised by the best masters:

Method of setting the Pallette as used by Chevalier Mengs, and others.

1. The principal light of flesh is composed of white and Naples yellow, or light ochre, or brown ochre, according to the complexion of the person; of these form the first and second tints.

2. White, light red, with a little yellow.

3. The same a little darker.

For
For Middle Tint.

1. White, black and yellow, tempered with a little red.
2. The same a little darker.

For Shadows.

1. Yellow, black, with a little red: in three degrees of strength. In all these shadow tints a little asphaltum may be used, in order to give a transparency and an harmony.

For a Warm Tint.

1. Naples yellow and lake.
2. Lake and vermilion.
3. Lake and light red.
4. Lake and terra de Sienna, burnt.
   A little asphaltum must be used in all these warm tints.
   Likewise make two other tints composed of black and white only—and two other tints of a purplish hue, which are composed by mixing a little vermilion with the black and white.

Another Method of setting the Pallette.

1. Light. Yellow ochre and white.
2. Ditto. The same a little darker.
3. Ditto. Light red, a little yellow ochre and white.
4. Light.
4. Light. The same a little darker.
   For a very fine complexion add a little vermi-
   lion in the tints, No. 3 and 4.
5. Ditto. Vermilion and white is also necessary
   in the cheeks, &c.
6. Demi-tint. The same as No. 1, with peach
   black.
7. Second tint. Yellow and black, in the dead a
   little red.
8. Third tint. Terra de Sienna burnt, yellow
   and black.
9. Reflexion. To No. 3 add yellow ochre and
   brown ochre.
10. Ditto. To No. 4 add lake and burnt ochre.
   In setting a palette it is good to observe to lay
   those colors near each other which harmonize: for
   example, first, white, then Naples yellow, next light
   yellow, dark yellow, light red, vermilion, terra de
   Sienna burnt, lake, blue, umber light and burnt, and
   black; also, observe in mixing the tints on the pal-
   lette to place them under in like harmony, begin-
   ning with the lightest of each, and so placing those
   of the next degree of strength one beside the other.

OF THE PRINCIPAL TINTS FOR PAINTING FLESH,
MADE BY MIXTURE FROM THE PRINCIPAL
COLORS.

1. Light Red Tint, of light red and white;
it is the best conditioned of all colors, for a general
ground for flesh. With this color, and the shade-tint,
we should make out the flesh, like claro obscuro, or

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mezzotinto. We should also remember, that this color will grow darker; because it is naturally too strong for the white; therefore we should temper it by mixing some vermilion and white with it, in proportion to the fairness of the complexion; and though thus mixed, it may yet be called the light red tint, to avoid confounding the vermilion tint with it.

2. Vermilion Tint. Vermilion and white, mixed to a middle tint; it is the most brilliant light red; it agrees best with the white, light red, and yellow tints.

3. Carmine Tint, is carmine and white, mixed to a middle tint; it is the most beautiful red, for the cheeks and lips: it is a finishing color, and should never be used in the first painting.

4. Rose Tint, made of the red shade and white, mixed to a middle degree, or lighter: it is one of the cleanest and most delicate tints used in flesh, for clearing up the heavy dirty colors; and therefore, in changing, will sympathize and mix kindly.

5. Yellow Tint, is often made of Naples yellow and white; or of light ochre and white, which is a good working color. Remember, the ochre is too strong for the white; therefore it requires a little allowance in using it. It follows the light red tints, and should always be laid before the blues. If we lay too much of it, we may recover the ground it was laid on, with the light red tints.

6. Blue Tint, ultramarine and white, it is a pleasant working color: with it we should blend the gradations. It follows the yellows, and with them it makes greens; and with the red it produces pur-
No color is so proper for blending down; or softening the lights into keeping.

7. **Lead Tint**, ivory black and fine white, mixed to a middle degree; it is a fine retiring color: is of great use in the gradations, and in the eyes.

8. **Green Tint**, is made of Prussian blue, light ochre, and white: this color will dirty the lights, and should be laid sparingly in the middle tints. It is most used in the red shadows, where they are too strong. It is of a dirty antipathizing nature.

9. **Shade Tint** is made of lake, Indian red, black, and white, mixed to a murrey color, of a middle tint; this is the best color for the general ground of shadows; therefore called the shade-tint: it mixes with the lights, and produces a pleasant clean color, a little inclined to the reddish pearl. As the four colors of its composition are of a sympathising nature, this mixture will be the same; and therefore may be easily changed, by the addition of other color.

10. **Red Shade**, is lake and a very little Indian red: it is a good working color, and a good glazer: it strengthens the shadows on the shade-tint; and receives, when it is wet, the green and blue tints agreeably. It is a good ground for all dark shadows.

11. **Warm Shade**, is made of lake and brown pink, mixed to a middle degree: it is a fine color for strengthening the shadows on the shade-tint, when they are wet or dry. We must take care that it does not touch the lights, because they will mix with it to a dirty snuff-color; and therefore should be softened with a tender cold tint.
12. **Dark Shade** is made of ivory black and a little Indian red only. This color mixes very kindly with the red shade, and sympathizes agreeably with the middle tints in the dead-coloring. It is a glazing color for the eye-brows and darkest shadows. It is an excellent shadow-color, and one of the finest working colors.

**FIRST PAINTING.**

**The Colors and Tints Necessary for the First Painting of Flesh.**

1. **Fine White.**
2. **Light Ochre**—and its two tints.
3. **Light Red**—and its two tints.
4. **Vermilion**—and its tint.
5. A tint made of **Lake, Vermilion, and White.**
6. **Rose Tint.**
7. **Blue Tint.**
8. **Lead Tint.**
9. **Green Tint.**
10. Half-shade tint—made of **Indian Red, and White.**
11. **Shade Tint.**
12. **Red Shade.**
13. **Warm Shade.**

The finishing pallette for a fine complexion requires more; *viz.* carmine and its tint, lake, brown pink, ivory black, and Prussian blue.

The first lay of colors consists of two parts—one the shadows only, the other the lights.
The use of the shadows is to make out the drawing, very correctly, with the shade-tint, as if it was to be done with this color only; and remember to drive the color, or lay it sparingly. The lights lay in with the light-red tint, in different degrees, as in nature; these two colors united produce a clean tender middle tint; to go over the darkest shadows with the red or warm shade, will finish the first lay.

The warm shade, if laid on the shade-tint, improves it to a warmer hue; but if laid instead of the shade-tint, it will dirty and spoil the colors it mixes with; if the red shade be laid first, instead of the shade-tint, the shadows would appear too red and bloody; the shade and light red tints are so friendly and delicate in their natures, that they will not dirty each other, though we are continually changing them.

To finish the first painting, improve the reds and yellows to the complexion, and after them the blues; observing, that the blues on the reds make purple, and the yellows green. The same method is to be understood of the shadows; but be sure to leave them clean, and not too dark; therefore allowance should be made in their grounds with the light red; because glazing will make them darker. A cloth of a dark, or bad hue, requires a strong body of color all over the shadows, such as will not sink into the ground, but appear warm, and a little lighter than the life, that it may be of the same forwardness to finish, as if it had been on a light ground; for, the business of dead-coloring is, that we leave it always in proper order for finishing.
The grounds of shadows, in the dead-coloring, should be such as will support the character of the finishing colors; clean, and a little lighter than the finishing colors, because the finishing of shadows consists, in a great degree, of glazing; all shadows and colors, that are to be glazed, should be done with colors of a clean solid body; because the glazing is then more lasting, and has a better effect.

The light red and white improved is proper for the first lay or ground; which should be always done with a full pencil of stiff color, brighter than the life, because it will sink a little in drying. The greater the body and quantity of color, and the stiffer it is laid, the less it will sink: every color in drying will sink, and partake, in proportion to its body, of the color it is laid on; all the lights of the flesh, if not laid on a light ground, must consequently change a little from the life, supposing there is no allowance made. The shade-tint for the shadows should verge upon the rose tint, in proportion as the complexion is delicate.

It is thought the great masters of coloring seldom sweetened, or softened, the colors; but in uniting the first lay, were very careful in preserving the brightness of their colors, and therefore did not work them below the complexion. The first painting should be left bright and bold, and the less the colors are broken the better: We should forbear using any colors that will prejudice them, and be contented to add what is wanted in the next painting.
SECOND PAINTING.

The second painting begins with laying on a very small quantity of poppy oil; then wipe it almost all off, with a dry piece of silk hankerchief, leaving only a moisture remaining from it.

The first lay of the second painting, is, scumbling the lights, and glazing the shadows; then finishing the complexion with the virgin tints, and improving the likeness, as far as we can, without daubing.

Scumbling, is going over the lights, where they are to be changed, with the light red tints, or some other of their own colors, such as will always clear and improve the complexion, with short stiff pencils; scumbling only such parts as require it.

The light red tint improved, is a good color for scumbling, and improving the complexion, in general. Where the shadows and drawing, are to be corrected, employ the shade tint, driving the color very stiff, and bare; the easier to retouch, and change it, with the finishing tints. Parts of the shadows should be glazed with some of the transparent shadow colors, such as will improve them, and come near to the life, taking care not to lay on too much, for fear of losing the hue of the first painting, the ground of which should always appear through the glazing. In uniting the lights and shades, they should not mix dead, and meally; the more the lights mix with the shades, the more meally those shades will appear.

Go over the complexion with the virgin tints, to improve the coloring to the utmost, both in the lights
lights and shadows. This should be done in the same manner as we laid them in the latter part of the first painting; with the reds, yellows, and blues; blending them with delicate light touches of the tender middle tints, without softening. We should leave the tints and their grounds clean and distinct, and be content to leave off while the work is safe and unsullied, leaving what is required farther to the conclusion; for, in attempting the finishing touches before the colors are dry, we lose the spirit, and the drawing, and dirty wherever we touch.

**THIRD PAINTING, OR FINISHING.**

It is now supposed the complexion wants little more than a few light touches; therefore there will be no occasion for oiling before we begin. We begin with correcting all the glazing; first, where the glazing serves as a ground, or under part; then we determine what should be done next, before we do it, that we may make the alteration with one stroke of the pencil, thereby preserving both the glazing and the tints; but if we cannot lay such variety of tints, and finishing colors, as we intended, it is better to leave off while the work is safe, and in good order; because those few touches, which would endanger the beauty of the coloring, may easily be done, if we have patience to stay till the colors are dry; and then add those finishings with free light strokes of the pencil.

It is much easier to soften over strong tints when they are dry, than when they are wet, because we may
may add the very colors that are wanting, without endangering the parts that are dry. If any of the colors of the pallette want to be changed to the life, when we are painting, it is better to do it with the knife on the pallette, than with the pencil.

OF BACK-GROUNDS.

The principal colors necessary for painting backgrounds in portraiture, as walls, buildings, or the like, are white, black, Indian red, light and brown ochre, Prussian blue, and burnt umber, from which the eight principal tints are made, as follows:

1. **Pearl** is made of black, white, and a little Indian red.
2. **Lead**, of black and white, mixt to a dark lead color.
3. **Yellow**, of brown ochre and white.
5. **Flesh**, of Indian red and white, mixt to a middle tint.
6. **Murrey**, of Indian red, white, and a little black, mixt to a kind of purple, of a middle tint.
7. **Stone**, of white, umber, black, and Indian red.
8. **Dark-shade**, of black and Indian red only.

Here the lead tint serves for the blues; the flesh tint mixes agreeably with the lead: the murrey is a good blending color, and of use where the olive is too strong. The umber, white, and dark shade produce a variety of stone colors: the dark shade and umber, used plentifully with drying oil, make a warm shadow color. These colors may be laid
laid with drying oil, because they mix and set the better with the softener.

Begin from the shadowed side of the head, and paint the lights first; then, the gradations and shadows, with a large, stiffish, tool, sparingly, with the dark shade and white, a little changed with such colors as will give it the hue required, but very near in regard to tone and strength; leaving them like mezzotinto.

The dark and warm shadows should be laid before the colors that join them with the dark shade and umber, because, if those colors were laid on first, they would interrupt and spoil the transparency, which is their greatest beauty. The more the first lay is drove, the easier and better we may change it with the finishing tints; therefore we may lay them with the greater body.

As we heighten and finish the lights, we do it with warmer colors; accompanied with tender cold tints. The lightest part of the ground is always nearest to the shadowed side of the head; and this part governs all the rest; it should be painted with a variety of light, warm, clear colors, which gradate and lose their strength imperceptibly. We must take care not to cover too much of the first lay, but consider it as the principal color.

When the lights are well adapted to support the head, it is easy to introduce whatever kind of shadows we find most proper; then soften and blend the whole, the tints will sink, and lose a little of their strength and beauty in drying. Grounds, walls, &c. may be finished at once painting; or afterwards
terwards glazed with a little of the dark shade and drying oil, drove very bare; and their hue improved with a few light touches of the color that is wanting. The dark shadows may also be strengthened and improved by glazing, after the subject is nearly finished, for fear of making them too strong.

Curtains should be dead-colored when we paint the ground; with clean colors, of a hue near to the intended curtain, such will support the finishing colors, with a tender sort of keeping, in regard to their tone in the lights, but much softer in the shadows, mixing and breaking the whole with the colors of the ground, as Fresney says, "bodies that are back in the ground, should be painted with colors allied to those of the ground itself." If we cannot set the folds the first painting, we should leave the masses of light and shadow, in regard to the keeping of the picture, broad and well united together, such as may appear easy to finish on. The colors of the landscape, in back-grounds, should be broken and softened, with those of the parts which join them: hereby bringing them into keeping, so that the parts do not stare, nor cut at their extremities.

The sky should be broke with the lead, and the flesh, tints: the murrey tint is of great use in the grounds of distant objects; the umber and dark shade in the near grounds: the greens should be more beautiful than we intend them, because they will fade, and grow darker. After all is painted, we should go over the whole very lightly with the softener.
OF PAINTING DRAPERIES.

The right method of painting draperies in general, is, to make out the whole, with three colors only: \textit{viz.} the lights, the middle tint, and the shade tint.

The middle tint should be very near to the general hue of the drapery: and the shade tint dark enough for the general hue of the shadows.

The lights should rather incline to a warmish hue: the middle tint should be made of friendly working colors, such as will mix of a clean tender cool hue, and the shade tint should be made of the same colors as the middle tint, only with less light; with these three colors we should make out the whole like mezzotinto, before we add any of the reflexions, or finishing tints.

The reflexions of draperies, \\&c. are generally productions of their own, and lighter than the shadows on which they are found; being produced by light, they will have a light, warm color, mixed with the local color that receives them. Here it will be necessary to observe the general method in managing the colors of the first lay, and those of the reflexions and finishing tints.

In the first lay, the high lights should be laid with plenty of stiff color; then shaped, and softened into character with the middle tint, very correctly. Where the gradations of the lights are slow, as in the large parts, it is proper to lay the middle tint first at their extremities, with a tool that will drive the color,
color, and leave it sparing: because, the lights will mix, and lie the better, upon it. Next make out all the shadows with the shade tint drove bare. After this, the middle tint, which fills up, and serves as a kind of second lights and gradations, should be managed very nicely, to produce character, without touching any of the high lights which finish the first lay.

Reflexions and finishing tints, are in general antipathies to the first lay; they will, without great care, dirty the colors on which they are laid; and therefore should be laid with a delicate light touch, without softening: if overdone, it may be recovered with the proper color of the part, either directly, or when dry.

When the color of the cloth is very improper for the ground of a drapery, we should change it with those colors which are most likely to improve, and to support, the finishing colors. This method will preserve them in their greatest lustre. In dead coloring, the lights, and shades, need only hint at the shape and roundings of the figure, but if we have a design to work from, it will be proper to make all the large and principal parts in their places, with a clean color, lighter than the intended drapery, though in general of the same hue, while the shadows are no darker than a middle tint: these should be mixed and broken in a tender manner; then softened with a large tool, that nothing rough, or uneven, be left to interrupt or hurt the character of the finishing colors.

Instances


Instances of particular kinds of Drapery.

WHITE SATIN.

All whites should be painted on white grounds, laid with a good body of color; by reason this color sinks more into the ground than any other.

There are four degrees of colors in the first lay to white satin: 1st. The fine white for the lights. 2d. The first tint, made of fine white and a very little ivory black, mixed to an exact middle degree between the white and the middle tint. This color follows the white, and with this, we should give the lights a character, taking care that this tint appear distinctly between the white, and the middle tint. 3d. The middle tint should be made of white, black, and a little Indian red, mixt to a beautiful, clear color, of a pearly hue. Remember to allow for the red hue changing a little toward lead color. If there be occasion to make any part of the middle tint lighter, we should do it with the first tint only. This color should also be laid, sparingly, before the white, in the lights that happen in the middle tints and shadows; on which we should lay the white with one light touch, not covering all the part made with the first tint: but, preserving a softening edge, or border, between the white and the middle tint. 4th. The shade tint should be made of the same color as the middle tint; but with less white, so that it be dark enough for the shadows in general; with which we should make out the shadows into character.
In the reflection and finishing tints of white sattin: brown ochre, mixed with the color of the lights, is a useful color, in general, for all reflexions produced from their own colors. Accidental reflexions are made with the color of the parts from whence they are produced, and the local colors that receive them. Two reflecting tints are wanted for draperies, in general, one lighter than the middle tint, the other darker. These may be changed on the pallette with the first, and the middle tints, as occasion requires, or be lightly broken on the part that receives them: but this last method is not so safe as the other. The tint for blending the dark shadows to the mellow tender hue, is made with the shade tint and a little brown ochre; laid on very sparingly, with soft light touches, for fear of making them heavy. If it be overdone, we may recover it with the color it was laid upon.

We often see a little blue used in the first tint of white sattin. When a warm, or dirty color, is mixed with a clean light one, they will form a dirty color. It is the want of the red hue which makes white sattins often appear like pewter.

**BLUE SATTIN.**

Blue sattin is made of Prussian blue and fine white. The best ground for blue is white for the lights, and black and white for the shadows.

The first lay of colors for blue is divided into three degrees:

1st. The
1st. The middle tint of a beautiful azure. 2d. The color for the lights about a middle degree between that, and white. 3dly. The shade tint, dark enough for the shadows, in general. The broad lights should be laid with plenty of color, and shaped to character with the middle tint, before we lay on any other colors. The less the colors are mixed, the better they will appear, and stand; for the lights of blue should be managed with as much care as those of white satin. Next follows the rest of the middle tint, and then the shadows. The more we drive the shade tint, the better it will receive the reflexions and finishing tints. The shadows should be strengthened, and blended, with ivory black, and some of their own color, mixt into a tender mellow hue.

The reflexions are made as those of white satin, with ochre and some of the lights: which should be done at once. The shadows, when dry, may be improved with the colors they were made of. The Prussian blue best to be used, is that which looks the most beautiful before it is ground: the sooner it is used after it is ground, the better.

Velvet may be painted at once. The method is, to make out the first lay with the middle tint, and shade tint; on which place the high lights with light touches, and finish the shadows as those of sattin; but the nearest imitation of velvet is procured by glazing; having first prepared a ground, or dead coloring, with such colors as will, when dry, bear out and support the glazing color. The glazing color is, of a fine transparent quality, used simply with oil only;
so that whatever ground it is laid on, the whole may appear distinctly through it. The best ground for blue is made with white and ivory black: the white is for the high lights, which, with the middle tint and shade tint, makes out the first lay like mezzo-tinto. The middle tint should be lighter, in proportion to the glazing, because that will make it darker. It is often necessary to cover all but the high lights with a glazing, laid with less quantity than if it was to be done once only. If any of it touch the lights, we should wipe it off with a clean rag. The very high lights should be improved, and made of a fine white, and left to dry. The glazing color is Prussian blue, ground very fine with nut oil; and should be laid with a large stiffish tool, that will drive the color as occasion requires. On the last glazing strengthen and finish the shadows.

We observe, in this instance, that glazing the middle tint, which is made of black and white, will not produce a color so blue, as if it had been prepared with Prussian blue and white; yet this color will preserve the beauty of the lights, in their perfection, by reason of its tender obscure hue, when the blueness of the other would diminish them. This method of glazing blue is the general rule for all glazing.

The greatest fault in coloring draperies of any kind, is, painting the shadowed parts with strong glaring colors, which destroy the beauty of the lights. This is not only the reverse of art, but of nature, whose beauty of color is always diminished in proportion to the light: for this reason we should blend, and soften,
the shadows, with such friendly colors as will agree with their local character, and the requisite degree of obscurity.

In glazing blue, the lights may be glazed with ultramarine, though the other parts are done with Prussian blue, hereby saving a great quantity of that valuable color.

Though this general method of painting sattins, is, to make the first lay of colors with three degrees, or tints; yet, in using them, they produce two more: for, the mixing of two different colors on the cloth, makes another, of a middle tint between them: so do the lights and middle tint, and the middle and shade tint: the first mixture answers to the first tint in white sattin; and the last is a sort of gradation, or half shade.

If the lights and middle tint mix to a beautiful clean color, of a middle hue between both, there will be no occasion for a color to go between them, as in the blue sattin: but if in mixing, they produce a tint inclining to a dirty warm hue, then there must be another made of a sympathizing nature, to be laid between them, to preserve the beauty of the lights.

It is necessary to understand these principles of the first lay of colors, as comprehending the general rule of coloring, and that on which the practice of excellent coloring depends.
SCARLET AND CRIMSON.

A light yellow red, made of light ochre, light red, and white, is the proper ground for scarlet; the shadows are, Indian red, and, in the darkest parts, mixed with a very little black.

The second painting should be lighter than we intend the finishing color to be in proportion to the glazing, which will make it darker.

The high lights, are vermilion for cloth, and vermilion and white, for satin, and velvet; the middle tint is vermilion, with a very little lake, or Indian red; the shade tint is Indian red and lake, with a little black in the darkest shadows. The difference between scarlet and crimson, is, that the high lights of crimson are whiter, and the middle tint is made darker. Their reflexions are made with light red and vermilion. The high lights should be laid and managed in the same manner as those of the blue, for fear of dirtying them; and sometimes they require to be touched over a second time, before we glaze them. The more the colors of the second painting are drove, the easier and better they may be managed to character: but the high lights should have a good body of color, and be left with a delicate light touch. After it is well dry, we should finish by glazing the whole with fine lake, and improve the reflexions and shadows. Scarlet requires but a very thin glazing. It is better to glaze crimson twice over, than to lay too much at once painting.
There are two different methods of painting a pink color: one, by glazing; the other, by a body of colors at one painting. The same grounds do for both; which should be, a whitish color, inclining to yellow, for the lights; and Indian red, lake, and white, for the shadows.

The second painting, for the glazing, is done with the same colors and a little vermillion, for the reflexions; and vermillion and white for the high lights; when dry, glaze it with fine lake, then break and soften the shadows into character, and harmony, directly.

The other method is, to make the high lights with carmine and white; the middle tint with lake, white, and a little carmine; and shadows with lake and Indian red, with a little vermillion for the reflexions. But the shadows require to be broken with some tender obscure tint.

**YELLOW.**

The ground for yellow should be a yellowish white, for the lights, and a mixture of the ochres, for the shadows.

There are the same number of tints in the yellow, as in the white, sattin; the method of using them is the same. The lights are made with king's yellow, ground with clean, good, drying oil. The first tint is light ochre, changed with a little of the pearl tint made
made of the dark shade and white: which should be laid, and managed, as the first tint in white-satin. The middle tint is a mixture of the light and brown ochre, softened with the pearl tint. The shade tint is made with brown pink and brown ochre. These belong to the first lay.

The reflexions are light ochre; sometimes, in the warmest parts, mixed with a little light red; the shadows are strengthened with brown pink and burnt umber.

**GREEN.**

The proper ground for green is, a light yellow green; made of light ochre, a little white, and Prussian blue, for the lights; and the ochres, brown pink, and Prussian blue, for the shadows.

The finest green for drapery, is made of king's yellow, Prussian blue, and brown pink. The high lights are, king's yellow and a very little Prussian blue; the middle tint has more Prussian blue; the shade tint is made with some of the middle tint, brown pink, and more Prussian blue: but the darkest shadows are brown pink and a little Prussian blue. The lights and middle tint should be managed in the same manner as those of the blue satin. The shade tint should be kept entirely from the lights, because the brown pink that is in it, will, in mixing, dirty them, as the black does those of the blues: they dry a little darker than they appear when wet. The king's yellow should be ground with good drying oil; for, the longer it is in drying, the more it will change.
change and grow darker: and the sooner it is used, the better it will stand. It is proper to have two sorts of king's yellow, one very light for the high lights of velvet.

CHANGEABLE COLORED SILKS.

Changeable colors have four principal tints, viz. the high lights, middle tint, shade tint, and reflected tint.

The art lies in finding the exact color of the middle tint, because it has more of the general hue of the silk than any of the others. The shade tint is of the same hue with the middle tint, though dark enough for the shadows. The high lights, though often very different from the middle tint, should be of a clean, friendly, working color, that will, in mixing with it, produce a tint of a clean sympathizing hue.

The method of painting silks is to make out the folds with the shade tint, and then fill them up in the lights with the middle tint. This first lay should be done to satisfaction before any other colors are added; the stiffer the middle tint is used, the better the high lights may be laid on it. The reflected tint falls generally on the gradating half shades, and should be laid with tender touches, sparingly, for fear of spoiling the first lay.

This method of painting answers to all the colored silks, as well as changeable, with this difference only, that the plain colors require not so much art as the changeable do in matching the tints. The last part of
of the work is the finishing, and strengthening the shadows with an obscure tint, inclining to a mellowish hue: such as will not catch the eye, and interrupt the beauty of the lights.

**BLACK.**

The best ground for black is light red for the lights; and Indian red and a little black for the shadows.

The finishing colors are, for the lights, black, white, and a little lake. The middle tint has less white, and more lake and black. The shade tint is made of an equal quantity of lake and brown pink, with a very little black.

The method of painting black is very different from that of other colors; for, the principal thing in them, is to leave the lights clean and brilliant—but in black, it is to keep the shadows clear and transparent. Therefore we should begin with the shade tint, and glaze over all the shadows with it. Next, lay in the darkest shadows with black, and a little of the shade tint, very correctly. After that, fill up the whole breadth of lights with the middle tint only. All which should be done exactly to the character of the drapery, and then finish with the high lights.

Here observe, that the ground being red, will bear out and support the reds, which are used in the finishing colors: the lake in the lights takes off the cold hue. If the shade tint was of any other color than a transparent warm hue, the shadows would consequently be black and heavy; because no other colors
colors, equally with lake and brown pink, can preserve the warm brilliancy, which is wanting in the shadows of the black. Black is of a cold heavy nature, always too strong for any other color; therefore it requires an allowance in using it. There will be a few reflexions in sattin, which should be added as those of other colors; they should be made of strong colors, such as burnt umber, or brown ochre, mixed with a little of the shade tint.

Though these grounds mentioned for draperies, are necessary for the principal, and nearest, figures in a picture, for a portrait, or the like; yet figures placed deeper in the picture, and such as are behind the principal, or front, figures, should always be fainter in the tints of their grounds, in proportion to their local finishing colors, and their just effects.

LINEN.

The colors used in painting linen are the same as those in white sattin, except the first tint; which is made of white and ultramarine ashes, instead of the black, mixed to a very light blueish tint.

In the dead coloring care should be taken that the grounds be laid white and broad in the lights: the shadows are composed of black, white, and a little Indian red, like the middle tint of white sattin. These should be left very light and clean, to support the finishing colors.

In the second painting the lights are glazed, with a stiff pencil and fine white only, drove bare, with little oil: the shadows scumbled with poppy oil, and
and some of the color they were made of. The middle tint of white sattin is the best color for the general tint of the shadows. With this, and white, in different degrees, make out all the parts to their character, with free light touches, without softening. Then with a large long pointed pencil, and fine white, lay the high lights very nicely, at a touch. After this the fine light blueish tint, mixed light, is laid in the tender gradations very sparingly and lightly, without filling them up.

The first lay should be left clear and distinct: the more it appears the better. It is the overmixing and jumbling all the colors together, which spoils the beauty of the character; therefore it is better to let it dry before we add the reflexions and finishing tints.

This method of letting the beautiful clear colors dry, before we add the warm, reflecting, and harmonizing tints, prevents them from mixing with, and dirtying, each other.

The principal blending colors used in the reflexions are the yellow tint, green tint, and rose tint; which last is made of lake, Indian red, and white. The dead coloring should be as white as we intend the finishing colors to be, by reason they will sink a little, in proportion to the color of the cloth, which the glazing with pure white, only, will recover.
The principal colors used in landscapes are:
1. Fine White.
2. Common White.
3. Fine Light Ochre.
5. Brown Pink.
7. Ivory Black.
8. Prussian Blue.
10. Terra-vert.
11. Lake.
12. Indian Red.
14. King's Yellow.

The principal tints used in landscapes are:
1. Light ochre and white.
2. Light ochre, Prussian blue, and white.
3. Light ochre and Prussian blue.
4. The same, darker.
5. Terra-vert and Prussian blue.
9. Indian red and white.
10. Ivory black, Indian red, and lake.

The
The colors necessary for dead coloring, are common white, light ochre, brown ochre, burnt umber, Indian red, ivory black, and Prussian blue.

The principal colors and tints for painting the sky, are fine white, ultramarine, Prussian blue, light ochre, vermilion, lake, and Indian red.

The tints are a fine azure, lighter azure, light ochre and white, vermilion and white, and a tint made of white, a little vermilion, and some of the like azure.

Landscapes should be painted on a sort of tanned leather-colored ground, which is made of brown ochre, white, and light red. This color gives a warmth to the shadow colors, and is very agreeable and proper for glazing.

Sketching, or rubbing in the design, is the first work of the picture.

This should be done with burnt umber, drove with drying oil, and a little oil of turpentine, in a faint, slight, scumbling, free manner, as we shade with Indian ink on paper, leaving the color of the cloth for the lights, and leaving no part of the shadows so dark as we intend the first lay, or dead coloring, which is to be lighter than the finishing colors. Though the foliage of the trees is only rubbed in, with a faint sort of scumbling, yet the trunks and bodies should be in their proper shapes, with their breadths of light and shadow. Buildings should be done in the same manner, leaving the color of the cloth for their lights: the figures on the foreground, if they are determined, should also be sketched in the same method, and then the whole left to dry.
OF DEAD COLORING:

Let the first lay, or dead coloring, be without any bright, glaring, or strong, dark, colors; so that the effect is made more to receive and preserve the finishing colors, than to shew them in the first painting.

The sky should be done first; then the distances, working downward to the middle group, from that to the fore-ground, and to the nearest parts; all parts of each group, as trees, buildings, &c. should be painted with the group they belong to.

The art in dead coloring, is, to find the two colors, which serve for the ground of the shadows in general, the sky excepted, and the method of using them with the lights: the first of which is, the dark shade with a little lake in it: the other is, burnt umber: these should be changed a little to the natural hue of the objects, and then laid and drove with drying oil, in the same manner as we shade with Indian ink, which is a scumbling kind of glazing; and as such they should be left: otherwise they will be dark and heavy, and would be entirely spoiled for the finishing glazing. Both these colors mix and sympathize agreeably with the lights, but should be laid before them.

When the landscape is designed, begin with the sky, which should be laid with a good body of colors, and left with a faint resemblance of the principal clouds; more in the manner of claro obscuro, than with finishing colors: the whiter it is left, the better it will bear out and support them. The dis-
tances should be made out faint and uncertainly with the dark shade, and some of their lights, in different degrees; and laid so, as best to find and shew their principal parts. Advancing into the middle group, we introduce, by degrees, the burnt umber in the shades; all the grounds of the trees being laid, or rubbed in, enough only to suggest an idea of their shapes and shadows faintly. The grounds of their shadows must be clean, and lighter than their finishing colors, such as will support their character, and seem easy to finish on.

In painting the lights, it is better to incline more to the middle tint, than to the high lights; and to leave them with a sufficient body of clean colors, which will receive and preserve the finishing colors the better; which may be done with a few tints.

SECOND PAINTING.

Begin with the sky; lay in the azure and colors of the horizon; then soften them; after that, lay in the general tint of the clouds, and finish on it with the high lights, and the other tints that are wanting, with light, tender, touches; then, soften the whole very lightly. The finishing of the sky should be done at once painting, because the tender character of the clouds will not match so well when dry, as when the whole is wet. The stiffer the azure, and colors of the horizon, are laid, the better the clouds may be painted upon them.

The greatest distances are chiefly made with the color of the sky; as they grow nearer and darker, glaze and scumble the parts very thin, with such glazing
glazing shadow colors as come nearest to the general hue of the group the objects are in: so that the first painting, or dead color, should be seen through it; on this add the finishing colors.

If this glazed ground be properly adapted to the object and place, it will be easy to find the colors which are wanted for the lights, and for the finishings. That we may not spoil the glazing, we should be very exact in making those colors on the palette, and in laying them with light free touches.

Here it may be proper to say something of the most useful glazing colors.

Lake, terra-vert, Prussian blue, and brown pink, are the four principal. The more they are managed like Indian ink, and the more distinctly they are left, the better their transparent beauty will stand, and appear. After these, burnt umber is a good glazing warm brown, used in the broken grounds and nearest parts; but the most agreeable color for the darkest shadows, is the dark shade improved with lake, drove with drying oil: it mixes harmoniously with the lights, the shadows, the trunks and the bodies of trees, and the buildings.

The ground of the objects should be made out, with such glazing shadow colors, as seem nearest to the natural hue of the object, in that situation; and as the principal glazing colors themselves, are often too strong and glaring, they should be a little softened by such colors as are near to themselves and the objects: thus, if in the distances, the terra-vert and azure, which are their principal glazing colors, may be improved and made lighter, with some of the sky tints;
tints: and as the distances come nearer, with the purple. As we get more into the middle group, the terra-vert and Prussian blue may be varied with some of the green tints, made without white, for white is the destruction of all glazing colors. As we approach the first group, there is less occasion for changing them; but the fore-ground and its objects require all the strength, and force, of glazing, which the colors are capable of producing.

After this glazing ground, we should follow with strengthening the same in the shadows and darkest places, in such manner as will seem easy to finish.

The colors that come next, for finishing, are in the degree of middle tints: these should be carefully laid over the greatest breadth of lights, in such manner as not to spoil, and cover too much of, the glazing: with a good body of color, as stiff as the pencil can agreeably manage, to character. The colors of the middle tint should be clean and beautiful, finishing all the second painting downward, from the sky, through the middle group. At the first group, all the objects should appear perfectly finished: their under or distant parts should be finished, before any of the other which are nearer, down to the last, and nearest, objects of the picture. Where it happens, that painting one tree over another does not please, forbear the second, until the first is dry. Thin near trees, of different colors, will do better, if we let the under parts dry before we add the finishing colors.
THE THIRD AND LAST PAINTING.

If oiling be necessary, lay the least quantity that can be, with a stump tool, or pencil, proportioned to the place that is to be oiled; then wipe the place that is oiled with a silk handkerchief, leaving no more oil than is proper for the purpose.

When finishing any objects, we should use a great variety of tints, all nearly the same color, but most of all, when finishing trees; as this gives a richness to the coloring, and contributes to produce harmony. As the greens will fade, and grow darker; it is necessary to improve, and, in some degree, to force them, by making an allowance in using them so much the lighter; the same reason applies to the glazing; which, if over loaded, will be dull and heavy, and consequently will grow darker.

The method for painting near trees, is, to make the first lay very near to nature, though not quite so dark, and to follow it with strengthening the shadows; then the middle tints; and last of all, lay the high lights and finishing colors; but all this cannot be done, as it should be, at once painting. The best way is to do no more than the first lay with the faint shadows, and leave it to dry. Then improve the middle tints and shadows, and let them dry.

The conclusion is, adding all the lights and finishing colors, in the best manner. This method of leaving the first and second part to dry separately, not only makes the whole easier, and more agreeable, but leaves the colors in the greater perfection; because,
because, most of the work may be done with scumbling and glazing, and some parts without oiling. The lights also may be laid with a better body of color, which will not be mixed and spoiled with the wet ground: what is said of trees, answers to all kinds of shrubs, and bushes.

The figures in a landscape are the last work of the picture; those in the fore-ground should be done before those in the distances; the shadows of the figures should be of the same hue, or color, with those of the group, or place, wherein they are situated.

As a picture is generally intended to be viewed at a distance, the artist should frequently consider his performance at, or near a similar situation; since whatever loses its effect at that distance, however neatly executed, is labour lost.

The shadows, if large, may approximate nearly to the same tone according to their situations, and may be thin of color; but the lights should be distinct, bold, spirited, and will not suffer, even if loaded with color; on the contrary, it will contribute to durability.

To use only one tint to one color, promotes cleanliness and freshness of the colors; too much mixing, teases and injures them.

If a tinct different from what are on the palette, is wanted while at work on a picture, it is better to mingle the colors proper to compose it on the palette with the knife than with a pencil.

There is in some persons a strange predilection for smooth pictures in oil; this, however, is far from
being meritorious, unless a picture be very small: but in larger pieces a bold and free pencil shews to advantage, especially in the lights, in the smart touches, and firm markings and drawing.

In general, colors look more brilliant while wet with oil, than when they are dry; a little observation will accustom the student to this circumstance.

It is usually the too great quantity of oil (especially of the grosser kinds) which occasions the decay of the colors: and, it is observable, that pictures generally begin to fade in the darker parts, and in the glazings, where the color is thin; the lights maintaining themselves long after those colors are obliterated.

A color cannot have a worse property than that of a tardy dryer, as it holds what dust unavoidably falls on it, and consequently sullies the beauty of the tints; some artists, aware of the bad qualities of the oils in use, make too free with turpentine to work thin, but this not only leaves the picture dead, but carries off part of the force in evaporation.

To know when an oil picture is dry, breathe firmly upon it; if it take the breath, it is safe. It is proper to let the first coat of color be thoroughly dry, before a second is applied; this should be carefully attended to in winter.

The pencils, when done with, should be cleaned by spirits or oil of turpentine; or, if meant to be laid by for a time, they may be washed with soap. The pallette should be constantly cleaned.
OF CLEANING OF PICTURES.

Water is the first material and of the most general use in cleaning pictures. This will remove many kinds of glutinous bodies, and foulnesses; such as sugar, honey, glue, and many others; and it will also take off any varnish of gum arabic, glair of eggs, or isinglass, and is therefore the greatest instrument in this work; it may be used without any caution with respect to the colors, as it will not in the least affect the oil which holds them together.

Olive oil, or butter, though not generally applied to this purpose, through an ignorance of their efficacy, will remove many of those spots or foulnesses, which resist even soap, as they will dissolve or corrode pitch, rosin, and similar bodies, and they may be used very freely, not having the least effect on the oil of the painting, nor the dangerous effects of spirit of wine and oil of turpentine.

Wood ashes, or (what will better answer the purpose, when used in a proper proportion) pearl ashes, being melted in water, make a proper dissolvent for most kinds of matter which foul paintings, but they must be used with great discretion, as they will touch or corrode the oil of the painting, if there be no varnishing gum or resin over it, by very little rubbing; the use of them, or scope is, however, in many cases unavoidable, and in general they are the only things employed for this purpose.

Spirit of wine, as it will dissolve all the gums and gum resins, except gum arabic, is very necessary for
for the taking off from pictures varnishes composed of such substances: but it corrodes also the oil of paintings, and softens them in such a manner as to render all rubbing dangerous, while they are under its influence.

Oil of turpentine will dissolve likewise some of the gums used for varnish, but spirits of wine will in general much better answer the purpose: there are, however, sometimes spots of foulness which will give way to the spirit of turpentine, but resist most other substances used for this purpose; it may, therefore, be tried where every thing else appears to fail, but even then very sparingly, and with great caution, as it will very soon act even on the dry oil of the painting.

Essence of lemons is of the same dangerous tendency with oil of turpentine, but is a much stronger dissolvent, and should therefore only be used in the most desperate cases, where spots seem indelible by all other methods: spirit of lavender and rosemary, and other essential oils, have the same dissolving qualities as essence of lemons, but they are in general dearer, and some of them too powerful to be trusted near the colors.

When paintings appear to have been varnished with those substances that will not dissolve in water, (which is seldom done by painters who are acquainted with the present practice, as they destroy the more delicate tints and touches of the painting,) they are, however, very easily and safely removed by the following method;

"Place
"Place your picture or painting in an horizontal situation, and moisten, or rather flood by means of a sponge the surface of it with very strong rectified spirits of wine; but all rubbing beyond what is necessary must be avoided. Keep the painting moist by adding fresh quantities of the spirit for some minutes, then flood the surface copiously with cold water, with which the spirit and such part of the varnish as it has dissolved may be washed off; but in this state of it all friction, and the slightest violence to the surface of the painting, would be very detrimental. When the painting is dry, this operation may be repeated at discretion, until the whole of the varnish is taken off.

To prepare the pearl and wood-ash ley, used in cleaning pictures, let an ounce be dissolved in a pint of water, to be stirred frequently for half a day; then to be decanted from the settlings.

N. B. This mixture is said to enliven the Brazil wash.

To make a stronger ley of the same, let two pounds of wood-ashes and three quarts of water, be managed as just directed, and evaporated (or even boiled) to one quart, or a less quantity, as you find it acrid to your taste. A strong ley is made by pouring hot water on a quantity of ashes, and when it has filtered through them, collect it for use. These leys are to be used warm with a sponge, and with the caution just directed. When thick spots are not easily removed, a strong soap lather may be of use, not suffering it to touch any other part of the picture but the spot it is to be engaged with.

For
For using spirits of wine and other dissolvents, the picture is to be laid on a table, and flooded with the liquor, or well dabbed with a sponge, so as to keep the picture very moist. Add fresh ley, &c. as wanted, then with cold water wash off the whole.

All dissolvents must be washed off with plenty of water, and should it be necessary to use any of them again, take care that the painting is quite dry; this must be attended to at every repetition.

All spots, &c. of dirt are attached to a picture, either before it is varnished, or during its being varnished, (in which case they dry with the varnish) or after the varnish is dry. If the latter, plenty of warm water generally succeeds; but if it be damaged while varnishing, or before that operation, the coat of varnish must be removed; then the spot cleaned, and the whole picture be re-varnished.

It appears, from this observation, that it is of consequence to set pictures, while drying, in a place free from dust, &c., since whatever dries with the colors cannot be removed.

It sometimes happens that a picture grows dull and obscure, and it may be necessary to revarnish it; this may be very safely done, after inspecting whether the first varnish be clean, &c.
OF TRANSFERRING PICTURES.

The art of removing paintings in oil from the cloths on which they are originally done, and transferring them to new ones, is of great use. The method is as follows:

Let the decayed picture be cleansed of all grease that may be on its surface, by rubbing it very gently with crum of stale bread, and then wiping it with a very fine soft linen cloth. It must then be laid, the face downwards, on a smooth table covered with fan paper, or India paper; and the cloth on the back must be well soaked with boiling water, till perfectly soft and pliable. Turn the picture face upwards, and having stretched it evenly on the table, pin it down with nails at the edges. Having melted a quantity of glue, and strained it through a flannel cloth, spread part of it on a linen cloth of the size of the painting; when this is set, lay another coat over it; when this is become stiff, spread some of the glue, moderately heated, over the face of the picture, and lay over it, in the evenest manner possible, the linen cloth already prepared, and nail it down to the picture and table. Then expose the whole to the heat of the sun, in a place secure from rain, till the glue be perfectly dry and hard; when this is the case, remove the picture and linen cloth from the table. Turn the picture with the face downwards, and let it be stretched and nailed to the table as before; then raise round its edge a border of wax.
wax as in biting of copper-plates, into which pour a corroding fluid, as oil of vitriol, aqua-fortis, or spirit of salt, but the last is to be preferred; dilute either of these with water, to such a degree, that they may destroy the threads of the original canvas, or cloth, of the picture, without discoloring it. When the corroding fluid has answered this purpose, drain it off, and wash away the remaining part by quantities of fresh water. The threads of the cloth must be then carefully picked out till the whole be taken away. The reverse surface of the painting, being thus wholly freed from the old cloth, must be well washed with water, and left to dry. In the mean time, prepare a new piece of canvas of the size of the painting; and having spread some hot glue, purified as before, and melted with a little brandy or spirit of wine, over the reverse of the painting, lay the new canvas evenly upon it, while the glue is hot, and compress them together with thick plates of lead, or flat pieces of polished marble. When the glue is set, remove these weights, let the cloth remain till the glue is become perfectly dry and hard. Then the whole must be turned the other side upwards, and the border of wax being replaced, the linen cloth on the face of the painting must be destroyed by means of the corroding fluid; because the face of the painting is defended only by the coat of glue which cemented the linen cloth to it. The painting must then be freed from the glue by washing it with hot water. The painting may afterwards be varnished, and if the operation be well conducted;
conducted, it will be transferred to the new cloth in a perfect state.

When the painting is originally on wood, the surface of it must be covered with a linen cloth, cemented to it by means of glue, as already directed. A proper table being then provided, and overspread with a blanket, or thinner woollen cloth, laid on in several doubles; the painting must be laid upon it the face downwards, and fixed steady; the board or wood on which it was done, must then be planed away, till the shell remains as thin as it can be made, without damaging the paint under it. The process is the same as already given for the front.

When a picture is by accident torn, or otherwise injured, it is repaired, by placing the separated parts as nearly in their first state as possible, then attaching, by a strong glue, a piece of cloth, of a proper shape and size, to which the threads of the torn parts firmly adhering, retain their situations. The place in the picture where the rent is, must then be very exactly colored as before, so as effectually to conceal the damage.

When a fresh cloth is applied behind a picture, to cover the back throughout, and to strengthen the original canvas, it is termed, lining a picture, and very much contributes to its preservation; especially, if the canvas be ancient, or thin in its substance.
Miss Greenland's Method of making a Composition for Painting in imitation of the Ancient Grecian Manner.

Put into a glazed earthen vessel 42 oz. of gum arabic and 8 oz. of cold spring water; when the gum is dissolved, stir in 7 oz. of gum mastich, which has been first washed, dried, picked, and beaten fine, which is very soon done: set the earthen vessel, containing the gum water and gum mastich, over a moderate fire, continually stirring and beating them hard with a spoon, in order to dissolve the gum mastich. When sufficiently boiled, it will no longer appear transparent, and will be stiff, like a paste; so soon as this is the case, and that the gum water and mastich are quite boiling, without taking them off the fire add 5 oz. of white wax, broken into small pieces, stirring and beating the different ingredients together till the wax is perfectly melted, and has boiled; then take the composition off the fire, as boiling it longer than necessary would only harden the wax, and prevent its mixing so well afterwards with water; the composition is taken off the fire, and in the glazed earthen vessel, it should be beaten hard, and while hot, but not boiling, mix with it, by degrees, 10 oz. of cold spring water; then strain the composition, as some dirt will boil out of the gum mastich, and put it into bottles.

The
The composition, if properly made, should be like a cream, and the colors, when mixed with it, as smooth as if with oil. The method of using it, is mixing the colors with it, as with oil; then paint with fair water. The colors may be used by putting a little fair water over them, but it is less trouble to put some water when the colors are observed to be growing dry.

In painting with this composition the colors blend without difficulty, when wet, and even when dry the tints may easily be united by means of a brush and a very small quantity of fair water.

When the painting is finished, put some white wax into a glazed earthen vessel over a slow fire; and when melted, but not boiling, with a hard brush cover the painting with the wax; and, when cold, take a moderately hot iron, such as is used for ironing linen, and draw it lightly over the wax; when the picture is nearly cold rub it with a fine linen cloth to make it entirely smooth; and, when quite cold, rub it again to make it shine.

Painting might be executed in this manner upon wood, or plaster of Paris, without requiring any other preparation than mixing some fine plaster of Paris in powder with cold water to the thickness of a cream; then put it on a looking-glass, and, when dry, take it off, and there will be a very smooth surface for painting upon.

Paintings may also be done in the same manner with only gum water and gum mastich, prepared the same way as the mastich and wax; but instead of putting 7 oz. of mastich, and, when boiling adding $\frac{1}{2}$ oz. of gum, put $\frac{1}{2}$ oz. of gum mastich and 5 oz. of gum water.
5 oz. of wax, mix 12 oz. of gum mastich with the gum water before it is put on the fire, and when sufficiently boiled and beaten, and is a little cold, stir in 12 oz. of cold spring water, and afterwards strain it.

It would be equally practicable painting with wax alone, dissolved in gum water, in the following manner:

Weigh 12 oz. of cold spring water and 42 oz. of gum arabic, put them into a glazed earthen vessel, and, when the gum is dissolved, add 8 oz. of white wax. Put the earthen vessel with the gum water and wax upon a slow fire and stir them till the wax is dissolved and has boiled a few minutes; then take them off the fire, and throw them into a bason, as, by remaining in the hot earthen vessel the wax might become rather hard; beat the gum water and wax till quite cold. As there is but a small proportion of water, in comparison with the gum and wax, it would be necessary in mixing this composition with the colors, to put also some fair water.

It should be observed that the water used by Miss Greenland in these preparations came from a chalk rock, and was remarkably soft; possibly any other water might answer equally well.

Another Recipe by Miss Greenland for the Ancient Grecian Method of Painting in Wax.

Take an ounce of white wax, and the same weight of gum mastich in lachrymae (tears) that is, as it comes from the tree, which must be reduced to a fine
fine powder. Put the wax in a glazed earthen vessel, over a very slow fire, and when it is quite dissolved strew in the mastich, a little at a time, stirring the wax continually, until the whole quantity is perfectly melted and incorporated; then throw the paste into cold water, and when it is hard take it out of the water, wipe it dry, and beat it in one of Mr. Wedgwood's mortars, observing to pound it at first in a linen cloth to absorb some drops of water that will remain in the paste, and would prevent the possibility of reducing it to a powder, which must be so fine as to pass through a thick gauze. It should be pounded in a cold place, and but a little at a time; as after long beating, the friction will in a degree soften the wax and gum, and, instead of their becoming a powder, they will return to a paste.

Make some strong gum arabic water; and, when you paint, take a little of the powder, some color, and mix them together with the gum water. Light colors require but a small quantity of the powder, but more of it must be put in proportion to the body or darkness of the colors; and to black, there should be almost as much of the powder as color.

Having mixed the colors, and no more than can be used before they grow dry, paint with fair water, as is practised in painting with water colors; a ground on the wood being first painted of some proper color, prepared in the same manner as is described for the picture. Walnut-tree and oak, are the sorts of wood commonly made use of in Italy for this purpose. The painting should be highly finished,
finished, otherwise, when varnished, the tints will not appear united.

When the painting is quite dry, with rather a hard brush, passing it one way, varnish it with white wax, which is put into an earthen vessel, and kept melted over a very slow fire, till the picture is varnished, taking great care the wax does not boil. Afterwards hold the picture before a fire, near enough to melt the wax, but not make it run; and, when the varnish is entirely cold and hard, rub it gently with a linen cloth. Should the varnish blister, warm the picture again very slowly, and the bubbles will subside.

When the picture is dirty it need only be washed with cold water.

Extract from Matv's Review for April, 1785.

"M. Febbroni, who was in England some winters ago, has discovered a new method of encaustic painting, of which he writes me the following account:

"M. Lewis, of Guttenbrunn, the friend of Mengs, and who may be called his successor, has lately executed a picture according to my manner. It is a Thalia done upon wood, prepared with wax; and is remarkable for the vivacity and splendour of the coloring. I believe I have already mentioned to you, in what this new method consists. You melt, or rather dissolve some good white wax in naphtha petrolei without color, till such time as the mixture has acquired, by cooling, the appearance and consistence
istence of an oil beginning to freeze by the cold. You mix your colors with this, and then keep them in small tin boxes. You dilute them more or less with the same naphtha, according as they dry, or as you wish to use them. This painting allows time enough to give all the finish you desire, and if you wish to work in a hurry, you may dry it as fast as you please, by exposing it to heat. When the picture is finished, it is of that fine tone, which is preferable to every varnish, or if you choose a varnish, you need only warm the picture, and all the naphtha will evaporate. When this is done, you must wait till the picture cools, when you must polish it, by running it over neatly with a cloth, as the ancients used to do. If you wish to have it still brighter, you must melt white wax on the fire, without suffering it to boil; mix a little naphtha with this, and draw a layer of it over the picture already heated, by means of a brazier, which you hold under, if the picture is small, or before it, if it is large. The colors at first appear spoiled, but you restore them to their first beauty, if, when the layer of wax is cooled, you polish it by rubbing with a cloth. It is then that the colors take the high tone of oil. If you fear the effects of fire for your picture, you are to make a soap of wax, which is to be done by boiling white wax in water, in which you have dissolved a twentieth part of the weight of the wax of marine alkali, or sel de souda very pure. Rub your picture with this soap, and when it is dry, polish it as above. If you do not choose either of these methods, give your painting its usual varnish of sandarac and spirit of
of turpentine. This method has been found preferable to all those that have been tried, and superior to oil for the beauty of the colours. There are many fine colours which cannot be used in oil, which may be made use of with great success in this method.

"As the naphtha entirely evaporates, one may be assured that this is the true method of painting in wax. There is likewise much to hope for the duration of pictures painted in this manner, as wax is much less liable to alteration than oil, and does not so easily part with its phlogiston."

This extract seems to suggest a more probable plan of attaining the ancient secret, than that of Count Caylus, or Mr. Muntz; whose rule was, to saturate a cloth, &c. with wax, then to paint on it with water-colours, or crayons, and fix the colours by gradually advancing the picture to the fire, till the wax, being melted, had absorbed them; then equally gradually withdrawing the piece. The thought was ingenious, but should seem to be more troublesome than that of Mr. Lewis, as above.

After all, it may justly be doubted, whether some bitumen, of a still more exalted and spirituous nature, was not the vehicle which compounded those colours whose brilliancy has remained from the remotest ages. That the ancients were well acquainted with bitumenical productions we are well assured, and possibly the East may possess some spring or springs of superior or more preservative qualities. Might not the ingredients they used in embalming afford a hint?

Naphtha petrolei is a bituminous kind of oil, issuing
issuing out of certain rocks in the territory of Modena. There are three sorts, more or less pure and colourless. It is used medicinally, and considered as good for sprains, bruises, &c. (This at least is the sort sometimes imported into England). It is very spirituous and volatile.

OF ETCHING.

This is one branch of the art of Engraving, and possesses some qualities in which it is superior to others; being executed with the utmost ease and freedom, and when well managed, expressing many subjects with great truth, and character.

The first preparation for etching, is to lay a ground (vide ground) over the plate, which operation is thus performed.

At the most convenient part of the plate, as well for holding it, as for the work which is to be executed on it, is tightly fixed a hand-vice; then, the plate is heated, till the copper shews a small change of color; or, till the back part of the plate, being spit upon, rejects the spittle. The ball of ground, which is tied in a thin covering of silk, is now passed gently over the plate so as to distribute the ground evenly to all parts, the heat of the plate melting it through the silk: then with the dabber, which is nothing more than a small quantity of cotton tied in silk, the ground is beat, or dabbed, to a perfect thinness and evenness; (in this part of the business much address is required, since, if the ground, when finished, is thicker in some places than in others, it will deceive the
the point employed upon it) the ground is then smoked, till thoroughly black, for the clearer discerning the strokes of the etching.

A wax taper, twisted together four, or five, or more times, is the most convenient candle to smoke with; but any will serve for this purpose.

The plate must be perfectly clean, and free from grease; as greasy spots, &c. prevent the ground from holding in those parts. To clean the plate, scrape a little whiting on it, and wipe it off with a clean rag, which will carry the grease with it.

While the plate is cooling, after the ground is laid, scrape some red chalk on the back of your print, tracing, or drawing, and rub it in all over with a clean rag. Then place the reded side on the plate, making it fast at each corner with soft wax. Lay the etching-board under your hand, to prevent bruising the ground; and, with a blunt etching-needle, trace lightly the outlines, and the breadths of the shadows, till the marks of them appear on the ground, which you must take care not to penetrate by tracing too heavily.

It will be proper at intervals to lift up a corner of the tracing, and to examine whether every part be perfectly traced before you take it off; as it will be extremely difficult to lay the paper down again exactly in its former position, if once removed.

Having completed the tracing, the off-track, or drawing traced, is removed; and the subject is ready for etching.

The practice of etching is easily attained by proficient in design; since it is little more than drawing,
in strokes, with a point, on the plate, what is otherwise drawn with a pen, pencil, &c. on paper.

The etching-board (by some termed a bridge) is a thin piece of board, generally of mahogany, of a proper length and width, raised by small supports at each end, to a convenient height for the hand to rest on it.

The points, or needles, are almost similar to sewing needles, but are stronger, and are inserted into handles four, or five, inches long, for the convenience of being properly held.

The best way to begin a subject, is, by forming the outlines very carefully, then inserting the shadows, beginning first in the darkest places.

Lines drawn in etching may be crossed by others, if wanted.

Two lines drawn by the side of each other closely, will unite into one under the operation of biting, whereby this line will become of great breadth, and color: this mode is very useful for dark fore-grounds in landscape, and has a good effect in architecture, &c. but the use of etching in historical subjects, is chiefly to prepare the figures, to be afterwards treated by the graver.

The characteristics of etching, are, a certain roughness (compared with performances of the graver) which does not suit glossy, and shining, objects, but which applies with good effect to coarser parts; such as, in landscape, the barks of trees, the broken, and looser touches of fore-grounds, &c. In architecture, it represents very happily the ravages of time in old buildings, mouldering walls, &c. Another charac-

2 2 teristic
teristic of etching is, its freedom; for which reason, it suits well the leaves of trees, light clouds, &c.; and, beside these properties, it is of great service where a true, even, and uniform color is wanted, as it is not only much quicker, but also more certain than simple graving, in general: hence it suits the blue parts of skies, the even teints of (new) architecture, back-grounds to portraits, &c. which are conducted by a parallel-ruler.

It is evident from the services required, that the points to be used, must vary in their fineness, some lines being made broad, others very thin. To whet a point with perfect truth, free from angular projections, &c. requires time, patience, and practice.

The plate being etched, the next process is to excavate the lines drawn, by subjecting them to the action of aqua-fortis; which operation is termed biting.

DIRECTIONS FOR BITING.

First, examine your work carefully, to see that nothing be omitted, or any thing redundant; if any scratches appear on the ground, or any mistakes be committed in the etching, they are to be stopped out; which is done, by covering them with a mixture of lamp-black and varnish, laid on with a pencil, which, when dry, will resist the aqua-fortis. But it is sometimes best to stop out these, as they occur in the course of the work, for by this means they will be less liable to escape notice among the multiplicity of
of other lines and parts; and when the varnish is dry, you may etch over it, if necessary.

The next thing is, to surround the work with a rim, or border, of soft wax, about half an inch high, forming the wax into a spout, at one corner, by which to pour off the aqua-fortis: and that it may not run out at any other part, take care to press the wax close and firm to the plate.

Having poured the mixture of aqua-fortis on the plate, let it continue a short time corroding the lines drawn; wipe off the bubbles, as they rise, with a feather, which may remain on the plate during the biting; after a proper time, pour off the aqua-fortis, and wash the plate, carefully, with fair water, pouring it on and off; then let the plate dry, and, by scraping off part of the ground from the faintest part of the work, try if it be sufficiently bitten; if not, stop out the part you have tried with lamp-back and varnish; and when that is dry, pour on the aqua-fortis again, for a further operation.

When the faint parts of your work are bitten enough, stop them out with the varnish, &c. and proceed to bite the stronger parts, stopping them out, as occasion requires, till the whole work is sufficiently bitten: then, warm the plate, and take off the soft wax; after which, heat the plate till the ground is melted, pour on it a little oil, and wipe the whole off with a linen rag. When the ground is taken off, rub the work well with the oil-rubber, and wipe the plate clean; then proceed to finish with the graver what parts of the subject require that process.

The wax for the border, is made, by mixing with a pound
a pound of bees-wax, one quarter, or one third, of a pound of Burgundy pitch, to soften it. As for any color added to it, it is useless; because, after a little while, the wax becomes black.

It is to be observed, that in biting a plate, much attention is required. If a plate be under-bitten, i. e. if the parts have not attained their proper color and force, there is usually no remedy, but by following every line with the graver, in order to blacken it: as on the other hand, if very much over-bitten, a plate cannot be rendered neat and delicate, let never so much time and skill be wasted on it. If bitten but little above the color wanted, a few strokes of the burnisher will lower it at pleasure.

If the air rising from the copper and forming bubbles hisses very much, in biting, it may be suspected that the aqua-fortis is too strong, or acts too suddenly on the copper, which for tender work is injurious.

OF ENGRAVING STROKES.

The tools necessary for Engraving are, an oil-rubber, burnisher, scraper, and oil-stone, also needles, or points; also gravers, compasses, a sand-bag, parallel ruler, &c.

Gravers are of different shapes; square, and lozenge: several of each should be provided. The square is used in cutting the broad strokes; the lozenge for the fainter and more delicate parts. Gravers should be in length five inches and a half, or thereabouts, the handle included.
The sand-bag is used to lay the plate on, for the convenience of turning it about to follow winding lines. The oil-stone must be of the Turkey sort; and, while in use, must never be kept without oil.

Great care is required to whet a graver nicely, particularly the belly: lay the two lower angles of the graver flat upon the stone, and rub them steadily till they are polished like a mirror; and till the belly rises gradually; so that, when you lay the graver’s edge on the plate, you may just perceive the light under the point; otherwise, it will dig into the copper, and it will be impossible to execute work with freedom. When the belly is whetted: to whet the face, place the flat part of the handle in the hollow of your hand, with the belly of the graver upwards, on a moderate slope, and rub the face on the stone, till it has an exceeding sharp point, which you may try upon your thumb-nail.

For tempering the graver, if too hard, vide graver.

Cut off that part of the handle which is on a line with the belly of the graver, to make that side flat.

Hold the handle in the hollow of the hand, and extend the fore-finger toward the point, resting it on the back of the graver, that you may guide the tool with more ease.

Take care that your fingers do not interpose between the plate and the graver, but let the whole machine slide, as it were, along the plate; and trust to the resistance of the copper for its steadiness. Delicacy of feeling is a prime quality in a good engraver.

Let
Let the table or board you work at, be firm and steady.

For strait strokes, let the plate lie flat on the table. For circular or crooked strokes, place the plate on the sand-bag, and hold the graver firm, moving your hand, or the plate, or both, as you see, or rather feel convenient.

Learn to carry your hand with such dexterity, that you may end your stroke as finely as you began it; and, if you have occasion to make one part deeper, or blacker, than another, do it by re-entering that stroke.

In the course of the work, scrape off the barb, or roughness which arises, with the scraper; but be careful, in doing this, not to scratch the plate. Never scrape directly across a line, but always at an easy angle along the course of the stroke.

Mistakes, or scratches in the plate, may be rubbed out with the burnisher, if of no great depth, and the part afterwards cleared with the scraper; polish it again at last lightly with the burnisher.

When you wish to examine what work you have done, rub it with the oil-rubber, which, by filling the strokes with black, will shew them, when the plate is wiped, to advantage. Too much oil-rubbing injures the finer work; as does (very materially) too much scraping.

Engraving in strokes, or hatches, as it is the most ancient, so it is the most noble, manner of engraving: it requires most skill, affords most scope for judgment, and genius, as well as for manual dexterity; but
but is, accordingly, more difficult to execute in a masterly, and superior, manner.

It is evident, that any line drawn, may be crossed by another line; or any number of lines, by a second number of lines; but it is equally evident, that not every such crossing can be graceful. If it follows too nearly the course of the original lines, it will form, by its intersections, a number of areas, of too sharp, and disagreeable lozenge, shapes; if the first lines are crossed at right angles, the areas formed will be so many squares, which, by possessing a kind of hardness in their appearance, apply only to certain subjects. The medium admits an infinity of degrees.

If we examine any (large) well-executed print, we observe, in some places; (1) single lines, or strokes, of considerable length, according to the drawing; (2) lines crossed at an agreeable lozenge; (3) lines crossed at right angles, where a kind of obscurity is wanted; (4) two lozenge lines, crossed with a third, usually much softer, and more tender than the two former, but following, or rather attending their course; (5) lines at right angles, crossed by a third at a lozenge, to divest the squares of their hardness and stiffness; (6) lines at a considerable distance from each other, and of a firm color, with a thin line between them; this is called interlining; (7) the same, sometimes crossed in the same manner; (8) round dots, in the flesh; (9) long dots, for the same purpose; (10) long dots, crossing each other; (11) thin lines crossing lines of dots; (12) very thin lines, made by the dry point, in the lights, &c. and many other contrivances for producing variety. These,
applied according to the indications of the design, or to the taste, and skill, of the artist, impart to capital prints a richness and character, which no other manner of engraving can boast of; and which is yet further augmented, by a judicious introduction, and mixture, of etching, engraving, and dry point lines.

The dry point is so termed, because used without a ground, consequently not bitten; the burr, or barb, rising from the copper, by the use of it, is very strong, and must be scraped off carefully. The whole point, and its handle, is stronger than an etching point, to sustain greater pressure when in use.

It appears from this mode of reasoning, that to attain considerable excellence in this style of engraving, is no easy matter; and indeed, of the many who are brought up to it, few arrive at superior honours; or, if they obtain skill in one branch (etching for instance), they fail in others: yet, as much of the progress, even of the best of plates, is little more than mechanism, and patience, abilities of all degrees are useful in the course of a long work.

It is proper to caution those inclined to attempt any of the branches of engraving, against a cramp posture, or, leaning the stomach against the table, or, poring with their eyes too close to the plate, &c. while at work. In very delicately finished works, the artist always has recourse to a magnifying glass; but as our readers certainly will not undertake such works, we proceed to another species of Engraving.
OF ENGRAVING IN CHALKS.

This manner of engraving has lately highly excited the public attention, and, indeed, has deserved it, by the beauty of many specimens which it has produced.

The process for preparing the plate, i.e. laying the ground, tracing, &c. is the same as before. The principles adopted in the etching, differ only, in that, instead of lines, the drawing, shadows, &c. are inserted in dots, as freely as may be, yet carefully. The biting is the same; with this difference, that whereas, in biting lines, no two should be suffered to unite, unless previously intended, and prepared for that purpose; in biting chalks (provided they do not by their union form a hard spot, or too considerable a black) this accident is not of equal consequence, if the subject be large. In small subjects, the more delicate and important parts should not be colored in the etching, but wholly inserted with the graver; being less hazardous, and much more accurate.

The plate bitten, and the ground removed, the effect of the subject represented, remains to be worked up with the graver. For small subjects, or such as are to be neatly finished, this is the only tool to be depended on. The best manner of preparing the graver for firm work, is, by changing its situation in the handle, so that the belly part of it, which was lowermost, becomes uppermost; then, by turning the handle in the hand, the point acts on the
copper from a greater elevation, which for strong dots is preferable; as only dots, not strokes, are required, the tool is, in this position, manageable with much greater facility, and speed.

The remaining part of the progress of a plate consists only in covering the copper with dots, in a manner lighter, or heavier, proportionate to the color, and to the drawing, required. When one covering of dots is scraped off, another must be inserted, and so on; by this repetition, a proper grain of dots, and the general masses of shade are procured. This process is tedious; but in return, it requires no great skill in the operator; a little practice, and proper attention, attains the whole mystery.

In larger subjects, or those which are to be slighted, some persons use tools of various sorts, such as wheels, with single, or double, rows of teeth, or, cradles resembling a mezzotinto grounding tool (but made with teeth), or, others constructed to their minds; but, these tools, though more expeditious than the graver only, are seldom so accurate, or so pleasing in the effect they produce.

These kind of tools, and a variety of others (amounting in the whole, when a set is perfect, to nearly forty), have been very much used in France, where the manner of engraving in chalks was first practised; they very frequently produce an effect more closely resembling an original drawing in chalks, than English performances finished solely with the graver; but, on the other hand, the neatness and accuracy, as well as a certain mellowness of style which distinguish English productions, are not only
only vastly superior to those of the French artists, but are universally esteemed so, throughout Europe.

The chief merit of plates engraved in chalks, is inserted by the artist who finishes the subject. Care and attention is requisite, and a good habit of design indispensable; every requisite in the manual practice is easily acquired.

The French have very well imitated drawings on blue paper, by using two plates; one of which printed the black-chalk effect, the other the white-chalk: on the same idea, chalk plates printed in black, on blue paper, may afterwards be touched with white-chalk, to a very pleasing effect.

OF RE-BITING.

When the parts of a subject which were intended to be dark, have failed of their proposed effect, they may be re-bitten, by the following process (which applies to all kinds of etching, and is among the secrets of the superior engravers): at a convenient part of the plate, being properly heated for the purpose, melt a quantity of ground; then with a dabber, carefully, by degrees, transplace as much of the ground thus melted, as is necessary, to the part proposed, by beating it gently, so that the surface, only, of the copper may be covered, and the hollows, or excavated lines of the work may remain free and clean. When this ground is cold, it may be re-bitten with aqua-fortis as before. It is frequently better not to smoke it, lest the heat of the taper should
should melt the ground into the work; in which case, wherever the ground covered the plate the aqua-fortis could not act.

N. B. Re-biting is sometimes used both to strokes and dotes, to strengthen a part which has not acquired all the color it should have; even after it has been laid in with the graver.

To clean strokes, &c. engraved, use a little spirits of turpentine, and rub the plate with crumbs of bread; if the dirt is of long standing, soap lees poured on the plate, while warming, is very effectual: but as this is a corrosive liquor, it must be immediately washed off the plate by plenty of cold water; and it is too strong for mezzotinto plates (especially) unless it be very carefully used.

OF MEZZOTINTO.

Mezzotinto is said to have been first invented by Prince Rupert, about the year 1649, who took the hint from seeing a soldier file his rusty musket; and Mr. Evelyn, in his History of Chalcography, gives us a head, performed by that Prince, in this way; but Mr. Le Blond is said to have introduced it most successfully into practice.

The Prince laid his grounds on the plate with a channelled ruler; but one Sherwin, about the same time, laid his grounds with a half-round file, which was pressed down with a heavy piece of lead. Both these grounding tools have been laid aside, for many years; and a hand-tool, called a cradle, resembling a shoe-
a shoemaker's cutting-board knife, with a fine crenellating on the edge, was introduced by one Edial, a smith by trade, who afterwards became a mezzotinto printer.

As it is much easier to scrape off, or to burnish away, the parts of a dark ground corresponding with the outlines of any design sketched upon it, than to form shades upon a light ground, by an infinite number of hatches, strokes, and points, which must all terminate with exactness on the outline, as well as differ in their force, and manner; the method of scraping, as it is called, in mezzotinto, becomes, consequently, much more easy and expeditious, than any other manner of engraving. The instruments used in this kind of engraving are cradles, scrapers, and burnishers. The scrapers for delicate work are much like a surgeon's lancet in shape and in fineness, but others are much stronger, for greater speed, and riddance.

To lay a ground, the cradle is to be passed forwards uniformly in the same direction; being kept as steady as possible, and pressed upon with a moderate force, till the instrument has passed over the whole surface of the plate. This first course of grounding must be crossed, at right angles, on the same principle. New lines must then be drawn diagonally, and the cradle passed along them as before: when the first diagonal operation is performed, these lines must then be crossed at right angles. The plate having undergone the action of the cradle, according to this disposition, a second course of cradling must be commenced: and the same must be repeated,
peated, regularly, changing the direction of the lines made by the tool. When the whole of this operation is finished, it is called one turn; but, in order to produce a very dark, and uniform, ground, the plate must undergo the repetition of all these operations many times.

When the plate is prepared with a ground; the sketch must be traced on it, by means of the paper rubbed on the back-side with chalk, as mentioned before. It is also proper to over-trace the lines, and drawing, afterwards with black lead, or rather, which is much better, with Indian ink, to secure the outlines. The scraping is performed, by paring, or cutting away, the grain of the ground, in various degrees; so that none preserves its original state, except the touches of strong shadow. The general manner of proceeding is like drawing with white upon black paper. The masses of light are first begun; and those parts, which lighten upwards but are in shade below: the reflections are then touched; after which the plate is blackened with a printer's blacking-ball, made of felt, in order to view the effect: the whole is then gradually brought to effect by scraping over the parts till they are sufficiently lightened.

Observe always to begin with the strongest lights.

It is easy to scrape more off any part if it be too dark; but, if a part be too much scraped away, it is troublesome; for it must undergo the action of a small cradling tool, proportioned to the size of the part, and the additional ground thus procured is not always a correct match to the original ground, which has
has an unpleasant effect, unless very skilfully managed. Mezzotinto plates are therefore proved, long before they approach toward finishing, if the subject be in any degree intricate, or considerable.

OF AQUA TINTA.

This manner of producing on copper the effect of a drawing washed in Bistre, or Indian ink, is altogether a modern invention; it was attempted in 1755 or 1760, by Mr. P. Sandby and Mr. Dalton, but it then failed of that success it has since met with. The first person whose productions were not only imitations of drawings, but were capable of printing any considerable number of copies, was Mons. Le Prince of Paris; whose early performances appeared in his "Modes & Usages de Russie." Mons. Le Prince, by degrees, improved his discovery, till at length it was thought, by the Honourable Mr. Greville, (brother to the Earl of Warwick) a secret worth purchasing at the expense of thirty guineas. This gentleman communicated the process to Mr. P. Sandby, whose attention and genius carried it to great excellence. Since its importation into England, it has been the subject of repeated and continued investigation; and as it was impossible to prevent the inquisitive essays of many ingenious engravers, who thought this article worth their acquisition, so it has happened, that more ways than one of producing this effect have been discovered. Each person thinks his own method the best; and all

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studiously conceal their principles; we may therefore claim the merit of being the first, in England at least, who communicated the secret to the public. We shall report several modes of procedure.

The first way we shall mention of producing on copper the effect of tinted drawings, is, by grinding a quantity of sulphur in oil, and with this mixture painting the plate; then, by placing the plate over a gentle fire, the vitriolic acid contained in the sulphur is set at liberty, and acts as a corrosive on the copper, forming a color lighter or deeper, in proportion to the heat of the fire, the time of its exposure to it, and to the strength of the acid employed in the mixture.

A second way of producing the same effect, is conceived on the well-known different affections of the same menstruum to different metals; and proceeds thus; saturate a quantity of aqua-fortis of a due strength, with shreds of silver; this liquor poured on copper, will quit the silver it contains, in order to act on the copper, by which it is more attracted; the silver will precipitate in the form of a subtle powder, and thereby occasion irregularities on the surface of the plate, which will hold the ink when printed.

Of these manners of procedure, the first is very offensive in its process, the fumes of the composition being highly disagreeable. The second, is chiefly applicable to very slender parts, and to add a color to places which are not of importance sufficient to require a fresh ground, or much trouble; such as leaves of trees, light flying clouds, &c. as it does not
possess much force, without great good fortune, or very close attention.

A third way proceeds on the principles, that minute interstices, alternately black and white; will, when viewed at a little distance, produce the effect of all black, according to the tone to which they are adapted; therefore, whatever will so fix itself to the plate, as to prevent the action of aqua-fortis where it is in contact, and yet will permit the aqua-fortis to corrode all around it, will produce alternately blacks and whites. This was first attempted with rosin finely pulverized; but that was apt (if too fine, or too much warmed) to form a coat, or superficialities over considerable parts of the copper, thereby resisting the menstruum on all sides. Sal ammoniac, pulverized with the rosin, and intimately mixed with it, was found to preserve interstices; but this applies only occasionally.

There are several gums which possess nearly similar properties; but the following appears superior to all others; and is (excepting the change of gum juniper, for gum copal); the method followed by Mons. Le Prince.

Grind a sufficient quantity of gum copal; divide it by sifting, into three or four parcels at pleasure, according to the fineness of each parcel: the first or finest powder serving for the lighter parts of the subject to be treated, such as distances, sky, &c. The second or grained powder for middle tints; the coarser grains of powder for foregrounds, and other very dark places; where strong biting is required by the subject. To accomplish this separation, the sieves must
must vary in fineness. Sift on the plate a sufficient quantity of the finer powder; the plate will now appear of an uniform tender white, unless closely examined, when the interstices between the particles of gum will be very discernible; heat the plate very gently, only till the gum changes from its white color, and is so far melted as to fix on the plate, from which it is scarcely to be distinguished by its color. When cold, the plate is ready for receiving the aquafortis. Stop out the lights, &c. as in common biting.

When the biting is over (which does not last long, a minute, perhaps, to the fine powder), wash the plate with water, as before directed for biting, and examine the effect produced, and the state of the ground; if some parts only are done, stop them out, and proceed to bite the other parts; if the whole be done of which this ground is capable, clean the plate by heating it, and apply a little oil, to remove the gum easily, if necessary. Those parts which are of the just color required, must then be secured, by stopping them out; the second powder must next be treated as the first has been, and the coarser powders, or rather grains of gum, must be treated in the same manner, to procure the bolder strengths: but these may endure proportionately stronger biting.

It is necessary to have more powders than one, because the hold the powder, or grains, has of the copper will permit only a certain degree of action in the aquafortis. The grosser the grains, the stronger hold they take of the copper; they will bear more heat to fix them, and will suffer more copper to be
corroded away from around them: but then, they would make very staring whites, were not a ground previously laid by the others; or, if they were misplaced on a subject, they would greatly disfigure it.

Sometimes a finer tint may be laid over a coarser to good advantage.

Sometimes a larger grain of whites may be procured, by melting the finer powders more than usual, which, by spreading each particle of gum, makes each grain cover a greater surface, which it protects from the action of the aqua-fortis.

It requires some patience, and facility with the pencil, to prepare the plate by stopping out; which operation is not only to be attended to at first, to preserve the whites, but may be repeated at any time, provided the grains of powder attached to the plate appear able to sustain the biting necessary to produce the color proposed.

Every manner of engraving by aqua tinta has much of uncertainty connected with it; and requires, not only good judgment, but great attention, and some, perhaps a good deal, of good luck, to succeed happily. If, therefore, any mode of practising it could be reduced to a certainty of producing the effect required, and could be so conducted as to be under command, it would be a fortunate discovery.

The first difficulty in *aqua tinta* is, to get the ground perfectly even, and uniform: to accomplish this, we have two objects in view; the first is to compose a ground which shall be properly divided into (1) a material which may produce grains to resist the aqua-fortis: (2) a material which
will produce interstices to admit the aqua-fortis. The best way, at present known, is, to bruise, grind, break, and sift together, repeatedly, till the compound powder appear of one uniform color, the gum copal, with a proportionate quantity of asphaltum; which will make a powder of pretty nearly equal fineness. Now, the gum copal will be fixed on the plate, by being melted, by means of so gentle a degree of heat as will not affect the asphaltum: this powder, then, being loose, admits the aqua-fortis to surround the grains of gum. N. B. Other powders may be discovered to answer the same purpose: and, indeed, whatever is near the specific gravity of the gum, may succeed in practice.

The second object we have in view is, to lay the grounds perfectly uniform, and evenly distributed, over the surface of the copper. It is true, that a steady hand may sift a powder through a fine sieve, very evenly, if the eye follow it closely, and this method is not to be despised; but, almost everybody must have observed, that, powders of all kinds are precipitated when at rest in water, very evenly, and uniformly; if then, a quantity of water, having a proper proportion of powder diffused in it, be poured on a plate, the water may be drained from it, by a proper inclination of it, while the powder remains behind: when the water has entirely quitted the plate, the ground, thus obtained, may be set by being warmed as before.

A menstruum, in which the grains of gum are dissolved and intimately mixed, may be yet better. Gum or rosin dissolved in spirits of wine, the liquor being
being poured on the plate, the spirits will evaporate, and the rosin becoming dry, will form itself into grains, which being fixed on the plate, allow interstices for the action of the aqua-fortis.

As the time necessary for putting a border of wax round a plate, is more than is engaged in the biting of a light ground, some artists make use of a trough, properly painted, and secured from the action of the aqua-fortis, into which, when filled with aqua-fortis, (and after having stopped out all that is to be left white on the plate, not forgetting the margin), they plunge the plate; and suffer it to remain there, only so long as they judge necessary to produce the color wanted; if upon examination the plate be not bitten enough, they plunge it again, till they are satisfied. This they do to every ground, till the plate is finished.

Each of these modes of practising aqua tinta, supposes a good deal of trouble in stopping out the parts which are to be left white: there have been, therefore, other methods suggested, which for some subjects answer better.

First, lay a ground of gum copal grain, all over the surface of the copper: when this is cool, and ready for use, paint, with the shadowing composition mentioned below, in the same manner, and with the same freedom, as with Indian ink, the shadows of the subject (if it be a landscape, the foliage of the trees, &c.) let it be thoroughly dry; then, with a large, soft, camel's hair pencil, cover over the whole, with the asphaltum varnish: and when that is thoroughly dry, plunge the plate into water: in a short
space of time, the water penetrating through this varnish, will dissolve the sugar, or the treacle, which forms its composition; and that, rising, will part from the copper, and bring with it all that covers it, leaving the copal ground unaffected by the water, and still adhering firmly to the plate. This bite as before.

The asphaltum varnish is made, by dissolving four ounces of asphaltum in about eight ounces of spirits of turpentine; using a very gentle heat: pour off the liquid, and add more of either ingredient, as the varnish may be thought too thick, or too thin.

The shadowing composition is made, by taking any quantity of treacle, and grinding it into a paste with whitening; or, by taking, of coarse sugar about two ounces, of whitening about one ounce, and grinding them with a sufficient quantity of water, to form a paste proper for use by the pencil.

If any hard edges occur in aqua tinta, they may be softened by the burnisher, or the burnisher may insert lights or slight touches of drawing, &c. occasionally, to advantage.

The aqua-fortis used in this method of engraving should not be too strong; because, as its operation is always rapid, if too strong, it will break up the ground, and do other mischief, before it can be prevented. It is not a bad way to try the strength of it, before it be used, on a separate piece of copper.

A very great disadvantage attending re-tinting of any part is, the nicety required to match a color; in fact, it is hardly possibly to lay two grounds so precisely alike as is requisite for that purpose: nay, it fre-
frequently happens that a second ground obliterates, or at least damages, the first over which it is laid.

Aqua tinta is a method of engraving (if it may deserve that title) so very rapid, that it will produce on a large plate, in one week, the effect of a month's labour at some other kinds of engraving: it is in general, however, but shallow on the copper, yet, when well managed, is sufficiently lasting. Its merit consists much in a very even colour, smooth, and free from blemishes. It applies well to architecture, to landscape, and to back-grounds.

Though I do not think much use can ever be made of the invention, yet I think proper to insert here the mode of etching upon glass: or, rather, the discovery of a solvent which acts upon glass, as aqua-fortis does upon copper.

The acid for this purpose is procured from sparry fluor, or Derbyshire blue John, powdered; and by means of concentrated vitriolic acid submitted to distillation by a gentle heat; what comes over, and unites with a proper quantity of water in the receiver (which is of lead as well as the retort) is the acid; it must also be kept in a leaden vessel. This will corrode lines, &c. drawn upon glass through a varnish.

_Explanation of the Method of printing in Colours._

The plate being warmed in the usual manner, the colours are applied by means of stump camel-hair pencils, to the different parts, as the subject suggests; it is then wiped with a coarse gauze canvas,
any other being improper; after this, it is wiped clean with the hand, as in common practice; and being again warmed, is passed through the press.

The colors are mixed with burnt linseed oil, and those generally used by painters are proper.

The little finger generally supplies the place of pencils. This art succeeds best in chalk engravings. The prints, if touched up with colours, after they are printed, will approach very beautifully toward the effect of pictures.

OF CUTTING IN WOOD.

This business is, properly, neither sculpture, nor engraving, but, being applied to many of the purposes of engraving, it claims affinity to that art. The smoothest grained woods are the best; such as pear-tree, or beech, but above all box. The surface being prepared by smoothening, a thin coat of white lead, tempered with water, is passed over it, the outlines of the design are traced with a black lead pencil, or ink, and the design is laid on the block; then wetted, and carefully rubbed on the back, till the lines traced are transferred to the white lead, which shews them plainly; the blank parts are then cut away with sharp knives, small chissels, or gravers, as required. This kind of work differs from engraving on copper; in that, the parts of the copper which are cut out hold the ink, and form the impression; in this, the parts which remain, being prominent,
Next, perform the same business. The blocks are printed as letter-press.

This kind of work has been made to produce an effect resembling washed drawings, by using several blocks, correspondent to the several colors of the design: the ink, being accurately mixed to the color wanted, is applied all over the surface of the block, and the darker colors printed after the lighter. Aqua tinta has superseded the use of this method; but one similar to it is practised at Paris, only using copper plates instead of wooden blocks, and printing the separate parts of the design in their proper colors, by which they are very prettily tinted.

In delicate works, or parts expressive of distances, to slope away the surface of the wood gently in those parts produces a good effect; because, in the printing, they less hold the ink, and less ink is pulled off them by the paper; consequently, they appear fainter.
OF MODELLING.

This is one branch of the art of the sculptor, and, in many cases, a very important one; being, to all works of considerable size, an indispensable requisite previous to cutting the marble; being also, the usual mode in which young sculptors study the principles of their profession, academy figures, &c.

The tools for this purpose are usually slender sticks of wood, made by the artist himself, and therefore of a shape at his pleasure; but, whatever other implements may occasionally be employed, the thumb and fingers generally perform the major part. The clay to be used should be fine, soft, free from stones, dirt, &c. and be carefully examined before it is used. In London, this kind of clay is procured from about Vauxhall.

To model a Bas Relief: on a strong board, of sufficient size, sketch the dimensions of the subject intended, then place the clay, which is moist and adhesive, laying a greater quantity on the parts which are to be raised, to give them thickness, and following the course of the drawing proper to the subject.

To model a figure, it is sometimes requisite to insert little sticks into the limbs, and other parts which will not support themselves without props; but this requires care. It is a liberty very allowable in modelling, to support the figure with beds of clay in convenient places, where they do not injure the composition, since these kind of models are to be considered as little more than sketches, or preparatory studies.

When
When the model is quitted, if not finished it must be kept cool, and moist, by being covered with a wet cloth.

If a model is intended to be preserved, it must be set by, to dry very thoroughly; then, taken to a pottery, where it must be gradually hardened, and baked. There are many risks attending this process; if the clay be not dry within, however it may appear without, sudden heat will spoil it; or, if there remain any stone concealed in it, when the heat of the fire reaches that stone, it will explode, and crack the piece.

If the colour of the clay used is not approved of, it may be painted in Distemper, after being burnt; oil colors, having a glossiness, are seldom employed.

To prepare for a large piece of sculpture.—The model is finished as above, the size of the figure intended, and then molded in separate parts, in which, when re-united, is cast a plaster-figure; which is repaired, (i. e. cut, scraped, &c.) with great accuracy. This figure is now the standard, from which a copy in marble is to be taken, the original part of the business being over.

To model in Wax.—The process is much the same as with clay. To temper the wax, some add to a pound of wax half a pound of colophony; some add turpentine, melting the whole with olive oil; some insert a little vermillion, or other color, to give it a tint. Wax will readily take every color added to it; and is accordingly sometimes used to imitate life; in which procedure cleanness of tint must be carefully attended to.
OF SCULPTURE.

Mr. Bacon having communicated to the public, in the Cyclopaedia, some remarks on that profession in which he excels, to offer it to our readers, requires, we presume, no apology. They are as follows:

"It is probable that sculpture is more ancient than painting; and, if we examine the style of ancient painting, there is reason to conclude, that sculpture stood first in the public esteem: as the ancient painters have evidently imitated the statuaries, even to their disadvantage: since their works have not that freedom of style, more especially with respect to their composition and drapery, which the pencil might easily acquire to a greater degree than that of the chisel; but, as this is universally the case, it cannot be attributed to any thing else besides the higher estimation of the works on which they formed themselves. Which is the most difficult art has been a question often agitated. Painting has the greatest number of requisites, but, at the same time, her expediens are the most numerous; and, therefore, we may venture to affirm, that, whenever a sculpture pleases equally with a painting, the sculptor is certainly the greatest artist. Sculpture has indeed the honour of giving law to all the schools of design, both ancient and modern, with respect to purity of form. The reason, perhaps, is, that being divested of those meretricious ornaments by which painting is enabled to seduce its admirers, it is happily forced to seek..."
Sculpture
seek for its effect in the higher excellencies of the art: hence elevation in the idea, as well as purity and grandeur in the forms, are found in greater perfection in sculpture than in painting. Besides, whatever may be the original principles which direct our feelings in the approbation of intrinsic beauty, they are, without doubt, very much under the influence of association. Custom and habit will necessarily give a false bias to our judgment; it is therefore natural, and in some measure reasonable, that those arts which are temporaneous, should adapt themselves to the changes of fashion, &c. But sculpture, by its durability, and consequent application to works of perpetuity, is obliged to acquire and maintain the essential principles of beauty and grandeur, that its effect on the mind may be preserved through the various changes of mental taste. It is conceived, that it will scarcely admit of a question, whether the ancients or moderns have most excelled in this art; the palm having been universally adjudged to the former. To determine in what proportion they are superior is too difficult an attempt. Wherever there is a real superiority in any art or science, it will in time be discovered; but the world, ever fond of excess, never stops at the point of true judgment, but dresses out its favourite object with the ornaments of fancy, so that every blemish becomes a beauty. This it has done by ancient sculpture to such a degree as not to form its judgment of that by any rules, but to form an opinion of rules by the example. As long as this is the case, modern art can never have a fair comparison with the ancient. This partiality to
the ancients is so strong as to prevent almost all discrimination; and is the sole reason, why many antiques, that now stand as patterns of beauty in the judgment of most connoisseurs, are not discovered to be copies. This is not more important than it is easy to be perceived by a judicious eye; for wherever there is a grandeur or elegance to an eminent degree in the idea and general composition of a statue, and when the execution of the parts (called by artists the treating of the parts) betrays a want of taste and feeling, there is the greatest reason to conclude, that the statue is a copy, though we were ever so certain of its antiquity. And surely, if evidence of a picture's being a copy proportionably diminishes its value, the same rule of judgment may may be no less properly applied to a statue. Modern and ancient art can never, therefore, be fairly compared, till both are made to submit to the determination of reason and nature. It may be observed, that the ancients have chiefly confined themselves to the sublime and beautiful; and, whenever a pathetic subject has come before them, they have sacrificed expression to beauty. The famous groupe of Niobe is one instance of this kind; and, therefore, however great our partiality to the ancients may be, none can hesitate to affirm, that, whenever the moderns shall unite great expression with great beauty, they will wrest the palm out of their hands."

In Sculpture the first thing done, is, out of a great block of marble to saw another of the size required; which is performed with a smooth steel saw, without teeth; casting water and sand thereon, from time to time;
prime; then, by taking off what is superfluous with a steel point and a heavy hammer of soft iron, it is brought near the measure required; and still nearer with a finer point; they then use a flat cutting instrument, having notches in its edge, or teeth; and then a chisel to take off the scratches the other has left; till, at length, taking rasps of different degrees of fineness, they gradually bring the work into a condition for polishing.

To polish, or make the parts smooth and sleek, they rub them with pumice-stone and smalt; then with tripoli; and when a still greater lustre is required, they use burnt straw.

To proceed the more regularly, on the head of the model, some place an immovable circle, divided into degrees; with a moveable ruler, or index, fastened in the centre of the circle, and divided likewise into equal parts. From the end of the ruler hangs a thread with a plummet, which serves to take all the points to be transferred thence to the block of marble, from whose top hangs another plummet like that of the model. But other excellent sculptors disapprove of this method; urging, that the smallest motion of the model changes their measures; for which reason, they rather choose to take all their measures with the compasses, though reckoned more tedious.

In large figures, the first part of the business being labour, and not skill, it is committed to workmen: and indeed the whole of this part of the profession being to copy the model, the master seldom troubles himself to work at it, at least, till the close of the process.
In imitating bas-reliefs, if it be a subject which admits of being laid flat, they endeavour to bring the copy to cast the same shadows as the original.

Sculpture has been in England rather a monumental art, than, as it is in many other countries, a decorative profession. Of late, we have had many elegant chimney-pieces of sculpture, but very few large figures, except for tombs. Our best specimens in public are, the statues of Phrenzy and Melancholy, on the piers before Bethlehem Hospital, which deserve to be ranked among the first performances in this art; they were executed in the reign of Charles II. by Gabriel Cibber, father of the poet-laureat. There is also a most elegant statue of King Edward VI. in bronze, which stands in one of the courts of St. Thomas's Hospital, in Southwark, by Scheemarker; and one of Sir Isaac Newton, at Cambridge, by Roubiliac.

Westminster-Abbey is the most famous repository of sculpture in England; and it contains many fine specimens; but the figures lose much of their effect by being crowded together without order; whereby one groupe injures another.

St. Paul's Cathedral has lately received further embellishments by sculpture; and more is intended. It affords many noble opportunities and situations for capital groupes, &c. in all parts, but especially in the circumference beneath the dome.
The following colors being newly discovered and made public, have been omitted in their proper places: we give them here for the satisfaction of our readers.

Brunswick Green.—This is a very valuable and newly discovered color, and is prepared by two brothers, of the name of Gravenhorst, at Brunswick. Hitherto it has been kept a secret; but it is conjectured to be a precipitate of copper which has been dissolved in tartar and water by coction, and which, by evaporation of the lixivium, is deposited in the form of a cupreous tartar. A similar color is sold by Messrs. Brandram, and Co. in Sise-lane, London, which possesses many, if not all, the rare qualities of that prepared at Brunswick.

Earth, White.—Many ingenious men have employed their talents in discovering a more wholesome, and cheaper, pigment, than white lead; and, perhaps, the finer and whiter sorts of earth might be usefully substituted. The Terra Goltbergensis is of a white color, which is dug up in several parts of Germany, more particularly at Goltberg, whence its name, and Strigaw, and at Lignitz in Silesia. At this time, it is procured in the neighbourhood of Hasselt, in the bishoprick of Liege, in the circle of Westphalia, where it is usually sealed with the impression of an eagle, and the words "Terra Goltbergensis."—Of tobacco-pipe clays there are also several sorts that appear convertible into pigments, especially one of this class which is found near Lymington in Hampshire, which is not at present turned to much use. But the earth termed Melimon
(vide Melinum), has ever been famous in the annals of painting, being the principal white of the painters of antiquity. It is still found in the same place from whence the painters of old had it, viz. the island of Milo, called Melos by the Greeks, whence its name, and is common in all the adjacent islands. It is not quite so bright a white as white lead; but as it never turns yellow, as white lead does, it is far preferable to that article in the course of time. Besides, as most of the discoloring substances of earths may be attributed to iron, if it were treated with marine acid, the brightest might be improved.

Orange Lake.—This may be prepared by boiling four ounces of the best Spanish anatto, and one pound of pearl ashes, for the space of half an hour, in one gallon of water. Strain the tincture, and mix it gradually with a solution of a pound and a half of alum in six quarts of water, desisting when no ebullition ensues. Treat the sediment as is usual in common lake, and dry it in square bits, or rolls, &c.

Patent Yellow.—This color, for which the ingenious Mr. Turner has a patent, is prepared by triturating red lead and common salt together in a mortar, and then exposing them in a crucible (made of tobacco-pipe clay) to a certain heat. The salt is decomposed, the marine acid uniting with the calx of lead, forms the patent yellow; and the basis of the salt, which must be carefully washed out, is the mineral alkali, of so much consequence in the soap, glass, and other manufactories.

Sugar of Lead.—Lead and its calces may be dissolved by the acetous acid, and will afford a crystallizable
tallizable salt, called sugar of lead, from its extreme sweetness. This, like all the preparations of lead, is a deadly poison. It has the property of rendering oils thicker, and causing them to dry more rapidly.

**TO MAKE WHITE PRECIPITATE OF LEAD.**

If a small quantity of strong nitrous acid be poured on litharge (which see), the acid unites itself to the metal with considerable effervescence and heat. Some water being now poured on, and the glass vessel containing the mixture shaken, a turbid solution of the litharge is made. If a small quantity of acid of vitriol be now added, it throws down a beautiful white precipitate; and the acid of nitre being left at liberty to act upon the remainder of the litharge, begins anew to dissolve it with effervescence. When it is again saturated, which will be known by the discontinuance of the bubbles, more acid of vitriol is to be dropped in, and a white precipitate is again thrown down. If any of the litharge remains undissolved, the nitrous acid being set at liberty a second time, attacks it as at first; and by continuing to add acid of vitriol, the whole of the litharge may be converted into a most beautiful and durable white. Unfortunately, this color cannot be used in oil, though in water it seems superior to any.

N. B. If the process be well managed, an ounce of nitrous acid may be made to convert several pounds of litharge into a white of this kind.

It has been strongly recommended to paper-sta...
ers, and others, who use water-colors in large quantities, to prepare their lakes, and the colors now prepared of chalk, on the basis of the above precipitate of lead.—For instance: if the color required be a very fine one, suppose from cochineal, the coloring matter is to be extracted by spirit of wine, without heat. When the spirit is sufficiently impregnated, it is to be poured by little and little upon the calx: the spirit soon evaporates, and leaves the calx colored with the cochineal. More of the tincture is then to be poured on, rubbing the mixture constantly; and thus, by proper management, many beautiful colors, not inferior to the best carmine, may be prepared. When only a small quantity of color, for the more exquisite touches of the miniature painter, is required, we would recommend the process to be conducted on the basis of white precipitate, or calx of tin, pursuing the same method of rubbing in the coloring tincture as when white precipitate of lead is used. If, instead of cochineal, Brazil-wood, turmeric, logwood, &c. be substituted, different kinds of red, yellow, and purple, may be produced.
By way of conclusion to this part of our Work, we shall add some **miscellaneous remarks**, extracted from a small work by the late ingenious Mr. **Robertson**; which being only distributed among his private friends, and never *published*, is in few hands: and being the result of the experience of many artists, communicated to him, as well in Italy, as in England, and written down by him, will, we hope, be acceptable to our friends; as certainly many of the ideas and hints are very good.

**GROUND AND PRIMING.**

Mr. Forrester communicated to me the following observations, which he had from Mr. Patoon and others.

The Venetian masters often worked upon jess grounds thus prepared. Take a fine, and even canvas, or board, and give it one coat of jess made with size; when dry paint upon it. The first coloring will sink in as the jess drinks up the oil, but by that means leaves the greater brilliancy in the colors; the second painting will not sink so much, and also appear very clear, after which you may very safely re-touch, and glaze or scumble with the mastic varnish at pleasure, and your picture will retain by far more force and vigour, than if painted on any other ground. You may likewise paint with safety on this ground (or even on a white silk without any preparation) in water colors, prepared in the common way, any head, figure, landscape, &c. After being harmonized
monized and finished in water-colors, the mastic
varnish must be carefully laid on before you proceed
to re-touch, glaze or scumble in the usual way with
oil and varnish until the effect proves satisfactory;
this will bear out and retain more force, delicacy,
and clearness, than any oil-painting whatever, and
will even last as long, and is also a method made use
of by some of the finest colorists in their best works.

It is of great importance in our first and second
painting, whether of flesh, drapery, landscape, &c.
to paint only with earths, reserving the most clear
and brilliant colors for the last painting and glazings,
by which means a greater truth and force will always
be preserved in our works, and they will also last the
longer for it. It may reasonably be supposed, that a
proper foundation of strong holding colors is neces-
sary (such as most earths are) under the more delicate,
which will make them last and bear out the better:
whilst, on the contrary, if earths are used upon the
clear and brilliant colors, the effect must be both
dull and heavy. Besides, if in dead or second col-
loring the finest and brightest tints are used, what
colors can be found to brighten or finish with?

The method used by Pietro Bianchi, who was a
very ingenious and general painter, and whose pic-
tures still maintain a great clearness and freshness,
though done forty, fifty, or sixty years—is this: he
took one half of drying oil, and the other half of
clear nut oil; these he mixed well together, and his
picture being dry, he rubbed (with a sponge or
brush) these mixed oils upon the picture, leaving it
only damp therewith, after which he re-painted or
re-touched.
re-touched at pleasure. This method was given by an old scholar of John Baptista Bougieur, who was well acquainted with the said Pietro Bianchi. The same person also informed me, that his own master, Baptista Bougieur, made use of the thick white varnish sold in the color-shops for re-touching and re-painting; but the consequence was, that, after some years, all his pictures became covered with a stuff like a mildew, which after being cleaned off would shortly return.

Signior Gaspar Scarmouchi, who is also an ingenious man, and a scholar of Lucatelli, recommends the use of poppy oil for according, re-touching, or re-painting a picture, which, he says, will never change, and dries much sooner than nut-oil. The method of applying it is by letting the picture be well dried, then rub, with a small sponge dipped in the oil, the part of the painting which you intend to re-touch, after that spread the oil with the palm of the hand, which will make the colors spread and work very agreeably.

Mr. Andrews says, that, if you would unite any part of a picture in water colors, whether sky, face, drapery, or any other part, you must wet the picture on the back, with a clean sponge moderately, so as to damp the colors, after which you may re-touch, scumble, or re-paint, as often as you please, provided the size with which you mix your colors is neither too weak nor too strong, and that the picture be painted on an unprimed fine cloth or silk.—This is Mr. Patoon's secret, and may be repeated with
safety as often as you please to re-touch it, and without any risk.

In order to prevent your colors from ever changing, and to maintain their original beauty, force, and vigor, the cloth should be primed with peach-stone black and white; that is to say, the second going over the cloth, or the last hand, as it is termed, should be done with this black and white, and the picture will maintain itself without the least danger.

According to Mr. West, when you intend to repaint, re-touch, or glaze your picture, let it first be tolerably dry, then give the whole, or the part which you intend to paint, a coat of varnish a day or two before, after which you may mix some of the same varnish with the colors you put on, which will make them bear out with great force and clearness, inasmuch that there will not be the least occasion for varnishing those parts when the whole is finished, only covering the other parts that appear dull or sunk in.

According to Mr. Jenkins, when the varnish is very dry on the picture, the best method is to rub on the part to be painted, or re-touched, &c. a little purified nut oil, which must be wiped clean off, so as to leave only a little dampness on the place, which assists the fresh colors in uniting with the old without any sinking in.

Mastic, with nut oil, is very good for re-touching, to be used instead of the white varnish sold at the color-shops.

For re-touching or bringing out pictures when sunk in, take purified nut oil, and mix it with oil of lavender.
lavender in equal quantities: rub it on the part, or, if the part is too fresh, mix the oils with the color on the pallet, or dip the pencil in it. This oil of lavender renders the colors pleasing and most agreeable, making them appear of a good body, easy to work, and quick to dry, so that the same part of a picture may be painted on, day after day, until it is finished, without the least inconvenience or bad effect.

**MILDEW.**

Some say, that, by shutting up a fresh picture on which you have put a mastic varnish, it will become mildewed, wherever that varnish has touched: however, the method of taking off that mildew is easy, and may be done thus:

*To prevent Mildew from Varnish.*

Wash the picture with a clean sponge, dipped in an equal quantity of vinegar and water, milk warm, which will take away the mildew effectually; afterwards it will be necessary, when the picture is dry, to rub it over with a clean soft sponge or cotton, moistened with purified oil, which you must wipe off as clean as you can with cotton, or any other material that will take the moisture of the oil away, and the picture will become clear, and look as fresh as ever.

Mr. Jenkins's method of taking off mildew from mastic varnish, is, by taking an equal quantity of spirits of wine, and rose water mixed, and so rub it.
it on with a sponge, till it takes off the old varnish, after which wash the picture with clean water, and when it is dry you may put on a fresh varnish again; but if the varnish has been mixed in the color at the time of painting, or re-touching, as is practised by many painters, you must not attempt to take it off by any means.

COLORS.

Umber burned or unburned is a good color, especially for dead coloring; it is used and recommended by Mr. Mengs, and has a good body.

Terra de Sienna burned, and mixed with dark yellow, and terra rosa, make a fine tint.

Crystal pounded to an impalpable powder is an excellent dryer of the colors, mixed either with oil or varnish.

In order to dry a picture suddenly, place the back towards the sun, which will effect it without the least detriment to the colors.

The best sort of the Terra de Sienna burned, mixed with white, and a little ultramarine, makes an exquisite flesh or fine color for skies, &c.

Terra rosa Persica, with black and white, makes an excellent fleshy tint.

Indian red, with ivory black, makes a fine color.

The black earth of England is a very fine color. Persico or peach stone black is a fine bluish black, and the best and safest in flesh, skies, water, &c.

A most excellent black may be made thus: take a quantity of white paper, the whiter and cleaner the better,
better, and burn it, preserving the ashes, which will, when mixed with oil, make a fine black.

GLAZING.

A very fine glazing liquid for the more delicate parts of a picture may be thus made: first grind the mummy or burned lake, or any other glazing colors, very fine on the stone with oil; when you are making the varnish, put in these colors, and let them boil in them till the varnish is made (mastic), in which time the colors will sufficiently incorporate with the varnish. When you are going to make use of it, in order that the colors may be mixed the better, stir the bottle well. This makes the most delicate glaze that can possibly be, and which may be put on any part of the picture; it will mellow it in the finest manner, without leaving the least smudged effect, or even the appearance of being glazed at all.

The finest brown used by Mr. West in glazing is the flesh of mummy; the most fleshy are the best parts; the threads of the garments, or any dirt which may prevent its grinding, must be entirely cleared away; after which it must be ground up with nut oil very fine, and may be mixed for glazing with ultramarine, lake, blue, or any other glazing colors; when it is used, a little drying oil must be mixed with the varnish, without which it will be longer in drying, which is the only defect it has, as it may be used in any part of a picture without fear of its changing.

The
The finest brown next to that of mummy is the Prussian blue burned, which is to be used in the same manner for glazing as the former, with this difference, from its being a better drier, there is no occasion to use drying oil with the varnish. In some respects, this has the advantage of the mummy, being very little, if at all, inferior in point of color; it dries better, is obtained with less difficulty, and ground with greater ease.

A good glazing brown is made of gumbouge burned; it is very similar in color to asphaltum, but much inferior to the mummy, or blue.

To obtain a very lively and beautiful green, paint the object, whether tree, drapery, &c. quite blue, afterwards glaze it over with brown pink, which will produce the wished-for effect.

The finest green may be produced by painting the ground white, and glazing over it with verdigrease mixed up with varnish.

OILS.

Linseed oil is expressed from the seed of line or flax. It is the principal oil used in all kinds of paintings, or, indeed, the only kind, except for some very nice purposes, where its brownness renders it unfit. The principal defects of linseed oil are these, a brown color, and a slowness in drying, both of which are in a much greater degree in some parcels than in others, arising sometimes from an accidental mixture of seeds growing with it, which make it partake of the nature of olive oil which can-
not be brought to dry by any art or means whatever. The excellence therefore of linseed oil consists in its near approach to a colorless state, and its soon drying. With respect to the first quality, it may be distinguished by inspection only; but the second can only be known by trial, for there is no particular appearance, or other immediately perceptible mark attending this last quality. Linseed oil is in general used without any other preparation than the mere mixture of it with the proper dryer, but to keep it a considerable time before it is used will always be found to improve it. It is nevertheless used sometimes after it is wrought into the state of drying oil (not to mix and make other unprepared parcels dry) but alone, as the sole vehicle of the colors. The convenience of this is the speedy drying of the paint so composed, but it cannot be practised when the beauty of the color is of the least consequence; for, in this case, the oil imparts a strong brown to the mixture.

Nut oil is the oil of walnuts pressed out of the kernels by means of a screw-press; it is used for the purpose of mixing with flake white, or other pigments, where the clearness of the color is of great consequence, and would be injured by the brownness of linseed oil. It is used without any other preparation than keeping, which is ever found to improve it with regard to its color and quality of drying. The adventitious faults of nut oil are turbidity, slowness in drying, and not being perfectly colorless; inspection points out the first, but the remaining two must be examined by trial: if, however, there is no adulteration in the case, time will generally cure it of all defects.
defects. Whoever would have nut oil perfectly good should peel the skin of the kernels before they press them, for the skin contains an acid oil of a very different nature from that of the kernel, and is extremely subject to turn brown, or even black, and consequently tinges the other when expressed with it.

Poppy oil is expressed from ripe seeds of poppies, in the same manner as nut oil from walnuts: its qualities and uses, defects and remedies, are also much the same, only when it is perfectly good it is much clearer, and will also dry better than the best nut oil.

Oils of spike or lavender are essential, or distilled oils, obtained by distilling spike, or any other lavender, with water. It is used in painting, only as the vehicle for laying on the composition formed of the flux, and colors in enamel painting, which its fluidity renders capable of being worked with a pencil, its volatile nature afterwards rendering it wholly dry, without leaving any matter that might affect the substances of the enamel, which an essential oil is only capable of. Oil of spike and lavender is subject to be adulterated by the oil of rosemary.

END OF THE COMPENDIUM OF COLORS.