

LOCKWOOD'S ART-WORK MANUALS

ILLUMINATING  
AND  
MISSAL PAINTING

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Antique Pattern Library



Cheshamford School of Arts

Prize awarded to

Charles Herbert Peacocke

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# Preface.

**T**HERE is no book on Illuminating, so far as the writer knows, that enters fully into such things as the putting-on of opaque colour, gumming up, &c., in such a way as to leave the student with distinct ideas as to what is “professional” and what is not. This treatise is, therefore, designed by the author to meet a need of which many amateurs and beginners have complained, and which he himself encountered when he began to illuminate.

The subject is immense enough to constitute a life-study. But, unfortunately, professional illuminators, having no time for artistic research, are apt to become enslaved to the perfection of their own “execution,” and isolated in the taste of their own time ; while, on the other hand, the amateur, although

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**PREFACE.**

he may have some knowledge of the traditional forms of art, has never had to meet the necessity of producing work that would sell.

It is hoped that from this short and practical treatise many a beginner will learn something of the tradition of the art, and something of the robustness and the self-control, the playfulness and the love of nature of the old illuminators, to whom our debt is so great.

P. M. W.



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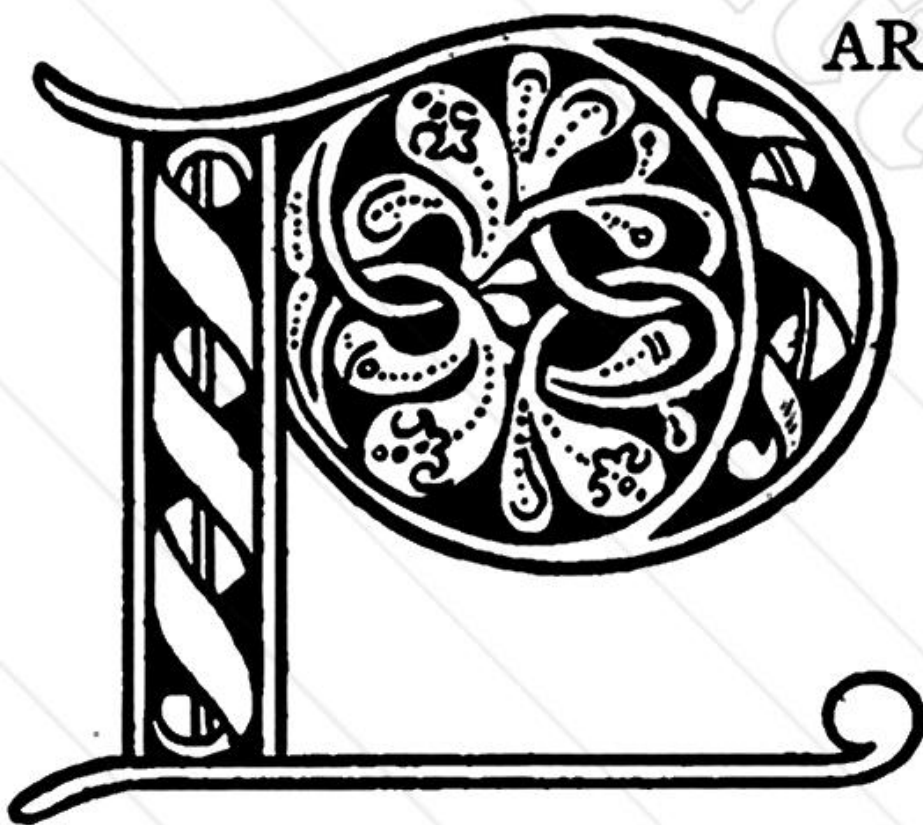
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# Illuminating and Missal Painting.

## CHAPTER I.

### The Materials Used in Illumination.

#### PARCHMENT.



ARCHMENT or "vellum" is the material generally used to take the decoration in high-class illumination. Vellum (calf's skin) is not a usual trade commodity, but Messrs H. Band & Co., Kelmscott House, Somerset Road, Brentford, sell the following: Artists' vellum for illuminated ad-

resses; Kelmscott vellum, not so heavy as artists' (specially prepared for printing the Kelmscott Chaucer), and Roman vellum, a lighter substitute, both for writing and illuminating, as well as for printing. Roman vellum is a fine quality of sheep or lamb skin, an imitation of the vellum used in the Vatican. "Prepared vellums" are stiff, and are used for framed addresses, &c. They are sold by the artists' colourmen at about 2s. the square foot. A fine quality vellum of this nature can be obtained of Messrs Partridge & Cooper, Fleet Street. The smallest piece kept is one 16 by 13 in., price 3s. 6d. Plain parchments can be bought at a law stationer's. They are of "good quality" and "best

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quality." The following are prices: good quality, 10 by 16 in., 8d.; 12 by 18 in., 10d.; 18 by 22 in., 1s. 6d.; 26 by 29 in., 2s. 9d. Best quality, 10 by 16 in., 10d.; 12 by 18 in., 1s. 1d.; 18 by 22 in., 2s. 1d.; 26 by 29 in., 3s. 6d. A superior quality of parchment (unsquared lambs' skins) can be had from Messrs Stallard & Co., Havant, Hants.

**PAPERS AND BOARDS.**

In practice, the author has found that Whatman's O. W. Drawing Board (hot-pressed) has perhaps the best obtainable surface for illumination on paper. Whatman's Water-colour Sketching Boards (hot-pressed) should also be tried. In the case of these latter, much disturbance of the surface, before colouring, results in the presence of loose hairs. The same firm supplies, also, Water-colour Sketching Board "special surface," No. 1, smooth; No. 2, extra smooth. Bristol boards have an excellent surface, but their lack of permeability is apt to be disconcerting in an attempt to obtain quite level washes of colour. The old-fashioned "Bristol board" is no longer procurable. Some heraldic artists use hot-pressed Whatman paper stretched upon a frame; but, setting aside the inconvenience of transferring some elaborate drawing correctly to a surface not well placed, it is doubtful if hot-pressed paper, even when it has not been damped, has ever the smoothness of hot-pressed board. Artists' colourmen supply paper ready-mounted on frames, or will mount it to order.

**COLOURS.**

**Pan Colours.**

Pan colours are easy to rub off, but the danger of fouling one colour with a brush that has been used for another is obvious. They are, also, great collectors of fluff (the illuminator's bane), and the practice of keeping them covered when working should be adhered to as much as



## COLOURS.

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possible. A box of pan colours carelessly left open for a night is likely to give trouble.

Here a warning may be given to those using gum-water and ox-gall. Unless care is taken, the colour in a pan may come to hold too much of either of these; and at best, the unheedful artist, taking from the bottom of a pan, may be working with what is practically a different colour to that which he took from the top. He may, for instance, add gum or gall to colour already holding enough for his purpose. Some pans of colour, when sold, appear to have too much gall in them. This is seen when some is rubbed off, and the brush then dipped in water by the ripple of colour that flies out.

Taking your colour from the pan with a knife is, if extravagant, an obvious saving of trouble in some ways.

### Cake Colours.

Colours in cake, except for some few drawbacks, are perhaps the most pleasing to use in illumination. A necessary disadvantage connected with them is the time taken in rubbing them down. They also shed small particles into the receiving water, especially those of makers who indulge in elaborate patterns in relief and fillet borders. Cakes lightly stamped with the maker's name in intaglio would save trouble. As to these chips, the illuminator should possess a small glass pestle with which to grind them down; one with a round and a flat end can be obtained from a chemist. This grinding down should be done *thoroughly*, or chalky-looking patches will be seen in the coats of colour. Another disadvantage of cakes is the presence of sparkling particles in some, probably through excess of gummy substance. These particles can never be got rid of by any grinding or dissolving. It is best to throw such colours away at once.

In rubbing the colour off a cake, the danger of grease leaving the hand can be obviated by holding the cake in a



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piece of paper, but care should be taken lest the cake become wet and the paper dry on.

The author always uses his white (Chinese) from cakes, except when mixing his own, and has never yet found any of the above-mentioned particles in either Messrs Rowney's or those of Messrs Winsor & Newton.

**Tube Colours.**

Water-colours in tube have the great disadvantage of drying in the tube, which must then be cut open, and the colour taken away with a knife. It is best to buy half-tubes. Tube Chinese white is convenient when a little white is wanted for touching up in a hurry. Some artists squeeze their tubes out into a china receptacle, for tube colours work better when they have once been dry.

**Powder Colours.**

Fine ground powder colours can be obtained of the artists' colourmen. They are applied to the material by being mixed with water, gum-water, and a little ox-gall. The use of them, however, is rather of the nature of a hobby. Powder colour white is useful when a strong white is wanted for linings.

**Colour in Bottles, &c.**

The colour most often used in bottle is Chinese white. Though, owing to the fact that it can be used thick, it is very convenient for the finishings just referred to, the author confesses that he has been able to do little with it in obtaining level coats of colour. He has seen it suggested that if it is diluted with distilled water and left to evaporate and thicken, and then diluted again, it is improved for working, and that white that has been out of the bottle for several days is best. There would, of course, be the chances of dust getting into it.

Vermilion in bottle can be made use of as an ink.



## INKS—BRUSHES.

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### INKS.

Under this head will come the mixtures of colours used for writing.

For black writing, the author uses a little of the best Indian ink with much lamp black (never ivory black). Gum-water is added to this to give brilliancy and viscosity, and if this mixture is too viscid, as is generally the case, ox-gall will make it flow. The gum should be well mixed in, or some letters will be "mat" and some brilliant.

For red lettering vermilion is the best, either pure or with a very little white. Unless gum-water is added this lettering is liable to smudge, but too much gum-water seems to obscure the red.

Blue "ink" is best made from Prussian blue (or ultramarine), Chinese white, and gum-water. The unmixed colours are, of course, too dark.

### BRUSHES.

Of the brushes used by illuminators little need be said. Most illumination can be executed with a No. 1, No. 2, and No. 3 red sable (round). The *extreme* tips of these brushes should be removed by a razor or sharp knife. They then have a rectilinear end, and are fit to be used for washes, especially Nos. 2 and 3. No. 1, which can hardly be described as a wash brush, should, however, have any awkward ends at the tip removed. The red sables of some makers are a little too thick for the illuminator's purpose, and will not give the colour out freely. When this is the case it is best to cut off some outside hairs, round, against the ferrule. For fine free-hand lines a crow and a miniature can be used, though the latter is not perhaps essential. For outlining—so important a feature of illumination—a duck is commended by its pliancy; and every illuminator should perfect himself in the use of a rigger, with which, held slantwise, elaborate



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curves and isolated curving lines can be drawn. The smaller a rigger is, the more it can be laid on its side, and more truly dragged along.

**PENS.**

For illuminators who use steel pens, those of Gillott are perhaps the best. Writing done with a steel pen, however, bears very little resemblance to the finely executed caligraphy of the manuscripts with its regularity and softness. Steel pens, moreover, are made in definite sizes; quills can be cut to any size. The making of a quill pen for mediæval writing requires a little practice, and the quill used must be a good one. Quills should be stiff, if not stout. They can either be bought (but bought quills are sometimes very weak) or obtained from a poulterer at Christmastide or Michaelmas. They should come from the end, or towards the end of a goose's *right* wing, and the goose should be a heavy one. As suggested by allusions in literature, the quills of a grey goose are the best. 'Turkeys' quills go sodden sooner than goose quills, but are very strong, and are, therefore, to be recommended. To prepare a quill for cutting, first take off any loose skin. Take some sand or ash from under a grate. Moisten the left hand well, and take a pinch of either; then, with the right hand, rub the quill between the thumb and two first fingers of the left till the wet sand or ash has nicely scoured it. Soak the quill for a short while in water. Next take a very sharp knife without a feather edge; turn the quill underside up, and, marking well the way the quill runs, cut with the knife and halve it lengthwise for some distance. Don't turn it over, but put your knife in at your left and twist the quill over against it in using the knife towards making a point. Then trim up the other side till you have a rough point. To split your quill, lay it on its back on some hard wood or bone, cut the rough point off square, and make the incision (not too long, and take care it is



*PENS—METALS.*

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straight) with a thin-bladed knife. Now sharpen the quill to a very fine point, and note to cut it away till the split is much shorter than that of a quill for modern writing. The shortest split that will let the ink flow is the desideratum in a firm-pointed pen. And now as to cutting off the tip. The tip of a mediæval pen was shaped like a plane iron, and the forms of the mediæval letters were derived from this fact. A plane iron dipped in ink and moved diagonally, side first, would make a line as thin as its edge; drawn diagonally, face first, it would make a line as broad as its face. If tipped over, it could draw a fine-lined circle with its right-hand point. To get this tip to your quill, take it, right side up, between the first and second fingers of the left hand; lay the end upon your thumb-nail and cut the point off slantwise, with the back of your knife depressed. If the two fingers of your left hand pull the quill somewhat, this will assist the cutting. A point that comes off with a click generally leaves a good pen. If the end of your quill is not broad enough, more can be cut away; and in very tough quills, or in making broad-ended pens, it may be necessary to cut away gradually. The point must not be cut off quite squarely, but along a line running away slightly towards the left so that, in use, the square end of the pen comes true upon the paper. It requires some trouble to get a pen exactly right.

**METALS.**

The metal used in illumination is gold, in leaf or powder. Gold leaf is, of course, necessary for burnished gold on gesso; but, as far as the writer knows, the art of laying on burnished gold is not commonly understood. Gold leaf is sold in books by the artists' colourmen. The price of one of these books is 1s. 6d. The gold, however, most commonly used is gold "paint," or rather powder, ready for use. This should be of the best quality that can be afforded, and for the best work, as pure as possible.



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Silver and the substitutes for it are probably never used in high-class illumination.

In buying gold "paint," it should be remembered that a retail artists' colourman seldom keeps the best qualities in stock.

**Various.**

It is perhaps unnecessary in writing of materials to refer to such things as the drawing board and T-square, set-square, &c., or to mathematical instruments. The burnisher, however, is important. This should be of the "claw" shape and as small as can be got. A very large burnisher is awkward to use. Besides claw-shaped burnishers, pencil-shaped burnishers are made. Gum-water can be bought in bottles, or the illuminator can dissolve gum arabic in hot water, making it of a consistency to suit himself. In glazing up with gum (a practice on which modern heraldic painting relies for a great deal of its effect), it is important that the gum used should be of a right consistency. Too weak, it will lift the colour or soak in; too thick, it will not dry out flat.

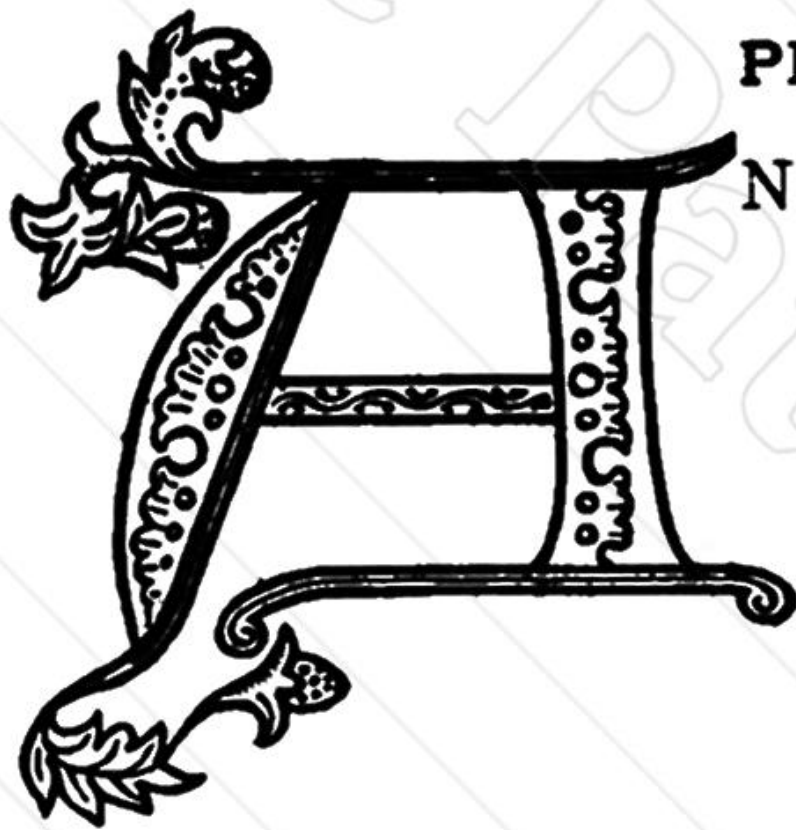
Ox-gall can be obtained liquid, in which state it is useful for taking, or perhaps attempting to take, stains out of parchment, though the economical illuminator may procure his gall in a pot.

Of tracing papers the clearest are, of course, the best.

The black lead used by illuminators is ordinary stove black lead.

## CHAPTER II.

### Setting to Work.



#### PREFACE.

AN author writing on illumination, and under the title of "Setting to Work," must crave the forgiveness of some of his readers if, from time to time, he explains things that are already well known to them. It will perhaps be easiest for the present writer to assume that these pages will be read by some who, though they have learnt to draw effectively, take up illumination as beginners. That being so, he can proceed to give what is, virtually, the history of an illuminator's experiences.

First of all, what is one going to do, and why is one going to do it, and what are one's capacities? We will presume that a draughtsman of average capacity wishes to illuminate artistically and sell his work.

Perhaps the surest step towards becoming professional is to see what professionals have done and are doing. Here, those who live in London or can come to it fairly often, have a great advantage. A look at the illumination, heraldic or other, displayed by such firms as Moring's or Culleton's will give the observer some idea of what is London work. The names of other herald painters and illuminators can be found in the London Directory. For the work of the past,



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the manuscripts in the British Museum—those in the glass cases—can be inspected by all. This series commences with the old Hiberno-Saxon work, with innumerable inter-lacements, and comes down to late times. Perhaps the examples of the fifteenth and sixteenth century styles are those that are nearest to modern illumination. No objection is made by the British Museum officials to persons using paper and pencil to make notes and sketches.

Talking of the sources of inspiration, the author had better state, in some kind of order, the various ways in which a novice can educate himself. *Ex nihilo nihil fit*; and it is presumed that no one will try to become an illuminator, relying too much on amateur knowledge of form and technique. An inspection of the best work referred to above will show how much must be *found out*, if that is to be imitated.

First, as to form: It is of little use to copy bad examples or to attempt to combine incongruous bits of knowledge into something pleasing. Illumination, to be worth anything, must rest on some tradition. Some of the forms in modern herald painting are derived from fifteenth century foliage.

For form in illumination, we have books and manuscripts. To take books as more accessible. Many books have been published with excellent facsimiles of pages of the old MSS. Unfortunately, most of these books are more than a little expensive, and some are out of print. Of course, such can be consulted in the library of the British Museum, the manner of gaining access to which the author will presently describe. Still, consulting a book in a library is not so satisfactory as possessing it oneself. The following are good books of facsimiles, at very moderate price:—

“Lessons in the Art of Illuminating,” W. J. Loftie: Blackie & Son (Vere Foster’s Drawing Books). The book is in four parts, price 1s. each. This book has explanatory text and some notes on technique. The latter, however, do not go very far.



*BIBLIOGRAPHY.*

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Vere Foster's Water-Colour Books : Illuminating. Four parts, 9d. each ; or cloth, 4s. (Blackie & Son.)

"Ornementation des Manuscrits au Moyen-Age." Librairie Renouard. H. Laurens, Editeur, Paris. These books can be obtained of Batsford, of Holborn. Their price is 2s. 6d. each. The volume of thirteenth century examples is exceedingly good. Unfortunately, the other volumes hardly approach it in quality. The examples in the fifteenth century volume seem not quite typical of the period.

There are many books of facsimiles in the public libraries of London, such as the Guildhall Library and that of South Kensington. The place of resort of those wishing to consult *any* book is, of course, the library of the British Museum. Admission to this is obtained by ticket. It is necessary for those applying for a "Reader's Ticket" to refer to some person of standing who can be found in some official list—clergy list, army list, &c.—to a member of any guild, corporation, &c. To those newly admitted to the reading-room of the British Museum, the attendants readily supply all information asked for. There is one catalogue book that I might mention, however—the "Subject Index." This the new-comer may not have heard of, but under the heads of Illumination, Heraldry, Missals, &c., he may find many books he wants. For those who have found their way to the reading-room of the British Museum, and for those who have access to any other large library, I supply the names of the following books dealing with our subject of form :—

Westwood, J. O.—"Palæographia Sacra Pictoria."

Westwood, J. O.—"Facsimiles of Miniatures of Saxon MSS." This book, though interesting archæologically, would be of little use to the modern illuminator. The period is too remote.

Humphreys, H. Noel—"The Art of Illuminating and Missal Painting." A book well worth looking at.



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Humphreys, H. Noel—"The Illuminated Books of the Middle Ages." This is a splendid book of *facsimiles*, with typical examples of all styles. It is worthy of special attention.

Shaw, Henry—"The Art of Illuminating." Contains many useful hints as to technical processes.

Shaw, Henry—"Alphabets." A useful book of typical alphabets.

Strange, E. F. — "Alphabets." A good book with alphabets (not in colour). In this book there are very accurate directions as to how to cut a quill pen. At the end is a good list of authorities on the author's subject.

Tymns—"The Art of Illuminating."

Jones, Owen—"The Grammar of Ornament." A folio, with fine examples of various styles of ornament from the Egyptian. Two fine pages of thirteenth century work.

Delamotte, F. G.—"Mediæval Alphabets and Initials" (Crosby Lockwood & Son), net 5s. A comprehensive book of coloured alphabets, ninth to fifteenth centuries.

Delamotte, F. G.—"The Book of Ornamental Alphabets, Ancient and Mediæval" (Crosby Lockwood & Son), 2s. 6d. This book has the mediæval numerals at the end.

### HERALDIC.

Fox-Davies—"The Art of Heraldry." A very complete and lucid book on the subject, with fine examples of ancient work, and many reproductions of modern heraldic painting, bookplates, &c.

Stodart, R. R.—"Scottish Arms." Some very good *facsimiles* of old work.

Gatfield, G.—"Guide to Heraldic Books and MSS." The searcher will find this book an invaluable guide.

*Note.* — Tracing is allowed in the British Museum, though tracing from valuable books is seldom granted. The reader must apply at the centre desk for a "tracing ticket."



OPAQUE AND DYE COLOURS.

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In the case of manuscripts, the students' room is free to any reader. Gatfield's Guide will, of course, be useful in helping the student to determine what MSS. to consult.

Anybody who has consulted the above-mentioned works, and made sketches and tracings, will have some basis of knowledge which will help him to invention. He should not be afraid of what is known as "cribbing." The ancient illuminators steadily kept to "the fashion," and if they altered forms they altered them no more than a good dress-maker dares to produce variants of a prevalent style of dress. What they never did was to *mix* styles. Hiberno-Saxon interlacements were never revived and put in sixteenth century capitals. The styles grew one from the other gradually, as a variant was accepted or dropped. And having said this much of form, the writer passes on to technique.

Those who have looked in shop windows and seen the best of the old manuscripts, will be struck by the extreme smoothness and enamel-like surfaces of good work, so different from the appearance of an every-day water-colour "sketch." Though one of the objects of these notes is to explain, as far as the author can, how these colours are got, he might mention here, generally, that much of the beauty of illumination is derived from the use of what are known as opaque colours—colours naturally opaque (as ultramarine), or dye colours (the *colores infectivi* of the old illuminators) mixed with white. Crimson lake is, for example, a dye colour. It cannot be put on smoothly *and thickly* without the use of white. A little experience is worth much eloquence, and the beginner would do well, before referring to manuals, to look carefully at, and, if possible, hold in his hand, some good specimen of modern work (preferably on paper). It is almost worth while to have a coat-of-arms executed by a good herald painter and see how the colours lie, what colours were used, &c. Manuscripts on old vellum



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are not much test. The old vellum was very easy to paint on ; it assisted the illuminator in every way.

There are hardly any works on the technique of illumination—a fact which led, in a great measure, to the publication of these notes, and what manuals exist show, in very many places, a lack of practical knowledge, or, perhaps, one ought to say, professional knowledge. It would seem that most professionals have either lacked skill in writing or preferred to guard their secrets. The author can only quote the following books as likely to be any use in matters of pure workmanship :—

Delamotte, F. G.—“A Primer of the Art of Illumination” (Crosby Lockwood & Son), 6s. Fine examples, in colour, of Hiberno-Saxon work.

J. W. Bradley and T. G. Goodwin—“A Manual of Illumination” (Winsor & Newton). There is much useful information in this book. It, however, does not treat of the materials and processes of illumination in a way to make it indispensable to a professional. There is no chapter dealing with modern heraldic illumination. The chapter on gilding consists of extracts apt to mislead those who aspire to the use of burnished gold.

Middleton, J. H.—“Illuminated Manuscripts in Classical and Mediæval Times.” A learned book by a great authority. This book is more than a manual ; but it is the work of a craftsman as well as a scholar. The descriptions and instructions are all the result of experience, *e.g.*, the author not only writes of papyrus, but was able to make his own.

There was, besides, a manual on illumination published by Messrs Rowney. It is now out of print.

### DESIGNING.

Having acquired some knowledge to work on, the illuminator can attempt, say, a testimonial or a manuscript page with ornamentation. As already stated, it is far best



to fix on a definite style in which to execute the work, and to keep to the forms of this style. The exigencies of the designing will lead to a great many variations, without the designer hatching originalities. Of course, he is greatly helped if he has time and leisure to note and sketch, and become thoroughly conversant with forms of the style he has chosen. It is as well, too, if possible, to adopt the script of the style. This helps afterwards in spacing, especially if small capitals are used.

The first requisites for designing are, of course, a drawing-board, a T-square, and a set-square. The drawing-board should be a good one (clamped), though if the draughtsman possesses a bench and can true up a board with a trying plane, the cheap poplar ones can be kept in order. T-squares should be ebony-edged. The cheaper pear ones soon get worn concave. This can be tested with a tight piece of cotton held beside the edge. The set-square can be a vulcanite 45 degrees, and it is advisable to use the same set-square throughout a job. Some set-squares are not mathematically true. Some cartridge paper, pencils (HB, F, and H), some indiarubber, and blacklead are what are next wanted.

Architects get their paper tight by first putting in a drawing-pin at the top left-hand corner. Drawing-pins should be put in very slightly inclined, so that the inside arc bites the paper. If they are put straight in, the shaft makes a hole that is apt to get enlarged and allow the paper to move. In any case, the novice should keep his drawing-pins down tight. Don't, however, put your first pin in tight at once. Put it in so that the paper can pivot on it. Then take your T-square, and get the edge of your paper parallel to the edge of your board. Hold it thus, and press in the right-hand bottom pin. Press the left-hand top one home. All that is needed then is, while slightly pulling the paper, to insert the right-hand top and left-hand bottom pins.



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And, now, don't forget to take a very sharp, hard pencil, and, holding it at a definite slant, to draw a line across your paper somewhere, with the T-square. It is advisable to draw a set-square line as well. These are the putting-down lines, to guide you when you take your paper up and put it down again. The lines you make later, in the hurry of designing, may not all be parallel, or may be too short to trust to.

And here a caution may be given. Even the best drawing-board, T-square, and set-square may not all be absolutely correct. Therefore, do not draw your upright lines at one time with the T-square applied to the bottom of the board, at another with the set-square.

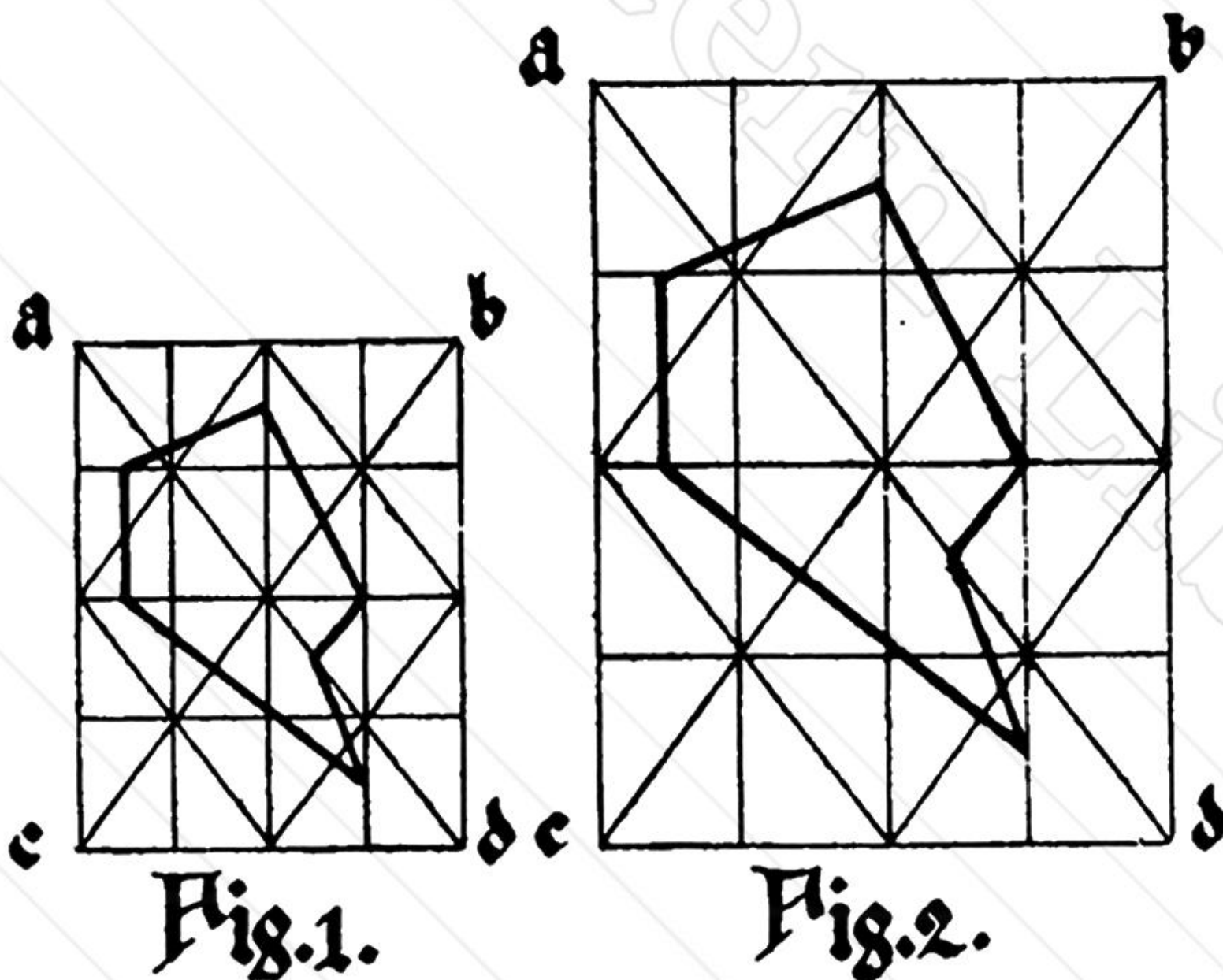
Your piece of cartridge paper down, you can take an HB pencil and proceed to puzzle out your design. Then, if things shape themselves well, the firmer F can be used. If you feel you are getting on, but, in doing so, have cut your paper or obscured your design with smears and lines, you can transfer to another piece. To do this, take the paper up, let some blacklead scrapings fall upon the back of it, and rolling up a ball of paper, rub the blacklead over the surface so that it is everywhere at the back of your design. Shake off the superfluous blacklead. Put down a piece of paper on your board, and on that your worked-on piece, using the putting-down lines to get this latter placed correctly. If then you trace over your design with some hard pencil, you will have an adumbration of it on a clean sheet of paper. This you pencil in. To remove the blacklead, flick it off with a handkerchief or cloth. If any then adheres, take it off with bread. Indiarubber can be used instead of bread on sketches; but beware of using india-rubber on paper or board you mean to seriously paint on. It is apt to rub the blacklead in and make a smear you cannot remove.

Thus you can create your design, from your first nebulous pencillings up to your last corrected copy, which had



better be on hot-pressed Whatman. (On this copy you can, afterwards, work out your scheme of colour.) Suppose you have pleased yourself, and yet made your design too small. The mode of enlarging drawings is such a commonplace that it is, perhaps, superfluous to explain it. To those, however, who don't know how to enlarge and diminish, the following figures will make matters clear at once:—

The diagonal CB in Fig. 2 must make the same angle with the base CD as it does in Fig. 1. To get this diagonal, you use an ivory rule (a carpenter's wooden rule will do) with one joint. By means of the smaller rectangles, and observing how your lines come in them, you can make an approximate enlargement of any drawing. Diminution is, of course, got by the reverse process.



### PAPER OR VELLUM?

The draft design finished, the next question is, to what shall it be transferred? The best illumination is done on "vellum." The author has already mentioned this substance in speaking of the materials used in illumination,

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and must now amplify what he has previously said. Roughly speaking, there are now two sorts of "vellum"—Prepared Vellum and ordinary parchment.

Parchment if uncreased can be put down as paper ; but it is not unwise, if you are going to damp it much in colouring, to use more drawing-pins. Creased parchment must be damped, and can be put down on the board with an edging of strong glue. Give it till the next day to dry. When the parchment is down, it must be pounced. There are, roughly speaking, three sorts of pounce—(1) powdered pumice-stone, (2) lawyers' pounce, which can be represented by the homely receipt of a teaspoonful of powdered resin to a tea-cupful of whiting, well mixed together, though, of course, the law stationers have their own mixtures ; the third pounce is powdered chalk or powdered whiting (levigated chalk), which is lawyers' pounce with the resin left out. Different skins require a different amount of pouncing, and the test of a skin being properly pounced is—can you write on it well? This can be tried on a margin. It is as well not to pounce skins too violently. Powdered whiting in a silk receptacle represents the first degree of pouncing. Powdered whiting rubbed over the surface of the skin with a roll of flannel or lint, and then rubbed off with a clean cloth is perhaps the simplest and best method of pouncing. Resin and whiting mixed as described is a good pounce, but resin cannot be used when gold leaf is to be employed. Powdered pumice is a drastic pounce, as can be gathered from the fact that the ancients used this substance as an eraser for palimpsests. It is as well to know the character of the skin used. Paint running on a skin may be caused, not by the pouncing, but may be from the nature of the parchment.

When the skin is pounced and wiped, the drawing must be transferred to it. This is done in the way described as for ordinary transferring, that is to say, by rubbing the back of the drawing with blacklead and then tracing ; but the greatest care should be taken not to incise the surface,



especially of not-"prepared" skins. The drawing is now lifted and the blacklead copy lightly marked in, the same care being taken against incising. A sharp HB pencil can be used. Then flick off the blacklead lightly, and remove what remains with bread. Those working in a private house should be cautioned against bread from which a servant has been cutting bread and butter. Take care your bread is clean, and not too hard. Indiarubber will remove refractory bits of blacklead, but should be used with great care, and always rubbed on paper before use. If your drawing is too faint to suit you, let it be outlined *lightly* with the best Indian ink. If too heavily used, the Indian ink may lift and spoil some colour.

In cases where you have occasion to add to a design—say, from some addition to the original—such can be got on tracing-paper, with a clearly visible outline, the tracing-paper then being blackleaded and the addition transferred to the parchment.

Prepared vellums are parchment or "vellum" treated, it may be, with some composition of plaster and chalk. Prepared vellums are stiff and cannot be rolled. They do not require to be damped and stretched, nor to be pounced. They are whiter than unprepared skins, and are sometimes a little rough, that is to say, they have not a glazed surface. The method of transferring to prepared vellum is the same as that of transferring to ordinary parchment. Incision of the vellum should be guarded against; but, while proper care should be taken, it is not difficult to erase on prepared vellum. Stains, pencil marks, and even colour can be scraped away, and, by the aid of the burnisher, little or no traces of them are left. Prepared vellums are difficult to write on; the liquid used is inclined to run, and the fine lines of the writing are not clear.

In transferring your drawing to paper or board, the procedure mentioned above is essentially followed. One is not often called upon to illuminate on paper by itself. Still, a



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finished painting might be wanted on such. Paper stretched on a frame with tacks has been referred to previously. Creased paper can be put down in the manner described as for parchment, or if it is not necessary that it should leave the drawing-board absolutely flat, can be fastened down with drawing-pins, say, three to a side. In putting down with glue, the less hot-pressed paper is soaked the better. Of course, hot-pressed paper and board are easier to draw on than parchment; but even when using these, incising the surface should be guarded against. There is the same danger of blacklead smearing. After it has been flicked off, the remainder should be removed with bread, not rubber. The drawing once traced in blacklead, the pencilling-in can be done, first with an HB pencil; that can, then, be partly removed with bread, and improvements made with an H or, better, an F. In using these harder pencils on board, the points should be got as domical as possible, for if hard pencils are very sharp, they run astray on the surface. Though, provided the pencil has not cut the surface, a good deal of correction can be done on a paper surface, it is advisable not to disturb such too much, or the smoothness of the colour will be interfered with.

## CHAPTER III.

### Colouring.



THE manner of putting on colour in illumination is, of course, a matter requiring special attention. Some colours are very intractable; some mix badly with others; and a list of tints set out in a manual may sometimes call up visions to the eye that could be realised in thin

washes, but which, when one came to the level coats of herald painting, would be found unattainable. The mixture, cobalt and gamboge, for example, would be very hard to work with as an opaque colour mixed with white.

Before speaking of the actual painting of the work that is to be the finished *magnum opus*, it would be well, perhaps, to take up the process of illumination from where the author left off. He spoke of "the last corrected copy" on which the scheme of colour could be worked out. The mention of a scheme of colour opens up, it seems, the whole question of periods. It is sufficient here to say that people, tired of the greens of Nature, have a tendency, in art, to crave for red and blue. The psychological reasons for artistic appreciation have been explained in several books on the subject. Whatever colour scheme is fixed on



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can at first be *thought* out, then put on in wash on the last corrected copy. As this copy will not be painted on heavily with coats of opaque colour, it is rather hard to revise on it. Therefore put your washes in as faint as possible, so that, if a certain piece of colour does not look well, you won't have great trouble in washing it off. This can be done with water containing ox-gall, a camel-hair brush, and a piece of clean blotting-paper. It takes some scrubbing to remove a wash, but Whatman paper, if it has not to be used for a finished painting, will stand a good deal. The blotting-paper is, of course, employed to mop up the washed-out colour. Wash the colour out as well as you can, because if you leave, say, too much blue, a substituted red will give you a purple. You can, as well, get colour off by using indiarubber when the paper is slightly damp, but this method should be employed with care. Possibly you may wish to trace again from the draft, and it is not desirable to strain it too much or make holes in it. Recollect, when you may want to refer to it, that it has blacklead on the back, and keep it away from a knife-stone that has grease on it. In fact, it is a good general rule to be careful what you do with drafts that you may bring on to your table again.

You have now settled everything ready for the illumination of the drawing you have ready on paper, board, or vellum. It is as well for us to begin with the practice of painting on board, for this is the hardest. Vellum, from its intrinsic value, may give one a greater sense of responsibility, but, as said before, it takes colour well. In all cases it is advisable to wash in your colours first of all. This shows you where the opaque colours must go, and prevents you leaving out a little piece, a thing it is easy to do when copying from a draft on to untinted surfaces, and you might, by chance, have thrown that colour away, and be forced "to match," a thing always to be avoided. Remember, when washing in, that very dark washes have a



**PAINTING ON BOARD.**

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tendency to work up from underneath and affect the tone of superimposed colour. Wash in, therefore, with light tones. It is not necessary to get these washes exactly level in appearance.

It was the old practice, and this had better be adhered to, to do the writing before illumination. In cases where burnished gold is used, this must be done before the writing; but of this hereafter. Our next paragraph, therefore, is logically Writing. However, as the matter of calligraphy is one that requires very great attention, and as the *heraldic* illuminator, at any rate, is not troubled by this question, it is best perhaps to continue upon the subject of colouring, and leave that of writing to be dealt with later in a separate chapter. Let us mention, however, to those who want to do writing at the present, the danger of ever leaving writing damp. When work with the writing finished is taken up in the morning by the painter, let him dry it a little before a fire, or otherwise take great care. Damp writing means a smudge, and nothing is harder to "doctor" than a spoilt black letter.

**PAINTING ON BOARD.**

Painting on board, as stated before, is difficult, and therefore in dealing with it one can cover generally the whole question of colouring. Perhaps one's first attempt at illumination has been on Bristol board. The colours, unmixed with white, were laid on with a camel-hair brush, and an attempt was made to get them perfectly smooth. The finished work may have pleased the operator, but he must have known there were better things to be bought.

Now, as far as the basis of colouring in illumination goes, all colours, as mentioned above, are mixed with white, and the illuminator paints with these "opaque colours." A colour mixed with white will, if laid on well, have a surface very different from that of a plain colour, but even a mixed colour laid on well may not have an appearance as



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good as the one desired. The experimenter will soon find how rapidly he improves. The permeability of the surface painted on, the thickness of the colour, and the manner of laying it on, comprising the questions of—in how many coats? and whether one shall be left to dry completely before another is superimposed, &c., all make a difference; and though practices, of course, differ, the author hopes that the experience gained from some of his own failures may be of use to others.

The lack of permeability of Whatman board has been spoken of. In water-colour sketching, absorption is obtained by damping the paper with water; with board this plan, so the present writer has found, does not seem successful. On the contrary, the damped board, incapable, it would seem, of receiving further moisture, leaves the wash of colour lying on the surface, the one thing to be avoided; for a wash of opaque colour—especially one not thick enough—left floating, dries out unevenly or gets a glazed surface, and, moreover, the white and colour, with some colours especially, are only too prone to disintegrate, the colour forming spots. Damping the board with water containing ox-gall has been recommended; but then, in the case of the colour hanging, the ox-gall only assists the disintegration mentioned. Dark spots will appear later, months afterwards, on a coat of colour, which seem due to the use of ox-gall. In fact, ox-gall, though used by architects for colouring on paper, which may have been much about, is in this case merely used as a time-saving convenience. It is useful, too, as an assistant in painting on greasy parchment, but, in the author's experience, had better be dispensed with as much as possible. This has been before stated, but the fact seems worthy of repetition here. The result of the present writer's experience is that, for painting on board, a wash of pure colour makes the best base, especially when the coats of opaque colour put on afterwards are not very thick. This is to say that, if you wash in your



scheme of colour on the finished drawing and let these washes get perfectly dry, they make a good base for the colours to follow, in most cases.

It might perhaps be suggested that an author could state generally his method of painting on board, and let the matter rest. In a *short* treatise all opaque colouring *might* be treated alike. Let us, however, take a single example, and speak of the use of vermilion (opaque), that is to say, pink. A vermilion bought of Messrs A. & B. is not the same as a vermilion bought from Messrs C. & D., not even when they are called vermilion, and not one vermilion and the other scarlet vermilion. Even when these two vermilions are mixed with the same Chinese white they do not behave in the same way. Vermilion of an orange hue will mix well with Chinese white, and though in the saucer the two colours will move apart a little, by constant stirring they can be kept together, and a properly level coat is the result. A heavy blood-red vermilion, on the other hand, sinks, and even with the thickest mixture, the white of the pink, laid on a surface, will appear in patches on the face of the coat. The only way to get such a mixture on is by a kind of house-painter's method; that is to say, you mix your colour thickly, and work it in with the brush as you go along, never letting it hang very wet. And this brings us to the fact that there are various ways of getting colour on, and that the manner of painting with one colour may not succeed with another. Chancing on an intractable vermilion may mean to the illuminator the spoiling and lifting of a coat and the loss of two days' work. Moreover, a blood-red vermilion mixed with Chinese white gives a cherry pink, which is not at all the *gules* of heraldry. Messrs Winsor & Newton's vermilion of the present date (1908) is the correct colour, and works well. This refers to *cakes*. The author has not used the pan or tube colour, so cannot speak of them.

Reference has just been made to the different ways of



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getting colour on. These are practically three—(1) floating on a series of milky washes ; (2) working the colour in as you go along, leaving meanwhile behind you enough floating colour for the whole to dry down smoothly. This might be described differently as a method in which you damp the paper in front of you while putting on a coat. The third method of painting is using your colour as thick as possible, your mixture somewhat resembling the oil colour ready for painting a door with. Of course, you can have your colour too thick. If this has been the case, you will discover the fact by your colour drying out with little crater-like holes in it where, owing to its consistency, it could not flow together. These three methods of putting on colour having been stated, they can be left for future reference, and it can be added that sometimes one and sometimes another can be employed, and a feature of one and of another can be combined as the exigencies of colouring occur. But it must be remembered that *these are not three hard and fast rules*. After he has spoken of mixing, the author will state the exact way in which he puts on certain colours.

**MIXING THE COLOURS.**

There is not much to be said about mixing colours. Taking cake colours first, you commence by rubbing down what you think is sufficient white in a saucer, with some clean water. Some people say that the water should be distilled, but this, of course, would be a tax in practice. When your white is about as thick as milk you can rub down some of the colour that is to go with it in another saucer, and add from this to the white with a brush, and stir it. Let us say we are making opaque Prussian blue. All colours, and this especially, differ greatly in tone (and hue as well\*) in respect of their appearance as a liquid and

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\* *Tone* is generally accepted as explaining the lightness or darkness of a definite tint ; that is to say, a lighter tone of A is A with more white added. *Hue* implies difference of colour. For example, if A is



## MIXING COLOUR.

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their appearance as a dried-out coat. They dry out light. Therefore, unless your illumination is to be somewhat faint in tone, it is probable that, so far from your not having to add the whole of the blue to the white, you will have to make the mixture bluer. It is as well to make up your mind that you will have, some time or other, to rub down more plain colour in an opaque blue. So keep one end of the cake for this, while the other remains clean. You should experiment with opaque colours. Here a pitfall may be pointed out. Don't mix and then test by putting some of the mixture on the substance to be painted on, imagining that the drying-out will give you a final tone only a little lower than that of this *wet* piece of experimental colour. This piece of wet laid-on colour may be much darker than the colour in the saucer. The dried-out colour will be fainter than the colour in the saucer. When you have rubbed in more blue your opaque colour should be fairly thick. *Beware of watery colours!* It is a good *dictum* that you are doing better in imitating the house-painter than in imitating the landscape artist. When your opaque colour suits you get the glass pestle spoken of in "The Materials used in Illumination," and grind the whole together with the flat end. You can't mix colour too well. If there are any chips in the mixture, these must disappear entirely. The whole colour must be liquid and well mixed, and to sum things up once more, it must be *much darker* than the colour that you wish it to dry out to—the colour, that is to say, that will be the colour you ultimately get. Tube, pan, and bottle colours are mixed much in the same way. It is best to have a knife and take from the pan with it. When colour from pan, bottle, or tube is lying in lumps, don't waste time and damage a brush by rubbing the colour down with it. Use the pestle, even if a little colour is

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a purple, the addition of red makes it a redder purple, *i.e.*, a purple of a different hue,



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wasted. The author has given up putting gum-water in his opaque colours, and, except when the pounce has worn off parchment, doesn't use gall. Gum-water, it is true, *does* brighten a colour, but it no doubt makes the colour "tacky." When gall is used to correct this it seems to make the gum conglomerate. However, if gum-water is used, it must be very little of it, just a drop, and this must be mixed in. Ox-gall from the pot is added to colour by taking a little bit at the end of a knife and resting it in the colour. Let about three ripples fly out. Mix the gall up well with the colour. White from the bottle has been spoken of. Its viscosity is its great drawback. If it is used, grind it well, and give it time to dissolve. But don't attempt to paint the argent of heraldry with bottle white. *N.B.*—Argent, except on parchment, is generally the material left alone and shaded.

**THE OPERATION OF PAINTING.**

We have now finished with general rules and with preparations, and come to the actual painting, colour by colour. It is best, perhaps, to take a set of colours, the heraldic colours, and a set of "artists' colours" to represent these, not necessarily the most effective, *e.g.*, ultramarine is the best heraldic blue, but many people may find it too expensive.

To begin with *gules* (red), and let vermilion stand for it. Opaque vermilion is, of course, pink. Messrs Winsor & Newton's colours in cake can be used. Vermilion dries out rather light, so make your mixture more red than pink, especially if you are using heraldic *gules*. There is, one may say, an exact point at which to stop adding red. Recollect that, if you get your mixture too red, you will not be able to shade it effectively with darker colour. One way of putting on vermilion is this: Mix your colour not very thick. (*N.B.*—This does *not* imply that it should be watery.) Float this colour over the bed of dry plain colour. The way



to do this is to mix the colour in your saucer well with a brush, and put some of it in a smaller saucer, one that has contained gold, for instance (Messrs Winsor & Newton's sevenpenny gold is in such saucers). Put the big saucer away, with a piece of paper over it. Now you are ready to paint. Floating the colour on means laying the drawing *flat* and leading the colour, so to speak, with the tip of, say, a No. 3 sable, cut as described before, till the whole of the surface to be painted is covered. You do not want to paint heavily and leave, as it were, a pool of colour to dry out. You want to keep your colour just wet enough for it to advance in a regular tide. Take care to paint as well up to edges as you can, consistent with the coat going on properly; and recollect, while painting, to sometimes stir the colour in the saucer. You have now a first thin coat of opaque colour on. For the very reason that it is thin you can paint on it before it is perfectly dry. Were it thick there would be a danger of your lifting a mass of colour in putting on another coat. In half an hour, an hour, or later, next day if you wish—for the coat, if you like, may be dry—you can float on your second coat. Lead it over as described, and try not to touch the under-coat with your brush. You have now two coats on, and the colour is fairly thick. You had better let it dry perfectly, for twelve hours at least. Next day, with a rather thick coat, you ought to be able to finish the colour; but if you then think it too transparent, you can put on a fourth the day after. Don't be discouraged if, before your colour has quite dried out, its appearance is not superlative. If you look at one of your old paintings, you will see how the colour has improved (and lightened too—remember that) since the day when you pronounced it finished. All the time you were painting, you ought to have had a clean sheet of paper under your hand. The writer uses wrapping paper for this, and throws away a sheet when it has got greasy, or when any colour has got on it. This sheet of paper is a constant source of danger, so always



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look at it before you lay it down to paint. It may have touched a saucer or a spot of colour on the table. Keep all your materials, except your water and the saucer you are using, out of your way, on the left hand. Water and saucer should be on the same side, for if your colour gets too thick, the "loaded" brush that dilutes it shouldn't cross your painting. Cover up any part of your drawing that you are not going to touch for some time with a sheet of paper fixed with two drawing-pins. For instance, in heraldic painting, the crest may have none of the colours of the coat, and you can start on that first. Don't *drag* the paper you've used for your hand across dry colour ; it polishes it. Beware of your moustache on frosty or foggy days.

If you are sure you have spoilt a coat of colour, then you can wash it off. It hurts the board somewhat to do so. Washing off is done, as described, with water and blotting-paper. You can add a little ox-gall to the water. Some of the fibres of the blotting-paper are almost certain to stick. Never try and lift these off with a knife when the board is damp. Let the whole dry, and next day use india-rubber. But before you lift bad colour, see if you can't float a thick coat of colour over, or even two or three, the bad colour being quite dry. It is wonderful how piled-up colour will dry out, and even when colour seems to be standing out from the surface painted on it will dry down quite flat and level.

**"THE BEST WAY OF PUTTING ON COLOUR."**

Vermilion put on as described above may have a somewhat enamel-like surface and lack the rich mat *bloom* that is so desirable. The best way of putting on this, or perhaps any colour, is to put it on as thick as you can ; but recollect that, if you have mixed your colour too thick, it will dry out with the little crater-shaped holes spoken of, and the coat will be spoilt ; so that, unless you are sure of yourself, you had better build your colour up or experiment with the thick



colour. If the colour is mixed properly, you can put on a first coating of it, working it in as though painting a door. Then, while this is damp or dry—dry for preference—float on a very thick coat of the thick colour. This seems somewhat a house-painting method, but it is expeditious, and the colour dries out rich and level. The first coat need not look very smooth when finished. One thing should be recollected about this method—that it's better for herald painting than for delicate picture work. Where tones (of letters or flowers) have to be graduated together, it does not do to use so thick colour. In a picture helmet in herald painting, as well, some artists use almost the ordinary "water colour" washes to get the relief and roundness; but for the "fields" of the coat-of-arms itself, this method (using thick colour) is very good.

*Azure* (blue) may be represented by Prussian blue. There is not much to say about the method of using this colour that has not been said of the method of using vermilion. Prussian blue, however, does not go on very well when used at all washy, so mix your colour rather thickly. It dries out very light. Therefore, mix it much darker than you want it. And, talking of blue, one can refer to composite colours. It is best not to use composite colours unless you are forced to. Sometimes one colour reacts on another. Prussian blue, for instance, must not be mixed with vermilion, cadmium or Mars yellow, if you wish the resultant colour to be permanent. Again, in a mixture of two colours, these may not always amalgamate and go on smoothly. Here is an example: Cobalt blue is very cerulean in hue; French ultramarine inclines to purple. Cobalt is rather heavy; French ultramarine is not so heavy. You can make a very good blue of these two, which is neither too faint nor too purple. But you will find, in using this as an opaque colour, that the thicker you've mixed the colour, the better you get it on. This is well worth remembering in using composite colours. You may have painted well



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with a colour once and then fail with it entirely, through having it too watery.

*Vert* (green) can be represented by *terra verde* (an earth). All earths are easy to deal with, so use them when you can. But take another green, emerald green. A good flat coat of emerald green as an opaque colour is a practical impossibility. The same applies to green oxide of chromium. This shows the limitations of the artist in respect of his palette. You must pick out the tractable colours. Take a composite green, Prussian blue and gamboge. Here what was said above of composite colours applies. Also gamboge is a gum-resin, and does not dry out at the same rate as the Prussian blue (cyanide of iron) with which it has been mixed. A coat, therefore, of this composite green has a mottled appearance for some time after it has been put on, which only goes away with complete dryness. Here is an example of a case where you may think you have failed, while the colour, after all, may turn out well.

*Sable* (black) is represented by lamp black. This colour in cake, so the writer has experienced, seems to get somewhat mottled if allowed to lie long wet as an opaque colour. The more white the mixture contains the less evenly it dries. He therefore uses it fairly dark, and not as a definite grey. He puts it on as thin as possible consistent with its being not transparent, either in two or three thin coats, or by working it into the board first and then floating colour on that. Ivory black is hardly a black, but a brown. It makes a good opaque colour, however.

*Tenne* (orange). Orange vermilion and cadmium can stand for this. Mixtures of red and yellow are not successful. They turn out muddy in most cases. Cadmium yellow tempering a good vermilion is an example of the contrary, however. Orange effects can be got by using a yellow, say cadmium or even gamboge, and adding the red as a glaze of pure colour. This will be dealt with later.

*Purpure* (purple). Permanent violet makes a good



opaque colour. There are various mixtures to represent purple. But purple is a colour not much used in illumination, and the question of the permanency of composite purples is a special subject. Crimson lake, which is not an heraldic colour, might be dealt with here. This colour used opaquely should be a definite pink. The writer floats a thin coat of fairly thickly-mixed colour on, and, without waiting for that to dry completely, a thick coat of the same. The more crimson lake that is added to the opaque colour the harder it is to colour with. Attempt a level coat of crimson lake by itself to prove this. Crimson lake is said to be very fugitive, especially under sunlight. Messrs Winsor & Newton's crimson lake, as an opaque colour, will stand a great deal of sunlight, much more than opaque Prussian blue.

The heraldic metals *or* (gold or yellow) and *argent* (silver or white) do not concern us here. Gold will be spoken of later in a special chapter, and *argent*, as white, in a chapter on heraldic painting.

So much for coats of colour generally. The author's object has been to explain the way of putting on opaque colour and nothing more. Later, in talking of the picture and using a palette, as it were, he can be more precise. For the present, he has tried to make it clear that, in painting on board, it is better to have a dry wash for a base; that opaque colours are mixed thickly and put on thickly; that they dry out lighter than they look in the saucer; and that it is not necessary to call in the aid of gum-water and ox-gall. Finally, that there is no peculiar *secret* known to illuminators—no *medium* unheard of by the amateur, no peculiar heraldic colours (though Messrs Rowney & Co. once sold such). It might almost be said of *any secret* of illumination, as was said of "the secret of Freemasonry," that the secrecy has been well kept because there was no secret to keep.



## CHAPTER IV.

### Painting the Picture.



DOING the plain work of getting on your colour well has been spoken of in the last chapter, that is to say, of obtaining a surface generally, even in tint throughout. An object can be painted in flat colour and an object can be painted in relief, and in modern heraldic paint-

ing the two processes are employed (for the most part), the fields being flat, the charges, helmets, mantles, &c., in relief. In tracing the history of illumination, on the other hand, one sees a general tendency from painting quite flat to painting resembling that of modern herald painters; so that if we follow the styles somewhat, we can pick out for description various processes, from, say, the way to obtain a clear, black regular outline, to the way to suggest the rotundity of a sphere, all, we will presume, to be done on board.

The simplest form of illumination is to paint an object in one colour flat. But even here, as might have been expected, something may go wrong. Suppose the object



to be painted is very small, a letter, say. Here, though using the greatest care, the artist can hardly hope to cover the surface to be painted so exactly that the edges are not weak. In painting in one coat this is the case especially, and as this coat would be a thick one, an attempt to remedy the defect may result in a noticeable ridge along the edges. It is, therefore, a good rule to remedy thin edges along thick colour by using a thinnish wash. In building up your colour in several coats, one coat may help to remedy the defects in another. Besides painting in one colour simply, the old illuminators, in addition, outlined the simple colour. As far as the writer knows, this was always done in black. The way of making an *atramentum* or ink of black paint has been described in "The Materials used in Illumination." This ink outlining is very hard. If ink is too fluid it runs; if too thick, it clogs, leaving a jagged outline. It is, moreover, absolutely necessary that the black, Indian ink, and gum-water be very well mixed, and that the Indian ink (this seems to "assist" the fluid, but can be left out), in cases where the stick throws off lumps, is well ground in with the pestle. If these lumps are allowed to remain, they continually bother you, and will choke up the mouth of a ruling-pen and cause a serious blot in an otherwise perfectly regular line. Besides this, in outlining, the evaporation of the fluid leaves you never working with the same material. This evaporation occurs in the brush as well, and baulks you. Consequently, you must sometimes wash your brushes and always "keep an eye" on your ink. Brushes are used for going round curves, ruling pens for doing straight lines. Much can be said of both. To take brushes first. A very stiff brush, especially one with a "spring" in it, will never outline well. It will give a jerk at the most inconvenient moments, and will not turn a corner. Any brush inclined to drop colour is also a nuisance, or one with an irregular tip, especially a very old one. The ideal brush is a thin one, of gentle pliancy if short, and



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greater pliancy if longer. This question of pliancy can be enlarged on. For short, plain lines, a "duck" brush is the best. Even a good sable can be used (a No. 1 or 2). There are some lines, however, that seem to demand the rigger, a most difficult brush to manage. In black outlining great steadiness of hand is required. It is, therefore, wise to begin work with short lines. When one is "set" and unconscious action comes, the harder curves will not be found difficult. In some cases where the line is a very difficult one, the cautious artist will use a thin brush, making a line finer than the one he wishes for ultimately. On this he can work, so to speak, following his first thin leading line with a brush holding sufficient colour to produce the thickness he desires. Of course, the breadth of a line depends partly on the pressure put on your brush. The keeping of one breadth throughout a line is consequently a matter of absolute tact. One thing should be remembered in outlining, that the colour to be outlined must be perfectly dry. The use of the ruling-pen on colour or along its edges is also very difficult. First of all, the pen should be a good one, that is to say, a pen of stiff steel, for some cheap pens close when pressed against the T-square or the set-square, and a line of irregular thickness is the result. The pen, of course, must be absolutely clean at starting. The rule is to wipe your pens after work, but this is seldom done. In practice the pen is cleaned as best may be before the new work. One caution may be given here: the pen once set for lines of a definite thickness may clog. To unloose the screw and clean is a great temptation, but this, of course, means readjusting the pen. One should wash the pen out, and pass a slip of paper between the points. In drawing lines with the ruling-pen on colour, that is to say, when you have painted over your pencil outline, and your black line must pass over the field, the line made by the ruling-pen should be drawn lightly and once for all. If it is "doctored" you are apt to plough up the colour. So much for a plain piece of colour



*GENERAL REMARKS ON PAINTING.*

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outlined in black. The next step is to have a white line inside the black one. White lining with our oxide of zinc (Chinese white) may give some trouble. The white is very apt to sink into the under-colour, especially into blues and crimson lake. To do away with this, the home-mixed Chinese white the writer recommended can be employed. Bottle white (Rowney's, for instance), before it dissolves completely, will also lie on a surface well; but most other whites annoy the artist much. A little gum-water had better be added to white from the cake, pan, or tube where white comes on colour.

**SOME GENERAL REMARKS ON PAINTING.**

The following are some general rules that may be useful to one who wishes to undertake either a page of illuminated manuscript or a testimonial. First as to arrangement. You should have studied arrangement from MSS., &c., and noted by what means the whole effect of the page is got. For example, in fifteenth century work, the principal object in the page is often a large capital. The foliage flowing from this capital sometimes makes a frame, as it were, in which the writing, in two columns, is contained. But note that though it does so, it is not necessary that the growth of the frame from the capital be carried out logically throughout. According to modern convention it should be so, but the old illuminators never feared a slight infringement of sequence if they thereby got effect. There is in all their work a certain childishness that is charming. Again, the custom of what is known as cribbing can be well indulged in in illumination; but though the illuminator of a page may have cribbed largely, he would, perhaps, be puzzled to discover the exact objects he adapted. The exigencies of composition change everything. In painting a page, paint, if possible, things at the top first; but try and leave large plain surfaces till late, as they are apt to polish. Dark-toned colours polish more readily than light-toned ones. Where



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colours are graduated from one tone to another, as in the case of foliage in relief, heavy painting at the first is not advisable. You cannot wash on the top of thick colour, especially if that colour contains gum. Gum lifts very easily. That is why the writer avoids it. Gall does not seem to make two washes containing much gum flow together, but, on the contrary, to lift the under-colour. It is advisable, when painting with any colour, and some blues especially, to make mental notes of the way the colour dries out. So to speak, one paints in the dark. A colour of one day is not the colour of the next, nor the colour of the day after, nor are all his colours in the same state of dryness as the illuminator continues painting. Here, again, arrangement and forethought will help the artist. He must note the behaviour of his colours both as to their change of tone and the time they take respectively in changing. The later coats of colour will naturally not dry out so quickly as the first washes which were put on when the material painted on was dry. Graduation of colour, as stated, is best got by a series of thin washes. It is not possible to get it by painting in one wash and using darker colour as required, as landscape artists do when painting skies, &c. The features of illumination are generally too small for this method. Some compound colours can be got by putting one colour over another. Orange, for instance, can be represented by opaque cadmium yellow allowed to get perfectly dry. On that, opaque crimson lake or madder carmine is floated. A red shading to a yellow, where an orange effect is desired, can be put on fairly thickly. When the opaque crimson is on, the pure colour can be used to give further relief. It is rather hard to put pure colour on the top of opaque colour, and this can never be done in one wash. Let your first wash of pure colour get perfectly dry, then deepen the colour on that. When all your body colour is on, and those colours by which you get relief, you take up the veining of leaves, &c. It requires some skill to vein leaves well,



and much that was stated as to black outlining applies here too. Recollect to keep an even distance between the veins on a leaf. When painting a vein on a leaf, you should always have an eye for the vein next it. Nothing looks worse than a leaf the veins of which are, as it were, independent of each other. Putting on gold "paint" should be left till after colouring. Even the very best gold powder is inclined to come off a little before it is absolutely dry. Some illuminators put a little gum-water to their gold, but it is doubtful if this ends by their getting as good a surface as would have resulted had they used their gold as supplied by the maker. The use of gold paint is difficult, as one coat cannot be placed on another with satisfactory results, nor can defective bits be well mended. The gold should be put on once and for all. The writer, first of all, damps slightly the surface on which his gold will come. He then puts his gold on in one coat and at his leisure. Care should be taken that not too many places where gold is to lie are damped at the same time, for this may mean that some of them will dry. It is very important to keep all fluent. A warning can be given here to those using gold from the shell or the saucer. Such gold is, of course, in lump, and disintegrates somewhat slowly. Therefore see that, before you lay it on a surface, it has broken up properly. You cannot gild smoothly if you are putting on gold in little blocks. After the gold is on, the writer does his black outlining. The black outlining should be done before the white lining of a painting, and the white line, coming inside, will often correct faults in the black. Outlining has been spoken of. It is best to keep a painting by one for a little, to see how much the white sinks in. Defective bits of white can then be renewed. A curious convention of mediæval work can here be mentioned: white lining was never used on green. A pale yellow was always employed, and certainly it gives a good effect. Another practice of the old illuminators was that of crossing their



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hair lines diagonally. It is impossible to exactly reproduce this in *facsimile*. The student is, therefore, referred to original MSS., in which he will note the various subtleties of the hair-lining and the careful way in which the appearance of light is given to the edges of leaves and other objects. In fact, the artist's note-book could be crowded with examples of this art. In some fifteenth century work, much of the beauty of the foliage is owing to the clever way in which the twists and recesses of the leaves are emphasised by the thin white lining. In modern illumination white line is not employed to this extent, and flatness is the result; or if white is put on, it is put on in patches, as though the artist had in mind the painting of an ordinary picture. The thinness or thickness of a line naturally affects its value, and attention can be drawn to objects by the lining with which they are surrounded. It is a common mistake to make in illumination, this of unwittingly drawing attention to some minor object by making the line round it too thick. If you have made too thick a black line, you can either paint some of it out with colour, or can, if you put a white line next to it, let that encroach on it.

Be careful as to painted lettering on a coloured ground, if such lettering is in lines. The line of *painted* lettering is rather hard to keep, and the T-square has occasionally to be taken up. As the pencil lines between which such lettering runs have to ultimately disappear from your painting, record of how they ran must be kept on your material to the left hand. From this you can correct your writing, if you find that it has got uneven. To paint lettering on colour with no guide to correct by is very likely to result in one line of lettering being taller than another. Naturally, care must be taken that the painting doesn't shift at all, and, therefore, in putting board down, it is wise to have two of your drawing-pins driven *through* the board. If board is merely held down by four pins, none of which go through it, it is almost certain to move a little if the drawing-board is carried about



### **GUMMING-UP.**

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much, and a line may be made that upsets the parallelism of the painting as a whole. So much for the actual painting of the page. The next operation is to do the gumming-up. But before that is taken in hand the illumination should, if possible, be put away for a while for the colours to dry out. Once gum is on, colour cannot be corrected, for setting aside the fact that even when gum is perfectly dry it has a tendency to lift, gum invariably cracks a little (generally in lines parallel to each other), and if the artist should find any portion of his painting too weak in tone he had better leave it alone, if he has gummed up, than correct on the top of the gum. Some portion of the superimposed colour is almost certain to be bad.

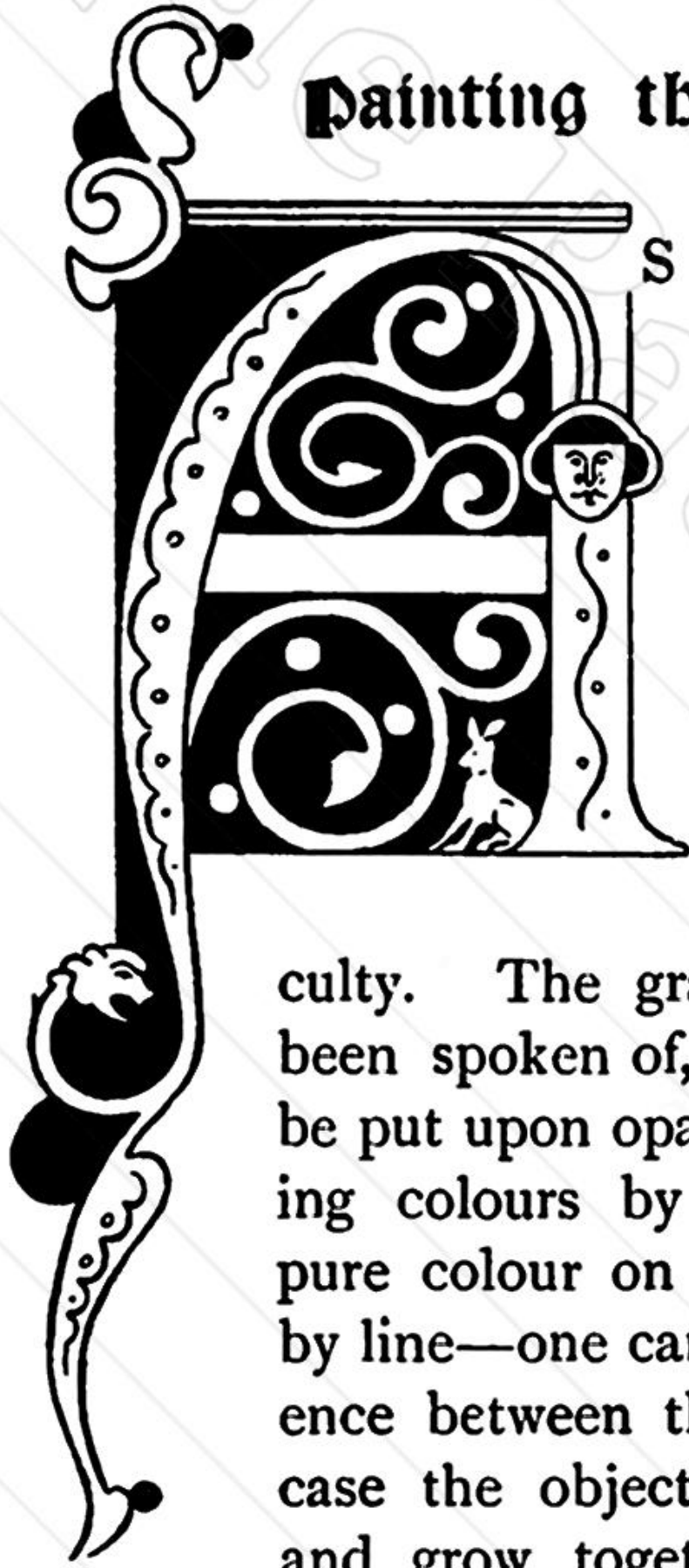
### **GUMMING-UP.**

The use of gum as a glaze or varnish has been spoken of, and it was especially noted that modern heraldic painters rely much on this glaze. The gum sinks into the colour slightly and deepens its tone. It also softens the colour beneath it, and, what is very useful to the artist, it does away with any crudity in the gradation of tints that may have been obvious before the gum was added. It is wonderful how gumming-up will improve even bad work. Gum-water is sold by the artists' colourmen, or you can make your own in the manner described before. In putting on gum one thing must be recollected, that it is not the thickness of the gum that produces a good glaze, but the thinness. Gum-water put on too heavily obscures colours, or may lift them if the gum is at all weak, or if you have allowed much ox-gall to get in the water you are using, a thing always to be guarded against. The proper way to put on gum is to smear it on, so to speak, with a soft brush. This seems impossible to do without lifting the colour, but such is not the case. The drier and thinner you use your gum, the less chance there is of lifting colour.



## CHAPTER V.

### Painting the Picture—No. 2.



THE description of how to paint, given in the last chapter, by no means exhausts the subject, the writer now had better add further statements connected with colouring generally, hoping that, from time to time, he may state something that will give a useful hint or do away with a diffi-

culty. The graduation of opaque colours has been spoken of, and how transparent colours can be put upon opaque ones. But besides graduating colours by washes and putting washes of pure colour on opaque colour, one can do both by line—one can, as it were, shade. The difference between the two processes is this: in one case the object is to make all the tints flow and grow together; in the other, shading of definite outline is put on the top of colour. In even the flattest thirteenth century work a little shading was done, especially in the case of animals, heads, &c. One thing to remember about shading is that it must be regular and sensible; so to speak, it should be a broader form of lining (only, of course, it is done in colour). Figs. 1 and 2 are examples of bad shading and good shading.



Notice that in Fig. 1 there is no system in the lines, and no logical suggestion of the way the curves of the bird's body come. Nor is the feathering of the wing of the bird correct. In one case, two pen-feathers spring from one upper feather; in another case, only one. Nor are the feathers of the down and neck properly "imbricated." In Fig. 2, on the other hand, the two ends of a lower feather-curve or -triangle spring from two tips of the feathers just above it. This illogical shading will affect the appearance of any painting,



especially an heraldic one with charges; but it is equally objectionable in flower and leaf work. Therefore, if you shade, you can first use thin, dry colour and a pliant brush. Afterwards, you can correct and deepen that with wash; but don't wash untidily first of all and forget that there must be a system. In some heraldic paintings, where the feathers of the neck of a large bird are very difficult, and must grow from small to big gradually and keep a proper direction, these feathers can be made good on the draft,



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then taken off—and, if needs be, amended in the process—on tracing paper. This tracing paper can then be laid on the flat opaque colour, and with a hardish pencil guiding lines can be incised through it on the paint. These will not show, as the colour that follows will obliterate the incisions. Take care to have enough of the outline traced carefully to guide you in putting down your tracing paper. The forms of mediæval shading should be studied from MSS. Recollect that your shading need not be of necessity in pure colour; it can be of darker opaque colour than “the field.” But what constitutes it shading, in contradistinction to graduation, is that it has a definite outline and shows as separate work. On the opaque shading you can shade again with pure colour. Where the ancient illuminators painted an absolute picture—a scene from country life in a calendar, or the siege of a town in a chronicle, &c., or, in the case of the late illuminators, when they did flower work—then they shaded-up as much as any modern painter. Much of the weakness of modern illumination comes from the fear of getting proper relief. Shade heavily and gum-up on that if you wish your figures to stand out.

**HEIGHTENING AND LOWERING.**

Akin to the operation of shading is that of lowering colour, the opposite of which is, of course, heightening. Most colours are heightened, *i.e.*, lightened with white; but vermilion, which is a somewhat obscure colour, can be treated with an orange or a yellow if a clearer effect is required. This was a habit of the old illuminators, who heightened their vermilion with orpiment. They lowered, *i.e.*, darkened, it with a brown or with dragon’s blood. Nowadays any of the cadmiums, yellow or orange, can be used to heighten vermilion, and the shade or lowering can be got in various ways. A rich effect can be got by making the heightened colour opaque, and then shading first in the pure colour, after that in a scarlet, say, alizarin (though



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scarlet alizarin is not a very clear colour), crimson lake, or, better, rose madder. Deeper shade can be then got with a brown. As this darkening of colour is not done in very large washes, as a rule, colours that would be intractable in large fields of opaque colour can be used ; but great care should be taken in getting them on. As said before, when you are shading with pure colour, each coat must be allowed to dry before another is put on. The first coat holds the opaque colour down, and on that you must add coat after coat of the pure colour, letting each get dry, till the colour is no longer transparent, but a homogeneous whole. But the reader will say that mere shading already spoken of is being again described, and not lowering of colour. That is so. You can, however, lower as you shade. You can add a little of the opaque colour to the pure vermilion, and then shade with that ; you can add a little of this mixture to the alizarin, crimson lake, or rose madder, and shade with that ; you can add a little of this last to your brown, and shade again. By this method of lowering your colour as you proceed, you can give it all the softness of gradation. But what the painter should know is how best to lower his various colours. He can then, with each descending series, either get plain gradation (in opaque colours), do plain shading, or graduate and shade at the same time. The following are some suggestions :—

**LOWERING THE TONE OF VARIOUS OPAQUE COLOURS.****Blues.**

*Ultramarine, French ultramarine, Prussian blue, and smalt.*—Add the pure colour, and black to that. If any harshness is found between a blue and blue-black (used opaquely or otherwise), the gap can be bridged with indigo. Beware, however, of indigo too opaque. It will have lost its blueness and have become a grey.

*Cobalt.*—This colour can run through smalt, ultramarine,



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or indigo to a blue-black. The result, however, is not very mediæval in appearance. Ultramarine, smalt, and indigo are the old blues.

**Reds.**

*Vermilion.*—As stated, this colour can be heightened with an orange or a yellow. Beware of lemon yellow, however—a very intractable colour. When vermilion is thus heightened, it should not be too opaque or a muddy tone is the result. Vermilion should be lowered, through crimson, to a brown or brownish crimson. Any of the following series will do—vermilion, rose madder, raw sienna or Vandyke brown; vermilion, madder carmine, burnt carmine; vermilion, scarlet alizarin, Indian red.

**Crimsons.**

These can start with opaque crimson, and be lowered as for red.

**Yellows.**

Yellows must be lowered through orange to brown. Try :—

*Cadmium yellow (pale)*, cadmium yellow, cadmium orange, cadmium orange (deep), burnt sienna (or the “pale” colours can be omitted); cadmium yellow, vermilion, raw sienna, Vandyke brown or sepia (more permanent).

*Mars yellow*, Mars orange, Indian red, Vandyke brown or sepia.

**Greens.**

Greens can be brightened by yellows and lowered to blue and blue-black. Try :—

*Terra verde*, or Hooker’s green. Heighten with cadmium yellow, and lower through ultramarine, smalt, or Prussian blue, to a blue-black if required; or use green oxide of chromium for the first darkening of terra verde. For small figures *emerald green* can be used, but it is a very



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intractable colour. It can be darkened by green oxide of chromium, and a blue darkening that.

*Terra verde*, or Hooker's green, and a red, an earth for preference—light red or Venetian red—will give an olive green that can be lowered by indigo.

**Oranges.**

Plain oranges can be treated as in the case of the lowering of yellows.

**Purples.**

As a rule the lowering of purples is attained by deepening from the opaque to the pure colour. One can then go on to a dark blue, like pure Prussian blue (which is very dark), or to a blue-black. Purples can also be lowered from the clear red hue to the obscurer blue hue. This is what happens in Nature, and can well be imitated in art. The flowers of the lilac are an example. Though it has been stated that in illumination purple is a rare colour, this applies more to such illumination as would be in evidence in testimonial work than to illumination as a whole. Where absolute pictures were painted in the pages of old manuscripts, purple was much employed for garments. The following lowered purples can be suggested :—

*Permanent violet.* Lower from the opaque to the pure colour, and then go on with smalt, ultramarine, or indigo, in fact, with almost any rich-toned blue.

*Rose madder or pink madder.* With these pinks for the high tones of opaque and pure colour, you can lower with permanent violet, and deepen still more with blue. Alizarin and purple madder can also be employed to deepen. But recollect, in experimenting with purples, that you are on dangerous ground. Strictly speaking, the facts are these : that carmine, properly so-called, is prepared from cochineal, and is fugitive ; madder is a compound of alumina and the tincture of madder root, and is permanent, though trade custom and convention may, in some cases, obscure this



distinction. The purple of the Roman and Byzantine illuminators was, of course, the murex. The Gothic Gospel of Upsal, known as the *Codex Argenteus*, has its pages stained with this Tyrian purple. The letters are gold and silver. These pages are pink, not what we now call purple or violet. In the deeper tones, this Tyrian purple is an obscure red, and certainly not worth the trouble of reviving. It is doubtful, indeed, if the Roman illuminators ever used it except for the staining of parchment referred to.

#### Browns.

Browns, in ancient illumination, generally made the deepening of some other colour. Leafage was not often brown, but sometimes architectural features were, and animals or parts of animals. The lights of browns were often yellow. The following are suggestions :—

*Naples yellow* or *yellow ochre*. Deepen with burnt sienna, then sepal (warm or cold) or Vandyke brown.

*Burnt sienna*, Vandyke brown, indigo.

The above will form some sort of palette for the illuminator, and the author has taken care only to mention such colours as have a fair reputation of being reliable. To have taken the palette of the ancients, century by century, would have been interesting; but then, even if we knew precisely what it was, they had their failures. One does not want to employ the Byzantine crimson that has gone nearly black, nor that of some of the fifteenth century herald painters that has gone quite black. An example of this latter can be seen in a grant of arms (*temp.* Ed. IV.) in the British Museum. The *gules* has the appearance of a deep blue-black ink. This may not have been a crimson, however, but red lead (*minium*). Avoid leads, that is to say, besides red lead, all the chrome yellows (chromate of lead) and chrome green. The Naples yellow (antimoniate of lead), however, which was much used by the early artists, seems to have stood the test of time. But their Naples



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yellow was native. Our Naples yellow is generally cadmium and white. The reader should consult Field's "Chromatography" and the works of Charles Martel.

LIGHTS AND SHADOWS.

The direction in which your light falls in illumination should be a matter of consideration. In heraldic painting, where, in addition to the *shades* of charges, mantling, helmet, &c., there are definite *shadows* shown of these charges on the "fields" and, maybe, of the mantling, helmet, &c., on the surface painted on, there seems a settled convention that the light should come, more or less, from the top left-hand of a square enclosing the painting. As far as it appears to shine *down* upon the plane upon which you are working, this can be taken, for theory's sake, as at an angle of 45 degrees, an angle commonly employed in projecting shadows. In ordinary illumination, such as testimonial work, &c., follows, no shadows are ever thrown by the ornamentation upon the surface painted on, although portions of this ornamentation are allowed to cast a shadow upon other parts (in late work). Nor is light from the top left-hand corner emphasised. Look at any old specimen of illumination painted in relief, and you will see that the artist has emphasised what is known as a top light, though here and there suggestions of the natural and convenient top left-hand corner light come in. The reasons for the difference in light-rendering seem to be these, that a modern coat of arms, with helm, crest, and flowing mantle above it, is intended to convey some idea that all belongs to some invisible knight, on horseback and in motion, at a jousting, who casts his shadow on an upright surface. This applies to where the helm, crest, and mantling are seen sideways. Where the helm and crest face you, and the mantling is arranged, not flowing, then the suggestion is of a carved coat-of-arms. Of course, in both these cases, the light could come from the top or top right-hand corner, but the shadows convenient

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to paint are those of a light from the left hand. Perhaps where the crest and helmet face towards the right the shadow should be to the left, or where there is a great suggestion of carving on a wall or panel, it could come as from overhead (in plane). In book illumination, on the other hand, there is no suggestion that the letters are standing up. Illumination is simply decoration, and if it is painted in relief, the idea, if anything, is of the embossed cover of a volume lying flat in open daylight. To get a violent side-light would suggest perpetual setting-sun light on the page, or that the decoration (say, of flowers) was hung up on a white wall, in both of which cases decoration in relief would be entitled to cast a shadow on the surface painted on. Therefore, illuminate, as it were, with a top light, and, above all, don't first shade a portion of your work to the right and then a portion to the left. Sometimes when a piece of very correct work seems to lack unity in some way, this is the reason of its want of repose. This is not to say that the old illuminators did not occasionally allow themselves what is known in literature as a *non sequitur*. They shaded as they felt. Take, for example, a grotesque animal climbing up foliage in fifteenth century work. An animal so climbing, calls for the light above him. In terminal flowers, too, especially where the plant work is not much conventionalised, an overhead sun is suggested, and a top and side light can come on any finial figure, like a gargoyle, or on any little picture, like a man spearing a boar amid foliage. When such a picture was very realistic, and the figures stood, say, on a mound resting on the base line of the illumination, they were allowed to cast their shadows on that mound. But a bird upon a bough should not cast his shadow on that bough, and break the flow of the foliage. In late work, figures and foliage *on colour* or gold were allowed to have shadows on that colour or gold, but the foliage in these cases was generally rather natural foliage, not conventionalised pattern foliage. To conclude, in



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studying old examples, besides noting the forms, take notice of the shading and shadows, and try to discover any rule that governed the use of them either in a work consulted or in its style and period.

**PAINTING ON BRISTOL BOARD.**

Whatman board finished with, we can now refer to Bristol board. Bristol board is very hard to colour on, owing to its being so little absorbent. It has, however, the advantage of being very smooth, not quite smooth, for in colouring on it one discovers a grain. Very smooth colour can be got on Bristol board in the following manner. Mix your opaque colour not very thick, and first of all scour the board with it, so to speak, that is to say, put on a thin coat, working it into the board as you go along, destroying the hot-pressed surface, as it were, by force. When this first coat is on, a single coat of the opaque colour will give you a very good surface. However, this, when dry, shows the grain of the paper very slightly, and another coat on this dry one will not be amiss. It requires some practice to get these level coats on Bristol board, and they only turn out well with colours that assist you—vermilion, ultramarine, terra verde, &c. Therefore, Bristol board should not be employed for large paintings, especially if there are any washes required, like those for a picture helmet; but the author has seen it used advantageously for small and simple coats-of-arms, in the case of which its smoothness assists the black outlining and the lettering of the motto. Also gold "paint" goes on it well. Put this on in the manner suggested for Whatman board. Recollect that any scour of hard indiarubber or any drop of moisture shows plainly on the substance in question.

**PAINTING ON PARCHMENT.**

This comprises painting on prepared "vellum" and painting on the plain skin. The nature of prepared parch-



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ments and the ease with which erasures can be made on them have been spoken of, and it was stated that they were difficult to write on on account of the *atramentum* employed running. This is the case with the colour, too, so avoid gall above everything, if you don't wish to go over your outside line, when trying to paint correctly. If you are putting on thin washes, and the prepared vellum you are using is very absorbent, you must have recourse to gum-water, but add very little of it—a dew-drop to a fair-sized saucer of colour. In painting on prepared vellum, a base of plain colour is unnecessary, unless you want it there to guide you. In general, two washes of fairly thick opaque colour, the first allowed to dry somewhat, or to get quite dry, before the second is put on, will give a good level coat. Recollect that prepared vellum, though it assists the painter greatly, cannot be used anyhow. That is to say, that intractable colours will not dry out in level coats even on the substance in question. A composite green of gamboge and Prussian blue is as difficult to deal with here as elsewhere.

As to plain parchment, colouring on it is a very different matter from colouring on a prepared skin, though in both cases the principal substance is the same. What differs is the dressing. In the first case, you are virtually colouring on a gesso, that is to say, a plaster or lime (possibly with white lead added) *plus* an agglutinant, with which compound the parchment has been treated. In the second case, if you have pounced with whiting, you are colouring on a lime rubbed into the surface only. This lime, being loose, will not all of it remain there. It has a great tendency to work out under the hand of the painter, so that at times you have so little pounce left that, unless the loss occurs at a place where you can repounce without hurting the work, you are forced to use ox-gall to overcome the greasiness of the skin. In the matter of erasures, too, the difference between painting on fixed and unfixed dressings is apparent. As stated before, you can scrape off a portion of anything in



*GESSO SOTILE.*

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the nature of a gesso, and the colour on that along with it ; but beware of scraping away till you come to the skin itself, for that is not of the same colour as the dressing, and, moreover, it will, if disturbed, leave you with a woolly surface to deal with, your "vellum" having a nasty disfigurement, especially if, in scraping away some stain or blot, you have been operating on the white where no colour is to come. An artist might think that when he has made the disfigurement above mentioned there was no remedy, that he had disturbed the prepared surface of the bought stuff, and that his painting was "marked for life." There is a remedy, and that consists in imitating, in a way, those who prepared the parchment—you can re-dress. This is how to do it : First take some *gesso sotile*. This useful substance has been referred to before, but the exact way of making it had better now be explained.

**TO MAKE GESSO SOTILE.**

Get some clean plaster of Paris from a chemist (a quarter of a pound, say). Put half of this in a jam-pot, and cover it well with water, and stir it well. The plaster of Paris swells greatly as the water slakes it, so take care that the vessel used is big enough to allow for this. As the object of stirring is to prevent the plaster of Paris ever setting, you must be assiduous, especially at first. So make your mixture on a "free" day, after breakfast, and stir it every hour of the morning and every two or three hours of the afternoon. Give it a good stir the last thing at night, and put it away with a piece of paper over it. It is important to keep it clean. The next day, and for at least a fortnight afterwards, you ought to try and stir it at least four times a day, especially the last thing at night. The plaster of Paris will now have quite, or almost, lost its power of setting. It can then be allowed to dry—don't dry it before a fire—and when dry can be taken out of the jam-pot and put in lumps in an air-tight tin. The ancients wetted their dry *gesso sotile* and



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made it up into cakes, and perhaps their plan was far the best, as *gesso sotile* degenerates if left as a powder and allowed to get damp. Maybe that changes of atmosphere make it *entirely* lose its power of setting, and that it should not do so.

To resume: Take some (dry) *gesso sotile* and grind it to a fine powder on any flat surface, with the pestle. Then prepare a little very thin but strong glue. Take the pestle and grind this up when hot with the *gesso sotile*. If the mixture coagulates, hold the surface you mix on in front of the fire. Then, while the mixture is hot, paint the defective part of your prepared parchment with it. Paint heavily. Then, if you have mixed your glue and gesso properly, they will dry out quite white, and will adhere to the surface. It is impossible to explain exactly how much and how thick glue you must use, but if there is too little glue in the mixture it will not adhere; if too much, it will dry out yellow and be very hard. How long it takes to dry, as well, is a matter of how much you put on. It should be dry in an hour or two if fairly thin. Don't dry it before a fire; that only bakes the outside. When your composition is dry, take a very sharp knife and scrape it down to the level of the surrounding surface, and your defective place is mended. *On no account burnish it.* When you scrape, the mixture should come away easily in a powder and leave a perfectly level surface, the powder just mentioned having been flicked off. If the mixture is very hard and shows the marks of the feather edge of a knife, either there is too much glue or, in making your gesso, you did not let your plaster of Paris sufficiently lose its power of setting. The mixture described is hard to paint on; therefore, though it does excellently for mending holes on the parts of your "vellum" to be left white, when you have made a hole and want to colour on the "doctored" place, you had better mix some white lead paint with your gesso. Try half *gesso sotile* and half fine-ground white lead, well ground together dry; then mix in



## WASHING-OUT.

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the glue as described. This gives you, as it were, an opaque white to paint on, or something of the nature of such. We can now go on to erasures on plain parchment, which we were contrasting with those on the prepared substance. There *should* be no erasures on not-“prepared” parchment. However sharp the knife used to erase with is, some woolliness is bound to be the result of trying to scrape out on skin. When a stain or mistake has been made, the only thing to do is to wash out. Washing out can be done with clean water and blotting-paper, the colour (dry or wet) to be lifted being first subjected to successive wettings and moppings-up by the blotting paper, while, if any remains, you must try and scrub it out with a hard sable. Ox-gall used in the water seems to assist these processes, and as skin is always somewhat yellow, there is no danger of it staining, as is the case when much gall is put on white paper. What was said as to touching board, on which washing-out has just taken place, with the knife applies here too. You must not touch the damp parchment with anything likely to affect its surface. But when it is *quite* dry, you can rub over, first, with bread, and then, if you like, with rubber. If, then, your place is not quite clean, and you can do it safely, pounce. The white pounce will correct any little staining left. It is comparatively easy to lift a bit of colour in a place where other colour is to supersede it, for the first colour need not be entirely eradicated, but where you have made a stain on parchment to be left uncoloured, you must be very careful. Be *quite* sure, before you apply bread or rubber there, that the surface is *perfectly* dry. Dry it before a fire, if you can, just before you use the bread. Once you have lifted the glossy surface of the parchment and left it woolly, you have made an almost hopeless blemish, one, moreover, in a place where you have no hope of “doctoring,” by putting on thick opaque colour. Not that you should trust to this elsewhere. The only chance of ameliorating a woolly place on parchment is, when it is



quite dry, to rub it as smooth as you can with powdered pumice-stone.

### **COLOURING ON NOT-"PREPARED" SKIN.**

In the matter of how to put on colour on not-"prepared" parchments there seems no doubt that what has been alluded to as "the house-painting method" is the best. Well-pounded parchment takes colour very easily provided that colour is thick enough. With any tractable colour a very level coat can be got as follows:— Have your colour as thick as you dare mix it. Then, with some of this make a good base on the parchment where the colour is to go by working the colour well in thinly, acting as if you were trying to fill up all the pores of the skin, and yet to leave no colour absolutely floating. When this has soaked in, put on a thick coat of the thick colour and let it dry till next day. On the top of that carefully float another thick coat. You will find that there is not the risk of lifting the thick undercoat that there might be if you were painting on a board. Parchment absorbs the colour too readily for that. But beware that you must not have a lot of gum in your bottom coat (if you are accustomed to use gum). Gold "paint" can be put on skin with far better results than those obtained when it is put on a paper surface, for the surface of skin is much smoother than that of paper. If one looks at gold "paint" in an old MS. one is struck by its good appearance, though, of course, the gold used was probably very good, if not absolutely pure. It is best to first damp the surface, as in the case of Whatman board, and then put the gold on leisurely, keeping all fluent. The writer has left the question of putting gold paint on prepared parchment till now for the sake of contrast. As said previously, the surface of such "vellum" is somewhat far from smooth. Here damping, therefore, and gilding, unless you gild heavily, will emphasise this fact. You had better do what was recommended as part of the operation of re-dress-



*NOT-“PREPARED” SKIN.*

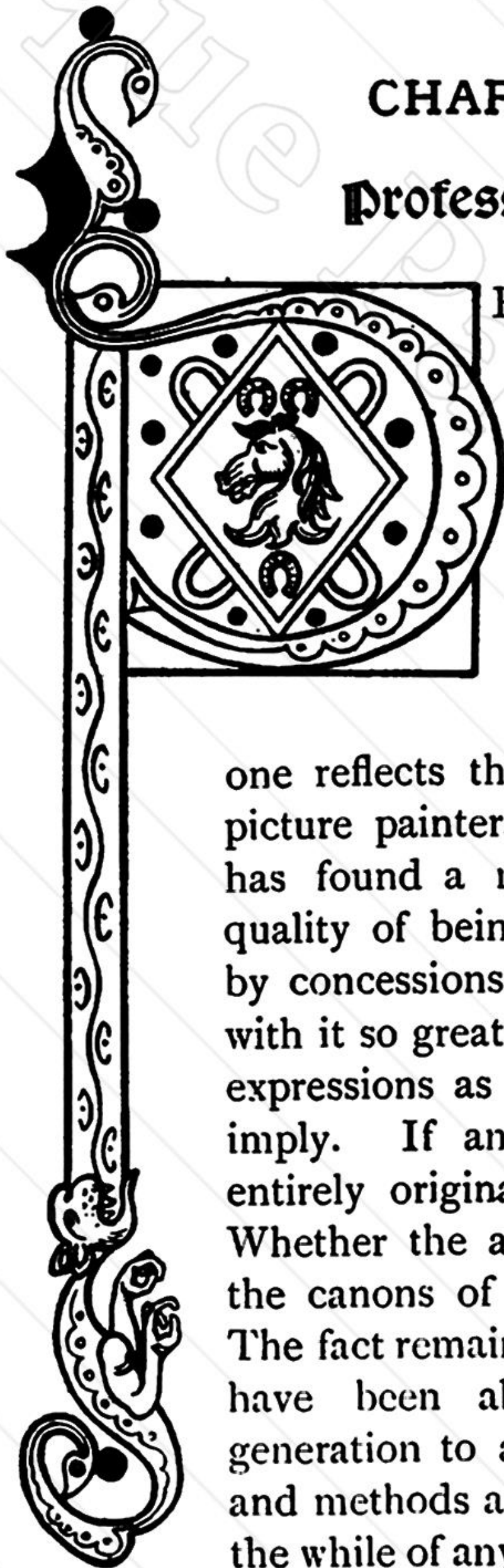
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ing prepared parchment—you had better scrape (“engrossing” is the correct term; “engrossing,” writing in a law hand, is of different derivation). Take a very sharp knife and lightly scrape or engross the prepared surface away till it is absolutely level, then burnish. You must take care not to engross until you come to the bare skin. Some firms of law stationers do not use gold paint for testimonial work on “vellum,” but lay leaf on *hot* glue. Such processes, however, have nothing to do with colouring, and will be dealt with later in a chapter on gilding.



## CHAPTER VI.

### Professional Art.



PROFESSIONAL art may be somewhat a contradiction in terms, as all real art is, as it were, professional, that is to say, it rests on tradition and, in some measure, on the fashion of the hour. This fashion may be modified by individual genius, but when

one reflects that the work of so many great picture painters and miniaturists (illuminators) has found a market, one recognises that the quality of being saleable, even when obtained by concessions to public taste, does not carry with it so great a necessity of reproach as such expressions as "Art for Art's sake" seem to imply. If anything, it is the isolated and entirely original artist who produces bad art. Whether the artist or the artistic public made the canons of art does not concern us here. The fact remains that certain forms and methods have been always handed down from one generation to another, and that certain forms and methods are now used, and that it is worth the while of any illuminator to know much about

them. The mere knowledge of his business and display



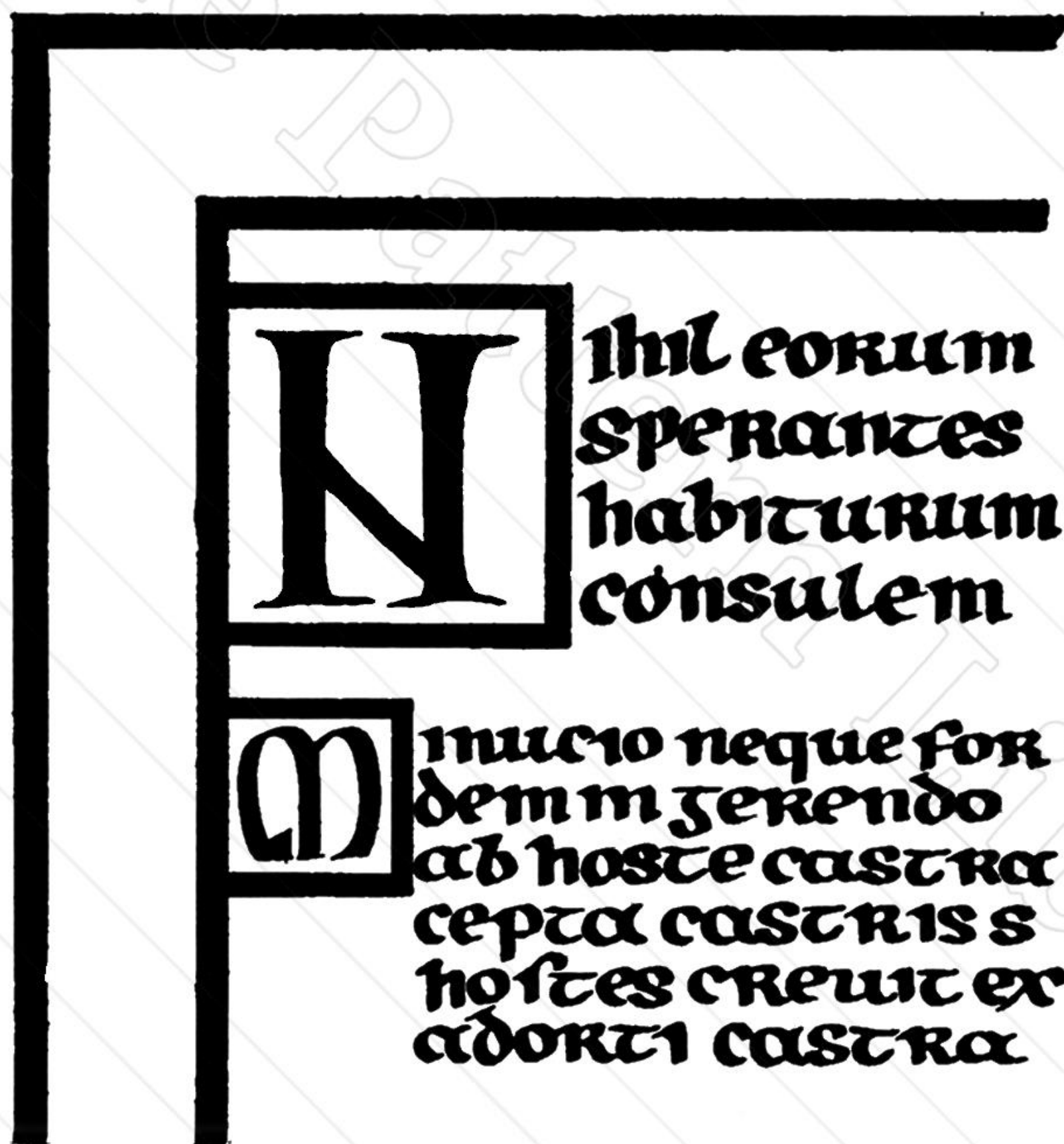
of erudition, that is to say, the evidence of an illuminator's familiarity with what is being done and what has been done, if they do nothing else, impress a public. It is the work that anybody might have done that is not remarked. If it were a matter of selling, an illuminator who had founded his style on bits out of illustrated papers would have no chance against one who had made a careful study of manuscripts at the British Museum, and had considered modern trade forms. The author will therefore mention some peculiarities of form and colour in mediæval art, and later, when speaking of modern testimonial work and heraldic painting, will attempt to show what is peculiar to these.

**THE ARRANGEMENT OF BORDERS, PICTURES,  
SCRIPT, &c.**

Nothing is easier than to look at an old manuscript, a testimonial, or an heraldic painting, to come away with the idea that one could reproduce it in essence, and then to find one's self hopelessly searching one's memory for the way in which certain features were arranged. Was the initial joined on to the border or isolated? Was the writing in two columns or in mass? Was everything in the painting black outlined or not? How exactly did the mantle fall, and how, where one streamer of it fell across another, did the artist so arrange that the turned-up white lining of the first streamer came upon the red of the second? Thus it is seen that, in addition to noting small features, one should come away with, as it were, a map of the piece of illumination as a whole. In cases where one cannot sketch, or has not time to do so, one is forced to rely on memory. This memory for art detail is a special gift, and there are those who can draw a portrait from memory, while it was said of a famous American general that he could look at a map and remember every feature of it. Such a memory for unconsciously absorbing detail, so to speak, would be invaluable to an illuminator. However, most persons have



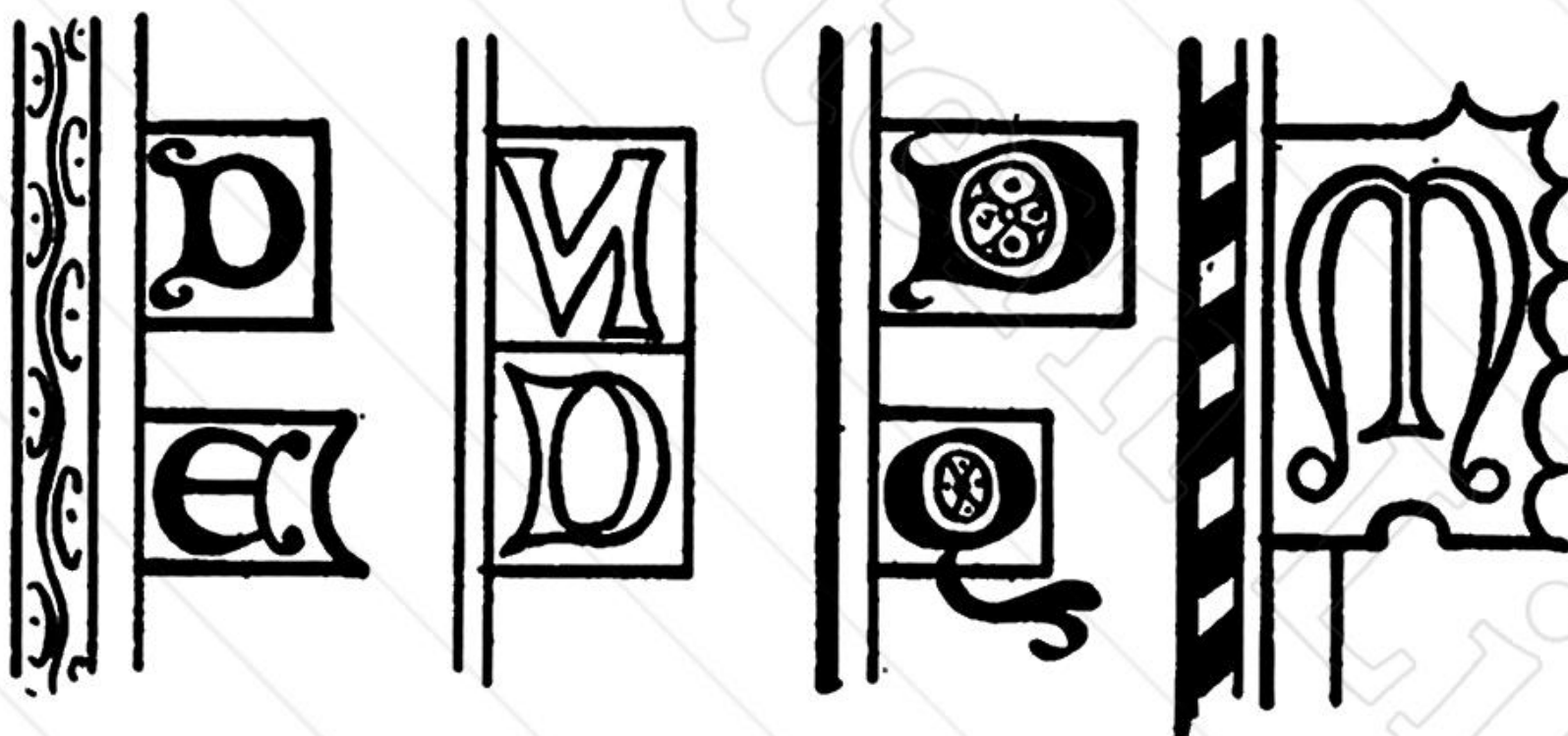
to cultivate a memory for artistic arrangement as a whole and for detail. It may help some to use unspoken words, saying to themselves, for instance, "All (the) border springing from top of initial D only; writing (in) two columns; foliage not overlying (meaning that there is no interlacing of foliage)," &c. Mention of the means of recollecting such matters implies that it is worth one's while to do so.



Unless one knows the established methods of arranging, it means loss of time in designing. To take borders first, the simplest form of border is, of course, a plain black or coloured line round the script, but this is, naturally, too simple to be much more than a theoretical arrangement. Then we have the rectangular border with one or more lines of colour bounding it and ornamentation enclosed.



Such borders occur in Hiberno-Saxon work, where within, say, red and yellow lines, grotesques are interlaced with secondary interlacements of very fine lines. Rectangular borders occur, too, in some of the later styles. They are found in thirteenth century work, where one would hardly expect them. Of course, all initials accompanying a rectangular border are for the most part isolated. They can either be simple initial letters or can themselves be enclosed in a regular figure bordered by one or more coloured lines. However, there was another arrangement sometimes used—the figures containing the letters are shown as adhering to the border. The figure containing a big initial letter at the top of the script did not fit into the top left-hand



angle of the border; this would have been inelegant. It was sunk a little. Smaller letters, also adhering to the border, came below it. The whole arrangement was this:—

Note that the letters are made part of the border by their giving up their left-hand containing lines and using that of the border. This joining letters on to rectangular borders, and, what was more elegant, the joining of letters in regular figures on to straight portions of borders, should be remarked. It is especially useful to you in getting your initials out of the way when your piece of illumination is narrow and you are cramped for writing space. Above are some examples from thirteenth century and fifteenth century work.



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Making the border and joining the letter on to it is, of course, the opposite to making the border proceed from the letter. To go through all the arrangements by which the latter is brought about would be to write a special treatise on borders. It is sufficient to point out that this is a thing that must always be noticed. To one studying a page of illumination nothing is more tempting than to make sketches of small and beautiful details from it. They do not individually demand much time in the copying, and when taken home can be redrawn and prettily coloured. Detail, of course, should be attended to, but when one is confronted with the designing of a page one may have reason to regret that one's stock of sketches as to arrangement is not a bigger one. Many weak and unimpressive designs, especially in the case of testimonials, are the result of the fact that the illuminator had a good knowledge of the forms of initial letters, but a mind very vacuous as to the arrangement of a page as a whole. To make sketches of the arrangement of pages as a whole may be uninteresting, and even a long spell of work may not give you time to get in enough detail to make the sketch worth colouring owing to the absence of definite outline, but sketches of arrangements should certainly be collected, especially as, in the less expensive books of *facsimiles*, dismembered details only are, as a rule, given, while even in the more expensive books, though the ornamentation of a whole page may be shown, the writing that accompanied it, together with the initials, large and small, is generally left out. Note how the writing comes in a page, whether it is in one or two columns (a most important point, for writing in two columns may be elegant where a mass of writing would be squat). Note also the proportions of the margins that separate the writing from the border and the border from the edges of the page, for a border of rectangular character is by no means always designed with an equal breadth of margin all round it. It is very often



lifted, making the bottom margin wider than the top one. You get an air of lightness by lifting paintings a little. You can especially notice this in the case of coats-of-arms, where an equal distance from the top of the crest to top of material painted on and from bottom of motto to bottom of material would be very inelegant. Why two-column writing is not commonly employed in testimonials the author does not know. There should be no difficulty about the signatures, especially if the signatories would let the illuminator carry out his scheme and put their names on his parchment for them. This is very elegantly done at the end of the second column in some Saxon grants, notably in elaborate ones where land was granted to a monastery and the monastic scribe illuminated the grant. A perpendicular line of beautiful crosses was made, coloured, say, alternately red and blue. Opposite to these, *Signum manus Ealhstani episcopi* (the sign of the hand of Ealhstan, bishop), *Signum manus Burheard, præfecti* (the sign of the hand of Burheard, the alderman), &c., was written, the colours of the signatures and crosses being "countercharged." We moderns could put "Signed, John Elston" and "Signed, James Burrard" opposite our crosses, and such an arrangement would be more congruous than untidy and irregular signatures at the bottom of good formal writing.

To pursue the subject of the arrangement of script further would be to encroach on the matter to be dealt with in a chapter on writing, and the author will now refer to pictures in a page. Pictures were largely introduced into old illumination, and perhaps only the time required to execute them is the cause of their being banished to so great an extent from modern work. The writer is referring to absolute pictures, that is to say, pictures which, although they may have been inserted as portions of a border, a letter, or a groundwork, are naturalistic to the extent of having, say, figures, a landscape, and plausible representation of the sky. There are



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other pictures that are not natural (*e.g.*, in the initial to Chapter IV. of this work, a knightly horseman is represented as careering in front of a diaper pattern, and one of the horse's hoofs is on a letter). But the point at which conventional pictures end and natural pictures begin would be very hard to place, and even in natural pictures conventions creep in, and it was only in comparatively late times, both in illuminating and picture-painting, that we find representations of scenes in which very noticeable and, to our twentieth century minds, somewhat absurd conventions are not present. Illumination fell into decay not long after the introduction of printing, and, therefore, we do not find in it such modern "photographic" pictures as we are accustomed to from the brush of a Marcus Stone or a Landseer. Such things as a life-like representation of a silver birch would not be often found in an old master or in a vignette in a missal. The repetition of natural details was sacrificed to general outline and tidiness. A willow-tree like a cabbage was perfectly admissible, nor were stars visible by daylight objected to; but this, however, is not so absurd as it may seem. Such stars, though there is no doubt that they are shining in the mid-day sky, represent, to some extent, a background of the nature of a diapered one. They are often placed in regular order, so that five of them make what is known as a quincunx. There are also skies of which the stars are irregular; but in such skies there will be found a tendency to make use of lighter gradations of blue towards the horizon. In skies with their stars in regular order, one is much more likely to find a level coat of darkish blue. These are, for the most part, the skies of the older illumination.

It will be seen from the above that there are two sorts of pictures, so to speak, made use of in illumination, *viz.*, pictures that are an integral part of the decoration, and vignettes that are inserted in the decoration. There are also pictures that are neither made part and parcel of borders, &c., nor are inserted in them, but stand in the page



more or less isolated. It is the first and last that we have to do with in speaking of the arrangement of borders ; vignettes standing, as they do, alone, can be dealt with separately when one comes to speak of the conventions of art. As might be expected, an orderly transition from isolated pictures, through pictures part of the border, &c., to vignettes, is not to be found. True, in some (early) Saxon manuscripts simple figures are met with, merely outlined or coloured in places and outlined, and standing on the untouched parchment ; but the employment of such figures does not stop with Saxon work. In a fourteenth century MS. in the British Museum (a Purgatoria of Italian workmanship) some of the pages are finished up by tailpieces—figures standing on a base (meant to represent turf, it may be), with no indication of a sky. Such tailpieces are of the nature of a border. The writer does not remember ever having seen them employed in modern testimonial work, but there is no reason why they should not be so employed, and, if the figures were well drawn, they would not be ineffectual. One good large capital and a picture tailpiece would go well with a page of bold writing, would be convenient for simple work, and would be a change from the hackneyed border more or less of rectangular form, that often only owes its effect to profusion and breaks down in simple work. Of course the designer of such tailpieces must know how to draw figures, and figure-drawing is an art which the modern illuminator appears to shirk. Drawing figures naturally takes time, and that is perhaps why so few occur in the work of the present day. Still, they are effective. Akin to the isolated tailpiece with figures in it is the decoration of a “tail” by figures. This was common in thirteenth century, and more common in fourteenth century, work. Say the illuminator had designed an A. The long tail of the A was carried down, looped, and carried across the page as a tailpiece, as it were. On this “tailpiece” (part of the initial A) the old illuminators sometimes represented

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“a mound,” *i.e.*, a stretch of grass, on which they seated their figures, who played at chess, kayles, fought, or made love, as the case might be.

Thus the isolated tailpiece and the tail decoration, by figures set on the tail of the big initial, come together. To mention such details of construction may seem pedantic ; still, it is not “art for art’s sake” which the author wishes to write about, but the necessity of learning the various dodges (let us call them) of men who have designed. Say you have designed your big initial first, carried its tail down the side and then across your parchment at the bottom. Then, if you have miscalculated as to the space your lettering will take and it stops too high up, what are you to do ? It is better to introduce grotesques upon your bottom bordering than to make use of meaningless flourishes and incongruous adjuncts to fill up.

**DIAPERS.**

To use a contradiction, the simplest form of diaper is the one that is no diaper at all, that is to say, a plain coat of colour. Then there is what one may call the wall-paper diaper, a plain coat of colour with a regular pattern designed on it, either in another colour, in white or gold ; gold was commonly employed. In fifteenth century work some of this gold tracery was very beautiful. But the best of all diapers are the mathematical ones, and they were made use of ubiquitously in mediæval art. They were even used in the “fields” of coats-of-arms. See Boutell’s “Heraldry” (the edition of 1898), where, on page 52, the quarterly shield of De Vere is elaborately diapered, while the shield next it, of Foubert de Dovre, is a curious example. The “charge” is a fish, and alternate squares of the checky field are decorated with fish scales, imbricated as in Nature. The following six figures are diapers from good MSS.

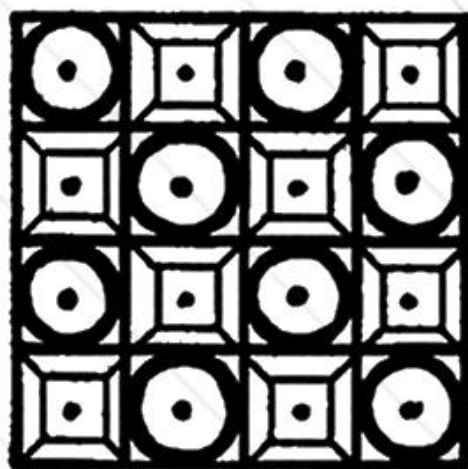
No. 1 is a very fine example. In the original the ground was a medium-toned blue, probably smalt. The



## DIAPERS.

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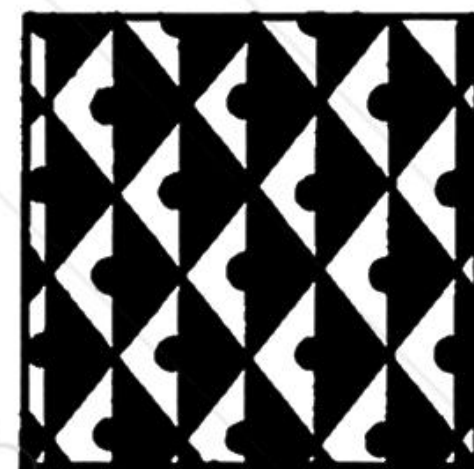
horizontal and perpendicular lines were of much darker blue, and though not extremely wide were appreciably wide, that is to say, they were by no means hair-lines. The circles were of vermilion, the dots inside them white. The outlined inner squares, with their dots and the diagonal lines, were all white. These white lines, though not exactly hair-lines, were rather thin. One variant of this diaper can be made by increasing the width of the horizontal and perpendicular lines, and placing a dot at the intersections, a white or a yellow one, like the dots in Fig. 4. Another variant



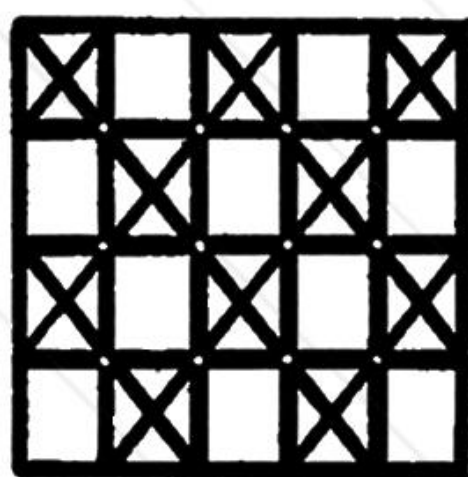
No. 1



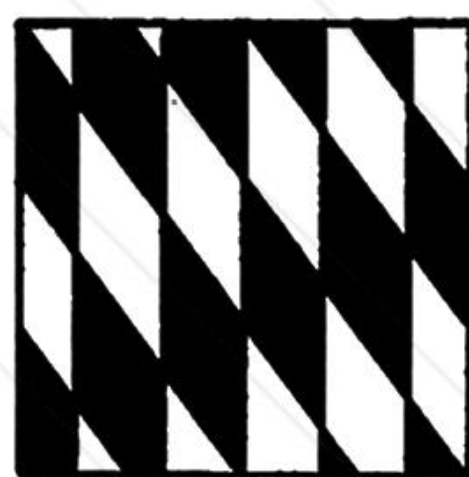
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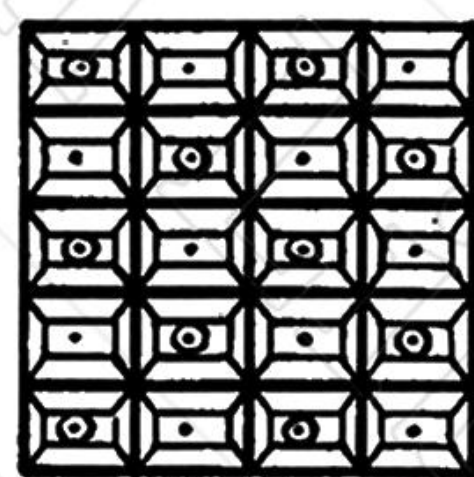
No. 3



No. 4



No. 5



No. 6

would be a purplish ground with horizontal and diagonal lines of a madder crimson, white outlined circles and dots, light blue outlined inner squares with white dots, light blue diagonal lines, and, if you like, light blue dots at the intersections.

No. 2.—You could use any “tincture” or “metal” here (white representing *argent*), but this diaper, founded no doubt on the French arms, is usually of gold and blue, as it were, countercharged, with gold fleurs-de-lis on blue. The



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“diamonds” should be black outlined, and, as a rule, they are more elongated, more like the heraldic “lozenge,” even more elongated than the lozenges in Fig. 3. Notice the peculiar shape of a mediæval fleur-de-lis. These heraldic diapers are very common in old work, and very effective. A square-divided diaper with the arms of France and England quarterly was much employed. In modern work fine effects could be got with the quartered arms of persons.

No. 3 is very effective in black and gold, the lozenges black outlined. It was used as a diaper for floors, and was sometimes drawn in perspective. As a floor diaper, it was often in light and dark green.

No. 4 was, in the original, of a light greenish-umber ground. The horizontal and perpendicular lines were noticeably broad and of a very dark umber green. Their breadth allowed for the yellow dots at the intersections being rather large. The crosses were white, of broad lines. Though, in the figure, there seem to be diagonal lines, this is only due to the fact that the crosses are drawn in black ink; in white they stand isolated, their ends parted by the dark green lines.

No. 5 is a very curious and beautiful pattern, and makes the “field” known in heraldry as *paly-bendy*. Had the heads of the lozenges pointed to the top and left, it would have been *paly-bendy sinister*. Turn the rectangle side up, and the pattern is *barry-bendy sinister*. Then, if the lozenges pointed to the left, it would be *barry-bendy*. Notice the subtle way in which this pattern is designed. Divide each side into four. Draw a perpendicular line in the middle of the square. To get the slope of your diagonals, take your jointed rule and draw a line from the right-hand bottom corner to the first division point of the top line, counting from the left. To get the width apart of your perpendicular lines, notice where a diagonal drawn from the middle of the top line cuts a horizontal line (afterwards rubbed out) drawn from the first division point of the left-hand line, counting



*DIAPERS.*

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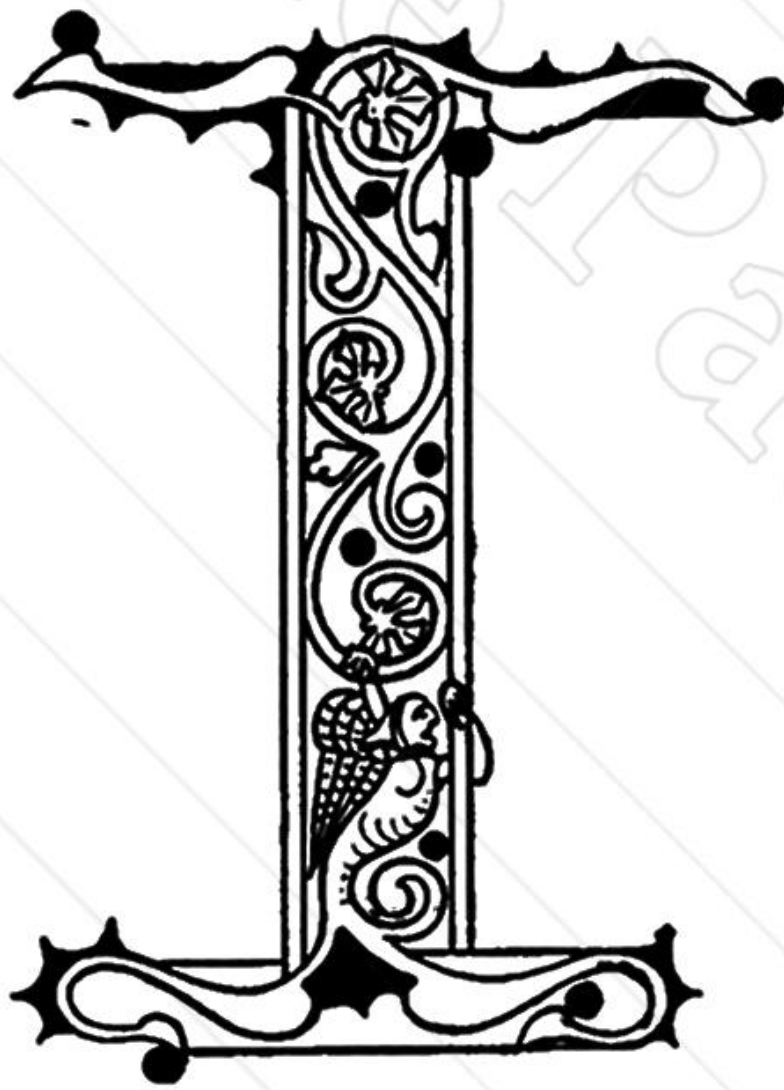
from the top. Patterns of this nature look well in gold and black, gold and blue, red and white, &c.

No. 6.—This is a variant of No. 1. The rectangles, however, are oblongs and not squares, owing to one side of the containing square having been divided into four, another into five parts. Note that the interior oblongs are not constructed on the diagonals of the external ones, that is to say, that these interior figures are more elongated than the external oblongs. This being so, though corners of two oblongs are joined by a line passing through an intersection of the horizontal and perpendicular lines, such connecting lines, if continued, would not join two other corners. This means that you must set your rule specially to join the oblongs, and not, by an oversight, use a diagonal you may have employed to find the centres of the bigger oblongs. This warning may seem superfluous in the present case, but it draws attention to the fact that you can saddle yourself with a great deal of extra work by not fully understanding the anatomy of a pattern when you are drawing it out or colouring it. The diaper in question had a ruddy purple ground, the horizontal and perpendicular lines were of umber green, the diagonal lines and interior oblongs drawn in outline only were of vermilion, the dots were small white ones, the circles were solid white with a black dot on that. This diaper can be varied by having different gradations of ruddy purple checkwise, or by making it checky of red purple and blue purple. White or red dots can also be introduced on the intersections. All these diapers mentioned do excellently inside a letter and elsewhere about a letter or border.



## CHAPTER VII.

### Gilding.



IN various forms of decoration, the use of gold has been made a matter of special study from very early times. It must have been obvious, from the first, that there were two ways of getting gold on to a flat surface—to make the gold into a plaque or leaf, and, having covered the surface with some adhesive substance, to stick it on, or to grind the gold to powder, and, having mixed it with some adhesive substance, to paint it on.

These two methods of gilding have both been freely used in the illumination of books. They have been used separately and they have been used together. The one process is usually described under the heading, "Gold Leaf," the other under that of "Gold Paint" or "Gold Powder." In the best illumination, the use of gold leaf was the commoner. It was thoroughly understood by the mediæval artists. Then there came a time when it was abandoned. Then the good methods by which gold could be laid on, in the illumination of books, were forgotten, and if any traditions of these remained, they were to be found in the possession of the sign-writer and the picture-frame



**BURNISHED GOLD—THE BASE.**

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maker, where they now still linger. At present, the usual custom of illuminators is to put gold powder on well, or, on the rare occasions where gold leaf is employed, to put it on not well, that is to say, in comparison with how it would have been put on by a mediæval illuminator. Several authorities have written upon this subject of the putting on of gold leaf, and authorities on the subject, and no doubt private persons besides, have made experiments in reviving the ancient processes. However, as stated, present-day illuminators, whether doing testimonial work or heraldic work, seem always to use gold powder. This can therefore be called the trade method of gilding. But as there seems a tendency towards the revival of the use of gold leaf, notably in its employment in what is known as *burnished* gold, the author will leave the subject of gold powder, of which there is not a great deal to be said, till later, and will first speak of gold leaf, and especially of burnished gold leaf, of which there is a great deal to be mentioned.

**BURNISHED GOLD.**

It is best not to begin by speaking of the gold, for though this is the most important substance, it is that which comes on the top, and is, therefore, last applied. The substance gilded on and the adhesive substance come logically first. Let us call one the base and the other the assise. To call the last the size, because I refer to it as "the adhesive substance," and the word size is looked on as denoting something adhesive, might lead later to confusion; for we shall want to distinguish between an assise, or bed (not necessarily very adhesive) put on the base, to receive the gold, and a size, or sticky substance, by which the gold adheres to that assise.

**THE BASE.**

The base or substance gilded on is, in our case, paper or parchment. To this the assise, of course, must stick



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firmly. In the case of paper, with its flying fibres (so inconvenient to the colourist), almost any assise and almost any size will stick well. To wet the paper to make a "key" might be thought of; but this would only weaken the substance put upon it, and, in the case of assise or size put on hot, would tend to cool this hurriedly, leaving it lying unattached, by reason of its cooling before it took hold of the paper. The cooling assise or size might lose its hold, as well, by quick contraction. It might move its feet so to speak. Also, by cooling both against the paper and on its outside surface, it might crack badly. The behaviour of an assise and a size on parchment is not so satisfactory as that of these on paper. Parchment is greasy, and the capacity of pounce to drop off has been spoken of. Of course, if you pounce with pumice, this roughens the parchment and affords a key. Pounce with resin in it would also do this, but it is very little resin (far better none) you should venture to make use of if your gold leaf isn't to stick to it. A pounce of plain whiting the author has suggested is the best, and the best way to deal with this is to pounce heavily with intent to roughen the parchment where assise or size is to come (you can incise the lines of your drawing somewhat so as not to lose them). Then wipe the pounce well off. Even in the best MSS., assise sometimes chipped, so, if you wish to be on the safe side, pounce with pumice or roughen the parchment by scraping with a knife in these places. However, the writer thinks that the chipping of assises and sizes is generally due to defective composition of these or improper manipulation. And here a point must be mentioned. Some authorities (see "A Manual of Illumination" (Winsor & Newton), J. W. Bradley, previously referred to, and "Writing, Illuminating, and Lettering" (Edward Johnston), John Hogg, Artistic Craft Series) are of opinion that, in mediæval illumination, the gilding was done after the colouring. This seems hardly possible, for the slightest moistening of the gum in a coat



## THE ASSISE.

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of colour would have made the gold leaf adhere to it and have ruined the coat, while the use of perforated shields to gild through and guard the colour would have been very awkward, and the shields might have injured the colour. In the first of the works quoted above, the fact that finished black lining is sometimes found smeared over with gold or gold leaf is mentioned as evidence of the gilding being done last. This smearing is probably the result of *re*-burnishing when the whole painting was dry, while minute "skewings," or loose pieces of the gold, could also get on the colour of a manuscript by use. As for the ability of the gold to stick, one knows only too well how easily any moisture of the breath or atmosphere will render colour or writing tacky. At present the writer sees no reason why the order burnished gold, writing, colouring, should not be the best. Once burnished gold is dry—and it dries quickly—it ought to defy injury from those working over it. If you do injure it and have to doctor it, then you will get skewings on your colour. Be extremely careful that your *atramentum* (paint-ink, with *gum* in it) is absolutely dry—dry it before the fire or in the sun, if you can—before you have gold leaf near it.

## THE ASSISE.

We now come to the most important thing in the making of burnished gold, the *assiso* or bed. As our word *size* is only another form of the word *assiso*, but as our substance *size* is generally a highly sticky substance, whereas an *assiso* needn't be, we can agree for the future to use the word *assise* for the bed, or what might now be called the gesso, part of our composition for gilding on, and to use the modern word *size*, expressing a sticky substance, for the glue or other viscous matter to which the gold leaf actually adheres. We can then speak of three ways of leaf gilding :—



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- I. Gilding with size only.
- II. Gilding on an assise with a size on that.
- III. Gilding upon an assise and size together.

These three processes having been stated, they can be left for future reference, when we come to explain the methods by which the mediævals obtained the level surface of burnished gold, and to point out the slight but all-important differences of procedure in the gilding with leaf referred to and leaf-gilding in ancient times. It would be, perhaps, more convenient to the reader if we continued with this at once ; but as the quality of the gold is a rather important subject, and as the tools employed in gilding will be mentioned from the first, something should be said of these, as follows :—

**THE GOLD.**

Without arguing nicely as to what gold should go on what assise, one can broadly state that the thickness and the purity of the gold leaf employed in burnished gilding is a matter for consideration. Roughly speaking, gold leaf has been used, historically, thinner and thinner, and alloy was added to it late. This is not to state that you cannot burnish gold with alloy in it, nor that, if you put pure gold leaf on badly and do wrong things, you can burnish it well ; but the use of pure gold does help you, and if you can afford it, you had better use it. To those who wish to know “exactly what happened,” the following notes will be interesting and useful. The English illuminators of the thirteenth and fourteenth centuries obtained their leaf from the gold florins of Florence, Lucca, and Pisa, which were reputed to be, and in all probability were, of absolutely pure gold. Our illuminators of the fourteenth century used also the gold nobles of Edward III. Not more than fifty leaves of three inches by four inches each were obtained from a gold ducat of Italy, which weighed more than a modern sovereign (Middleton). Cennino Cennini, an



Italian, who wrote "A Treatise on Painting," which he finished in the year 1437 (see Mrs M. P. Merrifield's translation of it), recommends gold leaf of about one hundred leaves from the ducat, but not more than a hundred and forty-five. If some enterprising gold beater who prepares leaf for illuminators would weigh specimens of the coins in question and produce the adequate amount of leaf from the right amount of pure gold, he would be deserving of gratitude. As for what pure gold is like, it is rather like lead in softness, and something might be said of this. It can be noticed, especially in early manuscripts, that though the burnished gold is very *bright*, it is not absolutely *level*. Now this, perhaps, was due to the fact that the leaf employed was rather thick, and the gilder trusted more to polishing it with his burnisher, spreading it as though it were butter on bread, so to speak, than to getting his assise beneath it absolutely level. In fact, one ancient writer, speaking of burnished gold, tells you to burnish till the sweat runs down your forehead. But note, that what applies to thick, pure gold, more or less of the softness of lead, by no means applies to the use of thin modern gold leaf hard with alloy. It is this taking of an isolated part of one receipt and following it when working after another that no doubt leads to modern failures. As said before, you must know the why and wherefore of everything, if you wish to be good at burnished gold. Even if you could use (the author does not say you can) thick, pure gold on roughish assise, for thin gold with alloy your assise must be superlative. And this brings us to our modern gold leaf of ordinary use. Books of this (price 1s. 6d.) can be obtained of the artists' colourmen. The same book, perhaps containing gold of somewhat inferior quality, can be got at an oil and colourman's, price 1s. 6d. or 1s. 4d. The latter people also sell what is known as transferred gold leaf, that is to say gold leaf adhering on one side to the paper of the book. Of course



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this, though convenient for rough gilding, could not be used for burnished gold, for when you had laid your leaf on the size and pulled away your paper from it, you would have some of the greasy substance by which it adhered to the paper to interfere with your burnishing. You must use "untransferred leaf." As far as the gilder with burnished gold is concerned, there is one great oversight of the artists' colourman. To prevent the leaf sticking to the pages of the book, he uses a red powdery substance, which is probably Armenian bole (red ochre). Now, in dealing with burnished gold, the slightest dust or grit has to be guarded against. The presence of this substance is, therefore, a disadvantage, especially on the face of the gold you burnish. The bole on the under part of the leaf does not matter so much, but it may stop the gold adhering somewhat. For a gold of good quality go to G. M. Whiley, gold beater, 58 Whitfield Street, Tottenham Court Road, W., who keeps leaf put up in books especially made for illuminators. The prices are 2s. 9d. and 4s. 6d. Moreover, by going to a gold beater, you can get any gold you want. For instance, if you want gold powder certified absolutely pure at headquarters, you can get that of the same firm (7s. a packet). It can be made into a paint by adding a little very weak gum water and allowing it to dry. Dentists' (pure) gold used to be used in illumination. But dentists now seem to be using gold that would be too thick for the purpose; at least the dentists' gold that the author has of late seen was of thickness so appreciable as to make it of the nature of sheet gold. One of the places where dentists' gold can be obtained is Claudius Ash & Sons, dental manufacturers, 5-9 Broad Street, Golden Square, W.



## MATERIALS AND TOOLS.



ESIDES the gold, there are various other materials made use of in the production of burnished gold. Of these, the most important is the gesso sotile, the method of preparing which has been described previously. Armenian bole (*balarminium*), as stated before, is a red ochre. It is perhaps through misunderstanding the qualities of this substance that many imitators of mediæval burnished gold have made failures. Such expressions as "Add Armenian bole to give richness," or "Add Armenian bole to give colour" are, in the main, misleading. Although Alcherius, who wrote towards the end of the fourteenth century, states that Armenian bole will give colour to gesso, one cannot help thinking that he was incorrect in supposing that it was for its colouring property that bole was then employed. When using the substance in question, one becomes more and more of opinion that it must have been used, principally, as a drier, or rather an absorbent, and the fact that it can be used as the base of a tooth-powder seems to bear this out. Armenian bole can be bought at a chemist's, though all chemists do not keep it. Any chemist, however, would no doubt get it. It should be noted that chemist's bole is not ground very finely. It is hardly necessary to enumerate the other various substances found in the many ancient receipts for gilding, but mention should be made of *cerusa* or ceruse, which is white lead; and of *minium*, or red lead. Of adhesive substances, the one most frequently employed was white of egg. Parchment glue is, of course, a present-day trade commodity. The ancient illuminators made their own glue from parch-



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ment shreds, by boiling these down, just as some picture-frame makers do to-day. Of the tools used by the gilder the most important is, of course, the burnisher. The forms in which this can be procured have been mentioned previously. As stated, the smaller your burnisher is, the better. Some of the burnishers sold by the artists' colourmen are much too big for delicate work. Though it is not absolutely necessary that the gilder have one, the possession of a gilder's tip is to be recommended. This is a thin flat brush of badger's hair, secured in shape between two strips of cardboard. It can be obtained at an oil and colourman's, and costs about 3d. For picking up the gold, the tip must be rendered slightly greasy by being drawn across the operator's hair. People with very dry hair had better draw it across the cheek or hand. The advantage of using a gilder's tip is that, should the gold blow up, it would not stick to a brush as it would to a piece of paper were that being used to lay the portion of leaf upon its assise. One thing should be recollected, both in reference to the gilder's tip and paper, that only the extreme edge of the tip should be made greasy, and that, when you have occasion to damp a piece of paper to make it catch hold of a piece of leaf, it is best not to lick it, but to wet the tip of the finger and then draw that along the edge of the paper, that edge being perfectly level. The above are the main tools used in gilding, and perhaps it is only necessary to add that some form of tracer or indenter is made use of by those who have occasion to mark patterns on the surface of gold.

**THE WORK.**

Having thus cleared the ground, as it were, we can go on and give a description of how the operator should proceed in his attempt to imitate the brilliant level surfaces of gold of the ancient manuscripts. Three processes were alluded to and left for reference, viz., gilding on size, gilding on assise with a size on that, and gilding on a substance



## PUTTING ON THE ASSISE.

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that was explained to be a kind of size and assise mixed. As gilding on a single sticky substance is by no means the highest form of work, especially where burnished gold is desired, it can, though it may come first logically, be left till later. Mixing much of a sticky substance up with your assise gives good results, but this is not the method most frequently described in ancient manuscripts. The method most frequently described is that of getting a good assise on and upon that laying the gold, by means of an adhesive. One does not wish to assert that this, in all its variants, is the best method, but as it, so to speak, embodies the two others, a typical example of it can be given; that can then be enlarged on, and the imitation of these ancient methods, by means of raising preparations, &c., can be mentioned. As for the Base, it matters very little whether that is taken as being parchment or paper. As for the gold leaf, the author will suppose that the ordinary leaf of the artists' colourmen, at 1s. 6d. a book, is being employed. Thicker and purer leaf is easier to use, but, as in the case of the laying on of colour, it is perhaps best that the writer should, if anything, go out of his way to describe what is difficult.

## PUTTING ON THE ASSISE.

A proper understanding of how to manage the *assise* or bedwork of gold for burnishing is absolutely indispensable. The subject has been again and again misunderstood. True, the mediæval receipts are not one by one self-explanatory, but by a method of careful comparison we can come to some conclusion as to what were the *raisons d'être* of the things carried out in the making of an assise, and in putting a size, or adhesive substance, on that. Take an isolated receipt and work from it, and you are almost certain to go wrong. What is chiefly wanted in an assise is that it shall be absolutely level, and this is got in the following manner. Take *gesso sotile* of the sort described before, and grind it up well into a very fine powder. The ordinary glass muller



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or pestle is used, and the grinding can be done on the back of a plate; but take care that this is a new one or, at any rate, a clean one, that is to say, that a plate which may have been washed in greasy water should not be used. Gesso sotile can also be ground down with a very thin breakfast knife, one that has been worn down till it is pliant, and perhaps this is more convenient than a pestle, as you can pick up the gesso on the end of the knife or "shepherd" it into a heap, that you can then crush down by pressing on the knife-tip with two fingers of the left hand. It is absolutely necessary that your gesso be ground very, very fine. Now, gesso sotile that has been lying by is apt to be found in hard lumps that are very difficult to reduce to powder (perhaps some chemical action takes place). To reduce their gesso to the proper state, some of the old illuminators ground it up *with water*, and then let it dry. Recollect, if you do this—and it is certainly best to do it, if your gesso is at all old—that the gesso must be allowed to dry naturally. It must not be dried in the sun or before a fire (chemical action takes place in those cases). And recollect that your gesso must be *quite* dry—you can well give it four days or a week—for if you have cold damp in your gesso, it will affect the glue you mix it with, and cause trouble. We now come to the glue. In explaining how defects in prepared vellum could be remedied, the present writer was, in a measure, explaining how to put on assise; but putting on assise for burnished gold is a much more delicate operation than that of mending holes in prepared vellum, and he can, therefore, speak much more in detail. The consistency of the glue to be mixed with the gesso was mentioned, and it was pointed out that a just medium must be found between a mixture that sets too hard and a mixture that sets too soft. As this mixing of the glue with the gesso is a matter of great importance to the result in burnished gold, one had better recapitulate, and, beginning at the beginning, show exactly what is done. We will suppose that you have a certain



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amount of finely-ground gesso sotile in hand, and that parchment ready to receive this gesso is before you. You must have a fire in your room or a small spirit-lamp burning. We will suppose that you have a rather large surface to be covered with burnished gold, say three square inches. Of course you won't begin your experiments by covering such large surfaces, but a point at issue arises in connection with such, and we will postulate a large surface. Take your clean plate, turn it upside down, and put in the middle of the underside about as much gesso sotile as would cover a shilling, piled up pyramidically. Towards the edge of this flat underside of the plate, put another pile of gesso sotile. Now for the glue. The author prepares his glue in a small cup out of a child's tea-service. It is an inch and a half high and an inch and five-eighths wide at the top. This he half fills with water. In that he puts a piece of the best carpenter's glue, of about five-sixteenths inch cube. This carpenter's glue represents the "bull's skin glue of the mediævals." We will speak of parchment glue later. When using a fire, you can put your little cup on the top bar of the grate, but be careful about smuts. Cover the cup over with a piece of paper, if such are about. Take care that your glue water isn't too near a very hot portion of the fire, so that it boils violently and bubbles. Bubbles are anathema in assise. You want a clear, strong (yet liquid), tractable, bubbleless glue. If you are using a small spirit-lamp, fix up what is vulgarly known as a "contraption" of wire, to take your little cup. You have now some hot glue ready. Take your cup in your left hand (the cup should have a handle), and pour a little on to the blade of your breakfast knife towards the tip. Turn the knife over and let the glue fall on the gesso. Then, with a circular motion of the knife pressed flat on the plate, grind the two together, adding more glue if required, till the mixture is like cream, and more gesso from your extra supply, if it looks too thin and bubbly. Extra gesso checks bubbles, but, at the same time,

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it makes the hot assise coagulate more rapidly than you wish. There is a just medium. Now take a *dry* No. 3 sable. If it is at all wet, suck all the moisture you can out of it, and dip it in the hot glue to warm it. I should have mentioned that, before taking up your brush, you should have, as it were, scooped up all you could of your warm assise on the blade of your knife and let it fall in a pile, if such a term can be used of a liquid in mass. Now for putting on the assise. Choose the least bubbly portions, and paint a thin coat on as rapidly as you can, letting no bubble escape your notice and remain unbroken. As the assise cools and coagulates on the plate, you will find less danger of bubbles; but there comes a time when it coagulates so much that it is intractable, and, in putting it on in this state, you will leave "caverns" or hollows. To remedy this, hold the plate in front of the fire or (not so good) over the spirit-lamp, and the assise will go liquid again. You will find that you cannot do this more than two or three times, as the assise will begin to harden, and, for further operations, you must make some more. Paint on your assise layer by layer till it is of very appreciable height. The expert can put it on fairly thinly, for he knows the exact amount to put, but the novice had better lay his assise on thickly and have plenty to engross, or scrape down. Take care to doctor the edges of the assise well up to the edges of the pattern, for the gold must go well up to these. Beware of too thin coats of assise on the "serifs," or outstanding thin portions, of letters. Weak coats of assise will break under the burnisher. Beware also of pits and slits. You will have to engross down to the level of the bottom of these, and may thus get your assise too thin. A quarter of an hour or more after your assise is on, it should have a yellowish look towards the centre. That shows that there is enough glue in it. At the extreme edges it should be beginning to assume a milky white. That shows that it is going to dry out well and not be too gluey and hard.



**CAUTIONS.**

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Recollect this, that you cannot doctor assise that has once set. The added portions invariably break up and come away under the burnisher, so get your assise on properly, once and for all. Now put your assise away to dry till the morrow.

**CAUTIONS.**

You have been warned of the necessity of eradicating every bubble. This is peculiarly necessary in the serifs and thin portions of letters, for there the presence of a bubble will make a noticeable gap in the burnished gold. I would draw your attention, too, to intractable lumps, or let us call them grits, in your gesso that you are trying to mix up with your glue to a mixture like cream. The presence of these means that your gesso is not ground fine enough. They must not occur. You must have recourse to grinding gesso that produces such with water, as described. Mix your gesso and glue *well* together. If you don't, when you come to polish your assise (of this hereafter), you may find a place that won't polish. This is fatal. Another caution: beware of heavy blacklead at the edges of your assise. When you come to polish the assise, such blacklead will smear over it. The portions of your drawing to be burnish-gilded would be better outlined in the thin lines of a hard pencil, or if you have got heavy dark lines, rub them out a bit.



## CHAPTER VIII.

### **Gilding—Continued.**

#### **ENGROSSING AND BURNISHING THE ASSISE.**



**HEN** you look at your dry assise in the morning, it should be of the whiteness of chalk. If it is yellow or yellowish, that means, it contains too much glue, and, when you come to engross it, you will find it either too

hard to scrape, or the feather-edge of the knife—and your knife is sure to have a slight feather-edge—will leave thin lines upon it. Well-made assise can be scraped away in a powder easily, and you can, so to speak, worry it away by waggling the knife, held lightly, over it. You don't want your assise to stand up too much above the parchment, and, when you are experienced, you will try and scrape it as thin as you can without touching the parchment. Very thick assise will absorb a lot of moisture ; this is undesirable—very thin assise may crumble under your touch, especially if you have the heavy hand of the inexperienced. Scrape your assise flat, blowing away the powder, then finish off the edges till they are quite thin, running, so to speak, into the surrounding parchment. I mean that the edges of your



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letters to be gilded should not end in a kind of jagged cliff : when you come to outline in black you would find this very disturbing. Be especially careful of your finish in receding angles. Now, when you have moulded your letter to your satisfaction, so that it is highest in the heaviest parts, lowest in the thin parts and edges, you blow away the last you can of the powder, and, picking up a small piece of chamois leather, carefully wipe away any that remains. Don't forget to do this. It is to be hoped you have no holes, where bubbles have formed, in your assise. If you see them, you must try and engross them away or try and rub some of the powder into them, as you wipe it off ; but this is only a makeshift. Now draw the back of your finger-nail across the assise, and it ought to leave a polished mark. If it does not, there is not enough glue in your assise, and it will probably break up under the burnisher. Now pick up your burnisher. Don't use it at once, for there may be a little powder yet on the face of the assise. Instead, breathe on the assise lightly three times, and wait. Over this exceedingly slightly moistened face of the assise draw the burnisher carefully, and a bright polish ought to come at once. The more the polish comes the easier it is to polish, until you ought to be able to lean firmly on the burnisher and rub it round and round till your assise shines like glass. Flash your burnisher off the parchment and up the edges, to make these smooth. Now comes the most important thing. If your assise is at all rough, or has marks on it, or if the edges do not join the parchment properly, or if, at any time, you feel it checking the burnisher, you can breathe on it somewhat heavily and make it moist and pliant. Then, if you wait a little, the glazed surface dries, while the under part remains damp ; and up to a certain point you can go on breathing, waiting, and polishing, until you are dealing with a hard outer crust and an absolutely pliant interior, on which you can press and mould the crust until it is superlatively level and of extreme brilliancy. THE WHOLE SECRET OF



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MEDIÆVAL BURNISHED GOLD LIES IN THE FACT THAT YOU CAN CRUSH A DRY OUTSIDE DOWN ON A SOFT INTERIOR.

Writer after writer states that, once your assise is on, you can't disturb it without breaking it. The very fact that you can disturb it without breaking it made burnished gold possible; for what you can do before the gold is on, you can do after the gold is on, as will be shown. "Breathing on the gold, burnish it," one mediæval writer says. He forgets to add, "Wait till your breath has had time to sink into, and moisten, the assise, and the outside gold to dry." The writer has purposely described how the glassy polish comes, before he mentioned breathing-on and moulding, because you should have some polish to preserve the surface before you start this breathing and pressing. But note that it isn't necessary to have your *full* glassy polish before you soften the assise; you can do this almost from the first, and such a course tends to stop cracking and peeling in certain assises. Of course, in your first experiments, you will breathe on the assise too much and polish it too soon. When that occurs, use the chamois leather, and, wiping off the grit, try and get the place right. Always breathe on serifs and thin parts of letters carefully, and mould them with the burnisher, but don't squash them down too much, or they will crack when burnished dry. You may have to trim the outsides with a knife, if you spread them as if they were butter, and they get outside the pattern. Mind your burnisher is clean. Rub it on the chamois leather each time before you use it. If you find a spot that won't burnish, then you have made the mistake I spoke of, and have not mixed your gesso and glue properly. Your only hope is to touch it with *very* weak glue, and trust to it burnishing then. Otherwise, it is certain to show when the gold comes on. On board, your assise should perhaps be thicker than if it were on parchment or paper, for in moulding down your damp assise under the burnisher, you ought to have some backing to press against. With paper and parchment, a



sheet of glass put behind does splendidly, but with very thin assise on board some of the polish seems to be lost to the assise by the give of the substance below it. One seems to drive the assise into the board. Of course, all your breathing and burnishing warps the parchment a little, but that can't be helped. Most mediæval manuscripts are warped a little where the burnished gold comes. You can adopt one of three plans when you are indulging in burnished gold on parchment—gild on a loose sheet, and lay that over the glass for burnishing; put your parchment down with drawing-pins, and lift a pin or pins to get the glass under; or, if you have got your parchment glued down, lift a bit of the glued edge and slip the glass under. Of course, too much warping of the parchment might interfere with writing. If there is danger of this, on small pieces of skin, do writing first. But be very careful if writing is damped by breathing. You should, however, cover up all writing in dangerous places before gilding. Fasten paper over it with drawing-pins. As for burnished gilding after your colour is on, you can, now, see it is an obviously wrong thing to do.

#### **USING THE SIZE AND LAYING ON THE GOLD.**

You are, at this point, left with a highly polished surface on which to lay the gold. Could the gold be put on to this surface direct, without the intervention of any adhesive, you would have a glassy surface with a flat leaf of level gold laid on it. In the case of an assise composed of gesso sotile and glue only, it is not possible to lay the gold on thus directly. Breathing on the assise, and then attempting to affix the gold, results in almost all this gold coming off under manipulation when the whole is dry. Nor, if, after the custom of gilders on wood, you wet the assise freely with a brush, and lay the gold upon the wet surface, will all the leaf adhere. It may do so in places, but even such gold can hardly be regarded as permanently in place. To lay gold upon the assise in question you must, as said, make use of



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an adhesive. The adhesive used by the mediæval illuminators was white of egg ; but it must not be supposed that merely coating the assise with this and laying on the leaf will result in your eventually having gold that you can burnish. White of egg is a most intractable substance, and many mistakes can be made in laying it on. In the first place, as Alcherius says, it must be whipped or beaten so that it is liquid and has no parts conglutinated and adhering together. What should be done is as follows : Take a fresh egg—one straight from the nest is best—and either blow half the white into some receptacle—a Shippam's potted meat terrine does as well as anything—or, like cooks do, break the egg and separate the white from the yolk. Then beat up the white of egg with a feather until it is all froth. You can let this froth stand all night, and in the morning you will find that some of it has become fluid again, and not only fluid, but more fluid than it was before beaten up. You must use at least half the white of an egg, otherwise the froth is liable to set hard, as froth, none going back to fluidity. In the event of your not letting the egg stand overnight, you can generally get enough liquid at the bottom of the terrine from froth that has stood for two hours or so. However, it is said that the long standing clears the egg, and perhaps it does. What you must never do is to paint your assise with the froth and put your leaf on that. However hard you press down the gold, you are sure to be left with some irregularity of the hardened froth, for the egg sets—if it doesn't completely dry—very quickly when put upon the assise. And here it may be stated that you must do all you can not to stir up bubbles when sizing with the fluid egg.

And now as to putting on the gold leaf: It is very difficult to do this correctly, even with proper white of egg, for there are various things to be considered. One had better, perhaps, begin at the beginning and speak of getting ready to gild and cutting up the gold, for, directly the white



## BREATHING ON ASSISE.

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of egg is on, the leaf must go on that. You want at hand your gilder's tip, or, in lieu of it, some pieces of paper, cut with straight edges; a very clean piece of chamois leather; some cotton wool; a camel-hair or sable brush—if a camel-hair one, a rather small one; your egg; and some water. Now take your book of gold leaf and a breakfast knife with a straight edge. See that this knife is very clean and not at all damp. The edge need not be very sharp; in fact, it can be a little feathered. Some people, the writer believes, cut their gold on a pad, but, by laying the book flat, you can, as it were, saw out pieces of the required shape, in doing which you must not press too heavily, or you will injure the leaf below and make it stick to the book where the pressure of the knife edge comes. Then put your book aside, but don't leave it open. Close it over the cut gold, putting something in it—the extreme end of your burnisher or the tip of a piece of wood—to mark the place. Before you begin this manipulation of gold leaf you ought to shut all your windows tightly, and shut and lock the door. If the day is at all windy, keep as far away from windows as is convenient, and keep away from the fireplace. You are now ready to lay on the white of egg. See that the brush you are going to use is quite clean. The writer spoke previously of how the secret of mediæval gilding depended on the fact that you can press a hard outer crust down on a soft interior. This being so, it is obvious that the state of your assise when you lay on the gold is very important. Say that you gild directly after you have *breathed on* and burnished your assise—what will happen? Your gold outside will dry first, enclosing the moisture of your breath in the assise, and at the same time that moisture will keep damp the white of egg, giving it time to settle down into the assise, so that your gold leaf will lie well against the assise. Say, on the other hand, that you have allowed your assise to dry during a hot night, or in a room with shut windows and a fire burning. Your gold will enclose no moisture in the assise,



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and a thick coat of your egg, drying quickly, will lie a hard, unlevel plate of inconvenient thickness, between your gold and the surface of your assise. Therefore, especially when you know your assise has hardened, and in almost any case, breathe upon it before laying on the egg; but give the surface time to dry, as in the case of burnishing it, before putting on the egg. How damp you make it must be a matter of experience, but make it fairly damp. It is a long time before you make assise so damp that its surface cuts up under the application of the egg. Assise that has been in a room with the windows open through a damp night is in about the proper condition. In laying on your gold, you want as thin a coat of egg as possible on the assise. On properly damped assise this coat is prevented from sinking in at once by the moisture already there, and is kept fluid by it, and you have time to get your gold on. On dry assise, this thin coat is liable to sink in at once and be lost, while, if you put on another coat thick enough to stop for some time adhesive, you will have the hard, uneven plate spoken of above. You cannot burnish the white of egg, and then wet, to put on the gold leaf. Egg is too hard to burnish if quite dry, and too sticky to burnish if at all wet. True, it will burnish if a little Armenian bole is added to it, but this is never satisfactory. When you have got your damp assise and your thin coat of egg on it, you must put on the gold leaf, you have ready cut, at once. Take up your gilder's tip and make it greasy as described, and lift your rectangle of gold leaf, making this adhere to the tip, preferably by a long edge. Then try and make the gold float out and settle down flatly on the egg. The egg on the assise ought to be wet enough for the gold to do this readily. If it isn't, it may be that your assise wasn't damp enough before you put on the egg, and the remedy for this is to breathe very heavily on the egg. Recollect, in breathing, that you have a nose, and that if there is any writing or gold previously put on you may disturb these greatly. So



**PATTING DOWN GOLD.**

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lay a piece of paper down where the breath from your nose will come. Don't hurry to disengage the tip, for the gold takes a little time to settle down. If, when you are about to remove the tip, it looks as if it would tear off some of the gold, part these two with the chamois leather, so that this does not occur. Now as to patting down the gold: Personally, the writer has found that gold that has never been patted down polishes best, for with our very thin modern gold leaf, there is no doubt that in pressing down the gold you force somewhat of the adhesive up through it, to interfere with the burnishing. It is the ideal gilding when your first piece of gold settles down quickly and flatly, and you breathe on that heavily and lay on another piece, and continue this operation until you have some six pieces of gold on. That gives you a good thickness of gold to burnish, with little chance of any adhesive ever appearing on its surface. However, in practice, gold blows about, and edges will turn up, so that, to get your next layer of leaf on, you must pat down. For patting down, roll some cotton wool up lightly in a little ball and put it in some chamois leather. Then pat tenderly, especially on a first coat. What adhesive you squeeze through, you hope to cover with your next layer, and, at any rate, you hope to have all your adhesive got under by the time you have put six coats on. Remember that you must change your chamois leather often, for adhesive will get on it, and egg on the top of your gold is fatal to burnishing. It is sometimes a good plan to give the gold a hard press down after an hour or so, especially if you find, by practice, that you are not good at making your gold adhere.

**BURNISHING THE GOLD.**

How to get gold exactly fit for burnishing at a certain time cannot be taught or learnt; so much depends on the weather, on how damp your gilding was before you put it away for the night, on the nature of your assise, &c. The



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common statement both of mediæval and modern authors, "When the gold is dry, burnish it," teaches nothing. Perfectly dry assise and gold would be unburnishable. As the writer has said, you must hope for dry gold on dampish assise; but not perfectly dry gold, for, in this case, you cannot weld the separate leaves together; and, also, the egg, or assise with egg in it, under dry gold is so brittle that you cannot affect it. All you do, if you attempt to burnish with your gilding in this state, is to rasp off the gold. On the other hand, if your gilding is too damp, you plough it up. Though the writer has sometimes gilded in the morning and burnished in the evening, your best plan is to gild late in the day, and put your work away, covered up and far from the windows, in a room with a window partly open. Next morning, when the night chill has gone off, in summer, and the fire has been alight, in winter, take up your gilding, and, *without wiping off the skewings*, feel your way gently with the (clean) burnisher. Sometimes the polish will come at once. When you have burnished down all the loose gold you can, wipe off the skewings. If, then, you hold your gold not very close to, but not far from, a fire for a little, you can get a much brighter polish on. There should be no question of this being a polish. The burnished gold should reflect not only the shape of a finger tip, but the pinkish colour of it, and, in good burnished gold, you should be able to read print backwards.

Sometimes, when gold has been got very bright, it will dim a little afterwards. This is the damp coming out of the assise. Leave it for a few days and then dry it before a fire or with a warmed cloth, and re-burnish. This application of a warmed cloth should be noted. It was a mediæval custom. On occasions when your gilding would be, otherwise, too wet, you can get a surface dry enough to burnish on by means of it.



**FAKING AND DOCTORING YOUR GILDING—  
ACCIDENTS.**

As the chances are that you will seldom find your gilding in the ideal state when you wish to burnish, we will now advise you as to how to meet the various troubles of one burnishing. First, to take gold that is too dry. In this case, you will either feel or soon find out how hard the assise is, and, if the gold itself is much too dry, you will be conscious of it acting as though it were grit under the burnisher. Your remedy is to do what you did in the case of the plain assise. Breathe on it, give the moisture time to soak in, and then again try to burnish. By going on with this, you should be able to get your highly polished gold; but of course the danger of getting a scar on the gold is very great. If this does occur, you must either breathe heavily, put on a piece of gold, and press it down, or damp the injured place with a brush, lay on some gold, and let it wait some time before you again attempt to burnish. It is wonderful how, by breathing, and more so by boldly damping, after the manner of the gilders on wood, you can doctor burnish gilding. But you must not get too much gold on, for there is a tendency, if you burnish this when too dry, for a whole piece of the gold to come away, leaving the gesso exposed. Nor must you ever attempt to doctor burnished gold by putting on white of egg and gold on that; for when you attempt to burnish, you will catch the hardened egg between two layers of gold and break it to pieces. When, in doctoring gilding, you have damped the gesso a little too much, the application of the heated cloth or warming the gold before a fire will sometimes save a scar. In the case of your gilding being much too moist for the burnisher, then you had better wait. Drying it before a fire is not successful. This makes the assise brittle. Another caution may be added: You can burnish gold with a rather heavy hand, if it is in a fit state, but, if the assise is somewhat dry or if



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you have so warmed it before a fire that the egg (or assise and egg) is hard, or hardish, there is a tendency for your gilding to break up, without actually peeling, and have a reticulated appearance when finished.

**CENNINI'S ASSISE.**

The writer spoke of a size on an assise and an assise and size all in one, drawing, as it were, a distinction between them, and he has also spoken of the highly polished surface, of the assise described above, with which you were left, to gild on. It is obvious that, if the gold could go straight on this, without the intervention of an adhesive, you would be spared the troubles attendant on the use of even the most tractable white of egg. Attention was drawn to the fact that it is desirable for your egg to settle down well, into the assise, and to the fact that a hard, uneven layer of egg, lying on the surface of the assise, was to be avoided. This amounts to saying that you are most successful when you do away with the distinction between the two processes and make the top layer of your assise an assise and size all in one, and the writer will, as far as relates to good work, abandon that distinction, which he made partly for the sake of argument. That it was desirable to get your gold straight on the assise, is seen from the words of Alcherius, for though many of the ancients did gild as described above, and though Alcherius's method of preparing the egg is no doubt a right one, Alcherius does not recommend you to paint the egg on the assise. He tells you to paint the mordant on in three coats, and to *temper the last* with white of egg beaten so as to be liquid, &c., "because this white of egg makes a size, or vehicle, sufficiently strong to hold the gold for burnishing, and to resist the shaking and violence of the friction and rubbing the burnisher over the gold." Now this may be so, but it takes a great deal, and the writer has found an inconvenient amount of egg added to your gesso and glue to make a proper tie for the gold. There is a



much better method, that of Cennino Cennini. He added the sticky substance "candy," or sugar, to his assise, as well as *biacca* (ceruse or white lead). This use of white lead is common in mediæval receipts for gilding, the reason of which probably was that the presence of the pigment made the assise more workable, and less of the nature of a plaster always inclined to become too hard. Cennini's receipt is as follows:—Take gesso sotile ; *biacca* (white lead—powder colour from an artist's colourman is best), never more than is equal to a third of the gesso ; and candy (sugar—the writer pounds up loaf sugar), a little less than the *biacca*. Grind these finely together with pure water, and let them dry *naturally*. Cennini then tells you to make your assise by tempering the mixed ingredients with cleared white of egg, such as we have described, to let it dry, and to put your gold on by either breathing on it or not, as you like. He adds that you can write letters with this assise, and that, if you wish your ground to be very level you can scrape it. Like most mediæval receipts, Cennini's does not seem to work out to perfection, if followed literally. If you mix your ingredients with egg, as described, there is the inevitable danger of bubbles, especially if you make an assise fluid enough to write with. The writer finds that, if he uses weak glue in the manner previously described, he gets just as good results as he does with egg. Then there is the phrase, "breathing on it or not, as you like." Cennini may have meant that you can either let it dry and breathe on it, or put the gold on while the assise is wet, not breathing on it. For, however much adhesive there was in it, one could hardly get gold on a dry assise without moistening, and, if you could, you could hardly burnish on so sticky an assise. The writer goes further than breathing—it takes so long to properly moisten an assise in this manner—and damps the dry polished assise with clean water, freely. Then he puts on the gold ; but never on the water hanging in a pool. He allows it all to sink in. Press this first gold with the



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pad, breathe on it, and lay on more gold, &c. You must, of course, take care not to break the level surface of the assise in manipulating the water. Cennini's assise is very easy to doctor. If you lift the gold in burnishing, finish the burnish as well as you can, then wash with water, and lay on more gold. If you have not wetted very much, you can burnish again that day. The sugar and glue together hold this added gold extremely well.

**ARMENIAN BOLE.**

Much more could be written of burnishing gold, enough to make a small book, perhaps, but as space is limited, we must pass on to the use of Armenian bole. As said before, this was probably used as an absorbent or siccativ. Its presence is not necessary in an assise, but it is a convenience, in that it makes the assise dry quickly, contributes to its polish, and prevents smearing, especially that of a size of egg. The author has seen excellent gold on an assise without bole, and very excellent gold on assise with bole. It is not necessary to add a lot of bole to the ingredients you temper with your glue. A little, finely ground, and well mixed up, will have the desired effect; too much will make the assise brittle; very hard to moisten for the burnishing, and very hard to keep wet enough to receive the gold, for assise with bole in it drinks up the water in a curious manner, and will render your gilding liable to crack with the reticulated appearance described. Assise with bole in it is generally a dark pink, not a deep red, colour when dry, and, as bole stains very much, it takes very little to get this. Beware not to put assise with glue and bole in it too near to the fire. It makes it blister. What appears to be a variant of this assise with bole in, is a certain raising preparation of the artists' colourmen. The experimenter should try this. It is very easy to burnish, because it remains moist, with a glassy surface; and it is very easy to put gold on it, by breathing and pressing down. But you have to, as it were



## GOLD POWDER.

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bake it to engross it, and as it always, of itself, becomes soft again, and remains so, you cannot get the metallic polish on it you can on other assises. Another preparation is what is called "burnish gold size." The author has bought it of an artists' colourman—a dry, grey substance in a pot, price is., and sold without instructions. This is no doubt the same, or much the same, as the usual "burnish gold size" of trade. This has to be mixed with parchment size to make a gesso. That is then scraped level, and sandpapered with fine sandpaper. The gold is applied on parchment size, put on hot, and left till tacky. When the first coat of gold is dry one more *must* be applied in the same way. When dry, all is burnished.

## GOLD POWDER.

The manner of putting gold powder on material has been already explained. It is, therefore, only necessary to add something on the subject from the artistic point of view. The earliest illuminators, in using powdered gold, put it on flat, and then enclosed the gilded figure with the ordinary black outline. This black outline was sometimes rather thick. However, in modern work, it is perhaps unwise to imitate this heavy line. It gives objects, especially such objects as the delicate ducal coronet of a crest, a somewhat clumsy appearance. Keep, rather, the heavy line for the parts of an object that are in shadow, and make a thin, firm line about the lights. Of course, in simple mosaic work, such as that of the thirteenth century, one would, as a rule, put gold powder on flat; but even in thirteenth century work a certain amount of relief was attempted. For instance, the little circles so characteristic of this style had, even when of gold, a little white dot on them, sometimes, which gave to this gold ball the appearance of a berry. Letters, as well, had lights of palish yellow, and black or brown hatching and washing was used for shades. But it was in subsequent periods that

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powder gilding was "worked-up," until this working up became of itself an art, as much as hair-lining was. Nor are modern carriage painters and illuminators behind the ancients in manipulatory care. The consequence is, that so far from powder gilding being a simple operation, there is a great deal that one can learn about it; in fact, one often comes on some new effect got in some particular way. Maybe that what first led to this emphasising of relief in gilding was that the Italian and other painters had begun to represent the appearance of gold by colours. If, therefore, you wish for useful hints, you would not be unwise to study old masters at the National Gallery, Hampton Court Palace, and elsewhere. The artists of the seventeenth century were especially good at gold effects. You will note that, in modern heraldic painting a feature such as a gold lion is seldom or never painted flat in powder. He is worked-up to the best of the artists' power, and is often very effective. I think modern sign-writers can vie with modern illuminators in the way in which they handle a gold beast. They have fine traditions behind them.



## CHAPTER IX.

### Heraldic Painting.



HERALDIC painting, executed as it now is, represents, we suppose, the acme of the illuminator's skill. It has frequently been referred to in these pages, and much that has been written has to do with it. One would be inclined to feel the want of an elaborate series of coloured plates, were it not that the most elaborate of plates might leave out some of the subtleties to which one wishes to refer. There comes a time when the handicraftsman cannot be imitated. Of course, in speaking of heraldic painting, one presumes that one's reader has a knowledge of heraldry; and a person who takes up heraldic painting must have a very good knowledge of it indeed, or should have some well-instructed student of the subject to refer to. It happens more than once that one is face to face with one's ignorance. Descriptions of arms are often given in blazon, that is to say, they are written down in the peculiar language of heralds; and the pitfalls awaiting the illuminator are numerous, not only as regards the drawing and colouring, but as regards the shading. No doubt many incorrect coats of arms are sent out by heraldic artists in the year.



### A FEW NOTES ON HERALDRY.

The following heraldic rules and maxims should be noted by those who wish to emblazon coats of arms correctly:—

Fields “parted per” are not entitled to a shadow, but a charge on a field has a shadow. *E.g.*, “Barry of six” means six divisions of the field all in one plane, and none of the divisions throws a shadow. But in, say, “argent, two bars azure,” the two bars throw a shadow on the silver field.

You must be careful as to the colouring of roundels. The bezant, plate, and fountain are flat, the other roundels in relief. The bezant and plate can, however, be shown with a certain thickness, as they are coins. Pomes are apples; hurtes are supposed to be wounds; pellets, cannon balls; golpes are wounds; guzes (sanguine), the ball of the eye; oranges, the fruit of that name. Torteaux, cakes of bread.

Notice a difference between *semée* and *sans nombre*. In *semée* of fleurs-de-lis, you can have half-lis, but not in powdered, gerated, *sans nombre*, and aspersed.

The rules as to differences are somewhat complicated, but they should be mastered by the heraldic artist. In strict heraldry, only the senior representative of a house is entitled to the undifferenced coat, but in herald painting, except in some formal document, the difference is generally left out. There can be any number of differences, one on the top of the other, to mitigate which inconvenience a rule obtains that, when a family takes in a new quartering or new quarterings, they can discard their difference and begin again. The position of a difference is *the centre chief*, but it is not incorrect—as there are many examples of the same—for it to be put on a fess or chevron. The difference of a single coat can, therefore, be taken as on the centre chief; of a quarterly coat, on the centre chief, on the palar line; but it is not incorrect to put it in the centre of the shield. In a shield of six, the difference is always on the



fess line, on the fess point, with the amplification that, on all shields of six or more, the difference must be on some line or partition at the nearest possible point to the centre fess of the shield. The difference of the eldest son during his father's lifetime is a label of three points, coupé, on the centre chief. As a label on a label is not correct, to avoid this, a grandson bears his label of five points. If an heir succeeds to his mother during his father's lifetime, his label must not cross her arms. That is to say, in a quarterly coat where two and three are the dead mother's, the son can only have his label on the centre chief of one and four. It must not cross the whole head of the shield. The rule as to the colour of differences is that they follow the usage of heraldry as to what tinctures are allowed on what, and that they shall differ, if possible, from the metals and colours in the shield, preference being given to gules and azure in colours. As a parti-coloured label is not permissible, in a shield quarterly argent and azure the label would be gules, half of it on the azure. See the whole subject of differences ably treated in "The Art of Heraldry" (A. C. Fox-Davies), perhaps the only heraldic book that enters into the subject fully.

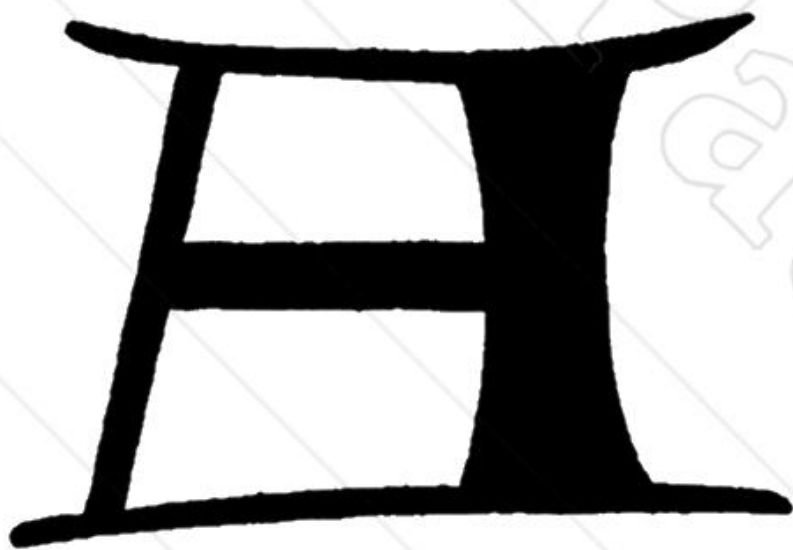
In colouring charges, crests, &c., though you may not commit an heraldic blunder, you may work up a colouring. A blackbird, or merle, sable, may have gold lights on his beak and legs, and be grey with black shades, or have white lights anywhere ; but a merle proper should hardly have the yellow beak and legs of nature touched up with gold lest it look like gold worked up, and postulate the blazon "beaked and legged or." A coronet or is generally worked up with yellow lights and vandyke brown shades, &c. A lion or can be similarly treated. But if you touch it up with gold, do not overdo the process, and make a lion proper a lion or. Recollect that a lion is armed (clawed), and langued (tongued) gules, if no tincture of arming and languing is given, but that, if it is on gules, it is armed and langued azure.



## CHAPTER X.

### **Heraldic Painting—Continued.**

#### **AN ACHIEVEMENT OF ARMS.**



**A**n achievement of arms comprises “the symbols, badges, and full armorial honours of a sovereign or subject” (Boutell). Leaving out everything except the actual arms, we have the shield, helm, crest, mantle, and wreath. The shield was of metal, painted.

The helm was of metal, with the blow-holes on the right (in a tournament, you had your adversary on your left, and the blow-holes were away from him). The crest was of wood or of leather stuffed. The mantle was of painted leather, cut (the mediæval word was “dagged”) at the edge or edges, for the sake of ornament. Crest and mantle were bolted on to the helmet; and to hide this, and to hide the join between them, the wreath was put. This was of two strands of worsted or other material, of different colours, twisted, and put round the helm. Sometimes the crest sprang from a coronet, usually when it was a beast’s or bird’s head and neck, or if it was a panache, or plume of feathers. In this case the wreath was unnecessary. And hence the rule that a ducal coronet (so-called because the coronet in question is like that worn by a duke) is not put on a wreath.

Knowing exactly what this defensive armour of the tournament was like, you have less danger of going wrong.



First, as to size. The helm and crest together were very much larger than the shield (see W. H. St John Hope's "Stall Plates of the Garter," and R. R. Stodart's "Scottish Arms"). I do not mean to say that it is incumbent on you to make them so, because in a modern coat with, say, some fifty quarterings, you have to use a large shield. But they were so, if you wish to be correct. To take the crest and mantle next. Note that, sometimes, the line of the crest and mantle was continuous. That is to say, that a knight might have such a thing as a greyhound's head for a crest, and the skin of the neck, so to speak, instead of finishing off at the wreath, might be continued to form the mantling. In this case, of course, the crest was cut out of wood, and joined on to the helm, and then the animal's skin, the bottom of which formed the mantling, was put on, and hid the join. In such cases there was sometimes a wreath round the animal's neck, and sometimes not. Though, of course, this doesn't excuse you leaving out the wreath when you aren't painting a picture helm and crest of this sort; and, in any case, you had better put it. The mantling, below the helm, was often split in two, and both sides matched. I don't say that mantles were, or are, always drawn logically. But, however you twist a flowing mantle in art, you ought to bear that in mind. It gives you a great deal of trouble, and puts a strain on the imagination, to design a mantle the sides of which match, and are yet behaving in different ways, as it were as the wind had chanced to take them; but the similitude with difference thus got is very effective. Note that, though mantles were originally cut out of leather, and were so shown, the time came when absolute foliage was represented. The mantles shown in Burke's "Heraldic Illustrations" are, practically, fifteenth century foliage. In Elizabethan and Jacobean times, the acanthus leaf of the Greeks was much copied; though some mediæval dagging was like the lobes of acanthus leaf. This may have been copied, in cases. As to the wreath, a convention has arisen



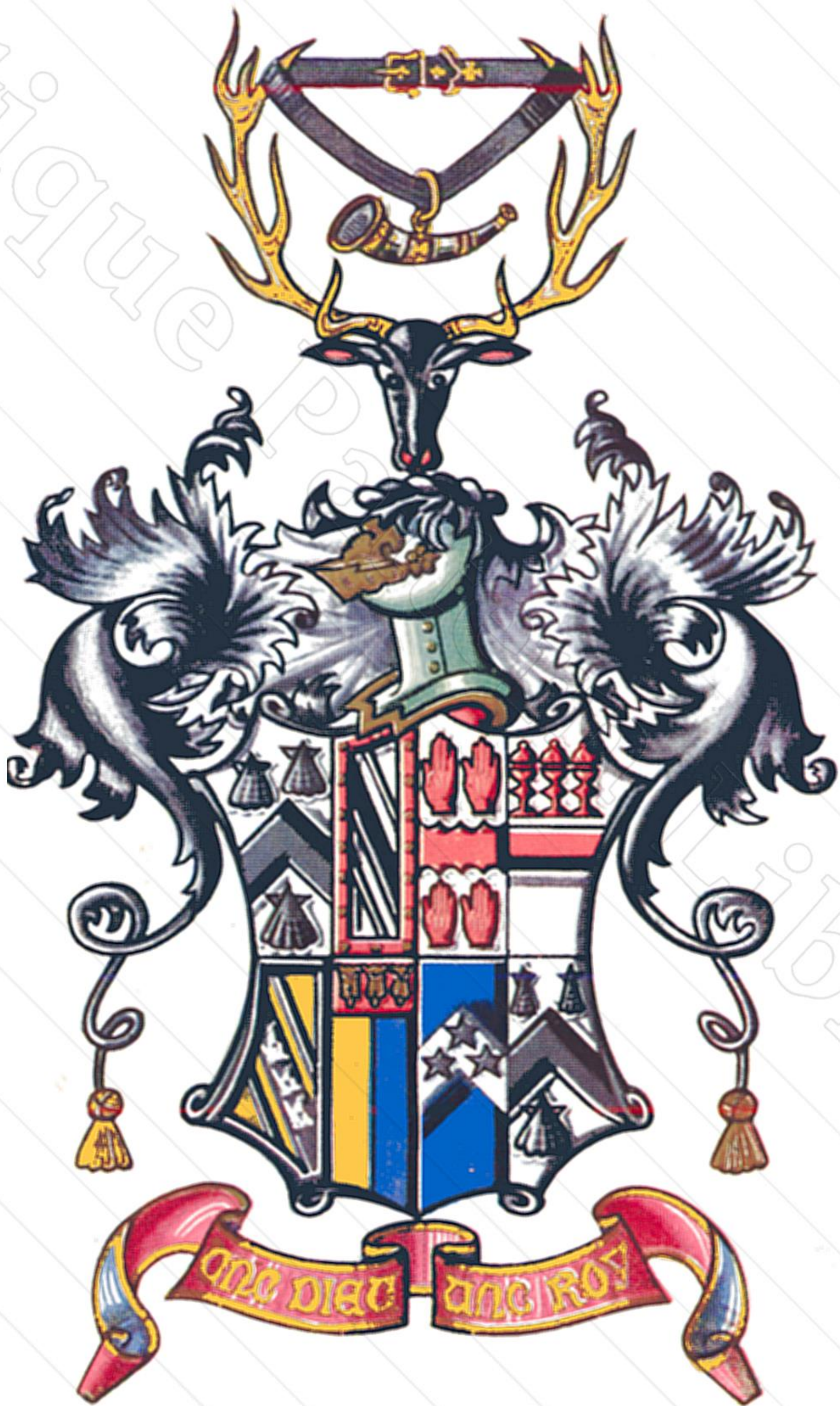
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by which it is shown of six pieces, alternately of metal and colour, the first piece on the dexter being of metal. It is as well, in drawing a crest on a wreath, to keep to this convention, even though it may seem illogical to one who knows what a wreath was. But, in painting a picture crest and helm, though you can always keep the metal on the dexter, it is sometimes very inconvenient to have to show just six of the twists. In that case, show as many as you like. The Garter Plates will bear you out. The rules obtaining as to the tinctures of wreath and mantle are easily explained. The wreath is of the predominant metal and colour of the coat, the metal, as I said, to the dexter. The mantle follows suit, being of the colour, doubled, or lined, with the metal. In the case of furs, the rule is that the fur itself is not used for wreath and mantling; but the metal or colour of the fur is combined with the colour of the principal charge, and *vice versa*. *E.g.*, ermine a chevron gules would give us wreath and mantle argent and gules. Ermine a chevron or would give us wreath and mantle or and sable. In quartered coats, the tinctures of wreath and mantle are derived from the coat of the crest. One does not mean to say that all mantlings were, and are, just of plain metal and colour. It may be distinctly stated in a grant that a mantle is "*semée* of roses" and "lined ermine." Some of the foreign mantles are very elaborate, being of four tinctures. For example, a coat Barry of three azure or and gules, with argent charges, would be accompanied by a mantle azure doubled argent, above, with flying tails gules doubled or. However, the simple rules apply when the tinctures of the wreath and mantle are lost.

### PAINTING AND WORKING UP AN ACHIEVEMENT OF ARMS.

To one accustomed to thirteenth century work and to very old examples of arms, the amount of elaboration now indulged in is often somewhat distasteful. Still, nobody







Antique Pattern Library



can say that a well-painted picture is not effective ; and the coats of arms produced nowadays are, mostly, nothing more or less than pictures. The ancients were more simple, and it is doubtful if they would have tolerated gumming-up. Let us take, for example, a simple coat : Azure three swords in pale hilts and pommels or, over all a fess or. In an old manuscript, this might have been simply painted in the plain tinctures, with everything black outlined. The gold might have been burnished gold. Such a coat, in the hands of a modern artist, would give scope for a good deal of fancy work. First, he would put on his opaque colour ; then the gold powder of the fess. But he would not paint the whole of the fess in gold. He would leave at the bottom a broadish band, which he would paint in a rich yellow. The hilts and pommels of the swords he would paint in this same yellow. Then he would lay on gold powder, leaving the yellow for the lights. In working up these hilts and pommels, he would use sienna and vandyke brown, to get relief ; and he might give the hilts a cabled appearance, by means of wavy sienna lines. White on the yellow would still further emphasise the lights. Unless he was painting on parchment, he would not use white for the blades of the swords ; but he would paint half the blades, longitudinally, bluish, to give the appearance of steel ; and to this he might add longitudinal hair lines of a deeper blue. Still, the coat would be rather flat. The next thing to do would be to let the charges throw a shadow. It is best not to let the shadows touch the charges ; it leads to confusion. Calling the top of the material north, assume a north-west light, and follow the outline of the swords, in dark blue, with a slight interval between the shadow and sword. There is still the shadow of the fess. Still keeping the interval spoken of, draw two lines with the ruling pen, at what distance you think fittest apart, leaving out, while using your dark blue, the blades of the swords you cross. Then fill in between the lines with dark blue. Where this shadow band comes on the sword



blades, it must be grey. In modern heraldic painting, the sinister side of the shield is almost always given a band of shade. This is made rather broad, provided you can make it so without encroaching on a charge. On the blue, this band will be dark blue; on the gold, it will be sienna or brown; and it will come round the bottom of the shield, and vanish where it meets the supposed light on the dexter side. You now have the black outlining. Outline the body of the shield with a firm black line, but make this thicker on the sinister side, and widen it out towards the bottom of the shield, where the heavy shadow is supposed to lurk. The fess and swords you outline in black, but not so thickly as the shield is outlined; and you can recognise the shadow at the bottom of the fess, and on the sinister side of the hilts and pommels, by thickening. You also draw a thin black line dividing the gold of the fess from the yellow. Now you gum up; that is to say, when all is quite dry. If your painting isn't dry, you will have a bad lift of the black. And I might have warned you against putting the black on wet colour. Glaze over the half of all your shades, including the black outline; and this glazing, you will find, makes additional shade, because it throws up the colours. Glaze the shadows of the swords and the fess, and the band of colour to the sinister of the shield, and glaze all the black lining. Put a band of glaze along the bottom of the yellow band of the fess. You need not be abnormally accurate in glazing generally, because, if, in glazing a shadow, you get some of the gum on the field, so far from this being a fatal defect, it makes, by slightly darkening the field, the shadow lie on the field with a very soft appearance. This darkening is peculiarly effective in relation to the broad band of the sinister, and you should make the gum encroach somewhat on the field, with care. If this is clumsily done, it will, in this large encroachment of gum on colour, be noticed. You now come to the white lining. This should be done after the gumming-up; first, because the



gum, being yellow (especially when dry), would obscure the white, and, secondly, because dry gum makes an excellent bed for white, and prevents it sinking in. Put a thin white line inside the black, all round the shield, and put a white line of light below the top black line of the fess. You have now finished your painting; but, if you like, you can let your shield throw a shadow on the material. This shadow should be of neutral tint, and carefully painted; and it is best to leave the interval I spoke of between the shadow and shield. The shadow had best be painted not in opaque colour, and it is best to paint it on the material slightly damped.



THE writer had better add a few more examples illustrative of picture painting. Let us first take two dark shields, say Argent a cross engrailed between four bats sable, and Per chevron engrailed argent and sable in chief two lions rampant of the second. Here there is a difference between a charge engrailed and engrailed partition lines. To speak of the colouring of the first coat: Leave the field alone, if you are colouring on paper; paint it white, if your material is parchment. Colour your cross and bats a decided grey; but you can make the bats a little greyer than the cross, for you want decided lights on the animals. As the cross is supposed to be a solid thing, you are perfectly justified in having a bevel or chamfer in the engrailments, vanishing into the points. This you paint in pure black; and when you come to the



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gumming-up, you glaze these chamfers. There will be places where light from top and left logically hits the chamfers. On the dexter side of the upright member of the cross, it will hit the lower part of the arcs; on the cross-bar, it will hit the sinister portion of the arcs. These lights you can put in either in white or gold. The bats themselves you work up with gradations from light grey to a rather dark grey similar to that of the cross. The deep shadows and the ribs of the wings you put in with pure black. You get your bright lights with lining of gold or white, whichever you are using, having previously gummed up your shades. For the shadows cast by the cross and bats and for the broad band of the sinister, you use a neutral-tint wash of colour not opaque on the untouched paper, and opaque on the whitened parchment. This, in both cases, you gum-up at the proper time. Of course, where the sinister band lies on the cross it is black (glazed), not grey. A black or coloured shade is generally all black or pure colour; a grey shade is generally gradated. If the coat was not very large, it would hardly, perhaps, be necessary to gradate the shadows cast by the charges; but the sinister band ought to be gradated to give effect. You cannot elaborate the coat more, unless you put a white line inside your black outline. This will show on the cross, and on the dark portion of the sinister band. The coat *Per chevron engrailed* has a point of difference. You have not a right to any bevels, although I have seen such put. Both in the case of the bats and the lions get your charges as big as you can. You ought to try and fill up as much of the portions of the field as possible. *Nothing looks feebler than weak charges.* It is for this filling up that the tails of lions, and eagles displayed, &c., have been so elaborated in heraldic art. You want to make a study of such things from good examples. Two other points relating to charges: First, they need not be all the same size; e.g., in the arms of England, you can make the lowest lion as small as you like,



to fit into the base of the shield, without his becoming a "lioncel." Second, you can shift a charge to show it up. *E.g.*, quarterly, the second and third quarters per chevron, in chief two moorcocks, over all an escutcheon of pretence. Here in the third quarter the sinister moorcock might be entirely concealed by the escutcheon of pretence. You can bring it out a bit, even though it doesn't balance with the moorcock on the dexter side.

I will give two more examples of colouring similar to those already mentioned. Gules a fess checky or and azure. Here, in working up, you can leave the gold alone, but you can, if you like, even though it isn't stringent heraldry, put a dark band on the sinister of the azure checks, and a white line inside the black outlining on that side. Argent a bend cotised sable, a bordure gules bezantee. Take care that your cotises are far enough away from the bend for the upper cotise and the bend to throw a shadow on the field. Put a black band on the upper side of the grey of the bend and cotises. Let the bordure have an edge, in shade, of crimson, and let it throw a shadow. Let your bezants have an edge in shade, to show they are coins, and a yellow light opposed to it, and let them cast a crimson shadow on the gules. You want to make such shadows nice and deep, and gum them up.



## CHAPTER XI.

### Writing.

#### INTRODUCTORY.



HE author has already made some allusion to the art of writing, and given some description of how a quill pen should be cut, &c. He will now amplify what he has written under a special heading. The subject of script is a very extended one, and writing, naturally, has its traditions like any

other art. It is as well to inquire into these before attempting to become a calligraphist, for though the writing of such things as a modern testimonial is often very correct, it bears very slight resemblance to the simple and effective writing of the mediævals, and is not seldom weak and florid. This is often due to the fact that the testimonial writer is using a patchwork alphabet he picked up anyhow, the letters of which were never meant to go together, and when he adds to these a set of capitals, some Lombardics, some Versals, some copies of print forms that were never meant to be made with the quill at all, some his own pure invention, he has produced a hopeless confusion which may be very striking, but is, still, very ugly. There are three books that all writers would do well to study—"The History of the



Alphabet," by Isaac Taylor; "The Origin and Progress of Writing," by Thomas Astle; and "Writing, Illuminating, and Lettering," by Edward Johnston (John Hogg, Artistic Crafts Series). The first and second will show him the origin of many modern forms, the second being a monumental work. The last is the best book on lettering extant, written by a thorough expert. For the sake of those who are interested in studying script, the writer will here insert a short bibliography, that may save the reader trouble in finding out what to consult.

**SOME BOOKS ON WRITING, FACSIMILES, &c.**

(1) "The Origin and Progress of Writing," Thomas Astle; (2) "Writing, Illuminating, and Lettering," Edward Johnston—this book has a good bibliography at the end; (3) "Alphabets," E. F. Strange—this book has a good bibliography at the end; (4) *Exempla Scripturæ Epigraphicæ Latinæ a Cæsaris morte ad ætatem Justiniani*, Hübner—this book contains copies of Roman inscriptions; it is in the British Museum Library; (5) "Greek and Latin Palæography," Edward Maunde Thompson; (6) "Palæography," B. Quaritch; (7) "De Re Diplomatica," Father Mabillon; (8) "Universal Palæography," Silvestre & Champollion; (9) "Facsimiles of Ancient Charters in the British Museum," published by the Museum authorities and sold at the Museum; (10) "Facsimiles of Anglo-Saxon MSS.," Ordnance Survey; (11) "A Guide to the MSS. in the British Museum" (plates), to be obtained at the Museum; (12) "Bible Illustrations," Oxford University Press; (13) "The Story of the Alphabet," Edward Clodd; (14) "The History of the Alphabet," Isaac Taylor; (15) "The Palæographical Society's Publications"—these contain numerous facsimiles; they are in the British Museum Library; (16) The New Palæographical Society publishes facsimiles annually; (17) "Photographs of Lettering"—such can be purchased at the bookstall in South Kensington Museum.



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In addition to the study of printed works, an inspection of the caligraphy of the MSS. (arranged in chronological order) in the British Museum galleries would not come amiss.



**MATERIALS.**

THE materials used by the scribe are desk, parchment, pens, ink, knife, &c. The desk can, of course, be your drawing-board, and the parchment can be glued or pinned to it; but there

is something to be said on this matter. In the first place, the mediæval scribes did not write with their parchment lying flat. They wrote with it lifted at an angle. Look at any picture of a writer from an ancient MS., and you will find this writer using a kind of lectern, such as is seen in churches, his material being inclined towards him very noticeably. Now, the reason of this was that, if you have your parchment lying flat, and hold your quill upright, as it should be held for writing, the tendency of your ink to run down it and make a blot is great. On the other hand, the more the angle between the plane of your table and the back surface of what supports your parchment approaches one of 90 deg., the more a pen held perpendicular to the writing surface assumes a horizontal position, and the less tendency is there for the ink to flow from it too freely. Try a pen with a rather long slit, and you will find that, though it may be useless for writing on a surface lying flat, when that surface is "cocked up" towards your face, you will be able to use it quite well, there being no excessive flow of ink.



**WRITING.**

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In writing on an inclined plane another point occurs. In the case of writing on a flat surface, with parchment fixed, when you get towards the bottom of your board, you can move your arm back on the table and go on working. When you are writing on an inclined plane, the line of script you are engaged on must be high up on the board, almost in one certain position. This is the reason why the old scribes did not pin their parchment down. They wrote with it loose ; and this one has to copy. To keep this loose parchment nicely in position you want a circular length of tape with a piece of elastic in it. This you put right round the board, and the pull of the elastic keeps the parchment down. Under this tape—to the right hand side—you can tuck a piece of scribbling paper, or parchment, to try your pen on. A good pitch for your writing surface is one of 60 deg. (at the back).

**PARCHMENT.**

The writer has already spoken of vellums, parchment, and pouncing. Lines are ruled on vellum as a guide to the writer. Whether these are made after or before the pouncing depends on circumstances. They can be ruled with a ruling-awl, or any other form of stylus with a sharpish point, or with a very hard pencil. In these cases, if your incisions are noticeable enough, you can pounce after ruling. Lines can also be ruled lightly with a soft pencil, so as to be breaded out afterwards, in which case they must come on the top of the pounce. The old caligraphists were not very particular about their guiding lines being invisible, and seem often to have used their real lead pencils (three of tin to one of lead) on the top of the pounce. As for the spacings of your lines, you can tick them off from a ticking-slip (a piece of paper with equal spaces marked on it, with a hard pencil), or you can use a star-wheel. In using a ticking-slip, the edge of which is, of course, a straight line, be very careful that your spaces *are* equal. Nothing is easier than to get such spacing wrong. Have your pencil very sharp, and, if even

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then your division lines have appreciable thickness, take care, in ticking off, that the dots you make on your parchment correspond with the *middle* of the line on the slip. Take off from a scale on to your ticking-slip, if you like, by laying the ticking-slip on the scale; but never attempt to tick off on to the parchment from a scale. The edge of a scale is much too thick for you to have any hope of correctness. A star-wheel, a somewhat expensive instrument, can be bought of a good artists' colourman, or an instrument maker. Wheels of various sizes are supplied. All you have to do is to get one of the points of your wheel in the proper position and rule. Several pieces of parchment can be pierced at the same time. If you look at a bound vellum book, such as a volume of wills at a Probate Registry, you will find that the wheel holes are at the edges of the pages, in the cases where they have not been trimmed away. Be mindful of the fact that you trim away in doing a book or testimonial, and get either wheel holes or pencil dots on a part of the parchment that will come off.

Guiding lines, it may be mentioned, were not always deleted or made inconspicuous. In some manuscripts we find them drawn in firmly in black or red. Besides your guiding lines you have what may be called a starting line, a warning line, and a stopping line. You begin a line of writing from the single perpendicular starting line on the left. If you are using marginal capitals standing away from the text, you must have another line to the left of this to guide you in making such capitals, or they may not come truly one under the other. The warning line, though it is not absolutely necessary to have one, is to let you know that you are getting near the stopping line. These lines should be about a quarter or an eighth of an inch apart. In exact testimonial work, you can, if you are very careful, always stop dead on the stopping line, but to keep this up throughout a book would be a tax on the attention, nor would this monotony peculiarly improve the look of the pages.



**PENS.**

The pens that can be used for caligraphy are of steel, goose quill, turkey quill, crow quill, or of reed. Steel pens for fine writing can be bought of artists' colourmen and pen makers, and the author believes that there is a very thin metal pen that can be cut at the end, as though it were a quill, on the market. However, he has never seen a specimen. Steel pens are not convenient to those who wish to become expert in writing and lettering, though the novice may prefer them. When once one has taken up writing seriously, the proper instrument is the quill, to which may be added the reed. The crow quill can be dismissed at once. The writer has never used one, and though it is said that the mediævals employed such quills for fine writing, he does not see why such were of necessity used, considering the fact that a goose quill can be so treated that it is capable of executing the very minutest script. Of the goose and turkey quill, the goose is the best, in view of the fact that a turkey quill is liable to become soon sodden ; but for doing large capitals or small portions of large writing, the extra size of the turkey quill is, of course, a help. It is the large size of the reed that makes that useful too. In Chapter I. of these notes the author described how a quill should be cut. To that description, however, he can add something. In cutting off the tip, though the thumb-nail can be used as described, a more certain sharpness can be got by putting the pen with back uppermost on a piece of glass or bone. There is another "tip," too, that should be noted. When your pen gets blunt, or if, by reason of its curve, it is marking too much at the edges, so as to make a hollow stroke, you can turn it on its back, and, holding it in the left hand, scrape away somewhat of the under part of the nib at the extreme tip. You do not want, however, to overdo this, as it renders your pen too pliable. The broad point of a large turkey

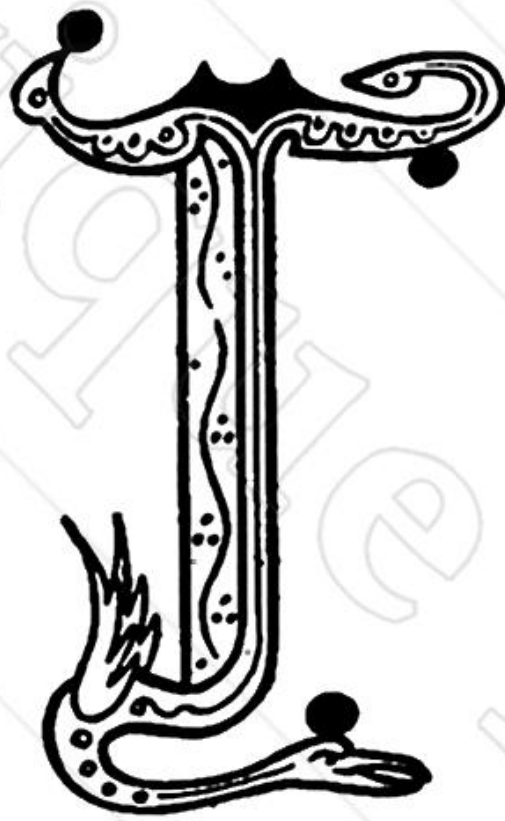


quill always wants this scraping. One thing must be remembered about scraping a pen *at the sides* to render the tip narrower—that is, that this should not be done after the tip is cut off, for, in that case, you nearly always leave loose fibres that interfere with your writing. So much concerning the treatment of a pen generally. In the next chapter, when the author comes to speak of the various forms of script, he will deal more fully with the cutting of a pen tip.

### INKS.

In Chapter I. a receipt for an atramentum or black ink was given. Pure atramentum, though it is very dark and permanent, and excellent for testimonial work, does not give good results in the case of a much-fingered book. It has a tendency to peel right off, as though it were an enamel, leaving only a dull mark to show where it was. In writing a manuscript, the scribe would not be unwise to use a trade ink, and of such inks, Blackwood & Co.'s "Old English Record Writing Ink" is probably the best. This ink has been accepted on tender, after meeting the requirements of the Government Chemist, and if any modern ink is permanent, this should be. One thing the writer should note, *i.e.*, that trade inks, though they may not be dead black when first put on the material, go black afterwards. Blackwood & Co.'s "Post Office Writing Ink" is not quite black when first taken out of the bottle. The author has given this ink a test of ten years, and it has stood, even on a manuscript allowed to lie about and be so injured by sun and dust that the paper has turned yellow.





T would be impossible, in the scope of these short notes, to enter deeply into the question of the origin and progress of writing, but something might be said of the evolution of our modern letters, especially that of capitals, if only as a guide to what is sensible and artistic, or rather, artistic because sensible. Since the introduction of printing, the artist in lettering has been freed from one great restraint, *i.e.*, obedience to the pen. I mean that the designer of a modern capital letter has his thoughts directed to the type-foundry rather than to the page of vellum. He draws his capital letters; his mode of operation differing from that of the ancients, who wrote them. It will thus be seen that the illuminator, if he really wishes to go back to the past and imitate ancient manuscripts, would be very unwise to take his quill and imitate letters from printed books. He is reversing what happened historically. For printed letters are but a variation of the old quill-drawn ones, and to go back from print to quill-drawn lettering is, as it were, to attempt to obtain the water of the fountain-head by making the stream flow backward. Nearly all the ugly letters of testimonials, &c., are a parody of ancient MS. lettering, with modern forms as a base. The result is a hybrid letter, neither one thing nor the other. Let us, at the very first, take an example of how a letter grew. We are all of us familiar with the modern capital "A," an isosceles triangle with a bar across the middle. This letter was once an eagle. In the first of the four A's on next page, a capital of the Hiberno-Saxon type, a suggestion of the animal still lingers. One can hardly call it picture-writing, for the resemblance to an eagle is certainly not a remarkable one.



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In the second and third A's below, and in the A's of "Uncial Writing," and "Rustic Roman Capitals," there is still a suggestion of the old form. This is not so noticeable in the second A of "Versals." In the A of "Lombardic Letters" regularity and the length of the bottom member of the main upright have done away with any suggestion of the old bird form, and given us the fifteenth century capital. In the first A of "Versals," and in the A of the true Roman capitals, we see that regularity has, also, done away with the bird altogether. Now, notice the A of Roman-Saxon writing, the ancestor of our modern "secretary" "a." Here the tail of the bird is still in existence, and the supposition is that all the A's we know are derived from one



common ancestor, our modern printed "A" and "a" being a variant of the second A above, and our modern written "a" a variant of the small Roman.

On the authority of Astle, the term "Uncial" hooked Letters is, more properly, Initial Letters, *litteræ unciales* having been used by mistake for *litteræ initiales*. Some writers maintain that uncials were painted letters made with the brush by the Romans. This seems doubtful, however, for there is amongst other ancient MSS. found in Egypt an Iliad of the second century written in Uncials. In the first and second centuries there was a large Uncial hand, the forerunner of the Uncials of the early vellum codexes of the fourth and fifth centuries. As to the beauty and interest of Uncial letters there is no doubt. The old bird form



A B C D E F G H I J K  
 L M N O P Q R S T  
 U V

Uncial writing

a b c d e f g  
 h i l m n o p q  
 r s t u v  
 x z.

Roman-Saxon writing



of the A has already been alluded to. The B is perhaps not so elegant as the Lombardic B. Notice the difference between an Uncial and a Roman capital B and a Lombardic. In the two former, the right-hand outline of the upright is a straight line; in the last it is a curve connected with the sweep of the letter. How this curve came about is suggested by the top of the B of "Versals." C, in all these scripts, seems to be much the same, and we can pass it over,

ABCDEF G H  
I L M N O P Q  
R S T V X.  
Rustic Roman Capitals

but D is an interesting letter. Notice, in "Versals," the difference between the two D's, and notice, in "Roman-Saxon Writing," the "d" in line 8 and the "d" in line 9. And yet these "d's" are generically the same, however they may seem to differ. In the *Codex Rushworthianus* of the Bodleian Library, a Roman-Saxon MS. of the seventh century, two peculiar rectangular capital D's occur. One is what we may call a perfect oblong (on end), with the right-hand containing portion lifted a little above the body of the letter, and



turned a little to the left. Cut off this excrescence, and you have a plain oblong. Make the right-hand containing portion already referred to a curve or semicircle, and you have a Roman capital D. The other D is also an oblong on end, but the right-hand containing portion rises high above this oblong, and is turned (rectangularly) very noticeably to the left. Make this letter curvilinear, and you have the substratum of the second D of "Versals"—the D of "Uncials." Make the right-hand containing portion an upright, and turn the rectangle into more or less of a circle, and you have the D of "Roman-Saxon Writing," line 8. I do not mean to say that the slightly varied D's of the *Codex Rushworthianus* were the first precursors of the two widely different D's of "Versals." What I wish to point out is, that the two D's of "Versals" are descended from one ancestral type, and that the "d" of line 9 of Roman-Saxon Writing is only another form of the "d" of line 8. Now take the F of Uncials. This is practically the same letter as the F of Versals; and you have only to add the right-hand extra portion to make the F of Lombardics.

**W**ITHOUT going through the whole Uncial alphabet, to show the common origin of the letters of the scripts in question, we will select one or more letters as exemplars. Let us take the interesting letter M. M was the face of

an owl, of which the beak is represented by the central portion of the letter. The two ears are suggested by the two points of the uprights of a capital M. It will be noted that in Uncials the central portion is a single stroke, while in Versals it is composed of two lines. This is more from the nature of the manipulation than from any radical



A B C D E F G H I  
J K L M N O P Q R  
S T U V W X Y  
Z

Lombardic letters

— T T T T T T T

~ C C C C C C C

~ P P P P P P P

— K K K K K K K

— T T T T T T T

C C C C C C C

— T T T T T T T

Lombardic letters →  
Formation of A D P  
Q T & Z L



A A B C D D

E E F G G H

I I J K L O

M M N N O P

Q Q R R S

T T U U V

X Y Z

Versals  
V R S H L S



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difference between the two letters. For, as can be seen, the left-hand portion of the Uncial M has been made first, the right-hand portion being added, almost as a separate member. This connects the Uncial M with the Small Roman "m" of "Roman-Saxon Writing." In this case the letter has been still made in three strokes; but the first member is as separate as the first member of a capital. To this first member another stroke is added, not to form a curvilinear whole, as in Uncials, but as an adjunct, and to that another similar adjunct is attached. Still, the three "m's" are, in essence, the same.

And now as to the formation of the quill for Uncial writing, for the differences of script depend largely on the formation of the pen. They also depend on the "spacing," and on one other important point, *i.e.*, whether the lettering is written between lines that make bounds for the letters themselves, after the manner of those of a child's copy-book, or whether the lettering is carried by the writer as straightly as is possible to him, between mere guiding lines, that the writing does not touch. It will be found by one that practises Uncials and other old Roman writing, that the quill must be cut across the point with a considerable slope from right to left (in plane). That is to say, that the pen heels over when in use, with its top towards the right. It is only by cutting your pen correctly that you can get the long thin lines of Uncials, &c., such as are seen at the top of the "t" and "r" for instance. As for the ruling, Uncials were no doubt often written between lines bounding the letters, though one does not dare to say that this was always the case; at least, it is quite evident that, if the boundary lines were there, they were not always kept to.

We have specially prepared the accompanying typical, if somewhat crude, Lombardic letters, both because these capitals are the substratum of all the capitals of the rounded type used in late manuscripts, and because the method of their formation requires some attention. That is to say, it



**ROMAN CAPITALS.**

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A B C D E  
F G H I L N  
M O P R  
Q S T V X  
J K W Y Z

**OLD ROMAN CAPITALS.**



is not always quite evident how the scribe set to work on one or other of them. If a Lombardic capital is not made properly it loses half its elegance. We have not space to go through the whole alphabet in question, but, as will be seen, we have shown the method of formation of A, D, P, N, T, E, and L. You will note that the inside curve of such a letter as N is got first, and the back put on it afterwards. If you like you can make your back more pointed—more of the nature of a Gothic arch; but, in any case, the way of making the letter is the same: two strokes run out and meet, to give thickness to the back, the top one being drawn first. There is another way of getting this thickness, which will be noted in the case of the N that comes before T in the lowest line of all. Here, the top thickening stroke is simply carried round, with a curve against the inner portion of the letter. In making these Lombardic capitals, you do not want the so obliquely cut pen that is necessary for Uncial writing, but some obliquity is necessary. No mediæval writing can be done with a pen cut quite straight across the point. In making large capital letters with a broad pen, do not forget how, if, owing to the arch of the quill itself, you are making a hollow stroke, you can, by laying the pen over on its back and scraping away the horns, so to call them, that annoy you, obviate your trouble. You can also sharpen the worn edge of a pen by this method, though the process had not better be repeated often. It is a wiser thing to re-cut or take up a fresh quill.

Versals are capital letters, of heterogeneous character, used for the beginning of verses, and as such are not a script, but, as it were, a selection of capitals that appealed to the taste of mediæval writers. For instance, of the two W's shown, the first is undoubtedly an Uncial, the second a Roman capital. Versals are composite letters; that is to say, the outline is drawn first and the body (in our case the letters are black) filled in afterwards. Take the first A



**Q**uasi non minus nobis  
iacundi atque illis  
tres sunt ii dies quibus  
conseruamur quam  
illi quibus nascimur  
quod salutis certa  
laetitia est nascendi  
incerta conditio &  
quod sine sensu nas  
cimur cum uoluptate  
seruamur profecto  
quoniam illum qui  
Roman Saxon  
writing



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illustrated for instance. Here, you draw your top stroke first. You then, with a sweep of the pen from the left, make the downward left-hand stroke of the right-hand member of the letter. You then make the right-hand stroke, fill in the body of the upright, and add the serifs at the bottom to finish off that portion of the A. The left-hand member is got in a similar way, and the cross-bar is made by two sweeps of the pen, and filled in afterwards. It is not necessary to go through the whole alphabet, for the learner will not invent Versals for himself, and when he is copying the Versals of another, his copies will not be true copies unless he makes the letters in the manner of the original scribe. Recollect that the cut of your pen, the angle at which your material is supported, and the angle at which your quill is held, all affect the writing. If a Versal, which is really an Uncial, such, for instance, as the M, the U, and the first W, does not seem to come right, maybe you have cut your pen as for making a real Uncial; that is to say, with too oblique a cross-cut.

On page 125 are shown true Roman capitals. They differ somewhat from our general run of modern capitals in respect of dissimilarity of size, the large quasi-circular and quasi-semicircular letters contrasting strangely to us with the small E and F. As will be seen, these capitals are for the most part of a strictly rectangular nature. They are, in fact, what are known as epigraphical letters—the letters of the inscriptions on stone or metal. Of these, the Rustic Roman capitals are an imitation with the pen.

We have given the above example of Roman-Saxon writing for the reason that it is written in what is known as the half-uncial script, a mixture of the majuscule letters the Uncials, and the minuscule letters the Small Romans. Notice the occasional use of the true Uncial “a” (*vide lætitia* in line 7). This Small Roman hand—or rather, a variant of the same—was the precursor of the English minuscule writing of the twelfth century, in which the heads of such



***BLACK-LETTER WRITING.***

**129**

letters as “m” are beginning to lose their rounded form, and the scribe is beginning to make them with one thin upward diagonal stroke and one thick downward diagonal. Later, the upward stroke is dispensed with, and we have the diamond-headed (and tailed) uprights of what is vulgarly known as “Gothic,” or “black-letter” writing.



## CHAPTER XII.

### Writing: The Origin of Various Scripts, &c.



MENTION has been made of the uncial handwriting, and an alphabet has been given. It might not be amiss to enter a little more fully into the evolution of some of the well-defined scripts, if only to prevent the uninitiated from putting, say, Set-Saxon writing beside thirteenth-century decoration, and the like. To begin at the beginning, the oldest Greek writing is in uncials, the oldest Latin writing in uncials or capitals. Alongside of the late uncial Greek writing (a book hand), we find another hand, the "cursive" or running hand, used for less important documents, a script not easy to read. Later, this cursive hand became more formal than at first it was, and assumed a calligraphic form (Gr. *kalos*, beautiful, and *grapho*, to write), in which state it superseded the uncial as a book hand. The Roman capital lettering was, at first, an alphabet of the monuments; but these letters, first worked on stone, in which case they kept, where possible, rectangular shapes, were later employed as a book hand. The examples of Roman capitals and Roman rustic capitals show the difference between the two forms of lettering. Roman uncial writing did not differ much from Greek uncial writing, and along with it there was used a cursive



**S**oðlice sum  
MAN hæfde  
trezen suna Da  
crað se zinzna  
to his fader · fader fule  
me minne dæl minne ahte  
de to me zebyned. Ða dælde  
he him his æhte.  
Ða æfter feapa dazum  
ealle his ðinz zezaden  
ode se zinzna sunu 7 fende  
pnaelice on feorlen rice  
7 forspilde ðan his æhta  
lybbende on his zaelsan  
Saxon writing



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hand, in this case too. A peculiar form of such cursive, or a form of the uncial writing affected by the cursive, gave rise to what is known as the half-uncial script. An example from modern life will show how this script arose. It was, as it were, a "print hand," such as is used when the particular scholar, not to spoil the appearance of his book, instead of using our modern cursive, imitates printing to the best of his ability. This half-uncial writing found its way into Ireland, where it obtained a high degree of excellence in the sixth, seventh, and eighth centuries, and was, in the main, the script of such books as the Lindisfarne Gospels, the Book of Kells, and the Codex Rushworthianus. And there we leave it for the present. In Italy, contemporaneous with, and following on the uncial and half-uncial hands, a caligraphic form of the cursive, known generally as minuscule writing, arose, and from such writing the small Saxon script (see example of Saxon writing in this chapter), and all the small scripts that we are accustomed to speak of generally as black-letter, are descended. There is one form of minuscule writing that is peculiar; this is the Caroline minuscule, that took place in France under Charles the Great. This was a beautiful form of the common minuscule affected by the Irish half-uncial. Meanwhile, the Roman cursive had not died out; it subsisted under the Lombards, and gave rise to the large Norman hand used in England in the reign of William the Conqueror, from which is descended our court hand, a set of characters that came into general use about the middle of the sixteenth century, and has only lately died out. Another form of the Roman cursive extremely hard to read, and with many abbreviations, was used for Papal bulls, &c.

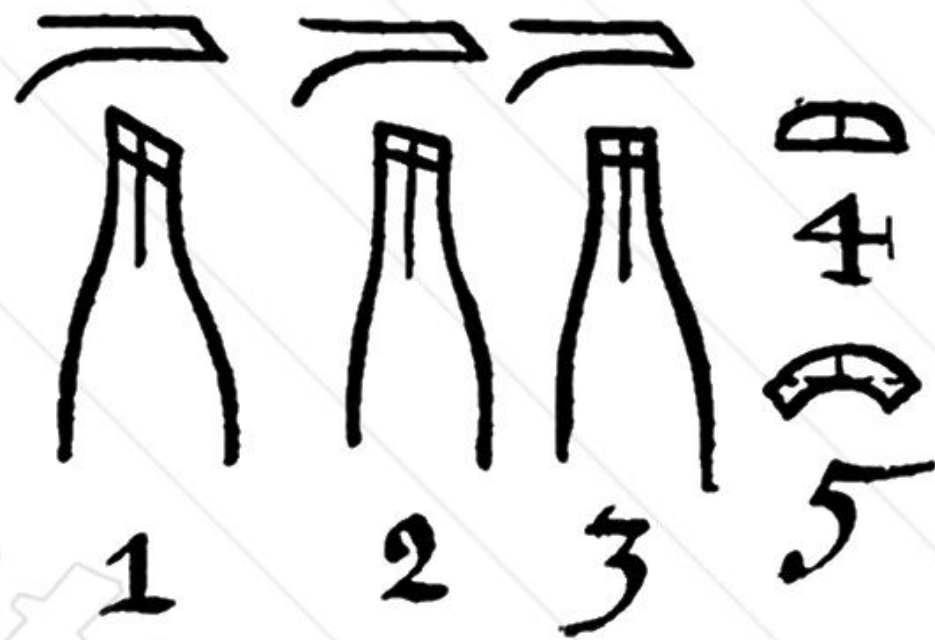
**PEN POINTS.**

Quills, as we have said, should be properly sharpened and properly finished to the orthodox mediæval termination. The accompanying rough sketches will elucidate the matter.

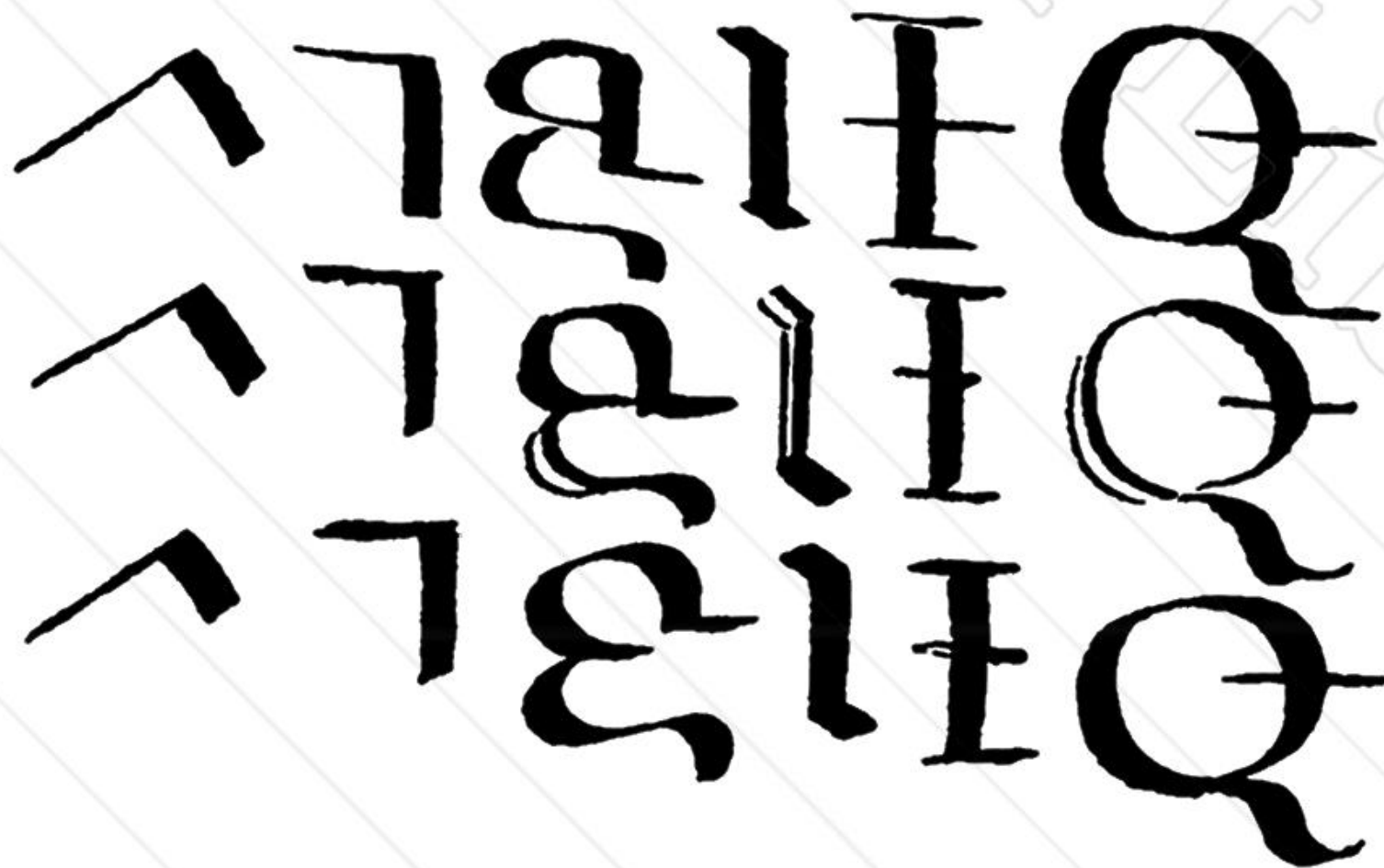


It will be noticed that pen No. 1 has its "plane-iron" edge cut back noticeably towards the right. Pen No. 2 is less cut back. Pen No. 3 is cut straight across.

Of the scribble below, the top line was made with pen No. 1. It will be noted that the horizontal lines are thin. Notice also in the figure next following, the effects of writing with a pen so sharpened. In the first of the M's, the heads of the perpendiculars fail to be lozenge-shaped.



In the first A, the head can be made to stick out nearly horizontally. In the third M, the bottoms of the perpendiculars can be made to terminate rectangularly. In the top "MARE," written in uncials, the horizontal lines are much thinner than are those of the bottom "MARE,"



and the whole word is better written. In fact, the pen point in question is the proper one for executing uncial half-uncial, and Hiberno-Saxon writing generally.

Pen No. 2 has its termination finished for ordinary script.



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In the bottom line of the scribble, the effects of writing with such a pen will be seen. Notice that the horizontal lines cannot be got very thin. In the second M, made with such a pen, the heads and tails are almost perfect lozenges, but it is impossible to finish off the bottom of a perpendicular rectangularly, as will be seen by looking at the fourth M. The head of an A has a tendency to slope downwards when made with a pen of this description. Note that

**m m a a m m**  
**a a a a a**  
**M A R E**  
**M A R E**

uncial letters (see the bottom "MARE") are not as they should be when made with this pen. Pen No. 3 and the small figures 4 and 5 can now be referred to. You cannot write well with pen No. 3, for it is impossible to hold a quill comfortably with its broad point exactly facing the material written on. In making an arc, too, the right-hand corner of the termination catches the material, and divides the two members of the point. See the second line of the scribble, where this has happened. Another source of such

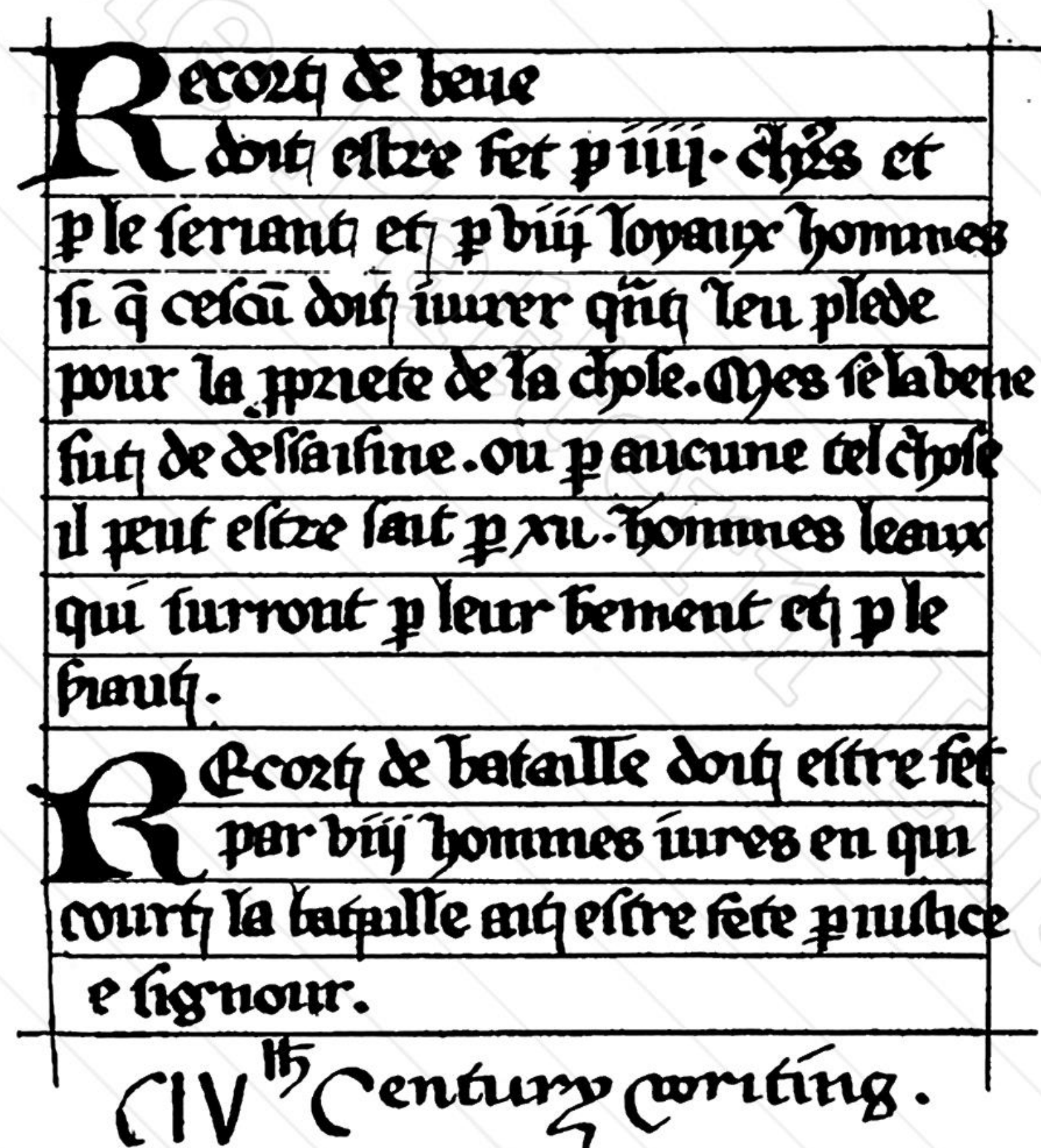


Equites hostiu essedariusq acriter proelio cu equitatu nostro in itinere confluerunt: ita tamen ut nostri oibz partibz superiores fuerint, atqz eos in silvas collesqz spulerint: sed. compluribz in terfectis cupidi? ifecuti inullos ex suis amiserunt At illi iter in illo spatio, imprudentibz nostris atqz occupatis in munitione castror. subito se ex siluis elecerunt inpetuqz in eos factu qui erant in statione pro castris collocati acriter pugnaverunt: duabusqz millis subidio cohortibz a Cæsare. atqz his primis legionu duar. cu hæ perexigu in intermillo spatio iter se constitisset nouo genere pugnae perterritis nostris per medios audacissime penumperunt. seque inde incolumes receperunt.

XV<sup>th</sup> Century writing



double lines is that the natural curve of your quill makes two projecting points. See small figure 5. These should be scraped away, as shown by the dotted line, and the point be as in Fig. 4. It should be mentioned that, in some cases, the right-hand corner of a termination can be made good use of, especially on parchment. In fourteenth and



fifteenth century writing, the heads of "a's" are often made entirely with the corner of the pen. The third, fourth, and fifth "a's" in line 2, on p. 134, are "a's" of this description. The sixth "a" is a false one, only made to show what can be done with a termination corner. The first "a" is given to show how coarse the head of an "a" is when made with the pen end flat on the paper.



The above are specimens of early writing, somewhat coarse, being written only on cartridge paper, but giving ideas as to arrangement and forms of letters.

abcdefghijklmnopqr  
stuvwxyz.

abcdefghijklmnop  
qrstuvwxyz.

Old alphabets .

abcdefghijklmnop  
qrstuvwxyz;

Debased modern alpha-  
bet.

The above are alphabets, two of ancient form, of which the lower one approaches more to half-uncial writing and is more archaic than the upper one, which has the later



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diamond heads of "black-letter." The debased modern alphabet is noticeable for its excrescences, especially the unnecessary hair lines, giving it a prickly appearance.

**WORKADAY SCRIPTS.**

**T** is not necessary, in modern work, to follow the writing of the old caligraphists in too servile a fashion; but it is not desirable, on the other hand, to make use of a script that bears no resemblance to early work, with its noticeable crispness and compactness. Ancient writing may be spoken of as cramped, and the closeness of the lettering put down to a desire to save parchment. It is, however, far more pleasing to some than the sprawling hand of certain modern work, where the surface of the parchment or paper is allowed, so to speak, to stare through the lettering, instead of the latter being a compact column of writing, with the letters in serried ranks. The only thing to be guarded against is, in diamond-headed writing, being obscure. The Latin word, "*minime*" is, in some ancient MSS., almost undecipherable; the "m's" and the "i's" and the "n" making a forest of stems, with tops all alike, that have to be separated, with difficulty. The dotting of your "i's" will, in these cases, often save trouble. Ancient "i's" were not always discriminated. Notice, in ancient scripts, the letters were sometimes joined together, the back of "d" being often used as an upright for the following letter. "E" for instance, shares a line with "d," and "a" is often made square to do so, even when the "a" of two loops is ordinarily being made use of. "E" is, also, put on the back of "p"; "c" is joined on to "o"; and the cross-stroke of "t" is run on for the down-stroke of a following letter. "G," when it has a flying member, is treated in the



**H**aving sketched in a tolerably fair piece of work it is to be hoped that we shall give our mind to mastering the lettering or text. This is the main object, the border or capital being only meant to beautify or adorn the words we think worthy of being patiently & thoughtfully inscribed. If done carelessly, it will only show that we attach little importance to perhaps a most sacred & choice passage. If we do it carefully at first, the habit will become facile & easy. If the reader has never attempted an old

A THIRTEENTH-CENTURY SCRIPT.



same way; "s" and "t" are joined together. You need not use these old compounds, but they have a pleasing, archaic look, and when you are spacing your writing carefully, they are very useful. Another thing to be noticed about ancient writing is, that it was not always mathematically correct. It was writing, not printing. Even in the best manuscripts, the scribe, writing between lines, but not touching them, would allow himself a good deal of laxity. In some MSS., you find parts of the writing written *upon* the bottom guiding line. Of course, to the novice, the bother is the diamond heads of his letters. He would, therefore, do well to practise with thirteenth-century script of the sort shown



herewith. Let him not practise on Whatman or cartridge, but on a smooth note paper, not cream laid. Parchment helps the writer a little too much; and it is better to be perfect off it, and then come to it as a treat. Note that, in diamond-headed writing, the diamonds are the most important part of the script. They are made separately and designedly, and the pen is, as it were, dragged along the material to get them a proper shape. It is sometimes lifted in order to make a diamond. This is noticeably the case in the last part of "r," where the up-stroke is often missing.

In choosing a script, it is best to consult an old manu-



**P**ur ceo ke la gent  
ke uenent al par  
lement le roy sunt sou  
ent deflaez et disturbez  
a grant greuance de  
eus e de la curt pa la  
multitudine des petic  
ions ke sunt botez deu  
ant le roy de queus le  
plus porroient estre  
espleytez par chanceler  
et par iustices purueu  
est ke tutes les peticions

WRITING OF THE LUTTRELL PSALTER.



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script or good facsimile. As old MSS. are generally in French or Latin, "y," "z," and "w" have sometimes to be supplied. Take care that you get them congruous with the rest of the text. "Z" can be got from old French, as also "k," where they are common letters. "J" is a modern letter, and has always to be invented. It can be looked upon as "i" with a tail. As for stops, it is best to use our modern stops, in an archaic form. The diamond-shaped stops are perhaps the most convenient. Examples of stops, some from old MSS., are shown in diagram on p. 140.

Of course, the inexperienced will not be able to read an ancient book in Latin, owing to the numerous abbreviations. These are a study by themselves. The majority of them will be found in Wright's "Court Hand Restored." W. Phillimore's "Supplement to How to Write the History of a Family," and E. E. Thoyt's "How to Decipher Old Documents" have the printed forms.

Though most ancient writing is written flowingly, with the pen held, more or less, in one position, there are some scripts and parts of script that demand special attention. We have already spoken of the making of the head of "a" by letting the pen heel over. The fork-headed top of "l," "b," "d," &c., and the forked end of "q" require special manipulation. In the case of such letters the process seems to have been this. Take "b," for instance. The right-hand side of the fork (to one facing the letter) seems to have been made by the sweep of the pen, that goes on to make the down-stroke. The pen is then lifted, and is turned over between thumb and fingers till the left-hand corner of the nib is ready to make a down-stroke forming the left side of the fork. It will be noted, in some MSS. that the left side is thinner than the other. The tail of "q" is made in the same way; but, in this case, the left-hand side of the fork is a continuation of the down-stroke, and the left-hand corner of the pen is used for the finishing. That at any rate, in some cases, the pen was lifted and used, and



the forks of the letters not put in with the brush is clear from certain old manuscripts, where sometimes the left-hand member of the fork misses the letter altogether, and stands a thin, quasi-semicircular mark, either apart from the letter, or with the back of its arc against it. That the mediævals used the corners of their nibs a good deal is clear from the

**E**st avis as pierres de la terre que touz les piers de la terre officer ou autre par cause de lour office ne par nul autre cause ne deivent estre menez en jugement ne perdre lour temporaltez terres tenementz biens ne chatelz n'estre arestuz ne emprisonnez outagez ne forjuggez ne ne deivent respoudre n'estre juggez fors que en pleyu parlement et devant les piers ou le roi se fait parte

*DIAMOND-HEADED WRITING.*

thin scribbles one sometimes sees added to the heads and tails of letters. The author has an old MS. with something like a man's face drawn at the end of a capital M, on a bottom line. As for the peculiarities of script itself mentioned, see "Writing of the Luttrell Psalter," on p. 141,



144 *ILLUMINATING AND MISSAL PAINTING.*

This writing, with the square bottoms of straight down-strokes, is a not uncommon form of fourteenth-century script. That this square-bottomed writing was, in some cases, made by cutting the pen with an oblique' end as for Hiberno-Saxon script is evident ; for the heads of the letters sometimes follow that script. This, however, does not fully explain the writing of the Luttrell Psalter, where the heads are distinctly diamond-shaped. In this case one of two things, it seems, must have been done. The pen may have been cut as for ordinary writing, and then turned in the hand, to get the straight-bottomed down-stroke, or the pen may have been cut as for Hiberno-Saxon writing, and the diamond heads have been got by a twisting of the pen inwards, between fingers and thumb. We believe that the last process is the correct one, and think that a head was, first, made separately, with the twisted pen, and then a stem added, with the pen so held that the stroke ended in the proper manner. It will be noted that the heads are, in some cases, a little larger than the breadth of the nib warrants. The cause of this most probably is, that the nib held twisted does not give a large enough diamond, and the diamond has, as it were, to be painted in to the required shape. Into the middle of the wet diamond the pen, held for the down-stroke, can be put. In the case of heads coming together, as in "m" and "n," the heads can all be made first, and the strokes added afterwards. Letters like "e" and "c" are made entirely with the twisted pen. Notice that it is not necessary to cut your nib with a very oblique end. A pen with a slight obliquity can be so turned as to make the required down-stroke, and the less obliquity there is, the easier it is to make the heads, &c. We have spoken of this straight-bottomed fourteenth-century writing at length because it is an elegant script, and one especially useful for any peculiar wording, to be written in a larger hand than that of the rest of your writing.

Thus much for formal hands. But it must not be



*ZIGZAG WRITING.*

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supposed that the mediævals always wrote formally, though they generally wrote well. What is known as zigzag writing is an example to the contrary. In this writing, there are no diamond-shaped heads and bottoms, but the letters are, for the most part, begun on a thin up-stroke; a curve to the right suggests the head; another curve to the right the bottom diamond; and the letter finishes on another thin up-stroke. It is these up-strokes that give the writing its zigzag look. This script is, as it were, the cursive hand of the mediævals, and is not to be despised, however humble it may look. Perhaps it may be too informal for testimonial work; but, if any one wished to write a book—say, a communion service or a marriage service—he might be driven to a script less laborious and tedious than diamond-headed writing. Zigzag writing is somewhat obscure, but its obscurity can, in a great measure, be obviated by marking the “i’s”—with a thin diagonal stroke from left to right. Simple manuscripts written in a quasi-zigzag hand are not at all expensive, and however simple these scripts of cheap MSS. are, they are certainly more beautiful than the common modern testimonial script, where the writer adds a hair-line member wherever possible, and the whole mass looks bristly, the hair-lines keeping the letters apart, and making the words gappy, and very unlike compact ancient writing; not to mention the labour involved in putting in these useless adjuncts.

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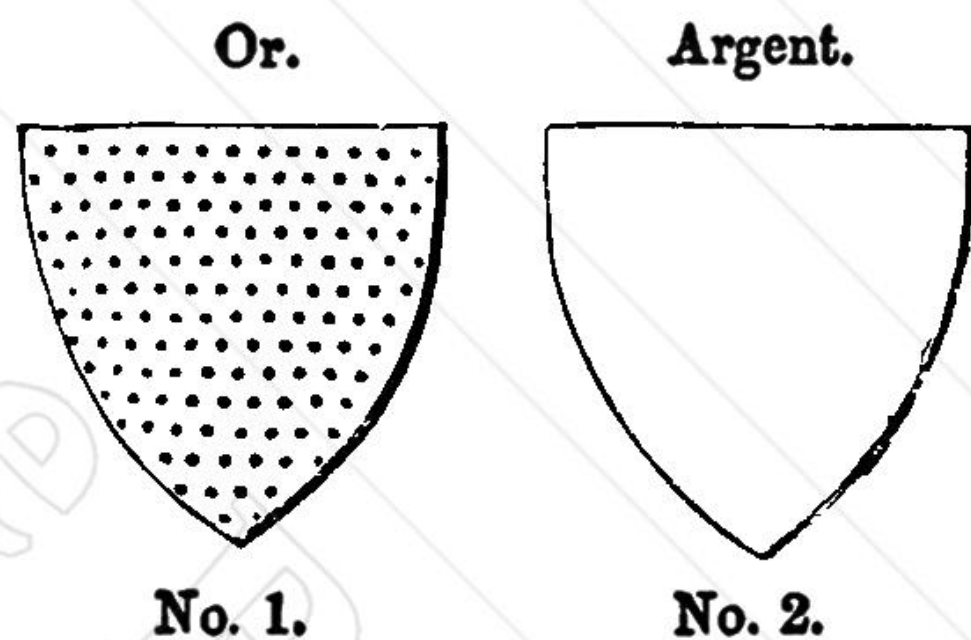
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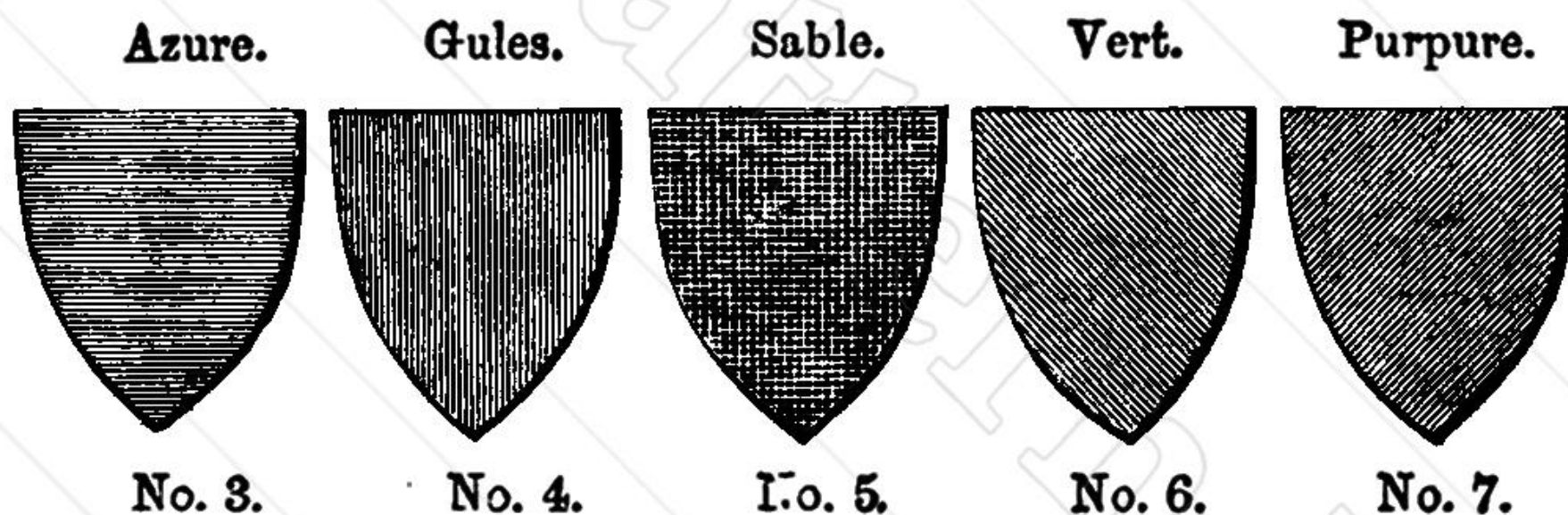
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