PAINTER-ETCHING

ETCHING

AND

MEZZOTINT ENGRAVING

LECTURES DELIVERED AT OXFORD

BY

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PAINTER-ETCHING

THE peculiar charm that belongs to the form of art we call etching, or rather painter-etching, cannot be adequately described in words,—it must be *felt*.

I take the term etching in its broad and most comprehensive sense; that is, including dry-point as well as "bitten work," or a combination of both; I would also include aquatint or soft-ground etching under this heading, provided always that the result is artistic.

There has been from time to time such quibbling over the mere terms given to the different forms of painter-etching that it has made the public, who cannot follow the ins and outs of the technique, suspect every production, and ask nervously if it really is an etching proper before they buy. I am told that one of the rules of the Royal Society of Painter Etchers is, that "All forms of engraving on metal, whether by the burin, the etching-needle, by mezzotint or aquatint, or by whatever other form (of engraving) the artist may choose as a means of original expression, are understood to be included in the term painter-etching." That is precisely what I feel to be the right acceptation

of the term. For instance, if we refuse to admit dry-point into the term etching, we can have no name for the etchings to which tone and colour have been given by a few dry-point touches here and there. Rembrandt's greatest period, to my thinking, was his middle period, during which years he always, as Mr. Seymour Haden points out, added dry-point to the bitten work.

Whatever the form of work on the metal, whether by corrosion, or indentation with a point or a burin, I freely give it the term etching so long as the character of the work strictly represents the freest expression of an artistic nature. Laboriously wrought plates invariably pass over the border line, though the methods of work employed may be the same as I have justified in the term etching. But there is no measurement, and there are no rules, by which the right thing can be recognised. The right thing has a charm and the wrong thing leaves us cold.

The charm of etching, then, must be felt; to feel it one needs a peculiar gift of appreciation, but the gift for the right appreciation of this subtle art is only given to a few. It can be absent in the mind of a great painter, or it can be present in the mind of a person who has never attempted to touch brush or pencil. It can be dormant for years and suddenly burst into active life, but there it must be,—a gift of nature.

No form of art-expression gives its exponent such intense pleasure, or causes such excitement in the doing. The etcher is under a spell whilst at work, for he is not wholly conscious of the actual character of the work he is doing, but by an

inexplicable sub-conscious action of the brain, which amounts to a spell, his hand produces something that his plain every-day, wakeful mind could not have devised or done by cold calculative effort. Thus it is that all etching must be uncertain, as it can never be subjected to conditions that are measurable, or wholly under control.

But in all arts it is the hopeless mannerist alone who can be certain of his results. This man, who seeks for no fresh thoughts, who ventures not an inch beyond the ground most familiar to him, must not be our guide. The great student of nature, whose mission is to interpret nature in all her phases and not to produce a commercial article out of her, must be our pattern. This student of nature, this interpreter of nature whose wide soul longs to transcribe in some permanent form his impressions of the beauties around him, will find all his methods of expression uncertain, and most of his results a mockery. Still, he must keep true to the unrest within him, and try again and again to express himself. The commercial artist will not risk failure, but the true artist almost courts it, for he dreads nothing more than to fall into a groove.

That the methods hitherto employed in etching have been needlessly complicated and troublesome cannot be gainsaid. On this point I shall dwell later on, because I think I have, through long experimenting, been able to reduce what to me was always most troublesome in the working of the art to its minimum.

From what I have said of the true artist, it will be gathered

that enough trouble is to be expected from his idiosyncrasy and temperament to keep all methods, however ingeniously devised, well within the bounds of uncertainty.

Hamerton's handbook for etchers gave me the first necessary hints in the technique of etching. I followed out the instructions as well as my temperament permitted, and even went so far as to apply the border wax with a hot key. But when I think back, and remember that I had never seen an etched plate when I commenced my experiments, nor had seen any impression of a Rembrandt etching, I wonder how I could have produced such work as my own portrait (with my two children in the corner of the plate), which must, after all, remain one of my best etchings. Quite at the beginning of my experiments a most irrational eagerness to see a print of the plate caused me to hurry the work, and to force it with violent biting, on the extremely doubtful ground. I am not the only etcher who, at the beginning of his career, has had an inordinate desire to see what his few touches looked like when printed. It is through expecting certain magical results from the printing that the young etcher suffers his greatest and bitterest disappointment. It is always the printing he relies upon when he cannot judge the appearance of the work on the plate itself.

My principal troubles arose from the fact that the process was a negative one, and it is only just within a few months that I have discovered a ground which enables me to see my lines black, or nearly so, upon a dead white surface, like paper. There is then no longer any need for Mr. Ruskin

to call it a "blundering art" (I quote from Mr. Seymour Haden's pamphlet). Further, a plate or several plates, can be carried about in a box with grooves to answer all the purposes of paper blocks for pencil sketching. Of course it takes great moral courage to use such plates like paper, but the possibility is there.

As far as I have seen in books, especially in Mr. Hamerton's, I find the positive process only used for working in the acid bath. Therefore I am certain that my positive process will be welcomed by all who wish to have as little accident, and as little blundering as possible, in the working of this fascinating art.

Besides the pleasure of working on a white surface, a further delight and assistance is experienced in the biting with such a ground, as it remains somewhat of a warm white colour when placed in the bath, and the lines turn black by the action of the mordant. One of our most eminent etchers came to see me one day when I had such a plate in the bath. It was just ready to take out, and when the ground was removed he exclaimed: "Why, there are no more surprises!" —so clearly had he been able to see the work on the plate whilst it was biting in the bath.

Thus my positive process renders the work as clear to the sight as a drawing done on paper. The difficulties attendant on the biting of the plate will always remain, for it is in that action that the full expression of the line is given. But I may express a hope that my new white ground may tempt painters to take up original etching

seriously, for it removes some of the primary difficulties of the technique. I look round with amazement at the few painters who have attempted to etch, and must perforce deplore the want of even ordinary interest for the art in most of my contemporaries.

In removing some of the technical difficulties of etching—difficulties that have stopped so many painters from attempting it—I may be doing an injury to etchers who would wish the practice of etching to remain with those who intend devoting their whole lives to this art alone, and who consider the technical difficulties a part of the art, to be overcome only by the chosen few. I cannot, I fear, give much weight to the feelings of men to whom the uncertainty of the process has a particular charm, although a well-known etcher once said to me that to him the charm of etching lay in getting qualities by flukes. I do not consider that view of any art to be the right one. And I say this advisedly, as, up to a recent date, all my good results have been more or less by flukes, and I never felt able to claim the full credit for them; but now I need only blame my artistic feelings at the time of working for any failure.

Surely life is more desirable with such a reduction of the chances of failure! It will surprise none when I confess that twenty times and more did I give up etching, and twenty times and more did I take it up again. I have burned holes with the acid in my clothes, and holes in my skin; I have spoiled carpets and had

inflamed throats from poring over the fumes; I have sat up half through the night with a plate that would not come right, and had finally to be abandoned; I have taken plates to my bedroom and worked at them when half-undressed, then gone to bed and had frightful dreams about them; I have neglected all duties in the dog-days of my etching career, have made my family miserable and ill by filling the whole house with bad fumes; and yet I live to say that I love etching with all my heart and soul, and believe that good times are coming for all good etchers.

The only chance of success for those who intend to practise etching is to throw themselves headlong into it, for etching cannot be practised in a perfunctory manner—much less learnt.

Nor is it well to start etching on the first symptoms of the craving for it. Much disappointment and disgust arise from a premature plunge. By that I mean, without proper materials to work with, or without having seen some etcher at work, or seen how plates generally look with bitten lines, etc. Had I known an etcher willing to impart his knowledge to me I might have been spared many an hour of sore trial to mind and temper, and might have been saved from that terrible error, into which I soon fell, of doing plates of enormous dimensions. Having pleaded guilty, I am at liberty to condemn the practice in others,—in modern etchers.

The fashion (for I can call it nothing else) of making

so many etchings from pictures has of late resulted in the production of huge plates, and they have followed each other in such rapid succession—thanks to competing publishers—that we cannot wonder at the market getting overstocked.

Thus it has happened that the curse has fallen upon etchings of being bought for their furnishing qualities, and not for their artistic merits. For two guineas you can get a good impression in print-state (the plate being steel-surfaced from the first) of an etching that will cover the whole wall-space over a mantelpiece in any ordinary bedroom. Then you may add another guinea and a half for framing; or you buy one more "to match" it (publishers always see that large plates get companions to match without delay), which just "sets off" the wall—that awkward wall, opposite the mantelpiece—next to the wardrobe; and lo! your bedroom is furnished pictorially in the newest style. Who asks whether it is a copy or an original etching? I have copied pictures in mezzotint, and have seen them about in houses doing such service as I have just described.

The astonishment of my host was worth seeing when I declared I engraved that plate. Oh, they thought, or were under the impression, or somehow got the idea, that it was a picture by Millais. "True, but" (I further insist) "I copied it, and this print is my work." I then put my finger to the corner of the margin and show my name as engraver. Dear me, they never thought of looking at the name. Finally, the host tells the whole thing to the hostess, but he gets mixed between the plate, the picture, and the

print, and tells her that I *printed* that *picture* which hangs up over the mantelpiece in the spare room.

I am really not surprised that Mr. Seymour Haden, in his Address to the Painter Etchers a couple of years ago, said: "It is, we feel, impossible to shut our eyes to the fact that, owing to a variety of circumstances . . . the whole subject of the painter engravers' art is still but very imperfectly understood." I would add that among the circumstances he referred to must be included the amount of picture-copying that has been done in etching, for I emphatically declare that etching is not a fit process for the complete reproduction of a picture.

Another unfavourable circumstance is, as I said, the abnormal sizes that plates have attained.

If my memory serves me rightly, Mr. Whistler is the only English etcher who has never sinned in this direction of size. My "sins of size" lie heavy on my conscience, for I perpetrated life-size heads, with lines bitten half through the plate, looking for all the world like ropes, and tearing the canvas, during the operation of printing, into shreds. The area of the backgrounds having been too vast for lines, I resorted to a file. Fancy filing a background to a head on a copper-plate, as if it were a piece of engineering work! One glimpse at a Rembrandt etching would have set me right. But, incomprehensible as it seems to me now, I never thought of going to the British Museum to look at those incomparable works.

Well, I must not be too severe upon myself for this

omission, for I have spoken to many etchers who have not studied Rembrandt as an etcher, and even to some who have hardly seen any original impressions of his plates.

Not many of the painters who go to the print-room of the British Museum have the Rembrandt etchings placed before them, and this brings me to the question of the interest shown by painters generally in this country for etching.

My brother painters must forgive me if I venture to chide them for their indifference to original etching. As I have had particular opportunities of witnessing this fact, I feel the more sad to think that in most cases they only interest themselves in the reproductions of their pictures, and pass over original work that may be small in scale but rare in quality.

I will presently try to find some cause for this in the painter's training and habits of thought. Meanwhile let us not be too severe on the public for their indifference to original etching. They are bewildered when they enter a printseller's shop, and they certainly do not know as a rule what are the characteristics of an etching. I give the public the hint to buy Amand-Durand's reproductions of Rembrandt's etched works if they cannot buy original impressions of the same master. The public will be better able to form a right taste by having these wonderful reproductions of the greatest of all masters in etching about them, than by trusting only to the influence of modern work in all its endless and confusing variety; for Rembrandt towers above all etchers, ancient or modern, as

Shakespeare towers above the dramatists of his and our own times. It is a sad sight to see an intelligent, well-educated, and even art-loving person stand before an etching of undoubted beauty without showing an atom of interest in it, let alone understanding of it. I own it is difficult to give reasons for one's love of etching, and I have suggested that its secret must be felt, as it cannot be described.

I realised this when I once questioned a friend of mine, who was looking at some original Rembrandt etchings I had in the house for a time, as to the reasons for her evident delight in them. The lady, used to the terminology of art (a limited thing, I own, at its best), and always among artists, was quite unable to answer me at first, because, as she said, she had never made it clear to herself. Then she said something about boldness, freshness, rhythm of line, and in fact everything but the one word that we etchers would apply first—"quality."

Now it seems to me that the quickest way for the public to get a critical judgment of etchings (provided always the natural gift of that particular appreciation is within) is to study new and old works together.

For pictorial art we have a National Gallery, where we can get refreshed or impressed without fuss or hindrance. But it is too troublesome to go to the British Museum and ask for the portfolios containing the etchings of that one master, Rembrandt.

Now, how would it do to have regular exhibitions of

modern painter-etchings side by side with those of the old master or masters?

This opportunity is actually offered by the exhibition of the Society of Painter Etchers, but I fear it is only a small section of the public that is even aware of this opportunity, one reason perhaps being that the exhibition is held out of the season.

I have watched the progress of the Painter Etchers' Society with much interest, for I was present (by Mr. Haden's invitation) at the first meeting, when he read to us his first sketch of the scheme. My recollection is somewhat dim; I can only recall the presence of Professor Legros (who did not understand English and was sketching all the time), and of M. Tissot (who confined himself to vowing vengeance against the dealers).

I was too inexperienced then to see the drift of the scheme, and withdrew before any of the plans had been ripened or settled. Though not a member, I have watched its progress with much interest, and distinctly think it right and wise that such a society should be founded for the painter etcher's art alone. It has now, I believe, a much firmer basis than it ever had before. It is a Royal Society with a charter, and its president, Mr. Seymour Haden, tells me they have at last got over their trade difficulties by the appointment of a master printer (Goulding) and also a publisher (Dunthorne), with both of whom they have agreements which, while fairly protective of their interests, are liberal to the trade and "clear of the abominations attaching to the Printsellers' Associa-

tion." They, moreover, consider their position a fairly good one, and their Society as firmly established and perfectly safe from all sorts of opposition and intrigue. I regret that at present they have not a building of their own, but must share the Royal Water Colour Society's Gallery.

The most original and interesting feature of their exhibitions is the fact that while three of the walls are hung with works by the fellows and associates, the fourth is given up to the work of some past great master. Last year they had Rembrandt, and this year they had Turner.

What a capital thing it would be if the Royal Academy were to devote one room to past masters during the summer exhibition, instead of having all the old masters together in the winter. How instructive if we could look quickly from a Reynolds or a Gainsborough to a Millais, or from a Landseer to a Briton Rivière. I believe that the effect would be most corrective and salutary as well as instructive.

Something of this sort was experienced a few weeks ago in the first, and in every way most interesting, exhibition given by the new Society of Portrait Painters. Though it was originated by younger spirits, they were wise enough to invite old hands to send some works of recognised repute. Not only is it a great delight to see old friends among pictures again, an opportunity not offered otherwise in London except at rare intervals, but the comparison is most wholesome.

To return to the painter etchers, there were some wise heads among them when this plan was devised. It is an

inestimable boon to the members of the Society, and a distinct training to the public, if they will but go and look for themselves, and study. The indifference of the public has no doubt made the struggle of the Society a hard one, but it will have to contend with still further difficulties; among which one of the most serious, to my judgment, will be for the immediate present the dearth of good original etchers, from whom they can add to their ranks; for it is an exclusive society, and not like the Royal Academy, which this year placed two thousand outside works by the side of two hundred contributed by members.

This forces me to reiterate my regret that so few painters attempt etching, for, from what class of artists shall we hope to draw recruits for original etching, if not from the painters? When Brahms was asked why he did not write operas, he replied that a composer must have at least two failures in operatic writing before he can hope to succeed, and for himself that he was too old.

A painter of standing could well say that he must have two dozen failures in etching before he can hope to succeed, and that he was too old for that experiment.

Then the whole mental training of the painter is somewhat antagonistic to the necessary mental vision of an etcher. There is a wild fascinating disorder about the feelings of an etcher when at work that would throw a trained painter off his balance. A painter can sit down to paint a scene in nature with a pretty clear assurance in his own mind that he can make something of it. He can sit down without any

special mental preparation for the work—or in other words, with but little *mental screwing up*—and succeed. How different is the case of the etcher. Even if a subject should attract him he must be "peculiarly ready" before he can grasp it for expression by synthesis or in a manner wholly suggestive. Pictorial interest must give way to the etcher's sense of line, and he must feel before he begins that he can account for everything in that scene by an indirect truthfulness.

Now a good camera-obscura will reduce the forms and tones of nature into a perfectly pictorial aspect, an aspect that a painter would at once grasp and strive to get. This view of nature is useless to the mind of the etcher. There is nothing to guide him but that subtle inner consciousness that can neither be counted upon nor passed from one person to another. In each it is an original and indispensable condition of the mind.

An etcher starts over and over again with some distinct plan of work, after a complete surrender to a favourite etching of a past master, but the spell works and puts him out of his fixed path, and lo! there comes something else altogether,—so he thinks at least,—until looking back he sees that his work *has reflected* the work that he vainly strove to copy.

Does this prospect tempt my brother painters? The difficulties in the way have not been disguised, but there would be little chance for success unless the painter threw himself heart and soul into the work.

He must have a good printing press, and all things ready

and handy for good printing. He must have dishes for biting, and not rely, as a friend of mine did, upon a bedroom wash-hand basin. He must above all not mind trouble and disappointment, and be of a temperament that can keep red-hot with enthusiasm in spite of constant disillusions and irritations, and not allow a plate to overbite out of pure bad temper, or revenge for past wrongs.

All this makes the painter, who has already a position in his art, hesitate before he takes the plunge.

It is not worth while urging a painter to do a plate now and again just to satisfy one's curiosity as to his probable capacity for the art. Excite him about etching certainly, but he must ignite spontaneously.

Again, some painters have thought it only necessary to draw the subject on the plate, and leave the biting to a "practical man." That is even worse than composing a piece of music in piano form, and then giving it to another musician to score for orchestra. Dry-point a painter might always manage, but the bitten line, with its unapproachable grandeur, strength, and clearness, must always tax even the most capable etcher to the utmost—ay, and he never seems to get to the end of its capabilities.

Therefore the painter who entrusts to another this form of final expression cannot be called an etcher. As Mr. Frank Short says, he is only a "draughtsman on copper." Far better that such an one should draw with pen on paper and have his ink lines reproduced mechanically.

It is this double expression that startles and balks the

painter when he first touches copper. Again, to be forced to abstain from pressure for gradation of tone is a second irritation. Lastly, to make a line deliberately that is not to remain the width it is drawn seems so alien to the painter's nature.

Here, indeed, are obstacles enough, and yet I am convinced that more etchers can be drawn from the ranks of painters than from mere draughtsmen, because the etcher must be by nature a colourist; whereas a wood-draughtsman's work deadens his sense of colour.

One would naturally suppose, however, that those clever draughtsmen on wood, or as we call them illustrators, who have made the illustrated papers of the last twenty-five years so remarkable, were almost ready-made etchers.

There is a long list of such men, beginning with Sir John Gilbert, then going on to Fred Walker, Pinwell, Du Maurier, Charles Keene, A. B. Houghton, Charles Green, Luke Fildes, Small, E. J. Gregory, R. W. Macbeth, Mrs. Allingham, and Frank Holl. Then comes a newer and much longer list of younger men, who are so clever that it would have gone hard with many of us if they had existed a couple of decades earlier. But of the former list, how many have become etchers? I think Mr. Macbeth and I make up the company.

The habits of sight—of artistic sight—are vastly different in the wood-draughtsman and the etcher. The draughtsman has a totally different method of getting at form and tonality, even if he draws with lines. There is immediate finality in his touches, which he would have to unlearn as an etcher.

How little practice the wood-draughtsman gets in colour with his work we see by his first attempts to paint, for he only succeeds in producing a drab-coloured drawing. This is hardly surprising, seeing that colour is by far the most delicate and sensitive of the artistic faculties. It is the slowest to come, and often the first to go.

They say Meryon was colour blind, and therefore took to etching. I cannot believe that. No etcher could have suggested such richness of colour, through the grandest quality of the bitten line, without being by nature a superb colourist. Probably he never handled the colour pigments enough to realise his conception of tone and colour, but it leaped out readily when he once handled copper. His early sketches in pencil of New Zealand are miserable productions —but not so his etched edition of the same. Of course there was a considerable interval between the two periods, and his sense of local colour may have grown into maturity during the interval.

Or look at Turner's earliest water-colours, and then go to his golden middle period! Look at Fred Walker's earliest water colours, so cold, and so like tinted book illustrations, and then compare them with his later period of the "Fish Shop," "Marlow Ferry," or even "The Swallow"! Endless examples can be found of this slow and delicate growth of the colour faculty.

In my own school I lay the greatest importance upon the *quality of the colour* my pupils produce; for I know they will be as good draughtsmen as their natural gifts will enable them

to be; but unless watched by a patient master, or by themselves, the delicate faculty of colour may wither before they know of its real existence, or it may be never properly brought into life.

It is therefore the sense of colour that an etcher must possess quite as much as power of drawing. The real colourist will give you in an etching all the sensations of looking at a fully toned rendering of nature, but with little labour. The poor colourist labours to get local tonality. In a word, *the best etchers* SUGGEST *tone and colour; the worst etchers* MAKE TONE *either by a multitude of tedious lines, or by undue or illegitimate "dodging" in the printing.*

You will gather from what I have so far said, that etching is for the few—for the few to appreciate, and for the few to produce. If, however, I did not think that it is possible to increase the minority of producers, I should not now be preaching to you my faith.

When last I lectured here on this subject, I gave but little critical attention to it, merely giving some details of the ordinary methods of work. My object is a different one now. If I preach a faith that I have, after many years of doubt and experiment, arrived at, it is to suggest remedies for the future.

And my first point of attack must be *fashion*, responsible as it is for endless harm to art. Its existence no one can seriously doubt, though no one has yet been able to say with certainty how a fashion gets started. As an instance of the way in which it changes, look at the engravers who formed

their style on Cousins' work when his reputation was at its highest. Such of them as still survive are nearly unemployed. And why? Because the fashion has reverted from the mixed style of engraving to etching (not original) and pure mezzotint.

Now plates that become popular are always, or nearly always, a surprise to all concerned in them; sometimes the surprise is doubly great when an undoubtedly good plate becomes popular. But the moment a certain subject proves to be successful, the publishers "rush" several other similar subjects into the market, generally with fatal results.

Meanwhile the damage to taste has been done. The publishers think of what will sell with the public; but, strange to say, the public does not know what to buy, and it is the publisher who can, and who does, make the public buy what he likes.

Therein lies one of the remedies, for I have faith in the generation of dealers; and if they would but stand shoulder to shoulder, the public would gladly submit to the right thing with mind and purse, and the artists would take off their hats to them. It is a mere question of drifting or not drifting into wrong paths of life. It is a mere question of strength, whether the dealers will allow themselves to drift with a mysterious current or fashion, or stay the current with the strong arms they possess, thus benefiting the art itself, and saving themselves from the certainty of having much work on their hands that will be unsaleable when the short-lived fashion has passed. I hold their opportunities of doing

good to art in general to be equal to their powers of doing evil, but I sincerely believe they would do the best thing for art in general, if it did not mean certain ruin, and that is but a natural and thoroughly human precaution. But we shall find in the long run that the best thing in art pays best.

In the print trade I would certainly urge that the liabilities of dealers should be lessened with regard to original work, even if the profits are reduced, and surely that will level conditions again. The artist should have a secure basis in making his charges, and I cannot believe that this can be accomplished if all the liabilities rest with the dealers, for in that case the artist must himself lose unjustly at times through the force of circumstances. I shall treat this subject further in my next lecture.

If fashion can change within a decade, I plead that the next change shall be in favour of original etching, with a revulsion of feeling against such immense plates, and that the public shall make it worth the dealer's while to encourage this art before all reproductive art, which would still leave a large margin for the reproduction of the best works of the year in the most artistic manner.

But such reproductions could only be executed worthily by men who are thorough artists, and who could also do original work if only encouraged. All the young engravers that I have trained belong to this category.

That dealers can do much when they stand together was shown not long ago, when they, through some right instinct, practically drove photogravure out of the market as a means

of producing the best pictures. Their instinct was more correct than that of the painters, for the painters instantly showed an incomprehensible delight in this new mechanical process that was to oust all living engravers for ever from the field. They said, "Here at least is our own work, and not that of another man." How little truth there is in such an assertion I shall hope to make plain when I treat the subject of mezzotint engraving. At present I only mention this fact to prove once more that our English dealers show right instincts, and can, and do, change a current fashion or a sudden craze.

A better remedy still against certain evils in the print trade would be, that the public, who must give up that indecision with which they usually enter a dealer's shop, should decide upon the thing they want without depending entirely upon the dealer's advice.

The dealer will of course submit certain things to the judgment of the client, but, in the better state of public taste to which we look forward, the decision should rest with the client. Thus the public and the dealer would combine to a great end.

I am no friend to the middleman, but our methods of life positively necessitate some channel by which the lover of art can be made cognisant of obtainable etchings, as he will otherwise waste too much time in trying to get at the worker himself. This is the excuse for modern advertisements, without which, for instance, none of our illustrated papers could exist.

For the advancement of original etching, such a body as the Royal Society of Painter Etchers should be able to do a great deal—that is, when it once secures the confidence of the public.

And as for the producers, with whom my sympathies naturally lie, I feel sure that the unnecessary difficulties of the technique have deterred many a painter from attempting etching. If my new positive ground relieves them of the terror of the technique, as it has done me, and if in the next decade it shall help the production of good etching work from the painters, I shall deem it a great privilege to be classed with the two men, G. P. Hamerton and F. S. Haden, who have for years fought so bravely for the revival of an art that was lost, but that must in the near future be as universally appreciated as it was in the days of Rembrandt.

A New White Ground for Positive Process.

It is my intention in these lectures to describe only the processes that I have found best, and I refer such of my hearers as may wish to compare what I have either invented, or now recommend, with the older processes, to Mr. Hamerton's book, called *The Etchers' Handbook*.

One sleepless night not long since I lay pondering over the principles of grounds for etching, and the thought came again and again to me to try to find a *white* ground, for a positive process, that should for all time do away with

the old negative method, which had given me such endless trouble,—a ground that should enable me to see my lines black on the white surface. How could I tell what I was doing when I saw glittering copper lines on a jet black ground, knowing all the time that they were eventually to represent black lines on a white ground? I constantly felt all the joy taken out of the work by the uncertainty of the process, but reflected that it had always been *the* method—Rembrandt did it, and it was only my misfortune that I could not master the recognised processes with any degree of certainty.

Still I thought, and thought, and thought. It was with figure subjects that I found the old process most troublesome and irritating,—and I have done a large proportion of original figure subjects in the last ten years, although I disclaim many of them from a technical point of view,—something clearly had to be done before I could start a new series of etchings.

That night I got as far as to think of an ordinary ground, but unsmoked, being covered with Chinese white. The trial proved that the white chipped under the needle. This, therefore, was useless, because there must be absolutely no hindrance to the free use of the needle; there must also be the possibility of making lines close together, without in any way breaking up the ground in between. But I clearly saw that so far I was on the right track, and the principle was, to lay an ordinary ground on the plate first, unsmoked, and then to coat that with some-

thing that should produce a *dead white surface*, without adding a perceptible pigment to the underground.

Long and unsuccessful experiments followed, until my wife in conversation led my thoughts to a material which, upon the very first trial, realised my dream.

Here it is. First lay a ground — say Rembrandt's or Bosse's—in the ordinary way, with a dabber, but leave it unsmoked. It has a golden, light brown colour, and is dry as soon as the plate is cold.

Then take what all actors use for their faces—so-called grease-paint. It is in handy sticks costing a shilling each, and is to be had in all colours at any theatrical shop, such as Clarkson's, Wellington Street, Strand. You take the white grease-paint stick, and hold it in your left hand, and take from it what you get by dabbing your finger on it, which you dab back on to the ground that is already laid on the plate. Dab it as equally as possible, but not too thickly.

Then rub into that somewhat soft upper ground, which will be of a pale, warm white colour, the finest powdered zinc-white with a soft and rather thick camel-hair brush. This at once clings to the greasy substance of the grease-paint, and the result is *a dead white surface like paper*. Where the point removes this white ground, the copper shows as a dark brown or almost black line. The plate must not be too cold when the grease-paint is dabbed on, and the chill should just be taken off when the zinc-white is brushed into it, but not more than the chill.

Here we have literally two grounds put upon the plate: the first an ordinary ground, which in itself is sufficiently safe for all biting, if properly laid; and the second, being composed mostly of mutton fat, has its own inherent power of resisting acid.

An ordinary ground may be made as follows:—

White Wax, 2 oz.
Gum Mastic, 1 „
Asphaltum, 1 „

I make my own ground, and shall do so as long as the splendid asphaltum lasts which I got from a mummy's head that Mr. F. Goodall, R.A., presented to me some years ago.

Laying this ground is simple. First take care that your room is as free from dust as possible, continually dusting the table with a damp towel, so that the bits of fluff and dust that would again rise from it with the least breath are arrested. Screw one little corner of the plate tightly in a hand-vice, and warm it over a spirit-lamp. Your ground, which is a hard ball, covered with taffeta silk, is then passed over the surface of the hot copper. The ground will ooze out through the silk, and must be equalised by the dabber, until it is of uniform thickness on the plate. Then heat the plate once more, to melt the ground all over, and, without further touching it, place the plate with its face to a clean wall to cool.

Care must be taken not to get the plate too hot, or the ground will burn and thereby lose its efficacy.

The dabber is made by first cutting a circular piece of cardboard, of about three inches in diameter, upon which you place a little bunch of horsehair, then cotton-wool on the top of that, finally covering all with the same silk just mentioned and bound with string at the back.

A number of grounds can be done at the same sitting (for they only take a few moments to do), and then covered with demy paper and put away. As soon as the plate is cool it is ready for use, and the white ground can be put over it without further delay.

The convenience of the white ground is as great a charm as its certainty. Those sticks of white grease-paint can always be trusted, but of course the first ground must be firmly laid, for we principally rely on that to resist the acid, as the finger lays the grease-paint on rather porously; but I have not found any better way of doing it. Still its main object is to hold the zinc-white, and rather assist than injure the lower ground. The shavings which the point brings up during work are of no consequence, and can be brushed off with a soft sable brush without reducing the whiteness of the zinc-white.

The time it takes to lay such a double ground on a plate 6 × 8, without counting the time for the plate to cool after the first ground, is about fifteen to twenty-five minutes. Every etcher should lay his own grounds or he cannot know their quality.

The white grounds described in Mr. Hamerton's book are really transparent grounds, and are not white in aspect

unless the plate is first silvered. This is very well when you work in the bath, when the lines turn black by the action of the Dutch mordant. But to try to work out of the bath on this waxed silver ground, one would have to go through the silver before the copper told as a black or dark line. This would at once deprive the etcher of that freedom of action with the needle that should be "as easy" (to quote Mr. Ruskin) "as lying."

My white coating can be applied to most unsmoked grounds. It can be put over Rhind's transparent chloroform ground, which is poured on to the plate,—a ground much liked by some etchers; or upon a ground that is made soft with oil of lavender, and applied with the roller; only the latter takes some time to dry,—sometimes long enough to cool the etcher's ardour. But I recommend the ordinary ground applied with the dabber as the underground for my white surface.

The Transfer.

The finest draughtsman needs a little play with the pencil before he can place his correct line; therefore some sort of transfer is necessary before the etcher can start on his plate. It is next to impossible to start a figure or a face direct on the copper, unless it be in dry-point, in which the light scratches are almost as easily erased as pencil from paper. But once remove the ground with your point and you are seriously committed.

None of the transfers I know of are quite satisfactory,

as most of them are apt to cause some confusion to the eye when the work with the point is placed over the transferred lines. I have even tried photography as a means of transfer.

Not very long before I discovered my white positive ground I made a last desperate attempt to find some method whereby I could transfer and bite in the first pen sketch for a composition, as a preparation for the further work on the plate. This was when I was engaged upon the illustrations to my *Pictorial Music Play: An Idyll.* I had already done some of them in the ordinary and orthodox way; but I had a peculiarly difficult task in these illustrations, because the scenes had to be represented as nearly as possible as I had placed them on the stage, as so many people had witnessed, and, I am happy to say, remembered the play.

I should have had no difficulty with my white ground, because the entire work is visible on the plate,—in black lines on a white surface. But on the black ground I never seemed to know what my composition was like, and to copy a drawing literally meant losing all spontaneity in the work. So I tried, only in a few of the illustrations, to get the design which I had drawn larger, and with pen and ink on paper, on to the plate in reduced size. These lines were transferred by means of photography, and then *bitten* in the usual way.

But my troubles were increased instead of reduced by this method, because the pen makes too broad a line, and by this process of transfer they remain too shallow in the biting. Again, only half the lines came out in the reduced state. As the work that was produced on the plates was so shallow, I

was compelled to rebite the plates and work them up by a succession of fresh grounds, taking care that all my additional lines were broad, so as to match the original lines. Instead of a steel point I used a closed up pen-nib; but by not biting the lines deeply, I found they were apt to run together in a manner that was not to be remedied. Thus I had light places where depth was required, and this was caused by the bitten spaces, which were too open and large, no longer catching the ink. Some etchers rather encourage this by what is called surface biting, but I do not like it.

Having so far criticised the few etchings to this opera worked in this way, I may add that amongst the black music notes they seem to take their places well, and almost better than the etchings in which the lines were deeper but narrower.

But let it be clearly understood that the manner of transfer of the design adopted for a few of these illustrations (afterwards rebitten and worked all over) in no way altered the fact of their being etchings in the real sense of the word. The lines were done by the artist and bitten in by the artist, and that with original design constitutes an original etching. A mere reproduction of a pen drawing is quite another thing, and does not enter into our field of investigation. I have used the pen in former times to start etchings—for the outline in fact—but without photography, and in this way:—

I silvered the copper plate first, then I drew freely with pen and *Indian ink* (which works beautifully on this silvered surface). Then I covered this whole drawing with lithographic ink, which I laid on with the roller. The next

A PEN ETCHING.

This is fully described on page 30.

process was to place the plate in cold water, and begin manipulating the surface that was covered with lithographic ink with cotton-wool—that is, by gently rubbing it. Soon the lithographic ink came away from the places where the Indian ink lines had been drawn, but remained on the surface where there were no lines.

I became acquainted with this process in America in the year 1883, when I was initiated into it as a secret upon payment of a heavy sum; but I find that a method substantially similar is mentioned in Mr. Hamerton's book.

Here you had the lines drawn on the plate in a positive form, and turned afterwards into a negative form ready for biting in——no, not quite ready, because the lithographic ink is too porous to resist the acid well, and to give it more resisting power it had to be dusted with dragon's blood in powder form, which adheres to the greasy ink, and can be brushed away from the places where lines are made. The plate is then subjected to the acid in the usual way, and parts stopped out. But you never get rid of the look of pen work in this process, as you will see in the illustration I give.

Photography as applied to scientific purposes is only beginning its wonderful career. Perhaps the day will come when it may give etchers some assistance, but at present I cannot see its utility.

One of the first portrait painters in Europe not only transfers his outlines from negatives taken direct from nature, but goes over the lines with pen and ink, and often allows those lines to show through the thin paint. He evidently

finds photography a useful servant, but I have never been able to see the same proportions in nature that a lens produces, and cannot help wondering how he arrives at his photographic view of nature. The often-asked question, Should an artist use photography? can be answered in these few words: Photography can only be used well by a first-rate artist, and his art will in no way be jeopardised by the use of it as a suggestive adjunct.

I should like to know how many artists there are in the world at the present time who never have attempted to make use of photography. Not many. But although I think it can be of the greatest use to the strong artist, I think it has done infinite mischief to some of the younger generation of painters, and has given a peculiar and often offensive turn to the art of our times.

But to return to the "transfer" after this digression, I have to declare that after all my experiments I have come back again to the thin paper that is black-leaded on one side. As you buy it there is too much black-lead on the surface, and I wipe a large portion of it off. Then I place the black-leaded side face downwards on my white ground, draw the ends over the edges to the back of the plate, and fix them there with shellac, which, as we shall see later on, is my stopping-out material.

Now you can begin to scribble lightly on the white side of your transfer paper, and as soon as your eye grasps the form within your suggestive scribbling, you draw your firm outline with a greater pressure of the pencil—which will

cause the black-lead to repeat them on the white ground. With the old method of black ground, it was customary to damp the paper upon which the pencil outline was made, and then to lay the pencilled side face downward on the ground and run it through the press. If successful, the pencil would come off as a light gray line upon the black ground; but success can by no means be ensured by this method. If the pressure is too great you run the risk of the paper sticking to the ground; if too light, the lines will not come off; besides, damped paper stretches unequally, and I have found outlines which demanded great exactitude to be disastrously put out of drawing from this cause.

For outdoor work, or work direct from nature, this method is almost prohibited, because you cannot expect an etcher to make only an outline at the first sitting, and return to the real work after such an interval as must elapse if he is obliged to make use of a printing press.

Subjects that are complete in nature give comparatively little trouble in the outlining. Even a head or a single figure offers few difficulties; but when it is a question of design,—of composition in figure work, the real difficulties begin. I have come to the conclusion that there is no more practicable way of getting such an outline on the plate than to draw the whole mass of your design, without nature, upon the white side of the black-leaded paper, not finishing or elaborating the parts; and then to draw each figure direct from nature into the indications of the design

thus transferred to the plate, of course remembering all the time its relation to the rest of the composition.

In our early days of wood-drawing we proceeded in this way. Just as it enabled us then to keep the spontaneity in the work which can only be obtained by direct work from nature, so will the etcher keep his whole feeling fresh without having blunted any of his sensibility by the making of elaborate sketches, or the tedious ordeal of elaborate outlining. Here again my white ground stands incomparably above all other grounds that I have known, for the simple reason that the whole result is as clearly seen on it as if it were drawn with the pen upon paper.

The transfer paper I have named should be tested before setting to work, to find what pressure of the pencil is necessary, because great inconvenience will be experienced by the black-lead transfer line appearing too strong on the white surface, being very like the colour of the copper when the white ground is removed by the point. In any case, the lines transferred should be as few as possible.

In the old method I have described of laying the pencilled lines face downwards on the ground, and running them through the press, the outline of course came the reverse way on the plate. Should it be required to reverse the subject on the plate in order to make it come out the right way when printed, it will be necessary, in using my method, to draw the subject the reverse way on the transfer paper, which can easily be done by drawing from the reflection of the subject in a mirror.

This must be done if you wish to keep a scene topographically correct. But I think every subject should be first examined with a mirror, because a motive in landscape may look best the way it is seen in nature, in which case it should be done the reverse way on the plates. Portraits should always be drawn the reverse way on the plate, because much of the likeness depends upon the irregularities of the face being given to the parts as they occur in nature, and not be made to finally come out the reverse way.

The Work on the Plate.

I have already stated that the *direction of the line* and the *character given to the line* in etching involve two distinct mental efforts. The etcher, whilst drawing the line, should always think of the second expression he intends to give it by the acid. That is, after all, a matter of judgment and experience.

The action and scheme of line-work are the outcome of his most intense artistic sensibility. Nature, with all its complex forms, has to be made clear with a few touches, and the union of its elements has to be built up by means of a few lines. And yet how wonderful it is that such a method of synthetic expression should represent complex nature at all, for there is no line in nature. But it again illustrates the fact that true art is not an imitation, but an interpretation of nature.

There is to me no mental phenomenon more wonder-

ful than the artistic "seeing" of nature. Six first-rate artists painting the same thing will paint six different versions of that object, because the artistic seeing of each artist is influenced by his idiosyncrasy and habits of thought. Etching, more than all the other arts, reveals the innermost feelings of those who practise it successfully. When we take into consideration how splendid are the qualities that can be given to the most rapid workmanship, we need not wonder that this art takes so strong a hold upon some natures. A pencil sketch, or a pen sketch, can be done with somewhat the same rapidity; but what a poor thing is such a line on paper compared to the etched or dry-point line when printed! Without rapidity of workmanship etching becomes a cool calculative effort, deprived of all its joy—barren, unimpassioned, worthless. Hence the character, the indisputably legitimate character, of etching is so often lost when mere painstaking and conscientious work breaks the spell under which the best work alone can be done. An etcher must have a craving for a certain subject before he attempts to etch it; if he can wait calmly for days before he attacks it, he lacks the finest instinct of the etcher.

An artist who has never etched cannot know how valuable is line, or how much it can do, even unassisted, to represent *tonality*. But even an etcher requires a long time before he can realise how much *tone* can be suggested by *a few open lines*, much of course depending upon the way they are bitten and printed. Still, myriads of lines *can* be employed

without losing one jot of the artistic freshness of the etchings. It depends where they are placed, as well as how they are drawn. The use of line differs in etching according to the etcher's mood and temperament. But it also differs from the line that is found in wood-draughtsmen's or pen-draughtsmen's work, which is always more pictorially suggestive than definite and structural. If you take a magnifying glass and look at the eye of Rembrandt's etching of himself leaning on a stone sill, you will see what I mean by structural work,—he has passed his line uncompromisingly round the actual forms; and if you apply the same means of examination to one of that excellent artist, Abbey's, pen-drawings —say to his book of Herrick, or his illustrations to Shakespeare—you will see what I mean by *pictorial suggestiveness* of work. Too much of the latter feeling is apt to lead the artist into a false kind of etching, where the *meaning* of the line is neglected in the endeavour to produce tone by the mere multiplication of lines. Forms are painted out with stopping-out varnish on a layer of lines produced more or less mechanically, often by means of four needles soldered close together.

Mr. Rhind makes these tempting needles very well, but they are the most dangerous things that can be put into the hands of an etcher; I still have them by me, but use them most sparingly. They have been much used by some eminent etchers in the copying of pictures, in order to force etching artificially into a vehicle for the imitation of tonality, for which it was never intended. I have also seen it in original etchings within the last few years.

Here I have touched one very difficult point in etching, namely *tonality*; it is a perpetual stumbling-block, and leads many an etcher into filling up his work with too many lines. How terrible is the danger then in being able to make four lines with one stroke!

We must always remember that *the line is the thing in etching*, and if it is to represent anything *it must be free from all mechanism—from all mechanical repetition.* But I have already stated that lines can be introduced in large numbers without danger to the freedom of the work; for instance, by putting a mass of lines in a face so close together that, with light biting, they form a tone, you still see the glimmering through the tone, of structural work, if the lines have been drawn with one point, and with a proper feeling for the forms.

Therefore, as etching is capable of so many varieties of line-work, indeed, of as many as there are temperaments to practise it, it is useless to press any theory too far. Within the bounds that I have suggested, there are endless possibilities of great work without attempting what must strike most observers on reflection as false or forced.

And now the question arises, How much difference of width in line should be given with the point on the plate before biting?

I fear I must differ from Mr. Hamerton, who says that "In general practice it is most desirable that lines should remain as nearly as possible such as they were originally drawn."

A BAVARIAN PEASANT (1).

This is a fac-simile (reproduced by photo-etching) of the drawing on the plate before it was bitten by the mordant; printed in a colour somewhat resembling that of the copper as seen where the point had removed my white ground.

The reproduction is defective in that all the lines are wider than in the original drawing.

A BAVARIAN PEASANT (2).

Print from the bitten plate.

The work on the plate took less than an hour to do, direct from nature; the biting about five hours, at a temperature of 65° Fahr. There were five stoppings-out, and Dutch mordant only was used.


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This would at once deprive you of the benefits arising from the second and additional mode of expression. It is, moreover, a fallacy to think that the Dutch mordant, for which the virtue is claimed of leaving your work as you draw it, does not widen the lines as it goes down deeply through any ordinarily good ground. Compare my illustration of the Bavarian peasant in its bitten state with the reproduction of the lines before they were bitten. You will see that—although the lines in the latter are too wide, owing to the photo-mechanical process employed—I used mostly one width of line throughout, and varied them only in the biting, and this was done with the Dutch mordant alone. (Of course there is no comparison between the widening powers of the Dutch mordant, or the perchloride of iron mordant, and nitric acid, which latter tears at the sides, where the point has removed the ground, much more violently.) The lines that are drawn on the plate should be more or less of one width, so as to allow the mind to concentrate itself on their direction, thereby separating etching from every other kind of drawing. I am speaking now of the bitten line, and shall leave the dry-point and burin line for separate analysis and treatment.

By the force of artistic feeling an etcher will seize essentials and leave out non-essentials. The passion that must goad him along will bring out a truth in nature that is only accurate in the abstract, for he may deviate from the literal truth, from measurable or photographic truth, as much as he likes; but his *individuality* must appear in the result.

This individuality by its passion and force becomes a "truth-finder" in itself, and forces other minds to see with it. No man can be called an etcher who does not possess this power of carrying others along with him. We may say this of artists in every other branch of art; but it applies most strongly to the etcher. Therefore the work on the plate can be summed up in a single sentence;—it is the mind of the artist.

We have now to consider the steel "point" with which we draw on the plate—that is, with which we remove the ground, to permit the acid to attack the plate.

The best way of sharpening a "point" is not the usual method of passing it up and down the stone, but to roll the body of the point between the palms of your hands, so that it may touch the stone only at the end of the steel. By careful manipulation in this way you can get a very sharp or a very rounded top to the point.

As it is most essential that all the ground should be removed with the point, the end of your steel should, when tried on your nail, just scratch it a little, but not so much as to stick; if the point sticks into the copper you seriously impede the freedom of workmanship. But if it scratches a little no impediment is put in the way of freedom of work, and yet you can be quite sure that all the ground will be removed, thus ensuring regular biting. One end of your steel point can be ground so as to produce a rather wider line than the other end, but, as I have explained before, it is better to rely on the biting to give variety of width. Varying the

width of the lines on the plate is all very well when you do not intend to stop-out parts during the biting. In fact the stopping-out might entirely negative the intention you originally had in varying the lines.

Let me then repeat that you are to draw freely and without restraint, choosing the point that suits you best, and then allow it to pass over the surface as rapidly as your mind can direct it, and leave the further and fuller expression of the lines thus produced to the action of biting with the acid.

The Acid Bath.

My white ground enables you to see absolutely and without any question of doubt or uncertainty the entire work on your plate; and that is a blessing. But here the full blessing must stop, as the further process of biting a plate must always remain to some extent hazardous and conjectural. I pass now to some details.

When the drawing on the plate is completed the back and edges must be covered with some acid-resisting material, and for this purpose I find shellac, dissolved in absolute alcohol, most useful, as it dries in a few minutes; then examine your work once more very closely, until you can make up your mind as to the treatment you intend to give it in the bath. Believe me, failure in biting arises much more from not knowing how wide or deep you *ought* to bite your lines than from any of the difficulties of judging the bitten line before the ground is removed. I cannot insist on this too much,

for doubt or uncertainty in this matter means failure, or at the best success by a fluke, neither of which conditions is desirable.

Therefore, with a thorough certainty of the kind of lines you want, you may place your plate bodily in the bath of the Dutch mordant, and be pretty sure of getting the result you desire, in spite of the hazardous nature of this part of the work. As you place the plate in the bath, you will be surprised to see the mordant cause the zinc-white in my positive ground to come off unequally—leaving a few spots of white here and there. This is of no consequence, and by passing a feather over the surface they will all be removed by the time the lines on the plate have become darkened through the action of the mordant. The grease-paint ground remains as you put it on at first, and this gives a very sweet colour over the light brown ground—something of a pale white flesh-colour.

You must bear in mind that heat accelerates the action of your mordant. To effect this acceleration without increasing unduly the temperature of your room, place your china dish containing the bath and plate upon the so-called heater, or plate-warmer, used for heating the plates in printing—an iron plate, heated underneath by a spirit-lamp, or by gas; or place your dish in a larger one containing hot water, which will have to be renewed from time to time.

All mechanical timing of the biting is useless. You may measure the strength of your bath; you may keep the

exact temperature of your room; you may time your plate to a minute; and you will still find a constant variation in results. Therefore trust to the examination of your line with a powerful magnifying glass. If you hold the plate in a sharp side light, you can, with considerable certainty, judge how deeply the lines are bitten. Another way is to pass a needle across some lines where an extra line or two will not matter, and form your judgment by the resistance the bitten lines give your needle; but I have found the former answer most accurately.

Biting a plate is a different kind of excitement from drawing on the plate, for the etcher has to concentrate his whole mind on the action of the bath, and the character he intends to give his lines. During this operation all interruptions are fatal to the temper of the etcher, which, with the strain of attention upon it, is easily upset, and that with dreadful consequences; wives of etchers—please note!

It happens, now, that after a certain time the mordant stops work. It apparently bites no further. If the etcher is weak, or of a hesitating nature, he will remove the ground, and find to his annoyance that the lines are not bitten enough; but if he is master of his material he will not let such a freak interfere with his firm intention of biting the lines as *he* wants.

What has caused this stoppage? It is explained by Mr. Hamerton thus: "By allowing the mordant to remain long undisturbed on the copper, a coat of oxide gets formed, which is not dissolved as the acid solvent is weakened." To

set the plate free from this bondage, take it out of the bath and wash it with clean water, passing a soft brush about the work. I also frequently give the plate a rinse with a weak solution of nitric acid and water. This, though it takes the black out of the lines caused by the Dutch mordant, yet makes the latter attack it well again, preventing, in fact, the stoppage of the *eating*. The Dutch mordant will immediately blacken the lines again, as soon as you put the plate back into the bath.

Shellac, of the best kind, dissolved in purest alcohol makes, as I have found by experience, an excellent stopping-out material. It dries almost instantaneously, and can be applied with a tiny sable brush to the smallest portions of the plate that you desire to save from the acid. When lines are already strongly bitten, the shellac must be put on a little thicker in the stopping-out. Stopping-out during the process of biting is a part of the work that is tedious and time-robbing. But it is of the greatest importance, if the etcher desires to give to his lines that full expression which corresponds to the expression given by an executant on any particular instrument to a composer's work. You may take the design and scheme of line work as corresponding to the composition, the performance of the composition being paralleled by the action of biting in the lines.

Suppose the work on the plate is done; it has been the outcome of artistic passion thrown off at white heat. Now must come cool judgment and mental restraint—as this crucial work of stopping-out begins.

To produce the full expression of the line it is well to employ, alternately, both mordants—the Dutch mordant and nitric acid. The former is composed of—

Chlorate of Potash, 1 oz. (avd.)
Hydrochloric Acid, 5 „ (liq.)
Water, 30 „

and bites much more deeply than broadly. The latter, which should be used with equal parts of water, broadens the lines, and may be especially employed for the strongest parts of the plate. I mention the alternate use of both mordants because every now and then the etcher desires to give the whole scheme of lining a little touch up in width. And as he stops-out the finest lines first, and then the next finest, and so on, until he has a series of lines left at the last that are to be very strongly bitten, it is well to finish off with this powerful nitric acid, always keeping a sharp eye on the stopped-out parts.

However, for all general use and for all delicate work, the Dutch mordant is incomparably the best. Its advantages are many: it blackens the line and thus enables you to see your work in the bath,—that is, with an unsmoked ground or with my grease-paint ground; it does not give off any unpleasant gases; it does not stain your clothes; it is not injurious to the health of the operator; and it attacks the plate equally, whether the lines are far apart or close together.

Nitric acid, on the other hand, bites far more rapidly where the lines are close together; it does not darken the

lines, and gives off most offensive gases during the action of biting, which are injurious to throat and chest; also any drop of it on your clothes means a yellow spot that can never be removed. Still we cannot dismiss this useful but unpleasant auxiliary.

As every etcher should make his own mordant, I will just describe the method. First, measure ten ounces of ordinary water, boil that, and pour it when boiling over one ounce of chlorate of potash, which should be in a stone jar; to this, when thoroughly melted, add twenty more ounces of cold water. Now measure five ounces of pure hydrochloric acid, throw in a few little bits of zinc, which will soon be eaten up by the acid; pour this into the stone jar, and the whole mixture will be ready for use in an hour or two. The solution should be kept in a bottle with a glass stopper, and it can be used again and again, until too much charged with copper, when it becomes inefficient. The indication of inefficiency will be a dark green colour; a pale green does not matter.

For the purpose of examining the plate and stopping-out parts, the plate should be taken out of the bath, and the surface dried with blotting-paper.

Cleaning the Plate.

When you have bitten the plate as fully as you intend, take it out, put it on the heater, and warm it. Then, after pouring on ordinary methylated spirit, which dissolves the shellac, and finally turpentine, which dissolves the ground,

wipe the surface till it is quite clean, changing your rags as often as necessary.

Here it may happen that you think some parts are over-bitten, or that there is some "foul biting" here and there. Do not let this distress you, but take a rubber, or, as it is called in the language of the trade, a "dolly," and rub the surface of the plate with fine emery-powder and oil. You will sometimes find that what seemed too broad a line was really only a narrowly-bitten line, with its edges stained black by the action of the Dutch mordant; and that the foul biting was a mere stain on the surface arising from the same cause. This appearance causes all the lines to look broader and deeper than they really are, whilst in the bath; and if one judges the line by its blackness alone, one is very apt to go astray.

Now, however satisfactory the drawing on the plate and the stopping-out may have been, you will invariably find that the work is a little hard and disjointed—that the plate, in fact, lacks unity. In order to blend the parts, and, as it were, pull the work together, fresh lines need to be added, and to enable you to make this addition a second ground will have to be put over the plate.

The Transparent Ground.

The second ground must be of a transparent nature, and must protect the edges of the bitten lines absolutely from the acid to which you intend to subject the plate again.

As far as I can make out, nearly all the transparent grounds that are mentioned in books, or sold in the trade, have a considerable degree of uncertainty in their operation. But a friend of mine, Mr. Baskett, the Master of the School of Art at Colchester, has invented a ground that is perfectly transparent, and absolutely protects the edges of the bitten lines. It is quickly put on, and is ready for use within half an hour after it is cold. By his kind permission I herewith give you the ingredients. Melt three ounces of the best paraffin candles with half an ounce of resin in a porcelain-lined milk saucepan; when they are both thoroughly melted, thin them down with benzoline until the mixture is quite fluid, then pour it over the plate (which has been made warm), just as photographers flood a plate with collodion, —that is to say, hold the plate with a hand-vice, pour the hot mixture into the centre of the plate, manipulate it until it reaches the edges, then pour it off, and when it ceases to run place it quickly on a cold iron plate; this causes the surface to turn dull and dead,—"matt," in technical language.

A quantity of this ground ought to be made and kept in a jar without the addition of the benzoline, which should be added whenever a small quantity is warmed up for use,—the greatest possible care being taken not to let the benzoline come near any flame, for it is most inflammable.

A little practice is necessary to lay the ground on very thinly; but it is one of the safest grounds I know, and even a moderately thick coating of it works well in the bath.

The Rembrandt transparent ground, which I lay first on the plate to receive my white ground, would answer the same purpose, and would be absolutely safe. But it can only be so used when it is light enough in colour to permit one to see the most delicate additional lines clearly through it. Most commercial samples I find very dark, probably owing to the inferior quality of asphaltum used in their composition.

The Work on the Plate through the Second Ground.

I have said before that the etcher should know exactly what character he intends to give the line before he puts the plate first into the bath; similarly, before he puts it into the second bath he must know whether he intends to finish up the plate entirely with bitten lines, as Rembrandt did exclusively in his first period, or whether he intends to finish his plate with dry-point work, as Rembrandt did in his second period.

Dry-point is the easier to apply of the two methods, but it is often of the greatest importance that the first work should be completed and finished in the same character. For this purpose a second ground is indispensable.

With the first work perfectly visible through the transparent ground, it is possible, by working in the bath, which should always be of the Dutch mordant, to make the most delicate gradations,—either by adding lines to work that seems too open, or by re-enforcing lines that are too faint,

or by drawing together parts that seem too disjointed,—in fact, to mend and perfect the first bitten work.

You must always bear in mind when you work in the bath that the line you make with the steel point immediately begins to bite; therefore the line you make first will bite more deeply than the line you make last.

The process of re-grounding the plate can be repeated as often as you like, and if you have the patience, the most delicate finish can be put into a plate in this way, because with each ground you leave the work underneath secured, and can add fresh lines as well, correcting imperfect ones. Thus I think it far safer, and altogether more practicable, to finish plates in the bath, which is again a positive process, so that from the beginning of the plate, with my white ground, to the different stages of finishing, the etcher sees clearly what he is doing; in fact he is working all the time with positive processes.

A plate *can* be entirely worked in the bath, which is the positive process used by Mr. Seymour Haden, and also described by Mr. Hamerton. A plate done in this way will have a gradation of line far superior to any gradation that is possible by stopping-out. For landscape with intricate leafage it is a most delightful, not to say logical, method. But I use it also to give delicate tone and modelling to faces—a practice in which I am inclined to think I have not many, if any, followers. I have often felt the desire to give a face a soft tone, something of the character of aquatint or mezzotint, but formed by a mass of lines that are not

A CHARTERHOUSE STUDY.

This is fully described on page 51.

mechanical, but distinctly of a structural nature. In my new series of etchings I have applied it to several delicate faces to my satisfaction. It gives a character that is as delicate as dry-point, but of a peculiar gray that the dry-point cannot produce. To this end the mordant should be a little weaker, otherwise the lines bite too rapidly, and you cannot get all your modelling done before the acid bites too deeply for the purpose you have in view.

A plate in which all the conditions were favourable, and in which I consider the face and hands successfully bitten, is the illustration called "A Charterhouse Study." The whole of the plate was first heavily bitten, with the exception of the hands and face, which were left in outline; then the plate was covered with a "Baskett" ground, and the tone and shading given to the hands and face in about twenty minutes. There was no further touching either by dry-point or further bitings.

Before passing to dry-point I ought to describe the method of effacing etched work. It is done by first scraping out the etched line with a three-sided scraper, then grinding successively with snakestone and a lump of charcoal (both with oil), and finally working up the surface afresh with fine emery powder and oil on a rubber. To level up the hollow which this erasure necessarily causes, lay the plate face downwards on a small polished-steel anvil and hammer it up from the back with a chaser's hammer.

Dry-point.

In Rembrandt's third period he gave up biting his plates, and even finishing bitten lines with dry-point, and produced all his plates in pure dry-point. We have this upon the authority of Mr. Seymour Haden, who has carefully studied Rembrandt's three periods.

The quality of dry-point is as distinct from the quality of the bitten line as the tone of a brass instrument is from the tone of a stringed instrument. There is no rivalry between the two. Each has its distinct value. But how wonderful it is that in spite of their distinct characters they should amalgamate so well in one plate,—in fact that they should complement each other. In bitten work there so often remains a rawness and a wiriness of line, which can be at once *mellowed* by a few dry-point touches, and for that reason I feel that the combination of the two methods produces the most agreeable results. If there remains too much clearness and sharpness in bitten work, dry-point alone, on the other hand, is apt to be too soft and lacking in emphatic clearness. The etcher should, therefore, allow his feelings to be guided by the character of the subject when he decides upon the method of work he intends to employ.

The beauty of the dry-point line is occasioned by the "burr" which is raised as the needle passes into the copper; in fact it pushes up a ridge of copper on one side of the line, sometimes on both, which catches and holds the ink in the printing. Many a subject in nature at once suggests the use

GWENDDYDD.

A dry-point.


DRY POINT

of such characteristics, and wherever dry-point is used alone it should be understood that the retention of the burr shall constitute the charm that the etcher hopes to give the plate. This burr can be removed—that is, can be cut away with a three-cornered scraper. But I think a strong veto should be put upon that habit.

I am now speaking of dry-point produced by the steel needle or diamond point, and not of the burin. The diamond point cuts out somewhat of a shaving, and therefore does not produce half the burr that is occasioned by the steel needle. Hence its employment is at once suggested for the more delicate parts.

Cutting off the burr should, to my mind, only be done to lines in very gray parts, where regularity in the printing is most essential. But simply to dig in a deep line with some instrument, and to deprive it of its mantle of beauty, the burr, is an absolutely wrong use of the material. A light incision on a plate, with the little natural burr left on the side, has always a beautiful quality when printed. A line made a little stronger, but deprived of its burr, prints invariably like a nasty scratch. The line may be correct, but it is without quality.

I rather fancy cutting off the burr has become a habit with some etchers, through the necessity of making it easier for the printer; but that would be as foolish as composing music for imperfect performers, or rearranging classical works in an easy form for bad players. The one exception I should make is when the etcher knows that a great many impressions

are likely to be required, say for a book where, from a commercial point of view (ugly phrase!), rapid printing or easy printing has to be thought of.

Although dry-point is an easier method of work than the acid method, I cannot impress the fact too strongly upon you, that it holds as high a position in the painter-engraver's art as any other form of painter-etching. There are sticklers in the world who are not satisfied unless an artistic effort is carried out in a single material, however limited that may be. They will no more accept dry-point as a form of painter-etching than they would admit the use of body-colour as a permissible auxiliary to water-colour painting. The latter question indeed was the cause, many years ago, of a younger society being formed, as the old Water-Colour Society would not admit works in which body-colour was used. This unutterably stupid rule was certainly broken through when they elected Frederick Walker into their ranks. Similarly, painter etchers can afford to disregard the opinion of those people who refuse to value dry-point or receive it as a part of their art.

The Burin.

Burin work is a form of dry-point, but as the burin is a lozenge-shaped tool, it cuts out the copper in a V-shape, and produces quite a different quality of line from that produced by the point, especially when its slight burr is retained. If deftly used it can be made most serviceable in drawing

A STUDY.

This plate is worked entirely with the burin, and direct from nature without preparatory sketch,—about three hours' work.

The plate printed badly from the steeled-surface.


Hubert Heckenmer
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together bitten lines that are imperfect; but the moment that burin lines stand alone, their identity is established. And here the danger arises that they will not harmonise in quality with the rest of the work in the plate. A great many etchers employ the burin for finishing bitten work, but on the whole, I think, if you wish to retain the complete appearance of the bitten line throughout your plate, you should rely upon the method I have already described of working in the bath.

The burin can produce most wonderful qualities, as any one may see in the engravings of Albrecht Dürer.

I may lay claim to a *tour de force* with this instrument in my engraving from my portrait of Richard Wagner, which is entirely done with the burin, but which I would not otherwise mention.

Méryon has used the burin in finishing his bitten work with a marvellous skill; no better example can be found of the harmonious combination of the two than in the works of this incomparable master.

The action that the burin requires in the hand is always a forward push, which allows of much less freedom in handling than digging in a steel point. The greatest freedom, however, is only to be obtained with the bitten line, because there you have only to remove the ground with a point that is so sharpened that it glides over the surface without entering the copper.

Further Auxiliaries to Etching.

Of *mezzotint*, which is sometimes used in giving tone to certain parts of an etching, I will speak in a separate lecture.

The *roulette* is a little wheel which impresses a number of little dots on the surface, and makes a kind of miniature mezzotint ground. This can be used to give tone in dark places, where the lines may be too open, but unless very judiciously used it produces a most disagreeable effect on the plate.

Aquatint, by which tints can be bitten over the surface of a plate to any depth and gradation you wish, is a method I cannot recommend, for it never harmonises with any other kind of work. Flat *sulphur tints* I would also summarily dismiss.

Soft-ground etching I will not describe, because it is no better than ordinary lithography, and much more troublesome to manage.

Printing.

We have now reached a most important part of our subject —printing the plates.

The artist is too apt to forget that it is in the printed state alone that all etchings are to be judged. It matters not how a plate looks, as long as it can be printed well; but it matters a great deal how the plate is treated in the printing if you want an artistic rendering.

There is plain printing, like the printing of visiting cards, and there is artistic, or artificial printing, which means the application of endless "dodges." These two methods represent the two extremes in printing.

The plate, when finished, is blackened all over with printer's ink by means of a dabber made of the blanketing used for the rubber, as described before. Then all this is apparently wiped off, and the feeling of an outsider will be one of astonishment that enough ink is left in the work to produce the requisite impression. But herein lies the mystery of printing. It is not only in the way the ink is left in the work, or between the work, that the artistic effect is given, but also in the very quality of the ink, which depends both upon the colours that are used and the oil with which they are ground.

In order to have all the resources of the art of printing at one's fingers' ends, one must undergo some apprenticeship with a clever printer. But there are printers and printers; and it is astonishing how few printers there are in England who can print artistic plates satisfactorily. In illustration of this I may mention an incident that happened to me some time back. You must know that I have had for some years a small printing establishment of my own at Bushey —of which I make a business. Now it happens that work sometimes comes with a rush, so that my two printers cannot get through it. On one of these occasions I thought I would send one of my etchings (a copy of a portrait) to some other printer. I sent it to one of the

first firms in London, with a sample of the manner in which I wanted it printed; in addition to this my printer gave them a minute description of the method of making up the ink, the nature of the oils used, and how the plate was to be treated in the wiping. Yet they failed after repeated trials to get anything even approaching our sample, and declared themselves unable to produce the result desired.

There is, of course, Mr. Goulding, who probably cannot be rivalled even by the French printers for ability. But a new generation of printers will have to be reared, because Mr. Goulding cannot do all the printing of the artistic plates that we hope will be forthcoming in the near future, nor do I wish to enlarge my establishment very much. Etchers themselves would never be able to print editions, but they should always do some of the most valuable impressions of their plates; for an etcher himself may be permitted to toy with his plate in the printing, to vary the impressions according to his mood, and as long as he signs them as printer, the public cannot complain. But such a privilege could not be extended to other hands, not even to the skilful hands of Mr. Goulding.

Every etcher should at the start of his career equip himself fully for printing. The press need not be large, but it is absolutely necessary that it shall have cog-wheel action, and have a fly-wheel instead of the star handle. This would have to be ordered, as nearly all the small presses are made with a star handle, which cannot give you the amount of pressure often required, the action being

A PORTRAIT (1).

For this I had a first sitting of one hour and a quarter, and a second of half an hour for the dry-point finish after the plate had been bitten. The same width of point was used throughout. The numerous lines by the side of the face, drawn close together but only slightly bitten, were intended when first drawn to be bitten in this way. The coat, hands, and darkest lines in the face and background were enforced by nitric acid. There is dry-point work in the background and in the shadow side of the face.

The print is *retroussaged.*


Hubert Herkomer
91.

A PORTRAIT (2).

Printed in the "visiting-card" style, to show how much printing can do for an etching; the plate being in precisely as good condition as with the preceding print.


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direct. I have had to hang on to these star-handled, single-actioned presses with all my weight, and even get a member of my family to assist in further weighting it. There is no use in having anything but the best kind of press, and all inventions in the shape of "convenient" travelling presses are worse than useless.

I have just the kind of press for my "proving" that would answer every etcher's purpose. It has a twenty-inch plank, double action, made by Messrs. Alex. Seggie & Son, Broughton Market Works, Edinburgh, and costs £30.

The etcher needs but little room for all the things he requires, if he is orderly. As I make some claim to the possession of the bump of order, I may as well describe my little studio in my German home at Landsberg, in Bavaria, which is a good example of how much can be practically placed in a small room. It is only 11 feet by 13½ feet, and contains a table with an etching desk and shade on it; a printing press, and all the arrangements for printing—that is, "heater," "jigger," slab for grinding the ink, slab for wetting and preparing the printing-paper, shelves for storage of paper, cupboards for storage of bottles, etc. Under the seat by the table are my bottles, with the mordants and my dishes for the plates. In the drawer of the table are all my tools. I should add that there is a stove near the door.

Here is a complete etching and printing establishment, but so carefully are all the things arranged, thoroughly carrying out the old adage, "A place for everything and everything in its place," that I still have plenty of room

for painting figures from nature, on a small scale. Adjoining the north end of the studio is a little glass house, seven feet long, six feet wide, and seven feet six inches high in the centre. Three steps lead up to this, and these steps are within the studio proper. Thus the model, who sits in the glass house, is raised, as he would be on a platform in an ordinary studio, whilst I sit in the studio, which is lighted by a side light, placed higher than the top of the glass house. This window looks to the north. I use this glass house also for hanging up impressions to dry.

To return to printing. If an etcher never prints his own "artists' proofs" (I use the term in its true meaning) he cannot know the real character of his plate. It is under his own hand that the capabilities of the plate in the printing should be tested; the ink, the wiping, the paper, the pressure in the press, all have to be varied according to the demands of the work in the plate. It is not a safe plan to "work up" to a certain printer's proving, any more than it would be safe for a physician to prescribe for a patient whose pulse he had not examined himself. The etcher must himself regulate the style of printing when the plate reaches the hands of the printer who is to print the edition.

The Ink.

The colours usually employed in the making of inks are the two blacks, German and French—

Burnt Sienna,
Raw Sienna,
Burnt Umber,
Yellow Ochre,
Crimson Lake,
Bistre.

These colours are kept in powder, and ground each day as they are required; for printing ink loses its brilliancy when it is kept for a long time.

The German black is probably the same that Rembrandt used, the other is a French black of more recent introduction, by which one can more readily obtain an artificial blackness, but to my taste it is often very unsatisfactory. Either black, alone, would produce an almost bluish tint; to obviate this the warmer tints are added. But a further character is given to the ink by the different strengths of the oil with which it is ground.

The strength of the oil is given to it by a process of burning, which, on account of its dangerous character, has to be carried out in the open, and some distance away from any habitation. Here the linseed oil is placed in a large cauldron and heated with a fire underneath. When it boils, a red-hot poker is thrust into the oil, which starts a flame on its surface. Now commences the tedious work

of ladling the oil over the flame, until the requisite degree of strength has been attained.

To produce very strong oil we need to burn it nine consecutive hours. But two or three hours will suffice for the weaker kind of oil.

When the colours are ground up with strong oil the result is an ink which wipes away readily from the bare places and sticks to the lines. This quality gives strength to the impression. For delicacy and tone the weaker ink has advantages, and the etcher must use his judgment in combining the two.

The Wiping of the Plate.

For ordinary or so-called visiting-card printing, a plate is covered with the ink by means of the dabber, which is passed along backwards and forwards in a rocking fashion. Then it is wiped, first with a rough canvas, afterwards with a muslin, and finally the surface of the plate is polished with the hand. For this last operation the palm of the right hand is covered with printing ink, and then passed across a large lump of fine whiting, the quantity being regulated by friction on the palm of the left hand. With the right palm thus prepared you can, by sufficient friction, clean the surface of the plate until no vestige of ink remains except in the lines. But it has pushed the ink so far within the edge of the line that you only get the very minimum of the line in the print; and you naturally get a hard, unsympathetic, inartistic impression of your work.

The first method of artistic printing that I will describe is done as follows:—The plate is inked in as usual all over, being first warmed on the heater, the greater part of the ink is taken off with a rough canvas whilst the plate is a little warm, and the surface wiped until your whole work appears in a soft and somewhat "blurry" state. Then you take some fine and very soft muslin and gently wipe the whole plate, keeping the plate cool, but warming the muslin every now and again. Some parts may, according to discretion, be wiped more than others, and with this treatment applied fairly all through you will find a gentle tone left all over the plain parts of the plate, as well as a considerable tone between the strong lines where they are close together.

This method does not bring out the strongest aspect of the work. To produce this we must resort to what I shall call the second artistic method of printing, which is termed *retroussage*. When the plate has been wiped to what I already called the blurry state, you apply the palm of the hand again, but more gently and with less whiting on it. This leaves a soft tone over the whole surface of the plate, besides pushing the ink well into the lines, leaving them, however, perfectly full. By this process you leave between the lines the same tone as will be left on the bare copper. The plate at this stage will not have a very rich appearance. Now take your muslin, fold it up so as to get a nice flat face to it, and after warming it on the heater pass it lightly over the whole plate, with barely the weight of the

muslin itself. This produces instantly a magical effect, for the lines seem to turn a deep black, and to be twice the width they originally were. What the muslin really does is to pull the ink a little out of the lines, and spread it over the edges. This method, if overdone, causes a fringe to remain by the side of every line, and may be considered a cheap way of getting a poor etching to look a little artistic. But when properly and dexterously used it is an invaluable method in printing.

There are etchers who denounce *retroussage* in all its forms, and whose theory is that the line should be filled with ink but no more. Here again I wish to declare that it is neither safe nor wise to drive a theory too far; many a plate might be saved from a commonplace aspect by a little *retroussage* judiciously introduced into parts. Again, an etcher can work for a certain kind of printing, so that for some of his plates *retroussage* would be altogether misapplied. But to say that *retroussage* or any form of artistic printing is illegitimate, would be simply to repeat the mistake of the old Water-Colour Society on the subject of body colour.

A plate worked in dry-point is printed in the same way as a bitten plate, except that for the final wiping the hand had best be used instead of the muslin pad.

There is still a third method of artistic or artificial printing in use which seems to me very disagreeable and undesirable, namely, that of leaving great tracts of printing ink over parts of the plate, like a wash of colour, to give an

artificial tone which is in no way indicated by the lines. In this way some of the most meretricious plates have been positively painted up to pass muster in the eyes of the uneducated public.

It is unnecessary to describe any other distinct methods, because every etcher by experimenting will and must find out what suits him best.

The Paper.

It is not enough that the paper you select for printing should bring out the work in the plate in all its detail; it must give the work a *quality* as well.

When I explain to you that the paper (which is always damped for printing) has to be pressed into the lines, so that they come out in an embossed form, you will understand that the paper must either be originally of a soft nature, or else by lying under moisture for several days must be thoroughly softened.

Be the paper English, Dutch, German, or French, it must be hand-made. Nearly all the paper of former centuries is good, but the amount of worthless stuff that has been manufactured in the latter half of this century is perfectly alarming. I have heard it stated that in thirty years' time not a book or document will have survived except such as are printed on Whatman's hand-made paper. Imitations are plentiful enough, especially in Holland, but I very much dislike them. Modern imitations of old Dutch hand-made paper are all very well for

bookwork, but not for the best impressions. With the exception of the Japanese, who will always manufacture delightful paper if left alone, and not interfered with by European agents, I do not think that any nation produces at present a paper of the quality of either English, or Dutch, or German, of the sixteenth, or seventeenth, or eighteenth centuries.

I should be glad to be convinced that I am wrong, and should rejoice to have modern paper of the old quality sent me. But acting on my scepticism, I determined, during my last visit to Germany, to seek out some more or less primitive hand-paper manufactory, where I could get some paper made more like the old than anything I have yet seen. After much inquiry I heard of a man who still manufactured hand-made paper, and it was not long before I visited him. I found him nestled in the corner of one of those delightful streams on the borders of the Bavarian mountains, a master-workman, as unlike the modern type of manufacturers generally as the modern paper itself is unlike the old. The bell was answered by the master himself; he had his blue apron on, and was in his shirt-sleeves,—a man standing six feet two inches, with a broad, strong, manly face, and a clear gray eye that looked at you with a straightforward honesty that was truly refreshing.

We sat down in his scantily furnished room, which was quite of the peasant type. I showed him some samples of old paper, and told him what I wanted. His enthusiasm was quickly fired, and he declared that he was not only willing to make such paper, but felt confident that

he would succeed. We then were shown over his manufactory,—that is, all of the party who could stand the pungent and almost overpowering smell that permeated every corner of that interesting place. I found things well organised, with powerful machines for all kinds of machine-made writing paper, and hand-made paper as well; for he had the sole right of manufacturing such paper for the Bavarian Government. Here were bundles of rags; farther on there were large tubs filled with the rags, in a pulp-form, produced by grinding in machines, identical with those which we use for stone-crushing and mortar-mixing. Then in a damp, ill-lighted compartment one man dipped his wire tray into the tub of watery pulp, and after giving the tray a shake passed it on to his neighbour, who took the pulp off the tray by inverting and pressing it on to thick rough flannel, after which he passed back his empty tray. A layer of flannel was then placed upon the pulp, and this went on until there was a pile about four feet high of flannels, with a flattened-out pulp between each. The whole pile was then put under enormous pressure, which squeezed out the water, after which the sheets of pulp were hung up to dry.

The next process was to size the paper, and it is upon this that the hardness or softness of the paper depends. When we term paper soft it means that the paper has not been much sized, or, in such forms as blotting-paper, not at all. The final stage is to give the paper a glossy or a smooth surface, by passing each sheet, placed between two smooth cardboards, through a roller press.

This is, roughly speaking, the way hand-made paper is manufactured.

The wire tray produces the lines that are seen when holding up the paper against the light, and the water-mark, of which we have such an infinite variety in old papers, is made also with wire, raised a little higher than the wire of the tray.

There will be a little delay in starting my paper, as special wire trays have had to be made, with my own water-mark on them; but if my Bavarian succeeds, I shall not fail to place it before the notice of brother etchers, who may be equally dissatisfied with modern papers, or may find the search for old paper rather troublesome.

There is, of course, a great quantity of old paper still to be found, and it has a tone that certainly cannot be imitated or given except by the hand of time. For instance, in that little German town of Landsberg, in Bavaria, of which I am a citizen, I and my family derived much entertainment during our last visit from searching for blank sheets through the old documents stowed away in the town-hall. It made one's heart ache to think that only four years ago two hay-carts were filled with these precious documents, which were sent to the paper-mills to be ground up again into pulp, and turned into machine-made paper. We found exquisite paper of the sixteenth, seventeenth, and eighteenth centuries. Much of it felt like velvet under the touch, but was excessively tough and hard to tear. I found I had to soak this paper and keep it damp for at least four days, before it was quite soft

and ready to take the most delicate line of a plate, but then it proved to be unrivalled.

It is such paper that gives quality to the work, — I might almost say virility; whereas Japanese paper, some kinds of which bring out the work beautifully, is apt to give it a semi-transparent and somewhat greasy look, only useful for certain subjects.

But there is a thick, hard-surfaced Japanese paper, which is much used simply because the publishers have demanded it, but which hardly ever brings out the best character of the etching. It gives the impression a certain commercial elegance which passes for quality in the eyes of the public; but no paper should be used that does not do entire justice to the work on the plate.

Old paper, or paper made as nearly as possible in the same way, cannot be made on a large scale, as the manipulation of the pulp in the tray cannot be accomplished satisfactorily if the tray is too large for one man to handle,—another reason why etchings should be kept within reasonable dimensions. Further, let me mention that large margins on etchings are a mistake. An inch and a half beyond the plate is excessive, and an eighth of an inch would suffice; for, when mounted on cardboard, they look far more valuable than with large margins.

In mounting an etching it is a further mistake to paste it all round to a cardboard; it is only the top of the etching that should be attached by means of a little slip of paper a quarter of an inch wide, pasted half on to the proof, and half

on to the cardboard. This enables the etching to be examined from the back.

In former times line engravings and mezzotint engravings were printed on hand-made paper such as I have described. When they were artistic productions, the paper certainly gave the right kind of lustre to the work.

But, with the introduction of that horrible "mixed style" of engraving, of ruled lines, etched lines, and mezzotint mixed up, of which I shall speak very freely in my next lecture, there came in a method of printing such plates on soft and very thin machine-made paper, called India paper, which was at the time of printing mounted on thick but very soft white paper. The "India" being soft, as well as the backing upon which it is pasted, certainly brings out all the work in the plate with the very minimum of trouble to the printer, but the effect of this can only be described as *commercial*; it is never artistic. Impressions printed on such paper are called in the language of the trade "India proofs."

But for etching there still remains to describe a most beautiful material, but difficult of management, and that is vellum. Although it has a tendency to give some plates too much transparency, it every now and then gives a brilliancy which is unrivalled. But every skin seems to be different in its preparation, which very much baulks the printer in his desire to get regularity.

Various tones of paper can be used to advantage, according to the subject of your plate. For instance, the green paper used by Méryon gives a superb effect to his architectural

work. But all choice of colour in paper must be controlled by the taste of the etcher.

It remains to mention the drying of the impressions. As I have already said, the work is brought out on the paper in an embossed form. This gives etching its peculiar richness of quality, far above every other form of engraving. For when looked at in a side light, as all etchings should be, every line casts its own shadow. Now when a fresh impression is put damp under pressure of mill-boards, these raised lines will be pressed back into the paper, and you lose at once one of the great sources of beauty in the art. Hence it is necessary to hang up fresh impressions on a line for several days, until the ink which covers the raised line has become thoroughly hard. Then you redamp the impressions, and lay them between what is called soft backing paper (the same as used in the printing of India proofs); the whole is then laid between thick mill-boards and heavily weighted. If this were not done the proofs would remain in a cockled condition, and thereby lose much of their charm.

Selection of Subjects.

I should dismiss this portion of my lecture as impossible to treat, did I not think that many of my hearers would be disappointed if I shrank from an attempt to give some kind of analysis of a perplexing element in the career of most young etchers.

An artist may suddenly see the poetic aspect of a subject,

though he may have passed it a dozen times before without having been attracted by it. Whether a painter works in oil or water-colours, or in etching, he ought to choose carefully the material that is most suited to the representation of the subject before him. There is no law to guide one in the selection of a subject or material. Indeed all selection is distinctly a personal matter, and "not transferable." An artist soon finds out that what will paint well will not always etch well, and *vice versâ*.

But the etcher has one enormous advantage over the painter: *he need not wait for any particular effect as long as the motive is before him.* The painter can do nothing with the mere motive: it must be bathed in an artistic effect before it attracts him, and then he must wait for its repetition before he can go on with his work.

An etcher can make nature turn on the pivot of his own individuality. The truth he produces comes more from *within* than from *without*.

Although the painter can also imprint his personality on his work, he cannot reproduce nature in such an abstract way as the etcher, because he must employ far more means to represent the simplest thing. Hence he is far more subjected to the bondage of outward truthfulness, and cannot enslave nature in the same way. All this gives the etcher a greater scope in selection than the painter. I would, however, point out two things in etching that must be avoided: triviality and ostentatiously bad drawing. Both are the strongholds of the enemies of original etching.

People say, "Are we to go into raptures over this scrawl? What does it mean?—what does it represent?" You tell them "it represents the mind of the artist," or give them some other abstract explanation, and you cause laughter!

They are right, these Philistines, many a time, and there would be no trouble of this kind if etchers avoided both the faults that I have pointed out. The etcher need not always etch a story that shall be plain to inartistic minds; it, however, is but fair to ask that a cow shall not be mistaken for a wheelbarrow, or a windmill for a cat. By triviality in selection I do not mean simplicity of subject, because simplicity is our first aim. I mean the downright trivialities that are put before the public with only here and there a scratch or two to indicate what the artist is pleased to call his mind.

Placing a subject on the plate is by no means an easy task, and many a time one feels after the plate is done that it ought to have been placed differently. Therefore it is a wise, though perhaps an extravagant plan, to work on rather a larger plate than you want, and cut it down when your plate is done. Many painters work on larger canvases until their compositions are settled, and then cut the canvas down as the subject demands.

There are so few figure etchers, compared to landscapists, that I make a strong appeal for more subjects in which the human figure is the prominent feature. For instance, I would gladly see reserved for etching some of the subjects that suggest themselves to painters, who do not, however,

see their way clear to treating them in oil or water-colour, and so let them slip.

In a word, regard for simplicity must not induce the etcher to ignore the fact that his production, however good as an etching, will be none the worse—I should say it will be decidedly the better—for being also a good subject.

The Sale of Etchings.

Before leaving the subject of etching, let me say a few words about the sale of etchings.

I feel that I am now treading upon delicate ground. But I have myself for years drifted with the stream of modern methods adopted by publishers in the sale of etchings; and now that I have arrived at a full and definite conviction with regard to those methods, and have turned aside to act in accordance with it, I am perhaps the better able to review the situation, free from suspicion of any ulterior motive. Both dealers and publishers have been uniformly courteous to me, and perhaps at times have found me not easy to deal with. But I must say that the methods of dealing with plates into which they have drifted need thorough alteration.

Now, the errors into which the print-world has fallen, and to remedy which it seems to me so important that action should be taken, are errors due to the advance of science. Let me explain.

Many years ago steel was introduced as the metal for the

engraver to work upon instead of copper, because it yielded more impressions. But the superb qualities obtainable in the softer metal, especially in the matter of mezzotint engraving, were changed for a thin, smoky character, quite deficient in the artistic aspect. This defect arises from the fact that the tool cannot go so deeply into steel as into copper. Again, the quality of bitten lines on steel differs wholly from that on copper. A steel-plate engraving would very often yield five hundred good impressions, which were erroneously called "artist's proofs." From a copper two hundred would be an excessive number. This steel period went on for some time, until science stepped in and showed us how an infinitesimally fine coating of steel could be given to the surface of a copper plate. This coating could be placed over the finished work without giving any indications of the work being either filled up or changed in any perceptible way. Here we at once gave the engraver the chance of returning to the softer metal for comfort, and quality in the work, with the additional opportunity of changing the surface of his plate, so as to render thousands instead of hundreds of impressions a possibility. Now, the one-thousandth impression of a plate that has been repeatedly re-steeled when the coating showed signs of wear is just about as good as the first; and this constitutes a difficulty as well as a danger. Your plate no longer goes through any form of wear, and *your print or second state is not really a change from the first state.* You can only vary the quality by the selection of paper and the care in the printing. To put anything like market value on the impressions, a plate has to

be literally destroyed after a certain declared number of impressions have been taken—destroyed whilst *the work is yet in a perfectly sound condition.*

Here we have the first difficulty, which cannot be so easily removed, except by a radical change in the methods of publication.

A publisher said to me it would never pay him to print from an un-steel-surfaced copper, because he buys the plate at usually a large price from the engraver, and has to get not only his money back, but a large profit in addition, which can only be accomplished by the plate rendering a large number of impressions. He is bound to lose a great deal on some plates, and therefore has to make up by large hauls on others. Here we have the danger—distinct danger to the art of the times, because a publisher instead of helping the artist to form the popular taste has himself to submit to its dictation.

In the case of original etchings, the remedy that I should suggest would be for publishers to minimise their risk by not buying the plate outright from the etcher, but by taking as many impressions as they needed, or could manage to sell, with a commission on each, say of a third of the selling price, *i.e.* 33⅓ per cent. This would at the same time avoid that ghastly rush that is made with every new plate, in order to sell all the "declared proofs" whilst the sound of the boom they give it is still in the air.

That the artist, who is often, alas! in a chronic state of impecuniosity, would sometimes prefer cash down in a lump sum when the plate is done, or even *before* it is done, I know

from personal experience. But I am certain that if he can arrange his affairs so as to be able to do the first waiting, he will get every chance of the large haul over a plate that might turn out popular. By placing all the risks in the hands of the publisher, the market is kept in a feverish condition, dangerous for artists and dealers, and injurious to the public.

I also feel that there are two strong reasons against the adoption of the *steel-surfacing* of the painter etcher's plates. First and foremost, it is not possible to get the artistic quality in the printing from a steel-surface that you get from the copper, because on the former the ink slips away so readily, whereas on the copper it clings sympathetically, and the wiping can be done with an artistic certainty and richness that I never found possible on the steel-surface. Let any etcher print an impression from the copper, and then from the same plate when steel-surfaced, and he will at once understand what I mean. He will alter his ink and his method of wiping, and his pressure on the press—all without avail; for *the result from the steel-surface will not be the same as from the copper.* This is not so much owing to the fact that the steel facing fills up the work—I believe the change is imperceptible, but it is that the surface takes the ink so differently.

The second reason is one that more especially affects the collector. Say what we will, there is in mankind an inherent desire to have what is rare. Place in the hands of any intelligent art-lover an etching, and tell him fifteen hundred impressions have been printed of that plate, and all as good as

the one he holds in his hand. Then place another etching in his hand, and say only fifty or a hundred impressions were printed of that plate, because the plate would not render more, and that that identical impression happened to be an extra good one. Supposing both the subjects to interest him artistically, his collector's instinct will overrule all other feelings, and he will value the latter most. The collector, on whom we rely for the purchase of etchings, possesses two strong traits in his idiosyncrasy—that of the amateur and that of the connoisseur. The former is supposed to love art for art's sake, the latter knows about things, "states," etc., and seeks rarity. The man who loves art for art's sake hardly ever becomes a collector, unless the second trait exists in his nature. But I wish it to be understood that I utterly deprecate the paying of large sums for the impressions of plates taken before the plates are finished—early states, that should only see the light of the artist's studio. It is, therefore, a matter of great importance that painter-etchings should be printed from the copper plate until the work shows signs of wearing. The price of the plate should, to a great extent, be fixed in accordance with the number of impressions that the plate yields.

When the plate no longer yields the best impressions, the plate *may be steel-surfaced*, a second state printed, and the print sold at a much smaller price, because the etcher may print as many impressions of the plate in the second state as the trade or buying public would require. I would further recommend that every impression be stamped at the back with

A MEZZOTINT.

Printed from my larger plate of the Right Hon. the Speaker of the House of Commons, the rest of the plate being stopped-out with paper.

this sentence: "Printed from the copper-plate" or, "Second state, and printed from the steeled-surface."

The misnomer of "artist's proof" should be abandoned altogether. "Remark proof" is another fad which should be abolished. By "remark" is meant a little etching of a figure or anything you like on the *margin of the plate*. That remark is made to identify a certain early state of the plate which, as matters are now arranged, is not allowed to wear or change. It has happened to me more than once that my remark on the margin was the only interesting part of the plate. I like the German word "Abdruck," but "impression" seems to answer very well. It is only when the artist *proves* the work on his plate that the "Abdruck" can be called a "proof,"—an "artist's proof,"—and those ought not to be brought into the market, and would only be very few in number, because he would certainly endeavour to save his plate if he knew it had to be printed from the copper itself.

Mezzotint Engraving.

Prince Rupert, or one of his assistants, is supposed to have invented the process termed mezzotint.

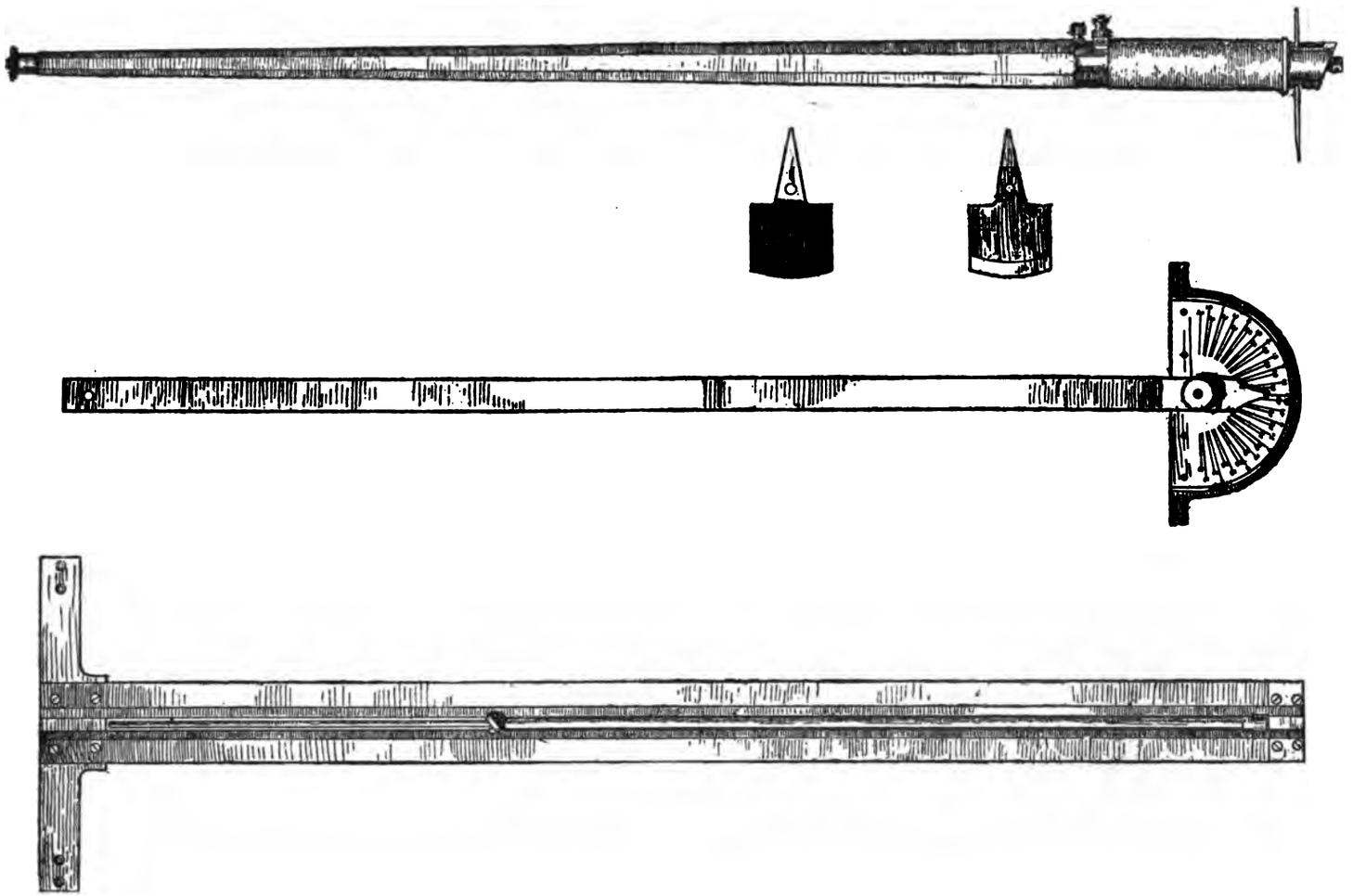
Its characteristics are softness, and a velvety quality in the blacks, with, however, a deficiency of sharpness of definition. A description of its technique will at once make this clear to you.

In mezzotint, unlike etching, there is no acid used; but what is called the "ground" on a mezzotint plate consists of

a *bed of burr*, produced with a tool having a toothed edge some two or two and a half inches wide, which is rocked to and fro all over the plate in many directions until the whole surface is, as I have said before, a bed of burr. If this burred surface were inked, and an impression taken from it, the result would be an even sheet of dense black. Here, therefore, is practically a black plate; and the whole process of engraving is accomplished by scraping away in various degrees this burr which prints black, leaving the entire burr for the deep blacks, and scraping down to the bare copper for the highest lights.

In former days, when copper plates alone were used, the effect was rich and strong; but when steel was substituted for copper, to enable more impressions to be printed from the harder surface, all that richness and strength were lost, and mezzotint was made to play a secondary part in those showy plates, done in what was called the "mixed style," which were designed to attract the eye of an unwary public as they passed the printseller's shop window. As copper is soft, the teeth of the tool enter deeply, and you have a strong burr ploughed up to catch and retain the ink. Steel, on the other hand, is hard and does not permit the tool to enter far into its surface; hence a thin *smoky* ground is all that can be produced on that metal. Now, copper is again used for mezzotint work, as it can be preserved by a thin coating of steel, deposited by electricity, after the engraving is finished, as I have already described.

THE ROCKING TOOLS.



The Rocking Tool.

This consists essentially of a flat piece of steel, very much like the flat blade of a chisel, grooved down one side into a number of ridges—sometimes as many as 120 to the inch—running parallel to its length. An edge is given to it by grinding from the smooth side only, so that the ridges terminate in the edge, forming teeth. And as, further, it is so ground that the edge is semicircular in outline, it can be *rocked* to and fro across the plate, leaving a series of dotted lines which, when repeated and interlaced often enough, produce the *bed of burr*.

In olden days the tool was set in a handle and held upright in the hand, the rocking being done by the turn of the wrist. That was a difficult method and needed much practice. But the accidental inequalities of the ground produced by it, resulting partly from its very difficulty, give, to my mind, some of their greatest charm to old mezzotints; and it was my first endeavour, when I started mezzotint engraving, to produce the same effect.

The original mezzotint ground of Prince Rupert was not a series of dots, but a series of lines scratched into the copper in circular sweeps. The drawback to this method is that the ground when scraped down was apt to show want of solidity, and look threadbare, whereas in our present method, especially with "pole-rocking," such regularity is ensured that there is absolute certainty of the tone remaining solid, to whatever degree the ground is scraped.

The Mezzotint Ground.

The mezzotint ground, as we make it now, is composed of a series of bands of dots, rocked across the plate according to a scale. But I hope yet to experiment with a ground of the character of that which Prince Rupert first produced, viz. a series of lines instead of dots, because the effect is far more like a dry-point etching than anything we can produce with our present dotted method. And I firmly believe that a combination of such a ground with dry-point work will be the great method of the future for the interpretation of pictures. In this scheme of work tonality will be possible, as well as the finest definition in drawing with the needle (dry-point), and, if successful, a homogeneous whole will be the result. Moreover it will be only manageable in the hands of a good draughtsman, so that the mechanical or commercial engraver will be a thing of the past. It is a dream perhaps, but it is one that is purely based upon the possibilities of the material for artistic expression.

When I commenced my experiments in mezzotint engraving I was much laughed at by professional engravers. No doubt my attempts were sorry enough, but I was on the right track, because I endeavoured to revive the old system of mezzotint work on copper again, relying upon the then more or less new process of coating the surface with steel for the preservation of the plate when finished. I regret that I allowed myself to drift into the abominable "mixed style," then all the rage, simply to please the publishers.

The laugh, however, is on my side now, for I have trained a set of young engravers, who work only in the style I started upon, and who have driven every other kind of engraving, except pure mezzotint, pretty well out of the field. These pupils have far outstripped my efforts in mezzotint work, and I record this with every feeling of pride and satisfaction.

Now, in studying the irregularities of the rocking in the old mezzotints, I was at once struck with the necessity of getting something of that character, without the chance of accident—the necessity, that is, of being able to control it. I succeeded in this by carefully studying the ways in which the first tool-marks cross on the plate.

We will suppose a plate is before you ready to be rocked. You first draw parallel lines with lithographic chalk in one direction across the plate, the spaces left between them being equal in width to that covered by one oscillation of the rocking-tool. Then you set the tool with its blade at right angles to the lines, and with its centre on one of them, and rock. By an imperceptible action of the hand you can make it travel forward in the direction of the line; but a beginner is apt to make the teeth bite into the same place twice, and stick. This causes a line that can never be remedied, except by scraping down to the copper and re-rocking the part, which at its best is only patch-work. Great care, therefore, is essential, to prevent such accidents. When you have rocked down on one line you start on the next, always allowing the ends of the tool-marks to overlap about a quarter of an inch. When the plate has been thus rocked over in one direction until it is

covered with the markings of the tool, it is said to be rocked "one way." You can then begin crossing that series of indentations with another, which is done by drawing a second set of chalk lines at an angle to the first and proceeding as before; and so on.

Now enters a most important piece of calculation; because upon the angle at which you cross the first few ways depends the character of the ground which you will eventually get. And it must always be borne in mind that the ground shows its particular character most strongly where the burr of the rocking has been most cut away by the scraper. Therefore the first few ways will always need the most care and consideration in the rocking. You can almost give the character of "cross-hatching" with the elongated dot, or can get the ground so closely rocked that it looks like a mere wash of colour when scraped.

All this is a matter of taste and experience in the mezzotinter, and cannot be dealt with adequately in a lecture. Suffice it to say that many varieties of ground can be obtained—

(*a*) By the fineness or coarseness of the tooth of the tool.
(*b*) By the way the teeth are ground.
(*c*) By the number of "ways" which it is rocked.
(*d*) By the weight of pressure given in the rocking.

All mezzotinters have imagined, at the beginning of their experiments, that all the effect they want can be given by a few "ways" in the rocking. This is a fallacy that cannot be

exposed too prominently. It is only what is called a *full-ground* that will "scrape up" well.

There is a method of first rocking a light fine ground which scrapes easily, then laying over the scraped work another ground of, say, nine or fifteen ways, or even less, with a coarser tool, and then of scraping up the whole thing again. If it is done by rocking into the first mezzotint ground itself, some good results can be got, because the texture is not left equal all over in that case, as it would if it were bitten in, but shows more in the lighter than in the half-tones. When textures are bitten in with acid over the half-scraped mezzotint work, as they frequently are, especially on faces, the result always looks as if a curtain were drawn across it. Samuel Cousins did this systematically, and often cleverly, but it is an inartistic trick at its best.

Cousins always etched in the gist of his drawing first, and then laid a mezzotint ground on this, and scraped; and finally gave texture to various parts by *texture-rocking* that was also bitten in. It would hardly be pedantic to ask if such work could be truly called mezzotint engraving. I have never seen this bitten texturing in old mezzotints, and fancy it has only been introduced to give more colour to the thinness of ground that is inseparable from the use of steel. I recommend that all texturing be done by the first few ways, strongly rocked, and then the ground filled up by a finer tool with lighter pressure. This means a great gain for the artist, who cannot so well produce artistic work if his hand has to do it twice over.

We sometimes rock four or five different grounds on one

plate: face and hands, say, of a portrait will be done in one way; coat in another; background again in another way; and so on until we get an interesting foundation for artistic scraping. A full ground generally means from sixty to eighty ways of rocking; but the number of ways necessary varies unaccountably, the ground sometimes "closing in" quickly, and at other times refusing to do so. The quality of the copper probably has something to do with this.

The quality of the copper for mezzotint rocking is of great importance, and nothing but the best hammered copper should be used. For all coppers I can recommend the firm of G. Raymond, 113 Charing Cross Road, London. They are excellent in quality, and reasonable in price.

The Scraper.

This instrument is really one of torture, the sharpening of which has caused more bad temper and bad language than any other tool used by the engraver. But it is of vital importance that its edge should be so sharpened that it cuts without scratching, and scrapes without burnishing. It is a little, harmless looking piece of steel about five or six inches long at first, and about a quarter of an inch wide—to be obtained of Sellars of Sheffield. A few years ago I found what was sold in most places in London for mezzotint scraping was simply the blade used for scraping out ink marks,—an ink eraser,—and was broad as your thumb at the end—an utterly useless instrument.

The small and proper scraper should be so sharpened that one side of each edge is broad and the other narrow, which ensures a better cutting ridge. Some engravers sharpen both sides equally down to the edge, but that is a tedious effort, and I think merely a personal fad. It is hardly possible to make this all clear in words, but one look at a scraper will enable you to understand what I mean.

The action of scraping must not be from the wrist, but from the elbow; and by keeping the end of the scraper in the palm of your hand, the blade is chiefly supported by the second and third fingers and thumb. There must be no digging into the ground, but simply a careful cutting away of the burr. If the scraper's edge is not sharp you will do little else with it than burnish. This produces a false brilliancy in your plate, which fails to print.

The point of the scraper is often used to sharpen up the work, either by a kind of stippling or by lines which blend very well with the mezzotint ground. Much character or artistic "snap" can be given to a plate by such after manipulation.

On the Character of Mezzotint.

There is always a tendency in the granulation of a mezzotint ground to resemble a lithograph in quality. Much can be done in the printing to obviate this; but publishers cry out all the time for brilliancy in engravings, and that causes great mischief all round. Plates are forced into artificial brilliancy at the expense of artistic quality, both by the

engraver and by the printer; the true character of the picture that is being copied is neglected, and a meretricious effect substituted—a danger to mezzotint originating in the popular taste.

There are some drawbacks to the free use of mezzotint for original work; for from the slowness of the method it will be readily surmised that mezzotint engraving is not a fit material for direct work from nature. For one thing, you cannot see what you are doing on the plate unless you work under a tissue paper shade. True, you can rub into your work tallow-grease and lamp-black, but that is a distinct impediment to good scraping, because you are all the time scraping away the dirty black instead of the burr; and, moreover, your scraper does not attack the burr so well when there is grease of any kind on the plate.

It is a slow and laborious method, and one that cannot be practised in haste without sacrifice of quality. It needs a temperament with great continuity of purpose, as well as an endowment of enthusiasm. Also, to succeed in mezzotint an engraver must be a skilful draughtsman. With the exception of Cousins, who could draw, at least in his best years, I venture to say that not one of those engravers who have done the largest portion of the "mixed style" plates could draw a head from the life. They were more or less human engraving machines.

Let me describe to you the way in which many of those popular engravings of a decade back were produced.

An engraver of the "mixed style" so much in vogue at

that time received a commission to engrave—let us say—a popular picture. He first reflected a little as to the treatment he intended to give it, and then straightway started his assistants to work. These assistants were weird personages, poor struggling hacks, who seldom saw the light of success; their whereabouts known only to the few. The histories of many of them would be worth writing, and would add a pathetic page to the history of our times. In most cases they were only skilled in the one thing they practised; it might be in making outlines, in ruling skies, in etching the stippled foundation for faces, in rendering landscape, or in mezzotint ground laying and preparatory scraping.

Here is a convenient company (to me profoundly pathetic) to which, when occasion arose, the popular engraver freely resorted. His plate, indeed, did not actually come into his own hands until most of his assistants had left their peculiar styles upon it. So it happened that the faces were etched by an expert in that peculiar manner called "stippling," while another etched the foundation lines of the clothes of the figures, another the grass and mid-distance, and another ruled the sky. This last is a difficult piece of mechanical work; lines are ruled through an etching ground with a machine that is guided by the hand, and these lines are bitten in with much careful stopping-out. I tried that work once, after having bought such a machine, but I soon found that nature had not destined me to be a ruler of skies. I may remark, by the way, that I am willing to sell that machine at a fair profit.

When this preparation of etching had been accomplished, another specialist was called in to rock a mezzotint ground over the whole plate except the sky, and partly to scrape it up. And now let us return to the engraver.

I am ready to acknowledge that he did his very best, when the plate came into his hands, to prevent the work of his assistants from being identified. Cousins indeed did all, or nearly all, his work alone; but it was a practice in which he had few followers, if any. I do not say that assistance should not be resorted to, but it must be of a kind to leave the engraver's hand free to throw his identity into the plate. But how could such an engraver as I have described change the work of so many skilled artisans? He could move the mezzotint ground, but the etched parts beneath remained immovable to the end. It can hardly surprise you that but little artistic feeling or skill was needed to turn out showy plates of this description. But this phase of engraving is of the past. May it rest in peace, and never come to life again!

That bad work always has been done, and probably will always be done in every branch of art, is unfortunately too true. Have we not execrable work done in etching? And even now, at the beginning of the popularity of the pure mezzotint revival, we see miserable work turned out by that method, with bad scraping and bad drawing combined. In the golden period of mezzotint engraving, when a hundred engravers were engaged on plates of Sir Joshua Reynolds' portraits, we must not think for a moment that all the work that was turned out was good and artistic. You have only to

look at the old mezzotint prints of prize-fighters to see what bad work was done. I do not wish to imply that the pictures of prize-fighters were painted by Sir Joshua Reynolds, but I would venture to say that many of the portraits of Reynolds were engraved by men who had engraved prize-fighters, for one can hardly imagine a hundred engravers (I quote Mr. Hamerton as to the number) to be all masters in their art, or of their circumstances. Perhaps, too, the method I am dreaming of for the future will be beyond the reach of the muddler or uneducated artist.

On the Interpretation of Pictures.

An innocent thought crosses the minds of many beginners in art; they think they can succeed in mezzotint engraving of pictures if they fail in their efforts to paint or draw. They are frightened of etching, but mezzotint they feel sure is so much easier.

Foolish beginners in art! To interpret other men's work—to render a coloured work in black and white—is a difficult art. To find the black and white that, as it were, underlies the colour, needs a fine sensitive eye. It is not necessarily the original etcher who makes the best engraver of other men's works, just as a musical composer is by no means the most likely to succeed in rendering other men's works with an orchestra. We have an illustration of this in Dr. Hans Richter, who is the greatest conductor and interpreter of other men's work in the world, but who

has openly declared his lack of original power of musical composition.

At the present day we have passed into an imitative period, in which as many mistakes are likely to occur as have already occurred in former times; only the form of the mistake changes. The present form is proneness to exaggerated care in the imitation of the surface of a picture. We aim desperately at pictorial effect, and this is natural, now that engraving plays so subordinate a part to painting. It was by no means always so. Dürer was an original engraver. Raphael, who considered engraving a real art, would not allow his pet engraver Marcantonio to work from pictures, we are told, lest he should lose the character of the line engraving, which he brought to perfection, and which was pure burin work.

Turner's engravers, though called line engravers, really etched their plates and finished with the burin, making copious use of the ruling machine for skies and other parts. It is amazing what they made of Turner's suggestive touches, —amazing, because it shows how insensible they remained to his artistic and suggestive work. Considering to what mechanical means they resorted, it is matter of wonder to see what delicate tones and minute detail they could get on a small scale. But it is not Turner you see so much in these marvels of human patience as the *engraver*. Everything is made out as clearly as in a map, and in the minutest work you can clearly see what the engraver intends as a tree, path, stream, figure, or the like; while Turner, with his suggestive

vague forms may have had something altogether different in his mind.

So much the worse for us. But he seems to have had a very free and easy time of it with his engravers, judging from the anecdotes Mr. F. Goodall has told me of his father's experience with the greatest of all landscape painters. Turner would tell him to alter in the engraving the perspective of one of his drawings or pictures, or tell him to put in a crowd of figures. One day Turner wished him to introduce a girl playing with a goat into the foreground of his engraving. This was rather too good a joke, and Mr. Goodall insisted on Turner painting it into the picture first; whereupon Turner locked himself into one of the rooms and remained there all day. I fancy this was repeated two or three days before the figure and goat were completed.

Reynolds's engravers aimed entirely at rendering the robust, artistic character of their master's work, with its strong light and shade, all excellently suited to the medium of mezzotint engraving.

But the severe imitation of *paint-manner* is a thing of our time.

In a black and white translation the manner of a painter ought indeed to be given, but not an imitation of the means by which he attains his result. Let us examine the surface of a picture, and we shall come upon some of the very first difficulties of the art of interpretation. Painters often use their pigments thickly and let the paint stand up in lumps on the canvas. This is done to give power to the colour, and to

give additional strength to parts in the picture. It is worse than foolish to imitate these lumps of paint when rendering the work into black and white. Now a photogravure renders them to perfection, and you say: "How wonderful! Why, you actually see the brush marks!" But these lumps of paint do not in any way represent the tonality of a picture; they are mere surface effects, the outcome of vigorous brush work. They strengthen the effect of colour, for dexterous handling of the brush will give artistic interest to an otherwise monotonous passage, without the aid of a change of colour. But the surface of a picture should never mislead an interpreter: he must look deeper into the character of the work.

In the English school, which is essentially a school of colour, we often find painters sacrificing tonality in their endeavour to reach brilliancy of colour in every part of the picture. Relative values, upon which tonality is built up, have been taught us by foreign painters, who in their turn have, by laying too much stress upon this quality, lost much charm of colour. Perfect balance of values and colour is rare in art; but the picture in which tonality is fully realised will certainly lend itself more satisfactorily to a rendering in black and white than one from which it is absent.

The picture of all pictures in which tonality is wholly wanting, but in which colour is kept up to its highest pitch in every inch, is Mr. Holman Hunt's "Christ in the Temple." That is an unengravable picture; and if my memory serves me rightly it was found to be so by the engraver at the very

outset, and Mr. Hunt was obliged to make a drawing, from which the engraving was eventually done.

It is clearly essential then that a picture, if it is to be engraved, shall have in it stuff that admits of reproduction in some black and white form. When such a well-selected work is adequately and artistically done into black and white it should always remind one of the entire effect of the original picture, and one should hardly miss colour. I may say with equal truth that a pianoforte arrangement of an orchestral score can be so deftly done that the effect of the instrumentation will be brought to one's mind as one hears it. This translation bears a somewhat similar relation to an orchestral score that an engraving does to a picture.

I say somewhat similar, because the parallel cannot be carried out completely. The engraver has little to guide him in the measurement of tone except his feeling; whereas the musician knows fairly accurately from theory where to place a note on the piano so as to represent the sound of a given instrument. There is a very ingenious chart sold on which is an upper line representing the entire keyboard of a piano, while underneath are given the notes as they would be written for all the different instruments in the orchestra. How easy would the interpretation of pictorial tones be made if a similar device were possible! Fortunately true art loves the elasticity and uncertainty of the human temperament far beyond all mechanical measurements or contrivances that pretend to ensure certainty in the result.

That results in the reproduction of pictures are uncertain we know well enough, and it is principally owing to the bad treatment painters have received at the hands of the "mixed style" engravers that they have hailed the mechanical process of photogravure as a blessed relief. I own that the mechanism employed by photogravure is far more likely to satisfy the artistic mind than the mechanism of human machines. Nothing can be more deplorable than the stereotyped mechanical treatment given by the various assistants of the "mixed style" engraver to the different objects in a picture. But all this does not affect the question of interpretation before us, for such work is outside it.

"Here at last is our own work," said the painters, on the advent of photogravure; "that is what we want; we don't want another man's touch." This sounds reasonable enough. But it is utterly wrong, as I hope I have already shown, in describing a few characteristics of the art of pictorial interpretation. The process of photogravure relies on the photograph; and that means *surface*. It is not a perfect mechanical process either, for it needs endless working up by hand before it is fit to be seen; the vile hand of man therefore does touch it. It represents the mere surface and nothing deeper, for it can never penetrate the surface any more than can a photograph. Its quality is like a "smoky" mezzotint ground, devoid of all character; and over all parts of the plate the quality of the ground is alike. Photogravure has been much, and at times cleverly used, as a preparatory medium for further work by mezzotint or etching, but the surface is so

uneven that it is difficult to rock or scrape a mezzotint ground upon it; and etching upon it is full of danger too. Photogravures are generally doctored up with the roulette.

If pictures are smoothly painted, reproductions of them by photogravure may do very well for respectable commercial work. It is pleasanter than ordinary photography, and in that way is useful for book-work. But it is to me a riddle how painters could ever have been enraptured by such a process for the reproduction of their best works. It is the human interpreter who can grasp the character of a painter's work, and the human interpreter alone. I should like to refer you to one of the finest mezzotints I know, to prove how a strong artist can interpret the character of another artist's work, in another material, without leaving out his own individuality. I speak of the mezzotint engraving after Frank Holl's portrait of Lord Dufferin, by my pupil Mr. D. A. Wehrschmidt. Every bit of spontaneity that can be given to a manner that is slow is to be found there; the strong individuality and taste of the engraver mark every touch, and yet the character of Frank Holl's work is given with unerring fidelity. I wish a photogravure had been produced of this picture as well, for I might have been saved all this argument by merely exhibiting the two together. They would have spoken volumes. If this mezzotint had been printed on hand-made paper, and from the copper instead of the steeled surface, I venture to say the impression would hold its place amongst the finest mezzotints of all times.

Now let us see how the different methods of engraving

answer the purpose of interpretation, and we will go back again for a moment to—

Pure Mezzotint.

This medium is far more suited to portraits than to pictures of varied textures and objects. It is too soft in character for the representation of all things, and too wanting in definition. Its very charm, in fact, is also its weakness. But the adroit engraver will touch the forms here and there with the point of his scraper, or even with a burin, and so give a definition and sharpness that would be impossible with the mere scraping.

No process is fit for the reproduction and interpretation of pictures that is not based upon tone. In mezzotint every degree of tone, and gradation of tone, can be given. It should, however, not be forced into artificial brilliancy by the printing, but should be treated something like an etching. But, as I hinted before, the publishers are not yet prepared to accept this form of printing of mezzotints, as the public are always crying out for bright or light prints. I will go further and say that mounted India proofs should be abandoned for ever, and hand-made paper alone used, with no more margin than I described as advisable for etchings.

Etching as a Medium for the Interpretation of Pictures.

Perhaps I have said enough to make publishers proclaim

me a dreamer, and enough to make engravers (of a certain type) declare I ought to be locked up; but what I am going to say under the present heading will, I fear, make my friends, the interpreting etchers, say I ought to be shot. Happen what may, I must say what I think, and what my convictions are—convictions that have slowly but surely taken shape in my mind.

It will be noticed that, so far, I have in no way disparaged the position of an interpreter of pictures. On the contrary, I hold it to be a serious mission in life,—one that in no way enters into either competition or comparison with original work, artistically speaking. But I cannot accept it at the expense of original work, and, from one cause or another, of which I will speak further on, original etching has found it hard to live and impossible to take its proper place amid much successful work in the way of picture copying by etching. I feel that the undeniable charm in so many modern etchings of pictures does not justify the prominent position taken by the latter compared to that of original work.

I wish to enforce the fact that one material is suited to the task of rendering coloured work into black and white, and another is not.

Although many English as well as French etchers have done remarkable work in copying pictures, I feel that the rage for the process as a copying medium has done the art incalculable harm. In the endeavour to give it what is distinctly foreign to its nature—tonality—skilful etchers have resorted to means that have forced etching out of its true province

into a region where it must ever remain an exotic, and one from which it will with difficulty be rescued.

In etching, the line is the thing; and in the greatest etchings tone is only suggested.

In the production of pictures, on the other hand, tone possesses an importance which it is not natural for etching to assign to it—every degree, every gradation of tone, being indeed of vital moment. If a painter wishes to etch his own picture, let him render an abstract version of it, and not attempt the imitation of all its tones and textures; then, I grant you, etching is in no danger of being ill-used. But this liberty can only be granted to the originator of the painting.

I have etched my own pictures, and have sunk spontaneity and originality in the effort of copying the picture before me. But there was little delight in the operation. I now, in my new series, resort to the plan of doing an etching of a sitter while the portrait is in progress, and before it is too far advanced. The painting is only of use to one for the purposes of the etching in so far as it lends itself to one's feeling for the latter. But to do, with a few lines on a plate, what has taken a couple of hours to do with a brush, is intensely interesting, and you put into such an etching not what you see before you in the picture, but what you aimed at when you were painting. Such work, however, cannot be called interpretation of pictures, because it really is a fresh interpretation of the sitter, or subject.

I only mention this method because I believe it to be the

only way in which a painter should etch his own pictures, be they portraits, landscapes, or figure subjects.

The interpretation of pictures is an art in itself, and should be judged and valued accordingly. It can in no way be compared to original etching, and it should in no way challenge the position that belongs by natural right to original etching. I have given my reasons for considering etching as a medium unsuited to the full interpretation of pictorial work, and you may have gathered that I consider pure mezzotint engraving the best method at present in our possession for translating into black and white all that is characteristic in painting.

It is hardly so necessary to take into account the question of the limitation of the issue of such reproductions as it is with original work, because the value of the engraving will always be secondary to the interest attaching to the subject of the picture engraved. People are attracted by the subject of an engraving first, and not by the manner of working in the engraving. With original etching the reverse is often the case.

But, for all that, I would suggest a radical change in the present manner of issuing impressions. Artist's proofs, for instance, if the trade is anxious to retain the misnomer, should, under all circumstances, be printed from the copper; and that may mean only twenty-five or fifty impressions. Let the charge for them be anything the publisher can get for them—for they are valuable. When the plate shows the least sign of wear, and before it has suffered any real damage, let

it be steel-surfaced, and the printing of ordinary impressions go on *ad libitum.* But there must be a separate stamp on the two states, for these would be literally *states* of the plate. I think it would be in no way unfair if the engraver were to touch the darks before the second state, with the steeled-surface, was entered upon. Although I think there is not so much difference perceptible in the printing from the steel-surface mezzotint plate (as compared to the printing from the copper) as we find in etching, I still feel that a peculiar charm can be given in the printing when it is done from the copper surface—a charm that is denied to the printer's hand when that surface has the steel upon it.

And let us for ever abandon the "India" paper, mounted upon rotten soft backing paper of huge dimensions, to which we are accustomed. Let us try to get an engraving within reach of our arms when reasonably outstretched, and let us remember that the paper upon which a work of art is printed should give it as much *quality* (artistic, not commercial) as a well-chosen instrument will give to the performance of a fine musician.

Engravings of interesting pictures will reach a far greater number of people than original etching can ever hope to do, because, as I said before, it is the subject of a work of art by which people are attracted. Here, then, are the means for an important mission to the people,—the interpretation of pictures to them. Let this mission be carried out in the spirit of the great art which will be at once its master and its servant, and it will be found that commerce can stand side by

side—even hand in hand—with art, with no loss of dignity to either, and with gain to both.

Let me now, in conclusion, bring to your notice a delightful artistic method of working on a copper plate, which is neither engraving nor etching, but which is capable of producing prints,—just as an ordinary engraving does. It is called monotype, because only one impression can be printed of such work. It is done in this way:

You take a polished copper plate, and cover it with printer's ink—cover it completely with the dabber, as if there were something to print. Now, with brushes, hard and soft, and with rags, or your finger, or all combined, you wipe out the forms you require from the black ground. You will soon find that you can get the most delicate tones; the most artistic manipulation with your brushes is possible, and brilliant high light can be got out with a bit of wood pointed at the end.

Here is a toy for a painter,—for it is painting pure and simple, the only difference being that the lights are taken away and the blacks are left. When your painting on the plate is done you put it through the press like an ordinary engraving; nearly all the ink will come off the plate, and you will find on the paper a splendid proof of your work. Great care must be taken not to have the pressure too great or it will crush the work, because the ink is only on the surface of the plate in different degrees of thickness,—no line, no incision being made in the copper. If on the other hand the

A "SPONGOTYPE."

Enough can be seen in this imperfect illustration to gauge the possibilities of the process.

It is printed from the untouched (steel-surfaced) electrotype.

pressure is not enough, the ink will not come off sufficiently to show all your work, and it will have a woolly appearance. The paper also must be in the right condition of moisture.

I know no method of drawing in pencil or colour that can approach the beauty of these printed blacks. The artistic mystery that can be given, the finesse, the depth of tone and the variety of texture, make this manner an almost intoxicating delight to the painter,—and it is only possible in the hands of a painter. But he must be rapid, for the ink dries in a few hours, so as to be beyond control. I exhibited such a monotype in the Royal Academy this year (it represented an old shepherd with clasped hands), and I was greatly amused to see how it puzzled the etchers, engravers, and draughtsmen who visited that much-neglected room in which black and white works are hung. Not one that I spoke to had the remotest idea how it was done.

I learned the process (if it can be so called) from that clever painter, Mr. W. M. Chase, of New York, and he, I believe, learned it from the Munich artists. It has been practised by many early engravers, but only in modern times by painters. William Blake is said to have worked in this way, and I have in my possession a little amateur work by the inventor of the steam-hammer, done in a similar way.

Now it seemed a pity that such rapid artistic work should be limited to one print only, and I started with my assistant, Mr. H. T. Cox, to invent a method for multiplying impressions from the work done on the plate, and he completed the invention.

I have patented the process, merely in order to prevent anyone else from securing a monopoly of its use, but give it freely for all to use and improve upon.

Mix in equal parts graphite with German printing black and oil, and cover the copper plate with this by means of a lithographic roller. Then do your wiping away of the forms as before described.

Take equal parts of bath-stone scraped to powder, bronze powder, and asphaltum (also in powder): soak the two first in turpentine, and when quite dry mix them with the asphaltum, and place the whole in a little bag of fine muslin.

When your drawing is done, dust it over with this mixture through the bag, until the plate is covered. Then brush it off very carefully and gently with a soft camel-hair brush, and you will see your work again, but filled in different degrees with the powder.

Let this dry for three days, and then send it to an ordinary electrotyper, and tell him to deposit copper upon that surface, but with the strict injunction not to touch the face of the work; for the plate is perfectly ready for him to commence his depositing, the plate having been made into a proper matrix.

When you receive the deposited copper, which will be of the thickness of an ordinary plate for etching or engraving, you will see the reverse of what you did. You lowered the lights by wiping away the ink, and left the ink standing up for the blacks. Here you will see the lights high and the tones lower, in a sort of granulated surface.

This process, which is eminently suited for original work, opens up endless possibilities to the painter, who, in using it, is hampered with none of the technical difficulties of an engraving process. He can get his result without having in any way departed from the *métier* with which he is naturally familiar. And it is conceivable that by working on the electrotyped plate with dry-point and scraper results may be arrived at which will surpass in artistic quality anything that can be obtained by methods of reproduction hitherto practised.

I have now honestly laid open my experience and knowledge of etching in all its forms, and of engraving. If I have given offence in my plain speaking to artist, etcher, engraver, publisher, or public, I shall indeed be sorry, for there is only one person in the world whose feelings I did not wish to consider, and that was—myself.

THE END

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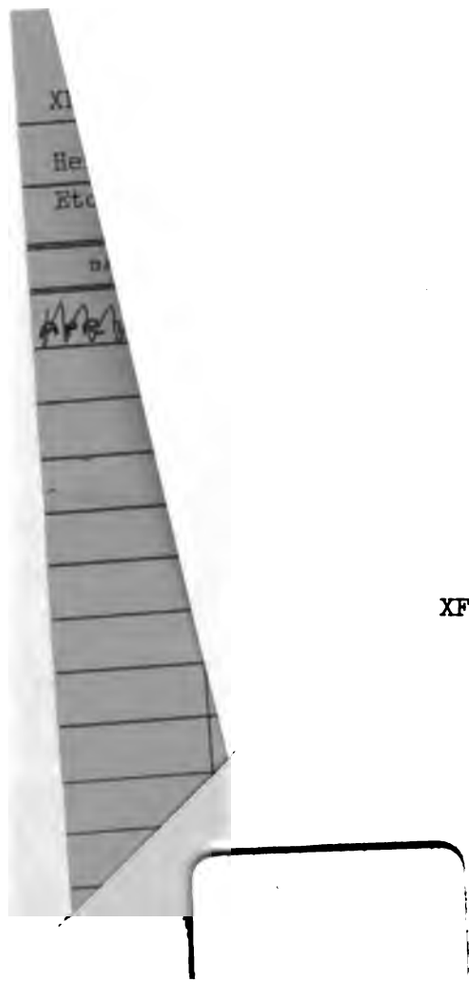

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