

PAPERS

15

POLITE ARTS.

The SILVER MEDAL and THIRTY GUINEAS were this Session voted to Mr. J. HASSELL, No. 11, Clements Inn, for his Improvement in the Aquatinta Process, by which Pen, Pencil, and Chalk Drawings can be imitated. The following Communication was received from him. An Etching executed on a Copper-plate, various Impressions and Specimnes of the Work, and Samples of the Varnishes and other Articles, are preserved in the Society's Repository.

SIR,

PERCEIVING the various methods of imitating drawings and sketches in the graphic art fall short of an accurate imitation of the black-lead pencil, I determined on an attempt, some years since, which, after repeated experiments, I flatter myself I have fully established.

The manner is totally new, and solely my own invention :—
by the method I adopt any artist can sketch with a black-
lead

lead pencil his subject immediately on the copper, and so simple and easy is its stile, that an artist can do it with five minutes study.

By this manner, the trouble in tracing on oil paper, and other re-tracing on the etching ground is avoided, and the doubtful handling of an etching-needle is done away, as the pencilling on the copper is visible in the smallest touch :— It has also another perfection, that by using a broader instrument it will represent black chalk, a specimen of which I procured Mr. Munn, the landscape painter, to make a trial of. I have, herewith, sent the said specimen marked **C**, and Mr. Munn's name is affixed to the same. This subject he actually drew upon copper, under my inspection, in less than twenty minutes, the time he would have taken, perhaps, to do the same on paper; in fact, it can be as rapidly executed on copper as on paper:

It is particularly pleasant for colouring up, to imitate drawings, as the lines are soft, and blend in with the colour. It is a circumstance always objectionable in the common method of etching, that those so tinted can never be sufficiently drowned, nor destroyed, and always present a wiry hard effect.

It is equally adapted to historical sketching, and might be the means of inducing many of our eminent painters to hand down to posterity their sketches, which, at present, they decline from the irksome trouble attending the repetition of retracing their performances, and the doubtful handling of the etching-needle, which can never give a sufficient breadth and scope to their abilities.

I have, Sir, forwarded, in an annexed paper, the different specimens, for the inspection of the Gentlemen forming the Society of Arts, &c. &c.

In making my specimens I have thought it necessary to shew, that if by any accident a part might fail, that it could
be

be re-touched a second time, and oftener if wanted; in this particular its simplicity stamps its use.

To elucidate the foregoing preposition, I purposely caused a part of the distance to fail in specimen A A; this is repaired you will perceive in specimen B, and the sharp touches wanted to perfect the sketch are added.

I beg also to state, it is not the stile usually termed *soft ground etching*: that process is always uncertain, cannot be repaired, and will only print about two hundred impressions; whereas the specimens herewith sent will print upwards of five hundred with care.

Should the Society for the Encouragement of Arts, &c. deem the subject worthy of their reward, I shall feel proud in communicating its process, and flatter myself the arts and artists will feel a peculiar addition and pleasure in its utility.

Permit me, Sir,

to subscribe myself, with all respect,

Your obedient humble Servant,

JOHN HASSELL,

Landscape-Draftsman, 11, Clement's Inn, Strand.

March 26, 1810.

To C. TAYLOR, M. D. SEC.

&c. &c. &c.

Process of drawing upon Copper, to imitate Black-lead Pencil or Chalk.

A remarkable good polish must be put on the copper with an oil-rubber and crocus-martus well ground in oil;
after

after which it must be cleaned off with whiting, and then rubbed with another clean rag.

You are then to pour over your plate the solution to cause ground, which is made as follows :—

No. 1.—Three ounces of Burgundy pitch.

One ditto of frankincense.

These are to be dissolved in a quart of the best rectified spirits of wine, of the strength to fire gunpowder when the spirits are lighted.

During the course of twenty-four hours this composition must be repeatedly shook, until the whole appears dissolved; then filter it through blotting paper, and it will be fit to use.

In pouring on this ground, an inclination must be given to the plate that the superfluous part of the composition may run off at the opposite side, then place a piece of blotting-paper along this extremity, that it may suck up the ground that will drain from the plate, and in the course of a quarter of an hour the spirit will evaporate, and leave a perfect ground that will cover the surface of the copper, hard and dry enough to proceed with.

With an exceeding soft black-lead pencil sketch your design on this ground, and when finished take a pen and draw with the following composition, resembling ink : if you wish your outline to be thin and delicate, cause the pen you draw with to be made with a sharp point; if you intend to represent chalk-drawing, a very soft nib and broad-made pen will be necessary, or a small reed.

No. 2.—Composition, resembling ink, to draw the design on the copper.

Take about one ounce of treacle or sugar-candy, add to this three burnt corks reduced by the fire to almost an impalpable powder, then add a small quantity of lamp-black

to

to colour it; to these put some weak gum-water, (made of gum-arabic), and grind the whole together on a stone with a muller: keep reducing this ink with gum-water until it flows with ease from the pen or reed.

To make the ink discharge freely from the pen, it must be scraped rather thin towards the end of the nib, on the back part of the quill, and if the liquid is thick reduce it with hot water.

Having made the drawing on the copper with this composition, you will dry it at the fire until it becomes hard; then varnish the plate all over with turpentine-varnish (No. 3,) of the consistency of the liquid varnish sent with this as a sample.

It will now be necessary to let the varnish that is passed over the plate, dry, which will take three or four hours at least; but this will depend on the state of the weather; for if it should be intensely hot, it ought to be left all night to harden.

Now the varnish is presumed to be sufficiently hard, you may rub off the touches made with the foregoing described ink with spittle, and use your finger to rub them up; should it not come off very freely, put your walling-wax round the margin of your plate, and then pour on the touches some warm water, but care must be taken it is not too hot.

The touches now being clean taken off, wash the plate well and clean from all impurities and sediment of the ink, with cold *soft* water, then dry the plate at a distance from the fire, or else in the sun, and when dry, pour on your aquafortis, which should be in cold weather as follows:—

To one pint of nitrous acid, or strong aquafortis, add two parts, or twice its quantity of soft water.

In hot weather to one part of nitrous acid add three parts of water.

In

In every part of this process avoid hard or pump water.

The last process of biting in with aquafortis must be closely attended to, brushing off all the bubbles that arise from the action of the aquafortis on the copper.

In summer time it will take about twenty minutes to get a sufficient colour: in winter perhaps half an hour, or more. All this must depend on the state of the atmosphere and temperature of your room. If any parts require to be stopt out, do the same with turpentine-varnish and lamp-black, and with a camel-hair brush pass over those parts you consider of sufficient depth; distances and objects receding from the sight of course ought not to be so deep as your fore-grounds; accordingly you will obliterate them with the foregoing varnish, and then let it dry, when you will apply the aquafortis a second time, and repeat this just as often as you wish to procure different degrees of colour.

Every time you take off the aquafortis the plate must be washed twice with soft water, and then set to dry as before.

To ascertain the depth of your work, you should rub a small part with a piece of rag dipped in turpentine, and then apply the finger, or a piece of rag rubbed on the oil-rubber, to the place so cleared, and it will give you some idea of the depth.

The walling-wax is taken off by applying a piece of lighted paper to the back of the plate, all round the opposite parts of the margin where the wax is placed, then let the plate cool, and the whole of the grounds, &c. will easily come off by washing the plate with oil of turpentine, which must be used by passing a rag backwards and forwards, until the whole dissolves, it is then to be cleaned off by rags; and care must be taken that no part of the turpentine is left hanging about the plate.

The plate should only pass once through the press.

Directions

Directions respecting Grounds.

No. 1.—The ground in hot weather must have an additional one-third of spirits of wine added to it for coarse grounds, to represent chalk; and one-half added to it for fine grounds, to represent black-lead pencil; and always to be kept in a cold place in summer, and a moderate warm situation in winter.

N. B.—If any parts are not bit strong enough, the same process is to be repeated.

SIR,

DURING the conference of the Committee of Polite Arts last Monday evening, an Essay on the Art of Aquatinting was produced, which, until that period, I had never seen; since then, I have procured a copy, and carefully perused it. As far as theory goes, respecting aquatinta, I allow it to be fair; but upon the practical part it is positively **wrong**, and what relates according to the opinion of your Committee as referring to my invention of the imitation of chalk and pencil-drawing, I can prove, by incontestible evidence, that I did produce specimens of my invention as far back as the year 1795 to the public, since which time I have improved the principle.

I flatter myself your goodness will enforce on the minds of those gentlemen who were present that I ought personally to prove the same, which I am prepared with documents to do.

Permit

Permit me, Sir, to remark, after a lapse of fifteen years, that surely some person might have produced figures and landscapes sketched in this manner; but not a single artist, to my knowledge ever gave one specimen to the public except myself, though my examples have been before them all the above time.

It is upon the application of the manner for freedom of imitating drawings, that I conceive it to be of importance, and from this circumstance in pointing out its utility, I claim a credit from its originality. If, Sir, it was previously known, why was it not in use? The fact appears to me, that no person, except myself, thought of taking the pains to study the subject.

Having thus brought it publicly to notice, I still feel a degree of pride in furnishing an additional and easy step to the promotion of the arts.

I have now, Sir, to apologize to you for trespassing on your patience, and as it is not possible for any gentleman to have taken more trouble, or have paid a more polite attention to the circumstance, I thought it most decorous to submit this memorial to you, as one of the Chairmen of the Committee of Polite Arts.

Trusting, Sir, you will be so good as to communicate the same to the Committee, I beg to subscribe myself, with all respect,

Sir,

Your very obedient humble Servant,

J. HASSELL.

No. 11, Clement's-lane, May 10, 1810.

To J. T. BARBER, Esq.

A Chairman of the Committee of Polite Arts.

Inclosed

Inclosed is the description of the experiments of varnish, tracing, and gum-water, as requested by the Committee, specimens of which I have sent.

GUM-WATER must be made in the proportion of half an ounce of gum-arabic to a quarter of a pint of water.

TURPENTINE-VARNISH is composed of an ounce of black rosin to an eighth part of a pint of spirits of turpentine ; if the weather is excessive warm, it ought to be made with a sixth part of a pint of spirits of turpentine.

TRACING-RAG should be made of a piece of Irish linen, not too much worn, the surface of which is to be rubbed with another rag dipped in sweet oil, just sufficient to retain a small portion of vermilion or pounded red chalk. This must be placed with the coloured part towards the ground of the plate, and the drawing or tracing laid upon it, which must be traced very lightly with a blunt point or needle.

TEN GUINEAS were this Session voted to Mr. RICHARD CATHERY, No. 14, Mead's-row, Westminster-road, near the Asylum, Lambeth, for his Method of preparing Ox-Gall in a concentrated state for Painters, and for other Uses. The following Communications were received from him, and Specimens of the Articles are preserved in the Society's Repository.

SIR,

IT has been long a desideratum to find out a method of preparing ox-gall for the use of painters, so as to avoid the disagreeable smell which it contracts by keeping in a liquid state, and at the same time to preserve its useful properties. I have invented a method of doing it with very little expense, which will be to those who use gall a great saving, as it will prevent it from putrifying, or breeding maggots.

One gall prepared in my method will serve an artist a long time, as it will keep a great number of years. It will be a convenient article for use, as a small cup of it may be placed in the same box which contains other colors, where it will be always ready. The qualities of gall are well known to artists in water-colors, particularly to those who color prints, as many colors will not, without gall, work free on such paper, on account of the oil that is used in the printing-ink.

The artists who make drawings in water-colors also use gall in the water which they mix their color with, as it clears away that greasiness which arises from moist hands upon

upon paper, and makes the color to work clear and bright. My preparation is ready for use in a few minutes, all that is necessary being to dissolve about the size of a pea of it in a table-spoonful of water.

It is also of great use to housekeepers, sailors, and others, to clean woollen clothes from grease, tar, &c. and will be found advantageous for many other purposes.

If it should meet with the approbation of the Society, I have no objection to prepare it for sale.

I am, Sir,

Your obedient Servant,

RICHARD CATHERY,

Botanical-Colorer.

To C. TAYLOR, M. D. SEC.

*Process for preparing Ox-Gall in a concentrated state,
by Mr. Cathery.*

Take a gall fresh from the ox and put it in a bason, let it stand all night to settle, then pour it off from the sediment into a clean earthen mug, and set it in a saucepan of boiling water over the fire, taking care that none of the water gets into the mug. Let it boil till it is quite thick, then take it out and spread it on a plate or dish, and set it before the fire to evaporate; and when as dry as you can get it, put it into small pots, and tie papers over their tops to keep the dust from it, and it will be good for years.

CERTIFICATES were received from Mr. GABRIEL BAYFIELD, No. 9, Park-place, Walworth; and Mr. WILLIAM EDWARDS, No. 9, Poplar-row; both botanical colorers; stating, that they have used the ox-gall prepared by Mr. Cathery, and find it to answer better than gall in a liquid state; that this preparation is free from disagreeable smell, and is much cheaper, as one ox-gall thus prepared will last one person for two years, and be as fresh as if just taken from the ox.

A CERTIFICATE was received from Mr. JAMES STEWART, No 26, St. Martin's-street, Leicester-square, stating, that he lately belonged to his Majesty's ship the Vestal frigate, and that he took out with him, in a voyage to Newfoundland, a large pot of the prepared ox-gall, for the purpose of washing his greasy clothes for two years; that he found it very servicable, and to keep its virtue as well as the first day.