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ILLUMINATION

AND ITS DEVELOPMENT
IN THE PRESENT DAY
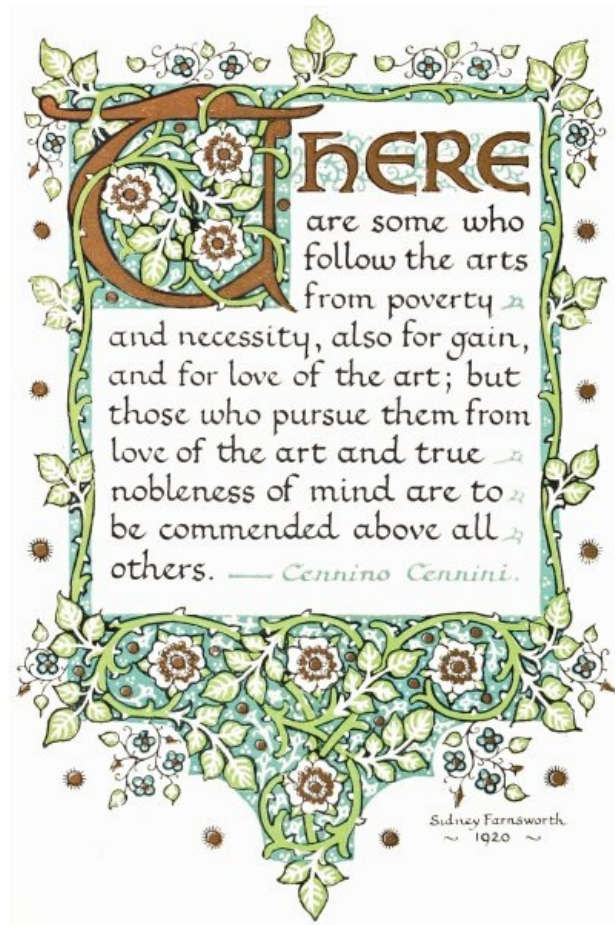
THERE are some who
follow the arts from poverty
and necessity, also for gain,
and for love of the art; but
those who pursue them from
love of the art and true
nobleness of mind are to
be commended above all
others.—*Cennino Cennini.*

Sidney Farnsworth
1920

ILLUMINATION

AND ITS DEVELOPMENT
IN THE PRESENT DAY

BY
SIDNEY FARNSWORTH

*Illustrated with Drawings
and Diagrams by the Author*

NEW YORK

GEORGE H. DORAN COMPANY

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PREFACE

This book is the outcome of a series of articles which appeared in *Drawing and Design*. At the suggestion of the Editor of this periodical, the whole of the chapters originally published have been entirely rewritten and considerably enlarged; at the same time a large amount of quite new matter has been added.

The additions that have been made include a chapter on the development of writing in the past, together with a number of alphabets based on historical examples. I have also added a brief sketch of the history of Illumination, as I felt that the book would not be complete without some reference to this side of the subject. Some attention has been given to the colours and gilding methods of the mediæval artists, and it is hoped that the notes given may be of interest to the student. Extensions have also been made in connection with the use of colours and materials by the student to-day.

Chapters on the further development of illumination, the illumination of the printed book, and printed book decoration, are also amongst the additions. The chapters on the application of lettering and decoration from the commercial standpoint have also been developed considerably, and at the end of the book some notes have been added on books for further study.

I have tried to write in as simple a manner as possible, so that the youngest student should have no difficulty in understanding the instructions that are given.

So many books have been written on the subject of Illumination that it may seem quite superfluous to add yet another to the long list. Still, I think that a work treating the matter from the present-day standpoint ought to be of some service to the student who is desirous of practising this art to-day.

I have felt for some time past that there was a need for a work that would deal with the various ways in which this art could be applied in a time like the present. I have found that most of the books that have been written on Illumination treat the subject either from the standpoint of the archæologist or merely from that of the amateur. It is simply the result of a sincere desire to supply what I feel to be a real need that this book has been written, and in the hope that it may serve as a handbook and guide for the serious worker.

It has not been written with the idea of introducing a quick and easy method of becoming expert in the art of illumination. Success, in this, as in anything else of importance, can come only through hard work.

I have endeavoured to foster interest and enthusiasm, so that the student may not look upon the hard work entailed with this subject merely as a certain amount of drudgery to be got through. To one who is keenly interested in any particular study hard work often becomes a pleasure, and it is only when such is the case that the full benefit is derived from such study.

Illumination has a value in the present day as well as it had in the past. The developments of this art are seen in many of the common-place things of to-day. In some cases the development has been carried so far as to lose almost its identity with the original craft from which it has sprung, but the connection is there all the same.

The art of the book began with the illuminated manuscript, the early printed books being based entirely on the manuscripts that preceded them; and the same thing may be said with regard to the application of decoration to printed lettering generally.

The practice of illumination in the present day should result in something more than weak imitations of illuminated borders which were produced in the mediæval period. Illumination ought to be a real living art to-day.

There are numerous ways in which it could be used as a craft at the present time, quite apart from the many ways in which it could be applied commercially.

With regard to the study of lettering, there is a great need for more serious attention to be given to it. We are so surrounded by bad lettering that it is well that an effort should be made to get better results, and, as a means to this, some study of the beautiful forms of lettering used in the past should be of the greatest service. For this reason I have tried, by giving some examples, to direct the student's attention to at least some of the fine styles of lettering that were employed in centuries gone by.

It is a great pity that the splendid book-hands of the past should have fallen into disuse, to say nothing of the beautiful decoration that accompanied the writing. It would, undoubtedly, be a good thing if some further encouragement were given to serious study of the well-formed lettering that was produced during the mediæval period.

I trust that this small work may, in some slight measure, be the means of fostering increased interest in lettering and illumination. I am deeply conscious of its many imperfections, and I only hope that, in spite of its many faults, it may be of some use to the reader who is interested in this art. If the study of it is the means of creating greater zeal and energy in the production of good work in this direction, I shall feel that my efforts have not altogether been in vain.

<div align="right">SIDNEY FARNSWORTH.</div>

THE ISLAND,
    LITTLE WALTHAM,
        NEAR CHELMSFORD.

INTRODUCTION

"In all great arts, as in trees, it is the height that charms us; we care nothing for the roots or trunks; yet they could not exist without the aid of these." This quotation from Cicero may as well be applied to the art of illumination as to anything else. The fact, however, that the tree cannot exist without the aid of the trunk and roots, shows how important these are; and no one who intends giving serious attention to the tree in its entirety can afford to neglect these.

It is only through careful study of the art of illumination that it is possible to understand fully the construction that enters into the growth of this art. When some knowledge has been gained of the manner in which this work has been done in the past, through practical experience, it is then that a real appreciation is felt for the choice work of the mediæval period.

"Perfect illumination," says Ruskin, in one of his *Lectures on Art*, "is only writing made lovely;... But to make writing *itself* beautiful—to make the sweep of the pen lovely—is the true art of illumination." Certainly it is only when the student is able to produce writing that is attractive in itself, that it is permissible to add decoration to it. The decoration should be the natural outgrowth from the writing.

A page of well-formed lettering makes good pattern, and is not merely pattern, as it serves also the purpose for which it was intended, *viz.*, to be read.

It is when he has gained the mastery of the pen, in making well-formed letters with good arrangement on the page, that the student may consider that he has well started on the road to the production of good illumination.

For the construction of well-finished lettering it is essential that a mastery of the tool and materials employed should be acquired. It is when the pen becomes almost a part of the writer, so that he is able to concentrate all his energy on the writing, giving scarcely any attention to the pen itself, that he may claim to be proficient in the use of the pen.

If there is one thing more than another that one feels when examining some of the best illuminated work of the past, it is that the writer was a master of the pen as a letter-making tool. He did his work well; his books were transcribed in a workmanlike manner, and the decoration which followed seems to come quite naturally from the writing itself.

It is for this reason that so much attention has been given to the use of the quill and reed pen in the formation of good writing.

Students are frequently at a disadvantage from inability to handle the pen properly. To help, in some measure, to remedy this, the student is shown how to make sharply-defined strokes before attempting to form letters. At the same time no particular manner of holding the pen has been insisted upon.

In the Introduction to his "Essay on the Sublime and Beautiful," Burke says: "I am convinced that the method of teaching which approaches most nearly to the method of investigation is incomparably the best; since, not content with serving up a few barren and lifeless truths, it leads to the stock on which they grew; it tends to set the reader himself in the track of invention, and to direct him into those paths in which the author has made his own discoveries, if he should be so happy as to have made any that are valuable."

This has been the ideal that the present writer has tried to keep ever before him in writing the instructions that are given in the succeeding pages. His aim has been to direct the student in the right way, and then to encourage him to study the subject for himself. Whether he has been successful in this endeavour must be left for the reader to judge.

The study of calligraphy, in connection with illumination, ought to be helpful in making the ordinary handwriting more legible. Before the age of printing, the book-hand developed alongside of the ordinary cursive handwriting, and possibly the fact that the book-hand has been lost may be advanced as a reason why most of the handwriting to-day is so degenerate. A careful study of some of the fine models of book-hands of the past cannot but be beneficial. It will certainly enable the student to appreciate beautiful forms of lettering, and its influence should soon be apparent in the lettering in general use. This should result in better sign-writing, better lettering in our magazines and papers, in short, better lettering all round.

Undoubtedly it would be a good thing if the children in our schools could be taught to form some of the fine book-hands of the past with the quill pen. It is certainly, to a great extent, due to the lack of a practical knowledge of some of the splendid forms of lettering used in the past, that the general lettering in use at the present time is so bad. It ought not to be at all impracticable for this suggestion to be carried out.

After the student is able to make well-formed letters with the quill and reed pen, and arrange them well, the use of decoration and the further development of illumination should follow naturally.

There is undoubtedly a place for illumination to-day, and even in connection with the illuminated manuscript book, which should certainly possess the first place amongst the work of the modern illuminator. There is not the slightest suggestion there that the illuminated manuscript should usurp the place of the printed book, but there is no reason why it should not be in use at the same time. One of the great charms that a fine manuscript possesses is its uniqueness, not being one of many, as in the case of the printed book. Then again, some things, as, for example, Poetry and Romance, are rendered in a much more sympathetic fashion in the illuminated manuscript than in the printed book.

There are many ways in which the art of illumination might be applied to-day, as well as in the usual illuminated testimonial. Several suggestions are given in the following pages for different ways in which it may be employed.

In the decoration of the printed book the services of the artist who is well-trained in the use of good lettering and book-decoration should be of value to the printer. Although there is no need for the printer to endeavour to

imitate the work of the illuminator, there ought, certainly, to be room for a well-developed style of decoration that could be used with a good form of type.

A few centuries ago, before printing was used for the production of books, illumination as a part of calligraphy was an important craft. Books were not only beautifully written but they were also richly decorated with gold and colours. The writing of long manuscripts was very slow work, compared with the increased speed of production afforded by the printing press; but, notwithstanding this, it appears to have been important that the writing should be rendered more beautiful by the enrichment of decoration. Unfortunately, although methods of book-production are now so speedy, most of the lettering is of the barest and crudest kind. Book-decoration seems to be, in most cases, confined to illustration, and even this does not often form an altogether inseparable part of the book.

With regard to the various developments on the purely commercial side, the study of pen- and brush-formed lettering cannot but be of the greatest service to the commercial artist who requires lettering for posters, labels, book-covers, and the many things that require lettering.

In fact, lettering enters so largely into decorative design that the study of some of the fine forms of lettering is of paramount importance to any artist who desires that the lettering that he uses should be of good construction. So many drawings have been spoiled through the introduction of weak and badly formed lettering that the need for training the student to produce lettering that is well-finished and of good form should be obvious to everyone.

Without doubt one of the great things in lettering is to allow the tool to have its way. Pen-formed lettering should be of a form easily constructed with the pen, and should not pretend to be a brush-formed lettering, and *vice versâ*.

It is for this reason that in the first chapter so much attention has been given in noting the influence that the tools and materials employed have had on the shaping of the letters.

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ILLUMINATION

AND ITS DEVELOPMENT
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CHAPTER I

THE INFLUENCE OF THE TOOL

Calligraphy and Illumination are inseparably bound up with each other. The art of Illumination cannot be severed from that of Writing. One cannot imagine the decoration apart from the writing. Undoubtedly this sprang from a desire to beautify the writing. Man sought to make his manuscripts beautiful, and the result was a form of illumination, at first very primitive, but gradually developing into the beautiful art that we are so familiar with in the choice manuscripts of the middle ages.

When commencing the study of the art of illumination it is extremely important that it should be approached from the proper standpoint. It is to be feared that this has not always been the case. The lure of the bright gold and colours has often led both teacher and taught astray, and the proper use of the pen in writing has been almost entirely neglected.

Instead of allowing the tool to have its own way, it has been forced to form laborious shapes that are not suited to its construction at all. The decoration, it is to be feared, has been looked upon as a sort of spice to be added as a finishing touch, instead of being a vital growth springing naturally from the writing. Until it be viewed from this standpoint, no real progress can be made. If a building is to be soundly constructed, the first thing to see to is that the foundations are well laid. The same principle applies in this case. The decoration, if it is to be living and real, must have a starting-point for growth. The student should see that this is a sure foundation and not a tottering, shaky structure. Well-formed writing should be the first consideration.

Ordinary hand-writing is a development of the kind of writing used by the old calligraphers. Generally speaking, the connection between the two is not recognised. Probably if this were so calligraphy of the present day would be much better than it generally is. The fact that it is generally referred to as "printing" shows how the connection has been lost. Drawing is thought to be more akin to it than hand-writing. It is no uncommon sight to see a student carefully drawing the shapes of the letters and then filling them in with a fine mapping pen. If the individuality of the pen as a letter-making tool were recognised this kind of thing would not occur.

It may be interesting to consider briefly some of the early influences at work in the production of writing.
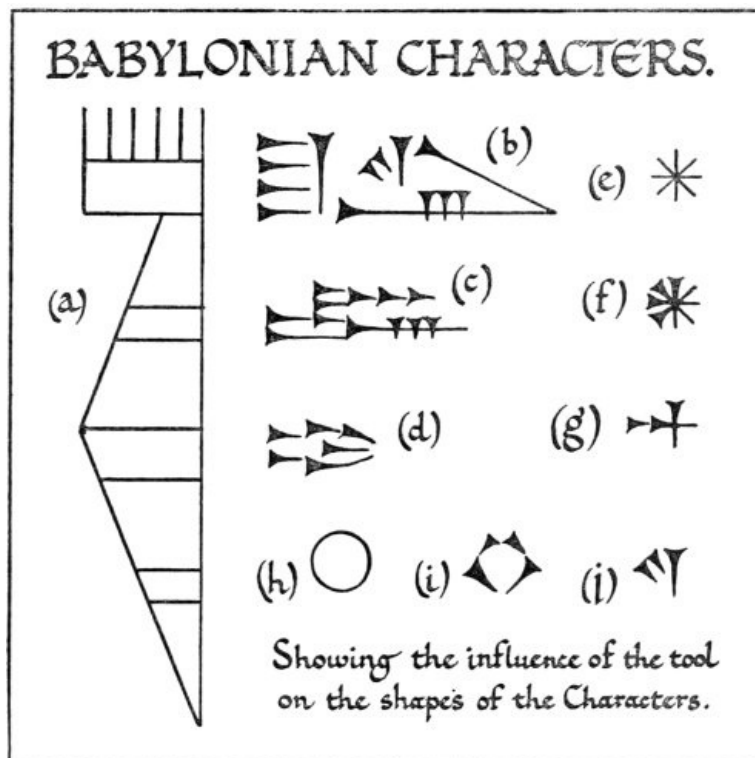
BABYLONIAN CHARACTERS.

Showing the influence of the tool on the shapes of the Characters.

Fig. 1.

In Fig. 1 some examples of early Babylonian characters are shown. In these early days the common writing material was clay. The characters used in writing were rough pictures of different objects which were drawn in outline. Thus the sign for "king" was a rude drawing of a man crowned; this was scratched on the surface of the soft clay with a pointed tool. One can quite understand how these characters could be constructed with a series of impressions in much less time than it would take to draw them in outline. Then again it must have been much easier to draw on the soft clay in this way. A square-pointed stylus was used for this purpose, and, with the wedge-shaped impressions thus produced, the characters could be formed quite easily. Not only was the scribe able to write with greater speed, but the way in which the characters were produced was more methodical. The

character for "king," when made with the wedge-shaped impressions, was constructed as shown in (*b*). One can easily recognise the same form placed horizontally, instead of vertically, as was originally the case. In course of time the characters became somewhat simplified. The next step in the development of the character is shown in (*c*). The final form is shown in (*d*), this being very much simplified. In like manner the signs represented in (*e*) and (*h*) were used to denote "star" and "sun" respectively. The development of these is seen in (*f*) and (*g*), also in (*i*) and (*j*). The reason for calling attention to these characters is to show how the shapes are influenced by the tool and the material employed. This is a most important factor in the formation of letters.

Where soft clay was used as a material, and the characters were formed by making impressions with a stylus, one would naturally expect that these signs would take the form of a series of indentations rather than flowing lines as from a brush or pen.

In the case of the Egyptian hieroglyphics, shown in , a difference is at once noticed. These characters were at first small pictures carved on stone. The hieratic characters were simple interpretations of these formed with a reed pen. It is quite obvious, to all who care to observe, how easily these characters could be formed, especially when they are compared with the earlier signs. In this case the influence is quite different from that of the Babylonian characters. Instead of a series of impressions, one notices long flowing strokes characteristic of the pen. It is interesting to note how the essential quality of the more elaborate character is obtained with simple pen-strokes. Although the hieroglyphic is often quite complex there is still a likeness retained in the hieratic form.
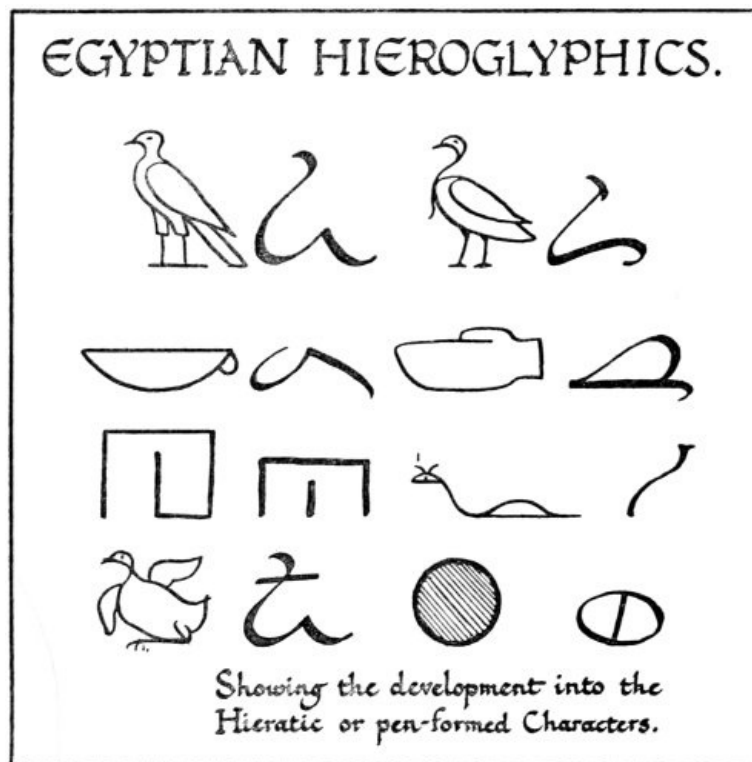
EGYPTIAN HIEROGLYPHICS.

**Showing the development into the Hieratic or pen-
formed Characters.**

Fɪɢ. 2.

The reed pen used by the Egyptian scribes was the forerunner of the modern pen. It was formed from the hollow stalk of grasses that grew in marshy districts. Sometimes pens were made from hollow canes and bamboos. This kind of pen is still used in the East.

The material used for writing upon was known as papyrus. This was made from the pith of a species of reed, the *Cyperus Papyrus* of Linnæus. This was, in early days, cultivated in the Delta of Egypt. It was used for several different purposes, one of the most important being for writing-material. This was prepared by cutting it into strips and placing these side by side, with another set placed across them at right angles. The two layers were stuck together and the whole pressed and dried, and the surface smoothed to make a sheet of writing-material.

It is a most difficult matter to state when the quill pen was first used. Probably the earliest allusion to it occurs in the writings of St Isidore, Archbishop of Seville, who lived in the early part of the seventh century. The following is the quotation in question:

"*Instrumenta scribæ calamus et penna; ex his enim verba paginis infiguntur; sed calamus arboris est, penna avis, cujus acumen dividitur in duo.*"

("The tools of the writer are a reed and a quill; for by these words on pages are impressed; the reed is of wood, the quill from a bird, and its point is divided into two.")

But of course it is extremely probable that quill pens were in use at a much earlier period than this. It is well

known that metal pens were used by the Romans, as a number of these, made of bronze, are in existence at the present time.

For general writing purposes tablets coated with wax were used by the Greeks and Romans. A stylus with one end pointed and the other flattened was used to write with, the writing being done with the sharp point and erasures made with the flattened end.
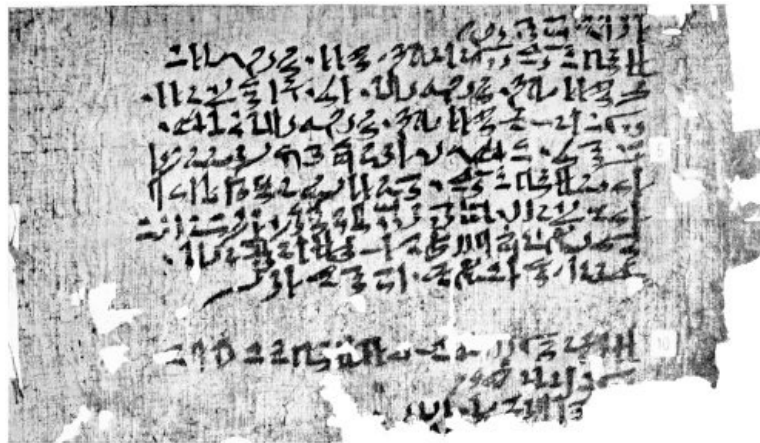
EGYPTIAN HIERATIC WRITING.

Ivory Stilus.
Silver Stilus, bound with gold wire.
Ancient Roman Bronze Pen.
Ancient Reed Pen.

The skins of animals have been used as a writing material since quite an early period, and the use of vellum was probably an improvement upon this. Pliny, in his "Natural History," tells the story, on the authority of Varro, of how Eumenes II., King of Pergamus from 197 to 159 B.C., was desirous of extending the library in his capital, but the Ptolemies, being jealous, stopped the export of papyrus, thinking by this means to prevent the royal library from growing. Owing to the lack of papyrus, skins were employed and, necessity being the mother of invention, the manufacture of vellum came about. Whether any real importance can be attached to this story or not, it is certain that Pergamus was a great centre for the manufacture of vellum. In fact, the word "parchment" is derived from *charta Pergamena*, *i.e.*, "paper from Pergamum."

It is easy to see how this ideal writing-material, with the quill pen, must have had a great influence upon the formation of letters. Generally speaking, the writing on parchment or vellum is crisper and more sharply defined than that on the papyrus.

There is not the slightest doubt that the influence of the tool and the writing-material had a great deal to do with forming the shapes of the letters. Good lettering was seldom or never consciously designed, but was the result of certain influences at work.

In the development of lettering in the past, the pen, as a letter-making tool, has played a most prominent part. A reed or quill pen cut with a broad nib, so as to give crisp thick and thin strokes, is an ideal tool for the formation of letters, but one thing is necessary: the pen must be allowed to have its own way. The letters should not be designed first and copied with the pen afterwards. If the lettering is to be pen-formed, let it be formed with the pen; it should come straight from the pen.

The capabilities of the pen as a letter-making tool should be carefully studied. The reed or quill pen should be used, and one of the best ways to become intimate with the pen is to cut it to shape for oneself. One is thus able to understand the possibilities of this tool as a means for the formation of letters, in a much more intimate

manner than if a ready-made tool is placed in the hand. The first thing to endeavour to grasp is how to cut and use the pen. After this has been mastered, the next step should be the formation of letters. This is followed by forming letters into words. Then comes writing and designing with masses of writing. Not until the student is thoroughly familiar with the use of lettering should he attempt to add any decoration to it. A fine piece of writing in black, or black and red, on vellum or fine hand-made paper is a piece of decoration by itself, but a bad piece of lettering cannot be made beautiful, however much ornament be added afterwards. The first step towards the study of illumination proper comes then, and attention should be given to the place of the initial letter and the part it has played in the past as a starting-point for the decoration in the MSS. of the mediæval period. At first a good deal can be done with the use of black and red only, or black, red, and blue. Then come simple decoration with gold and colours; the use of raised burnished gold; the application of illumination for commercial purposes; and the illuminated MS. book.

CHAPTER II

THE DEVELOPMENT OF WRITING IN THE PAST

Before describing the method of cutting and using the pen, it may possibly be instructive to survey briefly the development of writing through the centuries.

The alphabet, as we know it, has been traced right back to that used by the Phœnicians. In fact, until a comparatively short time ago, it was thought by some that it could be traced back to the Egyptian hieroglyphics, but in the light of recent discoveries this theory is no longer tenable. The origin of our alphabet is therefore still a matter for research, although there seems to be no doubt concerning its descent from the Phœnician alphabet.

The Roman alphabet seems to be a direct descendant from this, and it is from the Roman alphabet that the lettering that is in use to-day has been derived.

Roman writing was divided into two distinct classes: the formal book-hand, and the cursive hand which was the common hand-writing of the people.

MAJUSCULE WRITING

The book-hand first took the form of majuscules, which in turn were divided into Square Capitals, Rustic Capitals, and Uncials. After this came the modified forms of Uncials caused by the admixture of minuscules.
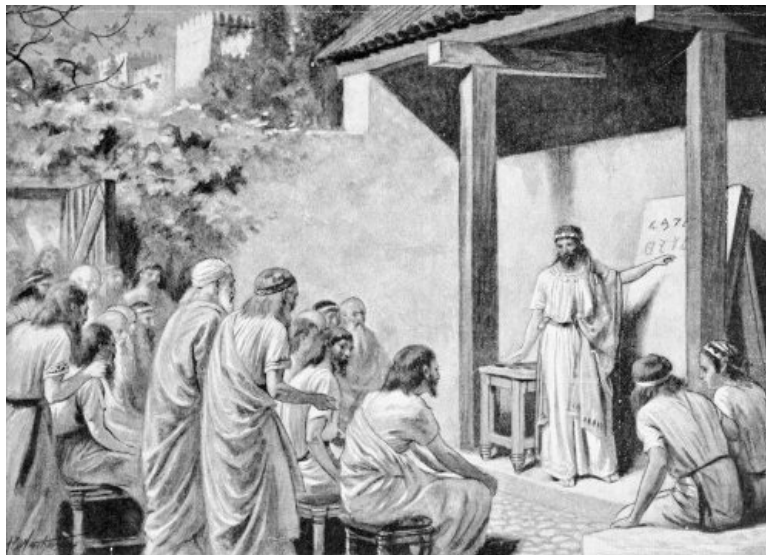
Cadmus gives the Greeks an Alphabet.

(Tradition relates that letters were first introduced into
Greece by a Phœnician named Cadmus.)

By way of explanation it may be here mentioned that, in both Greek and Latin palæography, capital letters are termed "majuscules," while small letters are known as "minuscules."

SQUARE CAPITALS

Probably the earliest Latin majuscule writing is that known as square capitals. These seem to be modelled on the same type of letter that was used for the fine inscriptions. Although the general opinion is that these are the earliest form, there is very little square capital writing in existence. The earliest specimen known has been attributed to the end of the fourth century, although it is thought that this form of writing had been in use some centuries before this. It was in use until the fourth or fifth century. There is not the slightest doubt that writing, when these letters were used, must have been comparatively slow work.

RUSTIC CAPITALS

Rustic capitals seem to be an attempt to write the letters by means of simple pen-strokes. Writing with this type of letter must have been much quicker than when the square capitals were used. This style of writing has been used in the earliest Latin MSS. now in existence, but, although this is the case, the general opinion seems to be that the square capitals were used first. The title "Rustic" is somewhat misleading, as it might lead one to suppose that these letters are rough in character, when they are generally written quite as carefully as the

square capitals.
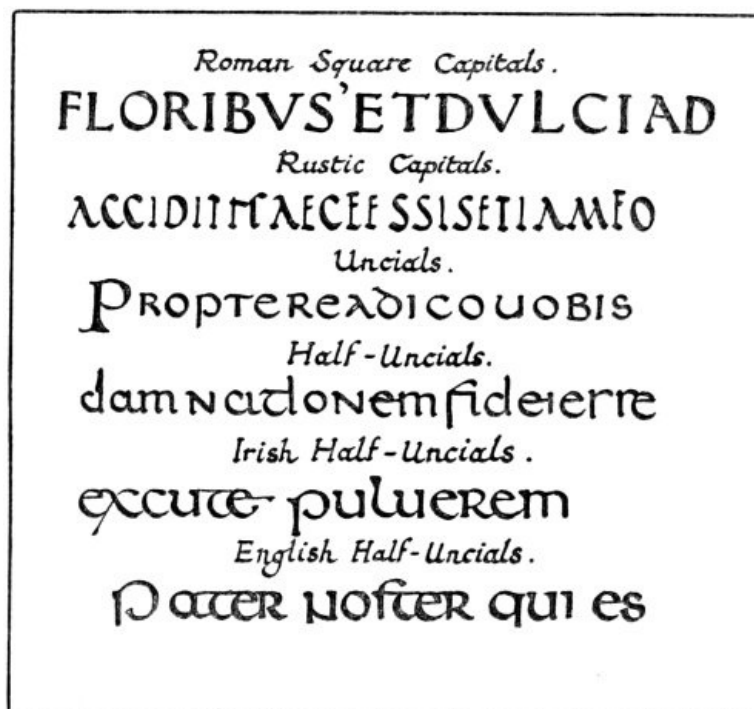
UNCIALS

Roman Square Capitals.
Rustic Capitals.
Uncials.
Half-Uncials.
Irish Half-Uncials.
English Half-Uncials.

Fig. 3.

The next stage is the use of the majuscules known as "Uncials." These are true pen-formed letters. They seem to be based on the square capitals, but, in place of so many angles, curves are employed, these being much more adapted to the use of the pen. It is a round hand, and a very beautiful form of writing. The simplicity of the characters with their flowing curves is such that they may be easily formed with a sharply-cut reed or quill. The letters, A, D, E, H, M, and U, are the principal letters that show the characteristics of this form of writing. It seems to have been in common use as a book-hand in the fourth century. It is, however, thought by some that it is quite possible that it may have been in use as early as the third century, as in the oldest specimens that are known the lettering appears to be fully developed. One of the special distinctions of this kind of writing is the way some of the vertical strokes rise above, or fall below, the line of writing. From the fifth to the eighth centuries it was given the premier place as a literary hand. The early uncials, as also were the square capitals and rustic capitals, were written with a pen cut with a slanted point.

MIXED UNCIAL AND MINUSCULE WRITING

It must be remembered that all the time these majuscules, both capitals and uncials, represent only one side of the handwriting employed, *viz.,* that used for the production of books. The ordinary handwriting of the people, known as "cursive" writing, was in extensive use at the same time. Very often this form of writing got mixed up with the other, and the result was a mixed style. For example, in some of the early majuscule MSS., notes have been found written in this style. This gradually came to be used as a book-hand, until soon very few of the early uncial forms were left.

HALF-UNCIALS

To this form of writing in its full development the title of "Half-Uncial" has been given. It was employed as far back as the fifth century for writing MSS. It may have been used because it could be written more quickly than the ordinary uncial; anyway, it seems to have been very extensively used as a literary hand. This style is very important, as it marks the beginning of the change from majuscule to minuscule writing. These characters were generally formed with a straight-cut pen.

IRISH HALF-UNCIALS

Writing in the British Isles was greatly different from that used on the Continent. On the Continent the hand was developed from the Roman cursive writing, while in England and Ireland the Roman Half-Uncial was the starting-point of development.

There is not the slightest doubt but that the rise of Christianity in the British Isles had a great deal to do with the development of the book-hand. It is a well-known fact that the Christian missionaries from Rome brought with them a number of MSS. which may have served as models for the native scribes. These were probably written in Roman half-uncials, which would account for the manner in which the Irish handwriting developed. Evidently no MSS. written in pure uncials came to Ireland; anyway, there seems to be no reason to suppose that such was the case, as no MS. of this type has been found that may be claimed to be purely Irish without any shadow of doubt.

Early Irish writing is in two forms, round and pointed. The round hand is distinctly half-uncial. Although it is most difficult to state the earliest date of the Irish MSS., the general opinion is that they date back at least as far as the seventh century. The famous Book of Kells is a well-known example of Irish half-uncials. The pointed writing was developed in the eighth and ninth centuries. This is probably a development of the round hand, and in course of time became the Irish national hand.

ENGLISH HALF-UNCIALS

In England there were two distinct schools of writing, one of which came from Ireland and the other brought over by the Roman missionaries. Very little is known of the writing brought over by the foreign missionaries, as only a small amount is known to be in existence. There is evidence, however, that some of the Roman rustic capitals were made use of.

The English half-uncials were modelled on the Irish half-uncials. The writing in the Durham Book, now in the British Museum, affords a good example of this kind of writing. It is interesting to compare this writing with that of the Book of Kells; there is a great similarity. Both are carefully written with the straight-cut pen. The English half-uncials also developed in the eighth and ninth centuries into a pointed hand. Capitals which were used for initials, etc., are simply variations of the majuscules.

MINUSCULE WRITING

As mentioned before, the Roman cursive was the basis of the writing on the Continent. Three great national hands were formed, *viz.*, Lombardic, Visigothic, and Merovingian.
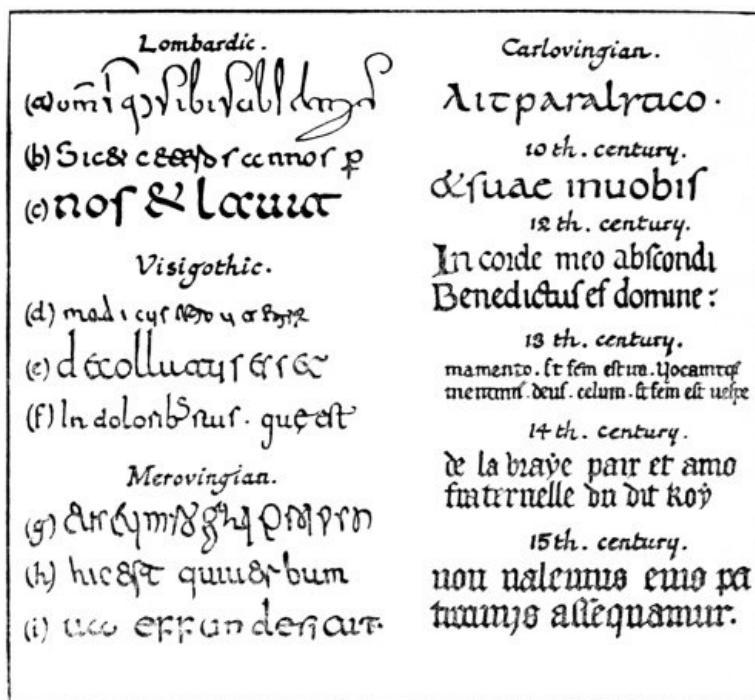
LOMBARDIC WRITING

Fɪɢ. 4.

This was the national handwriting of Italy; it was used from the eighth to the eleventh centuries. The term "Lombardic" is given as a general term to the writing of Italy in the early middle ages. In Fig. 4 some free

renderings are given of this hand. The first (*a*) is an example in one of its earliest stages, written cursively in the early part of the ninth century. The next, shown in (*b*) is the book-hand a little later. The third example (*c*) is a later development of the eleventh century, known as "broken Lombardic." It may be noted that in all these the slanted-cut pen has been used.

VISIGOTHIC WRITING

The title "Visigothic" has been given to the national handwriting of Spain. Derived also from the Roman cursive, it developed into a book-hand that was used in the eighth century. It was in use until the twelfth century. The first example (*d*) is a half-cursive book-hand of the seventh or eighth century. The next (*e*) a book-hand of the early tenth century. The last example (*f*) is the last stage, being of the twelfth century. All these are written with the slanted-cut pen.

MEROVINGIAN WRITING

This is the name given to the writing practised in the Frankish empire. This form of writing leads on to the great reform in the time of Charlemagne. Starting, as was the case in the other two schools, from the Roman cursive, it developed into a set book-hand which is noticeable in several MSS. of the seventh and eighth centuries. An early specimen is shown in (*g*). Several different types of writing were used within the limits of the Frankish empire, some of which bear a strong resemblance to the Lombardic style. In fact, so similar are they that it is rather difficult to distinguish one from the other. The example (*h*) is one of this type, being of the late seventh century. As uncial and half-uncial characters were still used for a good number of MSS. it is but natural that these should influence the style of writing. The specimen given in (*i*) is an example showing the influence of the half-uncial, and is a step towards the full development of the Caroline minuscule.

CARLOVINGIAN WRITING

The great revival of learning during the reign of Charlemagne resulted in the development of a new school of writing known as Caroline, or Carlovingian. Towards the end of the eighth century the decree calling for the revision of the Church books naturally became the cause of fresh activity in the writing schools connected with the monasteries. At Tours the book-hand was developed which is known as the Caroline Minuscule. An example is given of this hand. This form of writing spread rapidly all over the Frankish empire and gradually influenced the book-hands employed in the neighbouring countries. The use of the slanted-cut pen is an important thing in connection with the formation of these minuscules.

LATER STYLES

The tenth century example given is from the Benedictional of Æthelwold, Bishop of Winchester from A.D. 963–984. This lettering is of the foreign type, but it has a strongly defined native character all its own, some of the letters being distinctly Saxon in type.

From the twelfth century onwards a great number of MSS. were produced, each country having its own particular style and developing on certain definite lines. It is impossible to give specimens of all the different kinds of Calligraphy. The examples shown must be taken as roughly indicating the general style of the writing. The use of the slanted-cut pen tended towards the compression of the letters, thus forming a strong contrast to the letters produced in the earlier periods with the straight-cut pen.

In the thirteenth century writing became considerably smaller. In the latter part of this century a very large number of Bibles appear to have been written, and volumes were smaller, standing out in strong contrast to the ponderous tomes of the preceding century. In the fourteenth century the writing became considerably stiffer and more angular. This tendency showed itself still more strongly in the fifteenth century.

In Italy this tendency did not make itself felt quite as early as in the writings of Northern Europe. Although later on they became more or less affected in this way, there is a decided difference between Italian writing and the styles employed by the other countries.

In the fifteenth century the Italian scribes appear to have gone back to their early periods for models for book-hands, and it is this that influenced the early printers of Italy to use type of this character, which has its modern representative in the Roman type of to-day.

CHAPTER III

THE PREPARATION AND USE OF THE PEN

To obtain a practical knowledge of the use of the pen as a letter-making tool is, as stated before, the first important thing for the student to acquire. All the practice he can get in cutting it to shape, and using it in the manner described here, will be found to be of the greatest service in helping him to produce good lettering with it later on.

For large writing, the best tool is undoubtedly the reed pen. In fact, this is probably the best pen for the beginner to experiment with first. It is somewhat difficult to obtain a good reed pen. The ordinary kind that is sold by the artists' colourmen is rather too soft and soon becomes sodden with the ink. Crisp writing is then impossible. A pen made from a piece of hollow cane or bamboo seems to answer best of all.

A sharp knife is required for cutting, and a thin piece of metal to form a spring to hold the ink is a great advantage. It should be quite easy to see from Fig. 5 how the pen should be cut. The great thing to remember is to see that the pen is cut with a nice chisel point, as this ensures crisp and sharp writing. Another important detail is the slit in the nib. This should be just the right length for easy writing. If it is too long it makes the pen too soft, while, on the other hand, if too short it is difficult to write with it. The student will find that experiment alone will teach him what is right in this matter. An hour or two spent experimenting for himself with a reed or quill will teach him far more than pages of instruction. Beyond just giving a few hints, there is no need to devote much space to directions as to how to cut the pen. The few details given are just to act as a guide to the student.
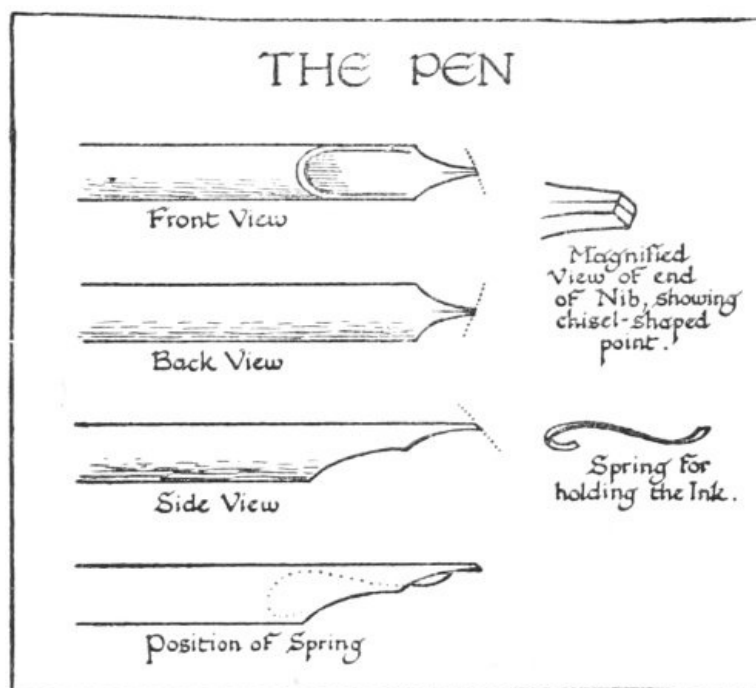
THE PEN

F<small>IG</small>. 5.

In cutting the nib, care should be taken that the slit is a clean cut, also that the points are equally proportioned on each side. The spring is best made from a piece of thin brass, copper, or pure tin. If, ordinary tinned iron is used it is liable to get rusty besides being generally too thick. It will be found that a great deal depends on the position in which this is placed, with regard to the flow of ink from the pen.

When using the reed pen for large writing it will be found necessary to pare the curved inside of the pen quite flat at the point, to ensure a firm stroke, as otherwise a hollow stroke will be the result.

For smaller writing the best pen is the turkey quill. The goose quill is not quite firm enough, but a good turkey quill can be cut either for quite tiny writing or large bold writing. It is best to strip the feather part right away, as there is no advantage in having it on the pen. This can easily be torn off by pulling the end of the feather downwards.

For practice any good smooth-surfaced paper may be used. Several of the well-known makers of high-class hand-made drawing papers make a special paper for writing and illumination.

A good fluid waterproof drawing ink should be used. Care should be taken to procure one that will not thicken either in the bottle or in the pen. It is a great fault with some inks that, although they do not seem to thicken very much in the bottle, they do so in the pen. When this is the case, good writing is almost impossible. One cannot produce good writing if one has to stop every little while to wash out one's pen. Besides, when the ink is beginning to thicken, clear, sharp writing becomes impossible.

Fig. 6 gives some simple exercises with the pen. It should be quite easy to understand the formation of the pen-strokes from this diagram. They should be practised over and over again until the strokes can be made very

easily. It should be noticed that the pen is kept practically at the same angle all the time. It must be held as easily as possible. There is no need to acquire any special manner of holding it. Different people hold the pen in different ways and it is best for the student to find out which way is easiest for him to hold it to produce good writing. If the pen is held in a manner which may be correct according to a copy-book but which feels awkward and cramped for the writer, the writing produced in this way is bound to show evidences of this. If, however, the pen is held freely, and easily, it becomes almost a part of the writer himself, and there is a feeling of freedom about the writing that is entirely absent from that produced by the other method.
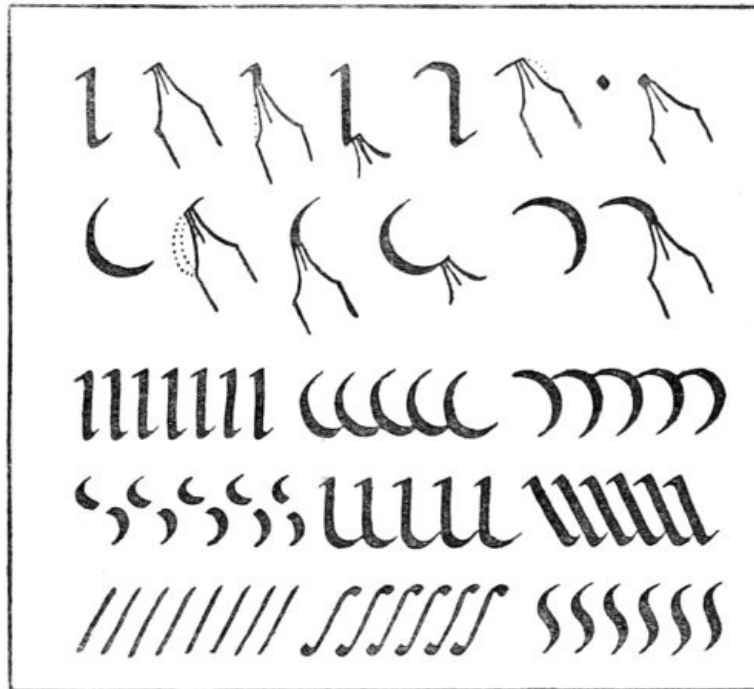
Fig. 6.

The strokes in the diagram were made with a turkey quill pen in exactly the same manner as described here. One of the most important things is to endeavour to keep the pen practically at the same angle all the time. If the pen is allowed to twist about in the hand, the distinction between the thick and thin strokes will not be sufficiently marked. It should be quite easy for the student to acquire this mastery of the pen without holding it in a vice-like grip.

For clear, sharp writing it is practically essential that there should be no ink on the back of the nib. A small piece of linen, free from fluff, should be kept for a pen-wiper, and the back of the pen should be wiped before commencing to write. The ink should be kept free from pieces of fluff or small hairs, as if these get into the pen it is impossible to produce good writing.

The exercise should be practised first with two ruled lines, then with one only. It is good training if, after this, the student will try his skill in writing without any lines at all. He should not sketch it in lightly first in pencil, but should start straight away with the pen.

The width of the nib should be approximately the same as the thickness of the thick strokes of the writing.

When the nib becomes blunt or uneven it should be carefully re-cut. When re-cutting the pen it is advisable not to cut it in too drastic a fashion. Cut it gradually, taking very little off at first and using only a very sharp knife. One of the best knives for this purpose is a surgeon's scalpel, as, being made of hard surgical steel, it does not get blunt so quickly as the ordinary pen-knife.

In the next chapter it is intended to begin to practise the formation of letters. Before studying it the student should practise cutting the pen and forming the strokes in Fig. 6. He should endeavour to make a sharp distinction between the thick and thin strokes, and also strive after perfect regularity. The more he practises this exercise the better will he be able to form the letters in the succeeding ones.

The student is advised thoroughly to master one stage before proceeding with the next. One that has been mastered is of more value than several hurried over in a careless fashion.

CHAPTER IV

THE FORMATION OF LETTERS

Having become somewhat acquainted with the use of the pen, the next step to be taken is the formation of letters, on the same principle as the strokes were made in the last chapter.

shows an alphabet of capital letters and also one of small letters. Each letter is formed with simple pen-strokes, and the student should experience no difficulty in forming these after practising the previous exercise.

Perhaps it would not be amiss to give a few suggestions as to working. In the first place he should set about his task in a workmanlike manner. It is practically useless practising on a few odd scraps of paper, in a slipshod way, without making any special preparations. This method of working is responsible for a good deal of slovenly work and cannot be too severely censured. The old proverb, "If a thing is worth doing it is worth doing well," is perfectly true in this case.
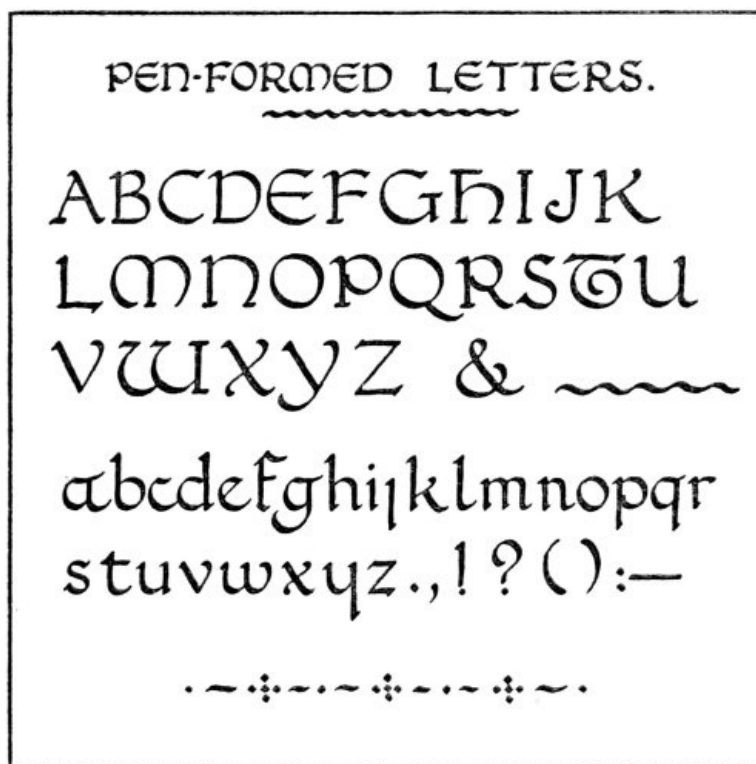
PEN-FORMED LETTERS.

Fig. 7.

The student should obtain a drawing-board and fasten his paper down carefully before commencing to work. It will be found that a pad made of several sheets of blotting-paper placed under the writing-paper will make the writing easier. This makes a much more sympathetic surface to write upon than the hard drawing-board. Then the slope should be considered. It is not advisable to work with the board flat on the table. It should be raised to form a convenient slope. In the old illustrations that we have representing the mediæval illuminator at work, he is always depicted as writing at a sloping desk. By far the most suitable for writing is a firm water-colour easel which can be inclined to any angle. If, however, this is not to hand, a drawing can be raised on a table to the required angle by resting one end of the board on a small box.

Another point is the lighting. It is best to arrange this so that the light comes over the left shoulder, otherwise the shadow of the hand falls on the work.

Rule lightly, with a black-lead pencil, some lines to work upon. First rule two lines for each row of letters. For the capitals these should be about ¾ in. apart, and for the lower-case letters 3/8 in. should be sufficient.

The pen should be cut so as to give a fairly bold stroke, to prevent forming a thin, weak-looking letter. Great care should be taken to ensure that the writing be crisp and sharp. See that the back of the nib is free from ink, and be careful to keep the pen at practically the same angle. The habit of turning the pen about in the hand while writing is responsible for a lot of clumsy work. The beginner generally fails to turn the ends of his strokes smartly, thus failing to distinguish between the thick and thin strokes. This is caused by not keeping the pen at the same angle. The least possible pressure should be put on the nib. Let the pen have its own way; do not force it at all. Some prefer to dip the pen into the ink, wiping the back of the nib on a small linen pen-wiper. Others use a small brush or quill for dropping the ink into the pen. Some dealers put their ink into bottles provided with quill stoppers for this purpose. Whichever way be used, care should be taken not to fill the pen too full, as if this is done there is every probability that a blot may be caused by ink dropping from it.

shows exactly how the various strokes are formed. The different strokes that go to make up the capital

A are carefully shown in the proper order and exactly how they can be made. Most of the letters in the alphabet are also shown with the pen-strokes necessary for their production. They are numbered so that the student should have no difficulty in understanding exactly how to form them, the first stroke being numbered 1, the second 2, and so on. It will be found that the letters that are not shown in this manner are made up of strokes that are shown plainly in some other letter.

Fig. 8.

After practising the formation of these letters between two lines, the student should use one line only. In fact, after he begins to get familiar with this method of forming letters he should discard altogether the use of the second line, as he should be able to write just as easily on one line only. Some students seem to be afraid that they will not be able to keep the writing the same size unless they use two lines. It is strange that in ordinary hand-writing they would never think it necessary to rule two lines to keep their writing the same size. The use of two lines is necessary to the beginner until he has become familiar with the pen, but there is no necessity to keep using these, for they only hamper him and give him less freedom in working.

One of the difficulties that beginners generally experience, in attempting to form letters with the pen in this way, is that they are unable to get good firm curves and strong upright strokes. The cause of this is nothing more or less than simply lack of practice. If the student has any trouble in this way he should practise the earlier exercise again and again. Weak-looking curves and tottering strokes will soon become few and far between as he gains confidence in himself. If he gives his whole attention to forming the strokes, the facility to produce well-formed letters will soon be acquired.

Another cause of bad writing is often due to the pen. If this is not cut so that it will give crisp strokes good lettering is impossible. The student should not waste time trying to write with a badly-cut pen; it is much better to re-cut it straight away.

After practising forming the letters this size, he should reduce them. The pen should be cut with a smaller point to suit the size of the letters, and lines should be ruled closer together. He should endeavour to get the same crispness and sharp distinction between the thick and thin strokes as in the larger writing. He should not rest satisfied until he is able to produce clear sharp writing on single lines. He should strive to keep the strokes of the letters quite upright, not leaning to the right or to the left. If he has practised the earlier exercise thoroughly he should experience no difficulty in this matter.

The next chapter will deal with massing letters together to form words and sentences. It is, however, as well to emphasise the fact that the formation of the individual letters should be mastered thoroughly first.

CHAPTER V

FORMING WORDS AND SENTENCES

One of the best ways to get familiar with spacing and forming letters into words is to write out a short quotation.

In Fig. 9 one is given for the student to transcribe. A sheet of smooth-surfaced paper should be fastened to a board with drawing-pins, placing the pad of blotting-paper underneath. The page should then be ruled out with the lines 3/16 inch apart, with the exception of the first lines, which are 3/8 inch apart. Rule the lines as lightly as possible, with an HB. pencil, so that they are just visible, and can be removed by the gentlest possible touch of the rubber.

It should be noticed that the width of the paragraph is determined by the first word, "Imagination." The way that the individual letters are carefully packed together, side by side, is an important factor. It is hardly worth while cutting a special wide pen for writing the initial I. This can be easily formed by making two strokes closely together. This practice should not be adhered to as a general rule for this type of letter, as some letters present a patched appearance when constructed in this manner. Letters should be composed either of simple pen-strokes or else built up. Never attempt to worry a letter into existence. Later on a method of building up letters will be shown. They are, however, a different type from those shown here.
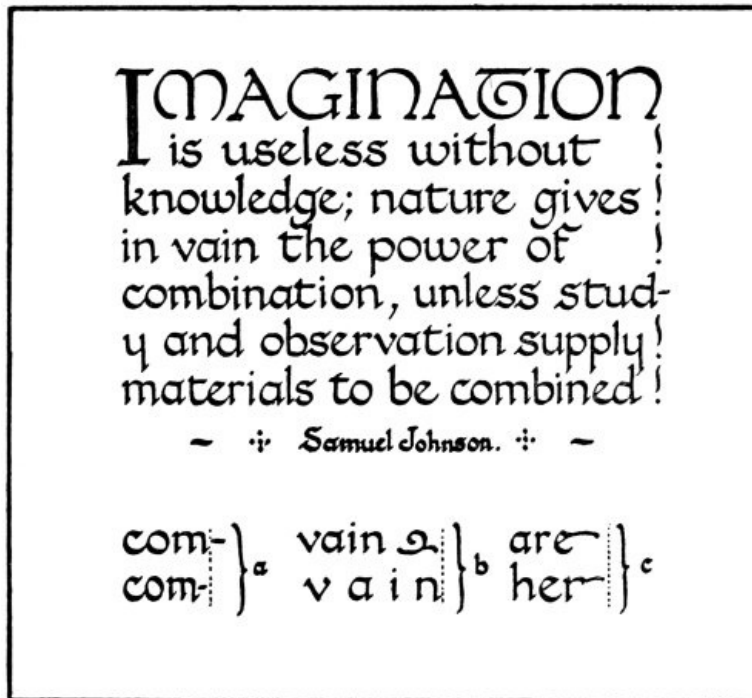
FIG. 9.

This exercise should first be written between two ruled lines to each row of lettering. Then write it out using one line only. Then reduce the size, cutting a pen with a smaller point, but keeping to the same proportion in spacing. In copying this do not draw the lettering first in pencil, but go straight ahead with the pen. Also do not attempt to copy it in a rigid manner, endeavouring to get exactly the same number of words on each line as in the copy. Pack each letter closely to its fellow, and do not attempt to spread out any word to make it fit better. The distance between each word should be about the width of a small letter. Do not try to squeeze a word or syllable in at the end of a line. It is better to let it project slightly over the line; see (*a*) Fig. 9. If, when the end of the line is reached, there is a space left not quite large enough for the next word, do not attempt to spread out the last word, but either add a simple pen ornament as in (*b*) or the line may be emphasised by pen-strokes or dots, as in the copy. Still another method is shown in (*c*), where flourishes from the final letter fill the space. These, however, should be used sparingly, as they tend to make the matter less readable.

After the student has had a good amount of practice in writing in this manner he will begin to feel his way and be able to mass and arrange the letters and words properly. It is only when he becomes master over the pen, so that he can write quickly and easily, that he is able to mass the letters into words with facility.

After having written this quotation, a fresh one may be selected and written out in a similar manner. If this practice is persisted in, the student will gain valuable experience in the spacing and arrangement of words.

FIG. 10.

In Fig. 10 several interesting points are noticed. In the first place the necessity for packing the letters should be noted in (*a*). If the two renderings of the same word be carefully examined, it will be seen that the first one has a somewhat broken appearance. This is notwithstanding the fact that each letter is exactly the same distance from the next to it. In the second example there is much more unity, yet the letters are not really so equally spaced. The way to get over this difficulty is to place each letter as closely as possible to its fellow. The first example looks like L ETTER ING because due consideration has not been given to the fact that however closely L and E, and R and I, are placed together, there will always be a fair amount of space, so that these should be packed, if possible, closer together than the rest. As the E is a curved letter, the L can easily be formed so that the lower part comes underneath. Also the tail of the R can project under the I. This device should not be carried to excess as shown in (*b*). One often sees architectural drawings disfigured by a lot of this kind of thing. The student is advised carefully to guard against this, or his writing will become freakish.

In (*c*) two examples are given which show the advantage of massed writing. In the first example the letters are placed together in a loose manner, and the two lines are too far apart. The second is much easier to read because the letters are packed closer together, and also the lines of lettering are nearer. For general purposes massed writing is undoubtedly best, but for some things, as, for example, in writing poetry, the lines may be wider apart. The letters, however, should be packed together, and it is not a bad plan to make the stems and tails of the letters just a trifle longer than usual.

A curious optical illusion is shown in (*d*), in connection with the letter S. The first one is constructed so that each half is approximately the same size, but it appears to be larger in the top half. It presents the same illusion if the page is held upside down. The second one, which is drawn with the top half slightly smaller, appears right. This applies to several other letters in the alphabet, but in the letter S it is most noticeable. The letter P is a letter that requires some attention. If a word begins with this letter, the form with the stem projecting below the line may be used; but when this occurs in the middle of a word, it tends to make it less readable. The example given, at first glance, looks like HEADS.

A modern fad of using V instead of U, and I in place of J, should be discouraged. In Latin, possibly, there is something to be said for it, but in modern English it looks foolish and affected, besides being almost unreadable at times.

The student will find the alphabet of italics useful for rapid lettering of plans, maps, etc. He should endeavour to preserve the same slope, not getting some letters falling over and others nearly upright. There is no need to give detailed instructions as to how to form the individual letters, as, after having practised the formation of letters in the preceding chapter, he should experience no difficulty in feeling his way with regard to the forming of the individual strokes that go to make up each letter. The same thing applies to the pen-formed figures that are given here. These are all composed of simple pen-strokes, and the student should be able to form these quite easily and quickly.

Constant practice with the reed or quill pen will do more than anything to make him an efficient writer.

CHAPTER VI

ALPHABETS FOR STUDY, BASED ON HISTORICAL EXAMPLES

After the student has, to some extent, mastered the pen, and is able to write fairly easily, it would be a good plan for him to study some of the best historical examples, forming the letters in the same simple manner.

The examples given here are free renderings of the various alphabets used in the different periods. In the case of any of the letters being missing to form the complete alphabet, these have been constructed in a similar style. The reason for doing this is so that the student should experience no difficulty in writing when using any one of these alphabets, as would possibly be the case if an incomplete alphabet were given. These alphabets are merely given for convenience, the object not being in any way to keep the student from studying the original manuscripts for himself. It was thought, however, that it might possibly be helpful if the various letters were given in the form of complete alphabets, as, after studying the various forms of lettering in this manner, the student would be encouraged to study the actual MSS. for himself.

FIG. 11.

One of the most beautiful forms of simple pen-formed lettering is given in . The uncial characters shown here (*a*) afford one of the best examples for practice in writing with the reed or quill. These letters are all formed with simple strokes made with the slanted-cut pen. For the purpose of general writing it may be as well to change the form of one or two of the letters, such as the A, for example, and possibly the D. Forming these characters with a well-cut pen is splendid practice for the student. He should endeavour to form the letters with simple direct strokes, with no touching up afterwards. After having practised the previous exercises well, he should be able to form these letters quite easily. He should, as opportunity occurs, examine carefully some of the fine uncial manuscripts, or at any rate some good reproductions of them.

The alphabet shown next (*b*) is founded on the Irish half-uncials. The one striking difference between this and the previous alphabet is that this is written with a straight-cut pen instead of a slanted-cut pen. This is plainly noticeable in the round letters such as a, c, e, o, etc., the thickness coming in quite a different place. It will be found that writing in this manner with the straight-cut pen is much slower work than writing in the other way. It is, however, very good practice for the student. The same remarks that were made about the uncial letters apply also here; it would be as well to modernise some of the letters, such as the "g" and the "n," when writing with this alphabet.

In some very beautiful alphabets are shown which are excellent in every way as examples for study. These are all formed with quite simple strokes made with the slanted-cut pen. The one shown in (*c*) is a free rendering of the letters used in the famous "Benedictional of Æthelwold." As the "s" and the "t" given here are liable to be somewhat unreadable, additional forms of these letters are suggested.

The example given in (*d*) is taken from a tenth-century Psalter, now in the British Museum. This MS. is a very beautiful example of the English writing of this period. The writing of this century should be very carefully studied. The student should not be content with merely working from the letters given here, but should study some of the MSS. of this period for himself, noting carefully the spacing and the arrangement of the lettering.
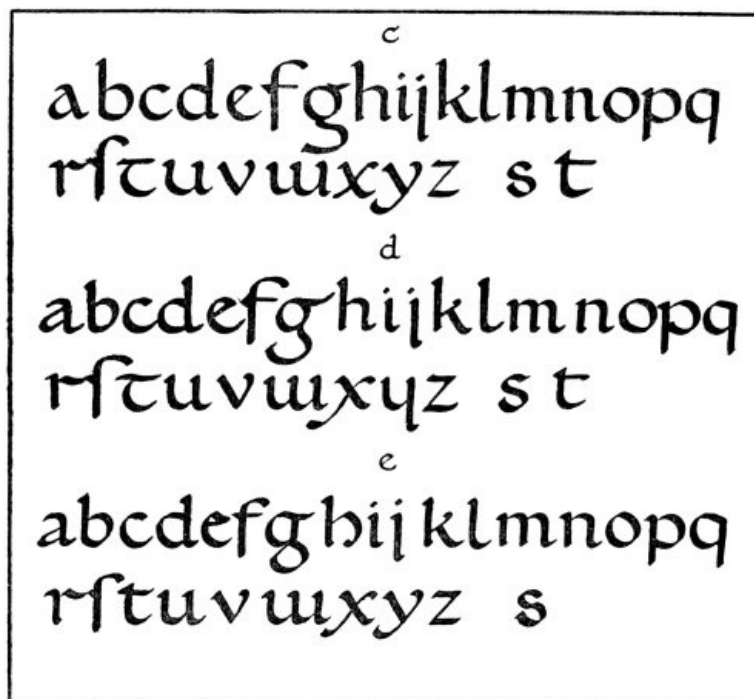
Fig. 12.

The next alphabet (*e*) is taken from an Italian twelfth-century MS. This is slightly stiffer in character than the preceding one, and the writing tends to become more compressed. However, the lettering still retains its round character. It is easy to mass the letters together when using this alphabet.

The letters in are still more compressed in character. The alphabet shown in (*f*) is taken from a late twelfth-century MS. of the French School. It is a very good form of lettering and will well repay careful study.
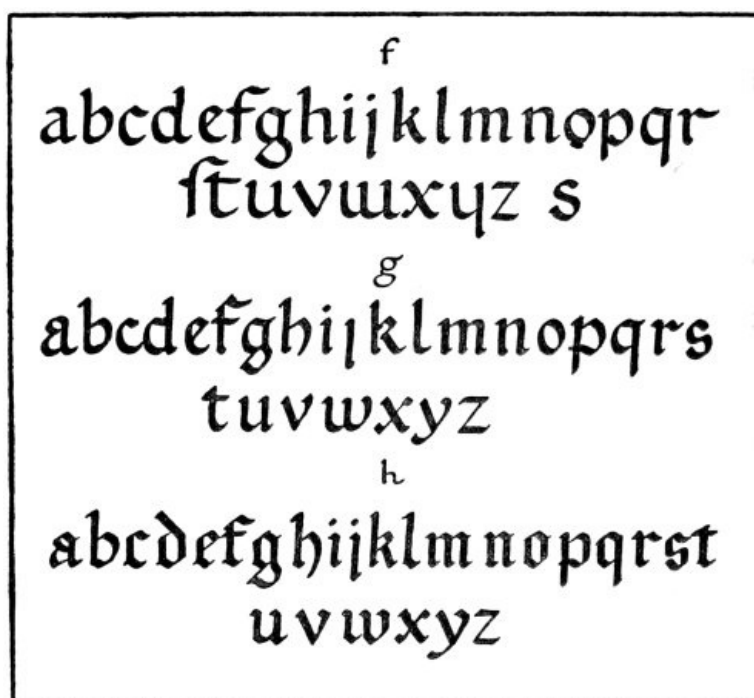
Fig. 13.

The next one (*g*) is a typical example of the style of lettering largely employed in the thirteenth century. Although the letters are shown here as large as in the preceding example, the lettering generally was much smaller. If the student examines carefully any of the thirteenth century MSS. he will notice this to be the case. He should practise using this alphabet in the same way, cutting his pen so that he is able to form the small letters quite easily. He will probably experience difficulty in producing writing as small as the mediæval scribe was able to do, as this comes only from a great amount of practice, but he should be able to write quite easily with the lines of lettering not more than 3/16 in. apart.

The alphabet that follows this (*h*) is from a fourteenth century MS. It will be noticed that the letters here are much more angular, and they conform more to what is popularly known as "Old English." This form of writing can be quite easily formed with the slanted-cut pen.

There is no need to employ a fine pen for putting in the thin strokes, as is so often the case, as the complete letter may be formed with the same pen if it is cut with a nice chisel point. It is most important that the student should form the whole of the letter with the same pen, without any touching up afterwards. The practice of forming letters roughly and shaping them up afterwards with a fine pen tends to cultivate most unworkmanlike habits and cannot be too severely censored. Also letters formed in this manner are always lacking in character and vitality. If the student has become familiar with cutting and handling the pen he ought to be able to form any of the letters given here without the slightest difficulty.

The alphabets of capital letters given in <u>Fig. 14</u> will be useful as initials, etc., in connection with the small letters. It is quite obvious that these letters are not formed with simple pen-strokes in the same manner as the small letters are. These are built up with a series of strokes, the body of the letter being then filled in with either pen or brush. This method of building the letters up with pen-strokes will be described in detail in a later chapter.

Fig. 14.

The first alphabet given here (*i*), is based on the capital letters used in the famous Book of Kells. These will serve well as initials when using the Irish half-uncial characters for writing with. A good many of the letters ar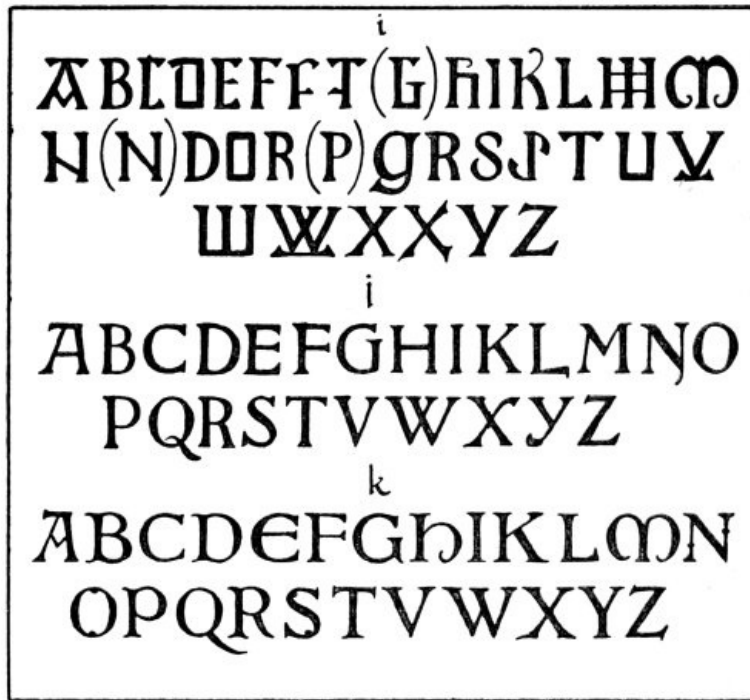e given in a variety of forms. Some of these are shown here and are liable to be somewhat unreadable if used in the present day. For example, the Irish O is shaped more like D, and may as well be used instead of this letter, which is not very distinct in character. The letter G would be hardly recognisable if used in the Irish form, so a simplified letter has been suggested. Some slight modifications have also been suggested in the letters N and P. By raising the cross-bar in N it conforms more to the modern shape of this letter. It is necessary to simplify the Irish P, as this letter resembles the letter R more than anything else.

The next alphabet, shown in (*j*), is based on capitals used in the tenth century, a somewhat stiff and severe type of letter.

The last one (*k*) shows the type of capital used in the eleventh century.

Some further alphabets will be given later on, when dealing with illumination.

The student should not content himself merely with forming the letters given here, but should study the subject for himself. He should, if possible, examine some of the illuminated MSS. exhibited in the various museums in London and elsewhere. He is specially recommended to study the MSS. produced between the tenth and thirteenth centuries. If he cannot possibly study the actual MSS. he should experience no difficulty in obtaining reproductions of them. The British Museum publishes an excellent series of collotype plates of a good number of their choicest illuminated MSS., as well as some splendidly reproduced in gold and colours. It will be found that a fair amount of time given to the study of these old MSS. will well repay in the end. The way the letters are massed together should be carefully noted, as well as the formation of the individual letters. He should note also the freedom displayed, the letters not being cramped in any way.

When studying lettering from photographs, or photographic reproductions, the proportional compass is extremely useful for measuring the exact size of the letters. The exact size of the page is nearly always given, and it is quite a simple matter to adjust the compass so that, when the measurement is taken with the smaller end, the exact size of the lettering can be marked off with the opposite end. This instrument is most useful when used in this manner, as it is difficult to gauge the exact size of the lettering from the measurements of the page. It is also always advisable to know, if at all possible, the exact size of the lettering in the original when studying a reproduction of a MS.

When examining MSS. in glass cases, when it is not convenient to have them taken out, a magnifying lens of

about five or six inches focus is very useful for analysing the construction of fine lettering. This depth of focus enables the lens to be used through the glass without the necessity of having the case opened.

The student should seize every opportunity that may arise to examine some of the best work of the mediæval period.

For the present he should confine his attention to the lettering. The decoration will be considered later on, but, as this springs from the lettering, it is essential that sufficient attention should be given to the foundation before attempting to build upon it. He should also, when opportunity arise, examine some of the best modern work in this direction.

CHAPTER VII

ROMAN LETTERING

The Roman alphabet is certainly one of the most beautiful of all the alphabets that we possess. It is, however, strictly speaking, not a pen-formed alphabet. The fine forms of the Roman capitals, as exemplified in the well-known inscription on the Trajan Column, were most certainly the result of the evolution of chisel forms. The pen-formed letters that came after were evolved from these Roman capitals.

At first the type of letter used was practically the same as the chisel form. Writing with this type of letter must have been extremely slow work, compared with the simpler pen-forms that came into use later. It is impossible to write, in the true sense of the word, when using Roman letters. Although in the case of the early square-capital writing these letters were constructed in a fairly simple fashion with a slanted-cut pen, it is very difficult to write with any speed in this manner and at the same time produce a well-finished letter. For general purposes it is better to form the letters as shown in Fig. 15.

These are constructed in quite a different way from the types already shown, the difference being that while they were formed with simple pen-strokes as in ordinary handwriting, these are built up.

FIG. 15.

For the purpose of illumination, Roman lettering is not by any means ideal. It is much better to select a true pen-formed alphabet; but for modern usage, such as the various branches of commercial work, Roman lettering is used a great deal. It possesses one very great advantage, that is, its legibility. As the man in the street has his daily newspaper printed in a form of Roman lettering, he is therefore more familiar with this type than any other. The greater bulk of the commercial art of the present day aims to attract the attention of this individual, so that it is necessary that it should be just what he can understand. To letter a popular advertisement in a late Gothic lettering would be foolish in the extreme, as he would, in all probability, experience difficulty in deciphering it. The thing to aim at, in this case, is to do it so that he cannot help seeing it. The most important thing, in the eyes of the advertiser, is not so much the design of the poster as the goods advertised, and the lettering calling attention to these must be clear, distinct, and prominent. Lettering, therefore, that is based on the Roman type is best for this kind of work.

Illumination, in general, appeals to a different type of individual. Something is required that is away from the ordinary. Also as illumination is so inseparably bound up with writing, it is almost essential that a true pen-formed lettering should be used.

The Roman capitals, as shown in Fig. 15, are based, to a great extent, on those used in the Trajan Column inscription. It will be found that the more practice that one has in forming letters with simple pen-strokes, as already shown, the easier it will be to form the letters by building them up, as in this case.

For general purposes the easiest way to form Roman letters is with a pen cut with a medium point and a fairly long slit. The outward strokes should be made first, then the ones that come inside the letter. The serifs are then added, the outline filled in, and the letter is complete. The lower-case letters given are a type that may be used in conjunction with the capitals. Apart from the utility of this alphabet, the student will find that forming these letters in this way will be extremely good practice. He should also practise forming them with a brush. For this purpose he should use a small, but firm, sable water-colour brush. Construct the letters in exactly the same manner as when using the pen. After a good amount of practice in this way he will be surprised at the dexterity he is acquiring with the use of the brush. Then, using a larger brush, he should

endeavour to form large letters in this way. This will be extremely useful for writing large notices and announcements.

For work where very accurate lettering is required, such as high-class commercial art, title-pages, etc., the outlines of the letters should be produced by means of tee-square, set-square, and compasses. The serifs also should be carefully drawn. In this case it is not wise to go straight ahead with the pen, without drawing first carefully in pencil.

The letters given in Fig. 16 are a type of Roman lettering made with simple direct strokes of the pen. These will no doubt be useful, as they may be very easily and quickly written. They should be very helpful for writing quickly announcements, notices, etc.

A few notes may be useful to the student with regard to the characteristics of the various Roman capitals.
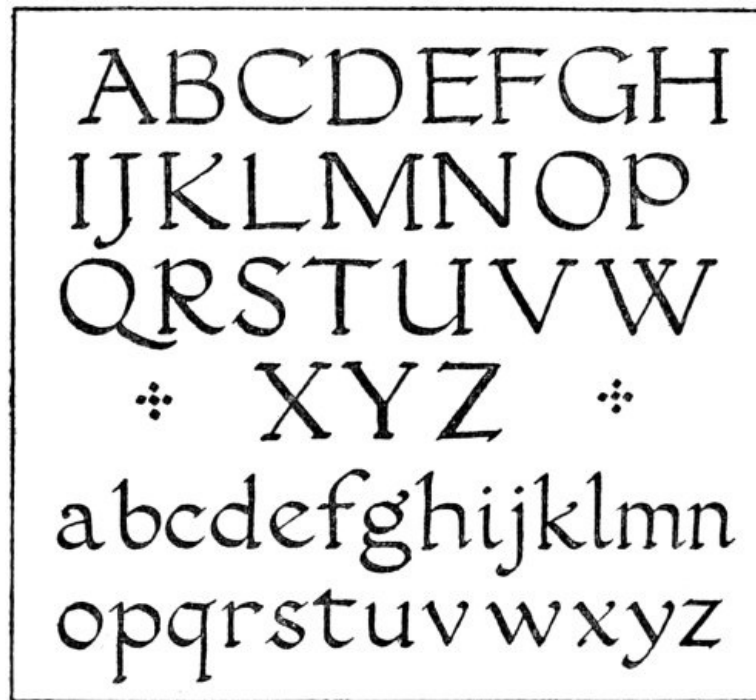

FIG. 16.

The letter A is sometimes pointed at the top, being generally formed in this manner in inscriptions, but for pen- and brush-formed lettering it is preferable to finish it in the way shown in Fig. 15. It should be noticed that in the letter B the top part forms an angle with the upright, while the bottom part curves into the stem. The same thing applies to D, E, and L. The serifs on the lower limbs of E and L should point outwards, while the serifs on the other limbs of E are quite straight. This also applies to F. It is best to make the cross-bar in H form angles with the uprights rather than curving into them. The form of the letter J may be varied, the tail may be curved round, but it is as well to avoid the ugly shape that is in general use. The tail may project below the line considerably, if it is felt to be necessary, but care should be taken not to exaggerate this too much. The same thing applies to the tail of the next letter, K. In the letter M the two outside strokes occasionally spread outwards, and in the form used in inscriptions the top serifs are missing. These, however are generally added to the pen- or brush-formed letter. The same thing applies to the letter N. The letter O is not quite a circle; it is sometimes made in the tilted form, *i.e.*, as formed with the slanted-cut pen; when this is the case all the corresponding curved letters should be treated in the same way. The curve of P does not always touch the upright stem below. The tail of the Q may be lengthened occasionally, as also is the case in the letter R. The letter S often leans slightly forward, but this tendency should not be accentuated too much. The top part of this letter should be made slightly smaller than the lower part; this applies also to all letters similarly divided in the middle. In the letter T the top generally forms angles with the centre stem instead of curving into it. For general writing the curved type of U should be used in preference to the V which is used in Latin inscriptions. W is formed by crossing two V's.

The student is strongly advised to study some of the best historical examples of Roman lettering. Some of these are detailed in the next chapter.

CHAPTER VIII

SOME HISTORICAL EXAMPLES OF ROMAN LETTERING

The examples given in this chapter do not pretend to be, in any way, a complete series of alphabets of Roman lettering. To go into this matter properly would require far more space than is available here. If, however, sufficient interest is aroused to encourage the student to study the subject for himself, it will be worth while dealing briefly with the subject here.

One of the most important alphabets is that used in the inscription on the base of the Trajan Column (circa 114 A.D.). To help the student to form these letters in their proper proportions, each letter has been enclosed in a square (See Figs. 17–22). This should be a great help in determining the correct form of the different letters. For example, take the letter O; this is not quite a circle, as is shown plainly by placing the letter in a square. In the case of the W, as this is larger than the other letters, this has been placed in two squares.

As the alphabet from this inscription is incomplete, suitable forms have been suggested for H, K, Y, and Z. Also additional letters have been given for J, U, and W, which are necessary in modern usage.

THE TRAJAN COLUMN.

This alphabet is extremely beautiful, and for important inscriptions it is hardly possible to find a better model. The student is advised to make a careful study of this alphabet.
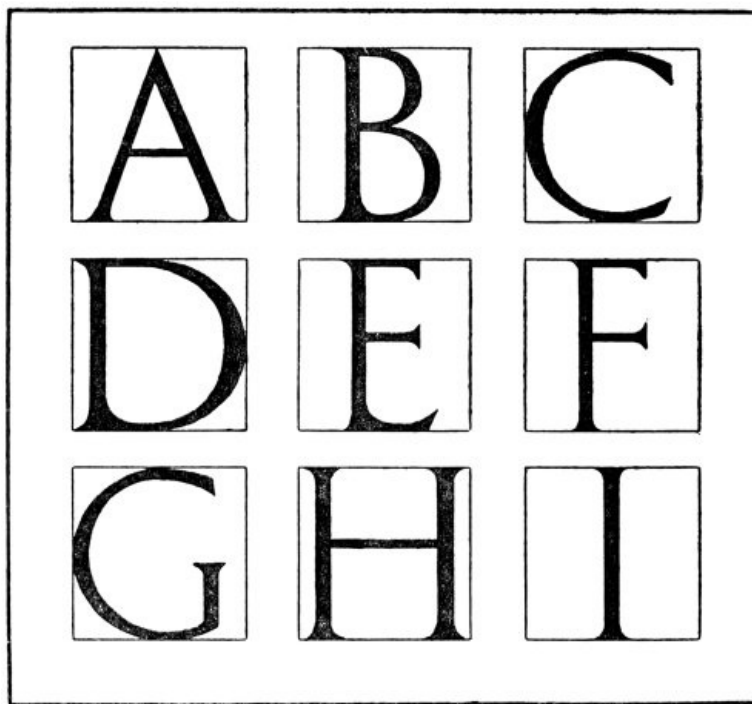
FIG. 17.

When using this alphabet for writing an inscription it is not a bad plan to make a small cardboard gauge giving the width of the different letters in proportion to the height decided upon. A small gauge like this is very easily constructed and should be a great help in quickly spacing the letters. For example, it may be noted that the letters C, D, G, H, K, M, N, O, Q, U and Z nearly fill the square, while A, R, T, V come next in size. B, X, and Y are slightly narrower, while the letter P is a shade less than these. L and S are still slightly less in width, and E and F are the most narrow of all the letters, excepting, of course, I and J. If these various widths are marked on the edge of a small strip of card it ought to be quite an easy matter to space these letters quickly.
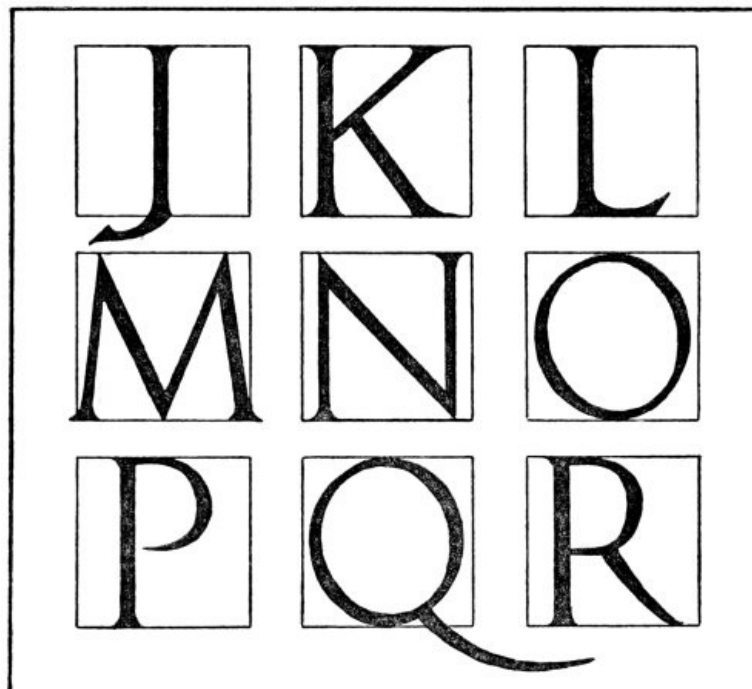
FIG. 18.

The first alphabet shown in <u>Fig. 20</u> (*a*) is a free rendering from a thirteenth-century inscription in the Church of St. Ursula, Cologne. As the alphabet was incomplete it has been completed, so that it may be used without any difficulty arising through any of the letters being missing.
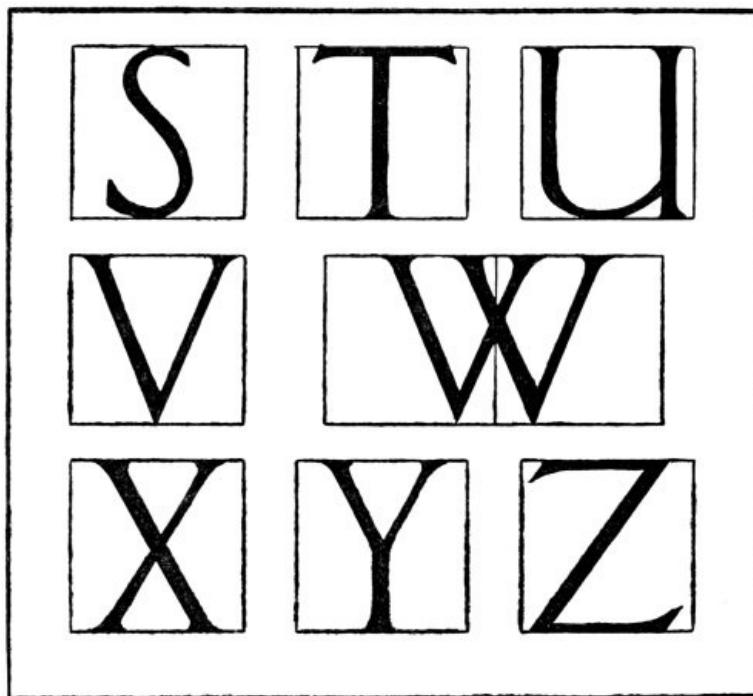
Fig. 19.

The next one is from an inscription of the early part of the fourteenth century (*b*).

A late fifteenth-century alphabet is given in (*c*), which is taken from an inscription in niello on a silver plaque fitted to a reliquary. This is Italian and is dated 1496.
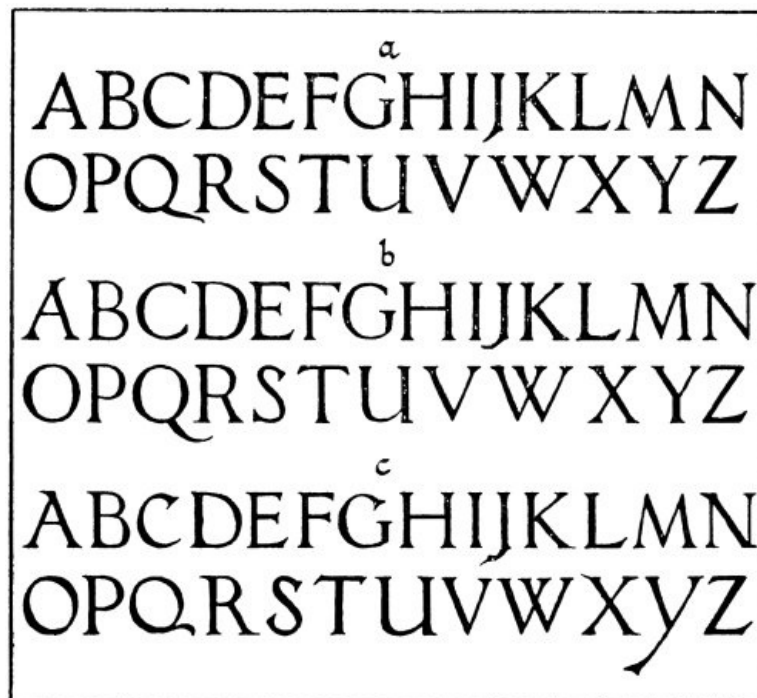
Fig. 20.

The alphabets of capitals and minuscules shown in Fig. 21 are of special interest to the illuminator. These are based on the writing used in a late fifteenth-century illuminated MS. now in the British Museum, St. Augustine's "City of God" (Add. MS. 15246). These letters are formed with quite simple strokes of the pen. In this MS. the *f*-shaped minuscule *s* is used. In the alphabet given here this has been substituted by one more in keeping with the modern type of letter, and several letters have been added to make the alphabet complete. The student is strongly advised to study the lettering in this MS. for himself. It makes a very effective script if written fairly small with a crisply-cut pen.

Fig. 21.

Some further alphabets are shown in . The lettering from which the alphabet is taken that is shown in (*a*) is from a title-page from "Utopia et Mori et Erasmi Epigrammata," dated 1518. It has woodcut borders and title-pages by Holbein. This style of letter is used throughout the book for headings, etc. It is undoubtedly a very fine type of letter and is worthy of careful study. As has been the case in the other alphabets, this alphabet has been completed by adding letters of approximate form to supply the missing ones.
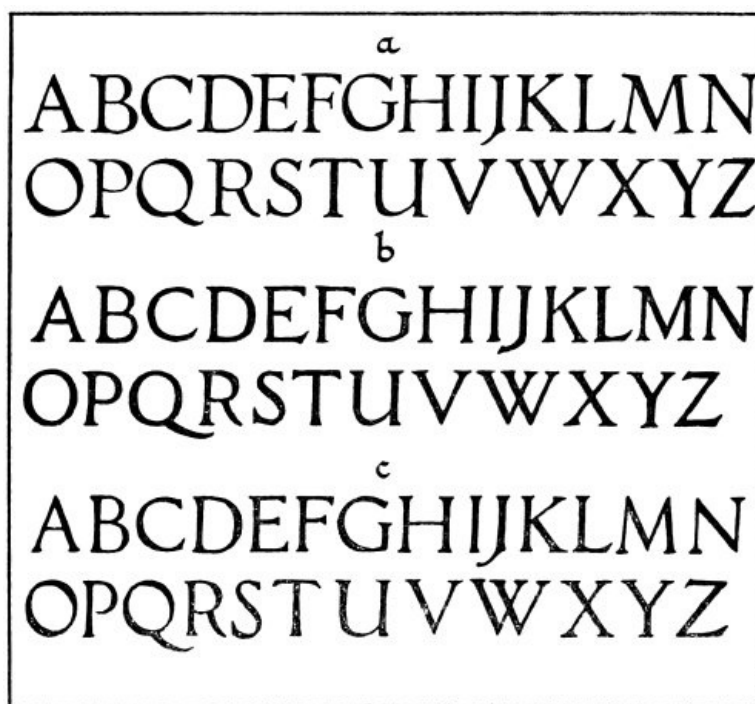
Fig. 22.

The next alphabet, given in (*b*), is taken from an inscription in marble on the monument of the Marchese Spinetta Malaspina (d. 1352), relating to its re-erection in the Church of San Giovanni in Sacco at Verona in 1536.

The last one shown here, in (*c*), is from an inscription on the marble monument of Filippo Decio (d. 1535), in the Campo Santo, Pisa, by Stagio Stagi (d. 1563).

Of course, numerous other examples might be given, but sufficient have been shown to enable the student to study the subject further if he so desires. There are numbers of reproductions from old inscriptions and MSS. easily obtainable.

In studying these alphabets the student will find that it is not a bad plan, after forming the letters with a pen

as described in the preceding chapter, to use a brush as also suggested there. He should then endeavour to form them fairly large, working straight away with the brush. A good brush for this purpose is a sable "writer," such as is commonly used by sign-writers. Dexterity with this type of brush is to a great extent merely a matter of practice. In fact, as has been insisted on repeatedly throughout this book, practice, and plenty of it, will do more than anything else towards making the student efficient.

When studying this subject further the student should note especially the manner in which the letters are arranged in the various inscriptions, as a great deal depends upon the arrangement of the letters and words.

CHAPTER IX

A BRIEF SKETCH OF THE HISTORY OF ILLUMINATION

(1) *From the Fourth to the Eleventh Century*

Perhaps it would be as well, before dealing with the practical side of illumination, to give a brief sketch of the history of this art in Europe. It will not be possible to do more than give just a very short outline of the history here. The modern illuminator should, however, know something of the history of illumination. It is not intended to deal with any but vellum MSS. Possibly it may be claimed that some of the Egyptian Papyrii are illuminated MSS., but thes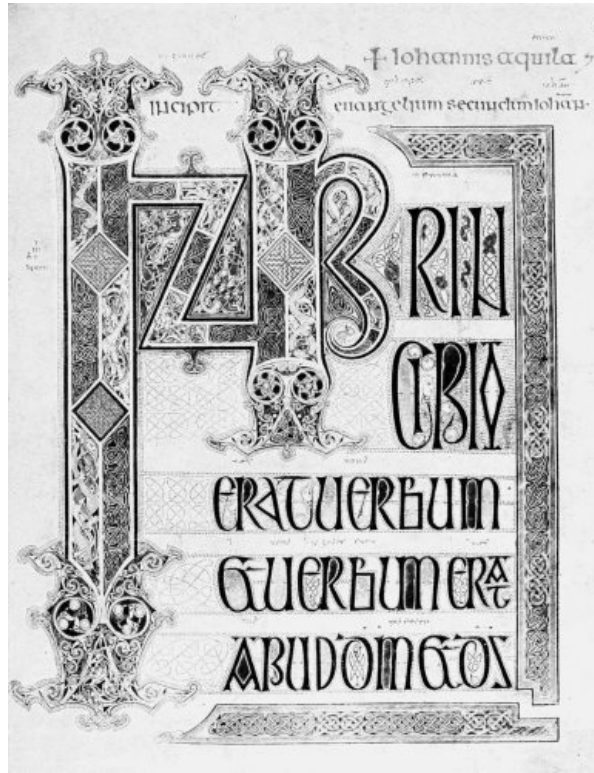e have little in common with the illuminated work of the Middle Ages, and it is with this that this short review is chiefly concerned.

THE LINDISFARNE GOSPELS.

*By kind permission of
the British Museum.*

CLASSICAL AND BYZANTINE ILLUMINATION

It is known from the Epigrams of Martial, who himself lived in the first century, that vellum MSS. were illuminated as early as A.D. 100. Although this was undoubtedly the case, very few MSS. have survived. It is very difficult to state exactly the date of the earliest of these, but most authorities are of the opinion that the third or fourth century is the earliest date that any of them can be assigned to. Some think that the MS. of Virgil in the Vatican (No. 3225) is the oldest illuminated MS. This MS. is written on seventy-six leaves of vellum. It has fifty miniatures, but of this number five are scarcely visible at the present time. These miniatures are framed with gilt or coloured bands, but the MS. displays nothing in the way of ornament which is generally associated with illuminated work.

Another early MS. is the Ambrosian Iliad, at Milan, which some think to be of the third century and others of the fourth or fifth. This is noted for its fine handwriting and also its illustrations.

These early MSS. are really illustrated rather than illuminated, as the term is generally understood.

Following on after this comes the Byzantine School of illumination. The most important of the early MSS. are the Dioscorides and the Genesis of the Vienna Library. These two MSS. are both thought to be of the sixth century. The first of these, called after its principal author the "Dioscorides," is a collection of treatises on botany, hunting, etc., by several Greek physicians. This was written for the Princess Juliana Anicia, daughter of Flavius Anicius Olybrius, who was Emperor of the West in 472. It is written in uncial characters and contains, amongst other things, a portrait of Juliana. It contains also a number of coloured drawings of plants, birds, insects, etc., illustrating the text.

In the Vienna Genesis the text is written in gold and silver on purple vellum. It has forty-eight miniatures which are placed in square frames, and there is no marginal decoration. Gold is occasionally used, but it is not burnished.

There is also a fragment of a Genesis Codex in the British Museum (Cott. Otho. B. VI.), which is supposed to

be of the same period.

The Joshua Rotulus in the Vatican Library (Codex Vat. Palat. Gr. 431) is a very important MS. It is thought by some to be a copy of an original MS. possibly as old as the fifth century. Opinions, however, differ, other authorities ascribing it to the fifth or sixth century.

Another well-known MS. is the famous Gospel Book in the Laurentian Library of Florence, known as the Rabula MS. This MS. is dated 586.

The first phase of the Byzantine School is Hellenesque, and, no doubt, it was part of the Alexandrian School, which was at its height in the sixth century. The later style, which reached its maturity about the end of the ninth century and began to decline after the twelfth century, represents what is generally understood as Byzantine. A Simeon Metaphrastes of the eleventh-twelfth century (Add. MS. 1180) and a twelfth-century Gospels (Harley MS. 1810), both in the British Museum, represent the peculiarly dignified ecclesiastical style of this school.

The Byzantine School influenced the development of illumination very strongly. Especially is this noticeable in Italy.

CELTIC AND ANGLO-CELTIC ILLUMINATION

In the development of illumination the Celtic School played a most important part. There is a very strong contrast between this and the Byzantine School. The Byzantine MSS. were illustrated by more or less naturalistic representations, while in the Celtic MSS. everything seems to be treated as pure ornament. Even when the human figure is introduced it seems to be treated in this way. Gold is also absent in purely Irish MSS. The artists do not appear to represent the figure with any degree of realism.

The chief characteristics of Celtic work are intricate spirals and interlaced pattern, also patterns composed of dots, and curious elongated creatures entwined together in a most complicated fashion.

Possibly the earliest date mentioned in connection with Celtic illumination is that given by Giraldus Cambrensis, who went to Ireland at the time of the Anglo-Norman invasion. He was chaplain to John, the son of Henry II. He wrote concerning a famous MS. called the Book of Kildare, a book which at present is not known to be extant. He describes it as having been written at the "dictation of an angel in St. Bridget's own time." St. Bridget, of Kildare, lived in the latter part of the fifth and the early sixth centuries, so that, if this account may be relied upon, it must have been written at least a century before the celebrated Book of Kells. From the details that Giraldus Cambrensis gives of the Book of Kildare, he might easily be describing the Book of Kells. It was evidently very similar.

The Book of Kells is now in the Library of Trinity College, Dublin. Some authorities think this to be as old as the seventh century, while others assign it to the eighth or ninth century. This is an extremely beautiful MS.; it has been described so many times that there is no need to give a detailed description here.

Another well-known MS. is the Book of Durrow, also in Trinity College, Dublin. Some have thought that this was written by the famous Columba of Iona, as the name "Columba" is mentioned in the colophon at the end of the MS., but whether this Columba was St. Columba of Iona is, of course, debatable. Certainly a number of authorities are agreed that its claims to be an actual relic of St. Columba are by no means to be altogether rejected. The Book of Durrow, although very fine, is not such a good example as the Book of Kells.

It would be interesting to know if St. Columba had much to do with the cultivation of this art. The early biographies certainly speak of him as an enthusiastic calligrapher, and in an ancient "Life of St. Columba" he is spoken of as having written "three hundred splendid, lasting books."

It was through the efforts of the Scoto-Irish missionaries from Iona that the art of illuminating was introduced into the north of England. They founded a monastery at Lindisfarne early in the seventh century. The famous Durham Book, or Lindisfarne Gospels, now in the British Museum, was written here about the year 700 (Nero D. IV.). The decoration and writing in this splendid MS. are essentially Celtic. It, however, differs from the Book of Kells by the slight use of gold in the decoration, also in the four full-page portraits of the Evangelists, which show a strong Italo-Byzantine influence. This MS. is undoubtedly one of the choicest treasures amongst the illuminated MSS. in the British Museum.

CARLOVINGIAN ILLUMINATION

At the end of the eighth century the great revival of the arts which followed the accession of Charlemagne acted as a great impetus to the art of illumination. This art was developed from the crude Merovingian style, and many elaborate volumes were produced. Some of the most sumptuous are the Alcuin Bibles, and the Gospel Books, which were written in gold. One of these Alcuin Bibles is exhibited in the British Museum (Add. MSS. 10546), also one of the Gospel Books (Harley MS. 2788). The miniatures and decoration in these MSS. seem to show the influence of the Roman, Byzantine, and Celtic Schools. The best period of Carlovingian illumination seems to be the eighth century.

THE WINCHESTER SCHOOL

One cannot write even the briefest of sketches concerning the history of illumination without referring to the work produced by the two Winchester Scriptoria, generally referred to under the appellation of "Opus

Anglicum."

The Anglo-Celtic tradition seems to have been completely lost, probably due to the Danish raids in the ninth century.

It is said that in the time of Alfred the Great, there was a scriptorium already in existence at Winchester, founded by St. Swithin, who was made Bishop of Winchester in 852. Alfred, when a boy of five, went with his father to Rome, and there is, at the very least, presumptive evidence that, when returning, he saw the library of Charlemagne at Aix-la-Chapelle.

When he came to the throne in 871 he founded another monastery near the old one, attaching a scriptorium. These two scriptoria were, at a later date, to become the nursery of English illumination.

Although Alfred seems to have done so much to foster this art, there are, unfortunately, no specimens which have survived that can be assigned to any earlier date than that of his grandson Athelstan (925–40).

A small MS. known as Athelstan's Psalter was principally written on the Continent in the ninth century, but many additions were made to it in England towards the middle of the tenth century. This MS. shows that some efforts had been made to replace the lost art of the Anglo-Celtic School, which had flourished more than 200 years before by a new style based on Continental models; and, although these miniatures may appear somewhat crude, they probably represent the best work of the English artists at this early period.

The first known example of actual Winchester work is the "Golden Charter" of King Edgar, in 966, now in the British Museum (Cott. MS. Vesp. A. VIII.). This represents an enormous advance on the crude paintings in Athelstan's Psalter; a miniature on a purple ground shows King Edgar, standing between the Virgin and St. Peter, offering the Charter to the Saviour. This page is well designed and a fine decorative border surrounds the miniature.

The most famous example, however, is the well-known Benedictional of Æthelwold, in the Library of the Duke of Devonshire. If the student wishes for a full and illustrated description of this fine MS. he is referred to the twenty-fourth volume of the Archæologia.

This MS. was written by Godeman, a monk of the old Minster, at Winchester; it contains twenty large miniatures, each facing a benediction for the most important days, with seven others of groups of Confessors, Virgins, and Apostles at the beginning, and at the end the bishop is represented giving a benediction in his cathedral. All these miniatures, excepting the last, are surrounded with arches or frames of gold and colours, and a similar border surrounds the opening words of the benediction.

The Harleian Psalter (Harl. MS. 2904), in the British Museum, is another MS. of this school. It would take far too much space to go into details concerning this, but special mention should be made of the drawing of the Crucifixion. This is in outline and is slightly tinted and shaded. It is very interesting as showing the stage that figure-drawing had reached at this early period. One very characteristic feature of Winchester work is the curious "fluttering" drapery which is noticeable in practically all the work of this school.

CHAPTER X

A BRIEF SKETCH OF THE HISTORY OF ILLUMINATION

(*continued*)

(2) *From the Twelfth Century to its Decline*

ILLUMINATION IN THE TWELFTH CENTURY

A great change is noticeable in the illuminated work of the twelfth century, one of the most important being the development of initial decoration and the use of raised and burnished gold, and especially the miniatures, which were often introduced within the initial letters. The art of illumination gained considerably during this century, of which the second half is notable for the number of richly-illuminated Bibles of large size that were produced.

In England during this century there is a great difference between the work produced and that of the preceding century. Probably a number of things may be instanced as having caused this. There is hardly a doubt but that the Norman Conquest may have had a great deal to do with the introduction of Continental ideas. It is also possible that the Crusades may have been responsible for a better knowledge concerning the Byzantine and Eastern Schools.

The framing borders to the miniatures, etc., are somewhat different to the loose entwined borders of the Winchester School, being generally simple rectangular bands, either displaying a simple pattern or else practically plain and severe. It is in initial-ornament that the greatest development is noticeable.

In the latter part of the century some very beautiful initials filled with conventional foliage with human, animal, and grotesque forms entwined were produced. Both in miniature painting and also in outline drawing a very definite style was formed.

The Psalter of Westminster Abbey (Royal MS. 2 A. XXII.) is a good example of the miniature painting of this period, while the famous Guthlac Roll (Harley Roll Y. 6) affords a good example of the outline drawing of this period.

THIRTEENTH-CENTURY ILLUMINATION

In the thirteenth century the style of decoration was more refined. Some of the most beautiful work in the whole history of illumination was produced in this century. Numerous examples abound, and these deserve very careful study. The ornamental border, which had practically disappeared in the twelfth century, gradually re-developed during this century; first in the form of a growth from the initial letter, it developed into a foliated border upon which small animals, birds, and quaint little figures were placed.

Some of the French MSS. of this period are particularly beautiful. Bibles are numerous, being often quite small in size. Some of these MSS. appear to be as perfect as if they had just been completed, the gold being still brilliant and the colours still retaining their freshness. All the MSS. of this period seem to follow a general scheme of decoration. For example, the opening page of Genesis is one of the most elaborate, being taken up with a series of miniatures representing the days of Creation; the Jesse tree was also represented at the opening of the Gospels.

In the latter half of this century diaper backgrounds were used a great deal in the miniatures, and in some cases burnished gold was used with patterns indented upon it.

A typical example of a thirteenth-century Bible is shown in the Bible of Robert de Bello, who was Abbot of St. Augustine's, Canterbury, 1224–1253. This MS. is in the British Museum (Burney MS. 3). It is written in a minute hand and illuminated with figure initials and partial borders. The initial I of Genesis is quite characteristic of thirteenth-century work.

Another MS. in the British Museum, a Bible History, moralized, in Latin (Add. MS. 18719), is a good example of the outline drawing at the end of this century. This is a MS. of the French School.

Another fine French MS., of about 1300, also in the British Museum, is that of the Somme le Roi (Add. MS. 28162), which, with its bright colours and burnished gold, is a good example of the best French work of this period.

There are, of course, many other MSS. that might be detailed, these instanced here being merely typical of the general style of work produced in this century.

ILLUMINATION IN THE FOURTEENTH CENTURY

The illumination of the fourteenth century was a development of the work of the preceding century. Nature was copied more, and natural foliage treated in a conventional manner was largely used. The oak, the hawthorn, the ivy, and various other natural growths were frequently employed. Especially was this the case with the ivy, which in the French MSS. was used a great deal. The use of very large initials was not so usual, but while the initials decreased in size the technique improved. This tendency towards naturalism developed more and more as the century advanced. These natural forms, however, were still considered as decoration and were not mere naturalistic renderings.

Miniature painting was also developed in this century; indeed, the art of illumination is generally considered to have reached its highest point of development in this century. Certainly some of the most beautiful and richly-decorated MSS. are of this period.

There is a fine example of English work of the early fourteenth century in the British Museum in the MS. known as Queen Mary's Psalter (Royal MS. 2 B. VII.). This MS. is very interesting, as it not only has the usual richly-illuminated pages, but also a large number of lightly tinted outline drawings.

A beautiful example of French miniature work of the early part of this century is shown in an Apocalypse, also in the British Museum (Royal MS. 19 B. XV.). The miniatures in this MS. are drawn in outline and slightly tinted, on grounds of dark blue and red.

Another fine French MS. in the British Museum is an Epistle in French by Philippe de Maizières, Celestin of Paris, to Richard II. of England, advocating peace and friendship between him and Charles VI. of France, 1395–1396. This affords a good example both of miniature work and ivy-leaf decoration.

Some initials that have been cut from a large Missal (Add. MSS. 29704, 29705) show the development of rich decoration in England towards the end of the fourteenth century.

ILLUMINATION IN THE FIFTEENTH CENTURY AND LATER

In the early part of the fifteenth century the work of the French School was undoubtedly superior to that of the English. The ivy-leaf decoration of the fourteenth century was developed into an elaborate decorative scheme. The gold and diaper backgrounds began to be dispensed with and natural scenery was substituted. In fact miniature painting became more and more naturalistic in treatment, and the same tendency is noticeable in the decoration, which, although often most elaborate and highly finished, is not to be compared with the earlier work.

In this century, Flemish illumination, which during the thirteenth and fourteenth centuries was very similar in style to the French and English MSS., developed into a most distinctive style specially notable for its fine, delicate drawing. An illuminated MS. in the British Museum, "Mandeville's Travels" (Add. MS. 24189), is an example of this style. It contains twenty-seven miniatures, without text, illustrating Sir John Mandeville's travels. These are drawn with a pen on vellum that has been tinted a soft pale green. They have been shaded in black and white with a brush, and colour is used for flesh tints, foliage, etc., and gold is also used for crowns, nimbi, etc.

In Flemish illumination of the latter part of the fifteenth century miniature painting became highly developed, becoming more realistic. The decoration became debased, becoming eventually merely a frame of gold or colour upon which were painted realistic representations of flowers, fruit, insects, etc. These were often beautifully painted, and the miniatures also show great skill from a technical standpoint, but lacking generally the fine feeling that characterises the work of the earlier periods.

This later style is represented by a number of MSS. in the British Museum. One only is mentioned here, although this is but one of many. The "Hours of the Virgin" (Egerton MS. 1147).

The Breviary of John, Duke of Burgundy (Harley MS. 2897), and the "Book of Hours" of John, Duke of Bedford (Add. MS. 18850), are two famous MSS. of the French School at this period, now in the British Museum.

"The Missal of William Melrith, Alderman of London" (Arundel MS. 109), is an example of English illumination of the first half of this century.

In Italy, as was the case in regard to writing, the illuminators in the early part of this century seem to have gone back to the period of the eleventh and twelfth centuries for models. A familiar type of decoration is formed of twining vine-tendrils, generally in white on coloured grounds. Another type that was in use a great deal was a delicate style of decoration composed of a conventional treatment of flowers, foliage, etc., studded with a large number of raised gold spots brilliantly burnished, outlined and rayed. In course of time these styles became much more elaborated with medallions, vases, candelabra, portrait busts, realistic renderings of gems, and Renaissance figures.

Some examples of late Italian work in the British Museum are as follows:—St. Augustine's "Commentary on the Psalms" (Add. MS. 14799); "Luiz, de Bello Macedonico," etc. (Harley MS. 3694); "Book of Hours," of Bona Sforza, Duchess of Milan (Add. MS. 34294).

When the art of printing from type was first practised, this did not at once stop the production of illuminated MSS. The large number of MSS. that were produced after this date shows quite plainly that, except in the commoner class of books, the MS. book still occupied the most prominent place. Professional illuminators were still employed by people in high positions, and some very costly and elaborate volumes were produced. Many of the early printed volumes were printed with spaces left for initials, miniatures, etc., to be filled in by the illuminator. However, in course of time this art gradually fell into disuse.

This brief summary of the history of this art is necessarily incomplete; it has not been possible to deal thoroughly with this subject here. It is hoped, however, that the student will continue the study of the historical side of illumination, and that this little sketch will serve as an introduction to further study.

Early 14th Century.

FLEMISH INITIALS.

Late 13th Century.

FLEMISH INITIALS.

CHAPTER XI

THE INITIAL LETTER

If the illuminated MSS. of the Middle Ages are carefully studied, the importance of the initial letter as a starting-point for the growth of the decoration cannot possibly escape one's notice. The rough sketches shown in Figs. 23 and 24 trace the development in this direction through the various centuries. These are given simply to indicate the way in which the initial letter was used in the different periods. The student is strongly advised to study the subject for himself. If he cannot examine the details from the actual MSS., there are plenty of excellent reproductions published which will enable him to study them at his leisure. It is, however, practically essential that, even if he cannot spend much time over them, he should make a point of at least seeing some of the actual work of the mediæval artists.

In the famous Book of Kells the initial letter is used to great advantage. It will well repay the student to study carefully some good reproductions of the pages of this wonderful MS. It shows what can be done with fine decoration based on lettering. Quite a number of pages are taken up with the words *Liber generationis Christi*, while one page is entirely devoted to the sacred monogram X P I.

Fig. 23.

In Fig. 23 an example is shown in (*a*) from the famous Lindisfarne Gospels, now in the British Museum (Cotton MS., Nero D. IV.). This beautiful MS. is written in fine, half-uncial characters, the decoration being of the kind known as Hiberno-Saxon, or Anglo-Celtic. A note at the end of this MS. states that it was written by Eadfrith, Bishop of the Church of Lindisfarne. It was finished about the year 700. It has a most interesting history, which is much too detailed to describe here. It should, however, be carefully studied from the standpoint now being considered, viz., the initial letter. The page represented by this rough sketch is the opening page of the Gospel of St. Matthew. Of course this very rough suggestion can convey no idea of the beauty of the original, but it gives one some notion of the way in which the monogram X P I has been used as a basis for the decoration.

Perhaps it would be as well for the student to study, for the present, some of the MSS. of the best periods from this standpoint alone. He should note exactly how the letters are placed and the manner in which they are used. For the time being he should not concern himself so much with the details of the decoration. This may follow later, after he has become more familiar with the subject.

The page shown in (*b*) is from a Psalter probably written at Winchester in the latter part of the tenth century (Harley MS. 2904). It is the commencement of Psalm ci. This is also in the British Museum, as also are all the examples illustrated here. It is quite different to that of the Lindisfarne Gospels, although possibly some Celtic influence may be noted.

The next one (*c*) is also from a Psalter (Arundel MS. 60). This is a further development of the same school as the last, and was probably written at New Minster, Winchester, about 1060. It is interesting to observe how the D is linked up with the border.

The initial B, illustrated by (*d*), is from a twelfth-century Psalter of Westminster Abbey (Royal MS. 2 A. XXII.). Very large initials were very common during this period. This letter is filled with foliage, animals, etc., and also shows scenes from the life of David. The initial B at the commencement of the Psalms was a favourite subject with the illuminator at this time. He generally introduced the subject of David slaying Goliath also.

A common feature of the thirteenth-century illumination was the use of large decorated examples of the initial I, of which an instance is given in (*e*). These were filled with miniatures and foliage and were extremely decorative in character. This one is from a French Gospel Lectionary (Add. MS. 17341), and is filled with scenes from the Life of Christ.

A charming example is shown in (*f*), which is from a Book of Hours (Stowe MS. 17). The initial D contains a miniature, as also does the A. This is probably either late thirteenth or early fourteenth century. David and Goliath are also represented. The whole MS. is delightful in style.

shows some more examples. Another page from a Book of Hours is given in (*g*) (Egerton MS. 2781). This is a fourteenth-century MS. The initials and borders are rather rough in technique, but they are very interesting from the point of view of design. The large initial D has a miniature representing a legendary story of the childhood of Christ.

The initial A shown in (*h*) is from a fourteenth century Missal (Harley MS. 2891). The letter is filled with a most delightful miniature.

The next example (*i*) is a very beautiful initial taken from a Bible executed in England during the latter part of the fourteenth century (Royal MS. 1 E. IX.). A number of the initials are filled with foliage, as in this case, and others contain miniatures. The backgrounds of these letters are usually of burnished gold with patterns indented upon them.

A simple, but very beautiful, type is given in (*j*). This is taken from an extremely fine MS. written, also, at the end of the fourteenth century (Royal MS. 20 B. VI.). It is a very interesting MS., being an Epistle by Philippe de Maizières to Richard II. of England, advocating peace and friendship between him and Charles VI. of France. This type of initial was fairly common at this period. It is a type of letter that should be very useful for the beginner.
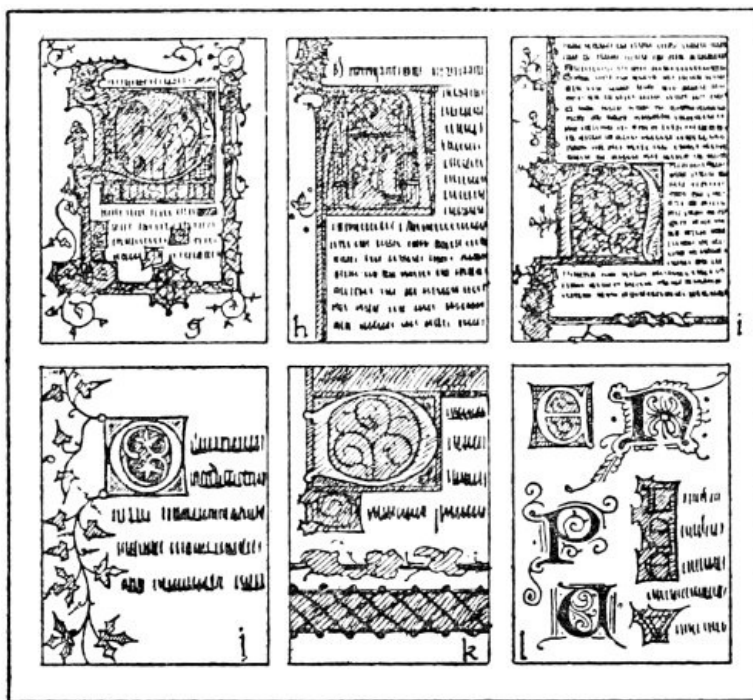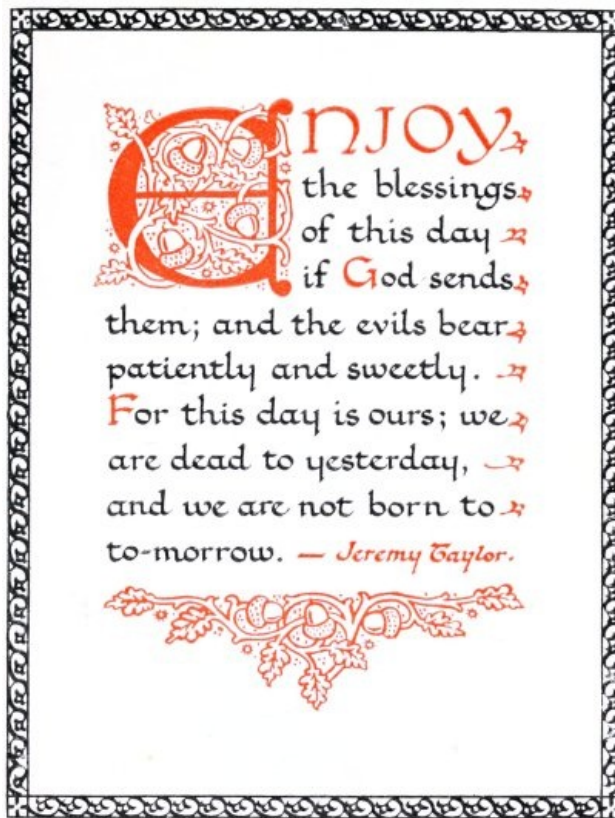
Fɪɢ. 24.

In the fifteenth century the initial letter lost a good deal of its importance. The result of this was that the decoration became debased in character, until it finally became nothing more or less than a number of naturalistic renderings of flowers and insects, painted on a gold border and represented as throwing shadows upon it. There is, however, a certain amount of sweetness about some of this work, especially when it is compared with some of the work of the present day. However, some of the MSS. that were produced in the earlier part of this century are very fine pieces of work. The example illustrated by (*k*) is from a Psalter of Henry VI., about 1425–1430 (Cotton MS. Domitian A. XVII.). The large initial D is joined to a miniature.

Several initials are given in (*l*). These are all of the thirteenth century. The E is of raised and burnished gold on a blue block, the centre being red and the whole finished with white lining. The N, P, and U are of a type largely used, being generally red with blue pen-work, or *vice versâ*. The others are similar to the E, but are shown as an example of how they were joined when coming close together.

Excellent reproductions of these examples have been published by the British Museum authorities in a series of collotype plates, the only exception being (*e*) in Fig. 23, of which an illustration is published in the Guide to the MSS., Part III.

The main object of this chapter is to direct the student to the study of the MSS. for himself and especially to show what an important place the initial letter had in the MSS. of the mediæval period. He is strongly advised to make a point of studying some of the actual MSS. for himself.

Enjoy the blessings of this day if God sends them; and the evils bear patiently and sweetly. For this day is ours; we are dead to yesterday, and we are not born to to-morrow. — Jeremy Taylor.

A Simple Page in Black & Red.

A Simple Page in Black & Red.

CHAPTER XII

SIMPLE ILLUMINATION IN BLACK AND RED

A good deal of very effective work can be done by using black and red only. The student should be able to do good work in this way before attempting to use gold and colours.

A method for setting out the page, before commencing to write, is shown plainly in Fig. 25. For this purpose a tee-square and set-square are required, together with a pair of spring dividers and a sharply-pointed HB. pencil. The approximate size of the page and the distance between the lines of lettering must be decided. Then the margins at the top and the two sides must be marked out, and the upright lines drawn in by means of the set-square. The distance between the lines of lettering is then pricked off down one side with the spring dividers. The lines can then be ruled across against the tee-square. A word of caution is perhaps needed here: the pencil should be held as shown in the diagram, and kept at the same angle during the ruling of the line. If this rule is not carefully observed, it is possible to start with the point of the pencil close up against the edge of the tee-square, or set-square, and finish the line with it about one-sixteenth of an inch away from it. If this habit is developed, the lines of lettering will hardly ever be quite straight and even. Another important detail is to see that the tee-square rests tightly against the edge of the board, and the set-square against the tee-square.

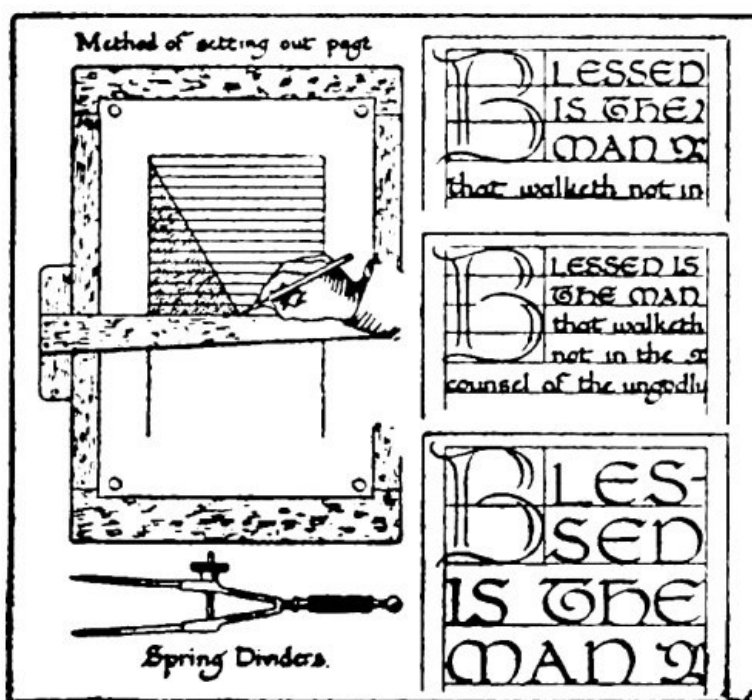**FIG. 25.**

It will be found that an HB. pencil is the most satisfactory grade for ruling the lines with, as if used lightly the lines can be cleaned off quite easily afterwards with a piece of soft rubber. Some illuminators recommend an H. or HH. pencil for this, but, although these keep a sharp point longer, the lines produced are not so easily erased.

After ruling the page the next thing to be settled is the size of the initial letter. It should be lightly sketched in with the pencil. It is best to use the writing lines to govern the size of this. For example, the size of this letter might be four or five lines down.

It is very effective to have the first few words in capitals. Several different arrangements are shown in Fig. 25. The position of these may be roughly planned out in pencil. They may then be written in red straight away, or may be left until after the black lettering is done. It is best not to finish the initial until after the lettering is done.

When the position of the initial and the opening words is determined, the black lettering should be proceeded with. The student should endeavour to ensure perfect freedom in working, also to aim at preventing the writing from looking as if a great deal of trouble had been taken to make it fit and space well. For anyone to derive any joy out of it, there must be a feeling of spontaneity and freedom about it. He should allow his imagination to work when writing. If he studies the words that he is writing he is bound to have suggestions come to his mind. For example, perhaps one verse seems to stand out very prominently, and it is felt that it would be better if written entirely in red. Or, again, another verse seems to start a new line of thought, and a fresh initial is suggested.

After the writing is completed, attention should be paid to the initial and the decoration. A good method for the beginner is to fix a sheet of tracing-paper over the page; as the lettering shows plainly through, there is plenty of opportunity for experimenting with decoration.

Some good types of letters suitable for initials are shown in Fig. 26. The first alphabet is based largely on a

type of letter used in the eleventh century, while the second one is a free rendering of thirteenth-century letters. These letters are all built up. They may be made with either pen or brush.

Fig. 26.

Building up these letters with strokes made with the pen or brush is excellent practice for the student. For constructing the letters in the first alphabet the pen will probably be found to be the best tool. These letters are constructed in a similar manner to that described in an earlier chapter on forming Roman capitals. Some suggestive details are shown in Fig. 27.

The letters in the second alphabet may be formed much more easily with a brush than with a pen. It will be seen in Fig. 27 how naturally the letter is filled in with the brush, the end of the stroke terminating in a small knob. For filling in the letters in this way a brush should be used quite full of colour, and it should also have; a good point.

Fig. 27.

After having a fair amount of practice in forming letters in this way the student will soon be able to produce them quickly and easily.

The terminals of these letters may be drawn out if necessary, or they may be joined up with the border. The

student should take note, from the examples given in the previous chapter, of the manner in which the initial was used in the past as a starting-point for the decoration.

Vermilion is a good red for this purpose. There are several varieties sold, known by various names, such as scarlet vermilion, orange vermilion, vermilion, and Chinese vermilion. The kind known simply as vermilion seems to answer best of all. Scarlet and orange vermilion are liable to look somewhat weak. This also applies to the Chinese vermilion we are able to get in this country. Some illuminators prefer to add a little crimson to the vermilion.

It is important that the red should be painted in solid, and not be thin and washy in character. This also applies to the black, which should be a decided black, not inclining to brown or grey. The red should be kept quite bright and clean, care being taken not to get it mixed up with dirty colour in any way. A great deal of the effect depends on the strong black and brilliant red.

In Fig. 28 an initial with a simple border is shown in (*a*). The initial letter and the decoration may be done in red, and also the opening words.

Very decorative arrangements are possible with simple lettering and a fine initial, as in (*b*). When an initial letter is used in this way, without any border, it is best to fit it in with the lettering so that the line of the letter does not project beyond the line of the black lettering. When, however, a simple border is added down the side, it may project, as shown in (*c*).

An interesting arrangement is shown in (*d*), where two columns are used. By the judicious use of red, a fine decorated page is possible if carried out in this style.

FIG. 28.

The initial O shown here is an example of what can be done with simple pattern work in the way of diapers. In the illuminated manuscripts from the twelfth to the fourteenth centuries a great number of these were used. This simple pattern work is very pleasant, and the student is recommended to study these for himself. He should also study the fine initials with pen-work in red and blue. He can then vary his work by adding blue in addition to red, using a red initial with blue decoration, or *vice versâ*.

The various forms of simple pattern work, made with simple pen-strokes, and shown here, should also claim his attention. He should endeavour to make borders for himself in this simple way. They may serve as tail-pieces and line finishings, and the construction of these is all good practice in design.

It is excellent practice for the student to write out a number of quotations in this way, in black and red, with nicely-drawn initials and borders of simple pattern work. He should endeavour to guard against making them too florid in treatment, and, above all, should be careful not to employ a lot of meaningless flourishes. The work of the mediæval period affords the best examples for study that he could possibly have.

CHAPTER XIII

THE COLOURS USED BY THE MEDIÆVAL ILLUMINATOR

One can hardly study the illuminated work of the Middle Ages without being interested in the methods employed by the artists of this period. The MSS. still in existence, with colours still fresh and bright, make one curious to know what colours were used to produce this result.

Our knowledge of the colours used in classical times is derived chiefly from Pliny's "Natural History" and the writings of Vitruvius. Theophrastus, in his work on stones, also adds some description of pigments.

It appears from these writers that the earth colours, such as the ochres and siennas, were well known, as also was the green earth terra verte. Blues and greens were obtained from the ores of copper, one of the most notable being azurite, a blue carbonate of copper. Verdigris was prepared by the action of vinegar on copper. Cinnabar, a native variety of red sulphide of mercury similar to our vermilion, which is the same thing artificially prepared, and orpiment, the native sulphide of arsenic, were also colours used at this period.

A number of white earths were also employed, chalk being the most important. White lead was used, being prepared in practically the same way as the best is to-day. Lakes were made by dyeing chalk or gypsum. Several vegetal dyes were used for this purpose, such as madder, weld, and woad. In addition to these dyes, lakes were prepared from kermes and the celebrated murex. Kermes is a red dye caused by a small insect similar to that of the cochineal insect; it was used for dyeing and for making pigments, both in classical and mediæval times. The murex was a species of shellfish from which was extracted the famous purple dye. This was the dye used for the purple vellum that was used so much in the early period.

The blacks used were carbon-blacks, such as lamp-black, bone-black, or the black prepared from grape husks and vine leaves.

Indigo was undoubtedly in use, and it is highly probable that the red resin known as dragon's blood was also in use. Pliny, in his "Natural History," describes the fighting between the elephant and the dragon, and he states that the name cinnabar should be given to the thick matter which issues from the dragon when crushed beneath the weight of the dying elephant, mixed with their blood. It is thought that he may be referring to this pigment, for, in another chapter, he refers to India sending the corrupt blood of her dragons and elephants. There is one colour, which was one of the principal pigments of the Middle Ages, of which no mention is made in the classical period, and that is ultramarine.

It is difficult to be certain as to how the different colours were mixed, but the ink used was prepared from lamp-black mixed with gum and water, and it is probable that the colours were mixed with either gum, glue, or egg.

The Lucca MS. of the eighth century, in the cathedral library at Lucca, contains, amongst other things, a short list of pigments. There is very little difference between the information given here and that given by Pliny. This MS., however, gives the first distinct directions for making artificial vermilion. It is also interesting as giving definite information as to how colours were mixed for working on parchment or vellum, as the following quotation plainly shows: "On wood the colours being mixed with wax, on *skins* fish-glue being mixed."

In the twelfth-century MS., the Mappæ Clavicula, the greater part of the Lucca MS. is repeated.

The Schedula Diversarum Artium of Theophilus is also of about the same date, and is a very important MS. It is divided into three books, the first dealing with painting, the second with the manufacture of glass, and the third with metal-work. It is evident that Theophilus, who was a monk in some German monastery, was a worker in metal. However, he collected quite a lot of information on various forms of art work. It is, of course, in the book on painting that the information with regard to colours is found.

In Chapter XXVII. he gives instructions for preparing the gum for mixing with colours. This is described as follows: "Take gum which exudes from the cherry or plum tree, and, cutting it up very small, place it in an earthenware pot, and pour water upon it abundantly and place it in the sun, or in winter upon the coals, until the gum has liquefied; and mix it together with a smooth piece of wood. Then strain it through a cloth, and grind the colours with it and lay them on."

In Chapter XXXIV., which is entitled "How Colours are Tempered for Books," he says: "Make a mixture of the clearest gum and water as above, and temper all colours except green and ceruse and minium and carmine. Salt green is worth nothing for books. You will temper Spanish green with pure wine, and if you wish to make shadows, add a little sap of iris or cabbage or leek. You will temper minium and ceruse and carmine with clear of egg. Compose all preparations of colours for a book as above, if you want them for painting figures. All colours are laid on twice in books, at first very thinly, then more thickly; but once for letters."

Salt green, that is mentioned here, was a mixture of verdigris and subchloride of copper. Spanish green was verdigris, and minium was red lead, while ceruse was white lead. Verdigris is, of course, a notoriously fugitive colour, but while in ordinary water-colour painting it would probably not be safe to use, it would last fairly well in books. Certainly it seems to have done so in the past, if one may judge from the greens in many of the old MSS., which are still brilliant.

Other colours described are those known as "folium" colours. These seem to have been different vegetal dyes.

In Chapter XL. he gives a description of how to prepare ink. This is quite different from the ink of the classical period, which, as mentioned before, was made from lampblack and gum-water. The ink described by Theophilus is more of the nature of our modern writing-ink, being prepared from the bark of thorn-trees, amounting really to an infusion of tannin, with the addition of iron sulphate, popularly known as green vitriol.

There is no mention in this MS. of the preparation of ultramarine.

Following this there are the MSS. that have been translated by Mrs. Merrifield, *viz.*, Eraclius, Alcherius, the book of Peter St. Andemar, all included in the MSS. of La Bègue, the Sloane MS., and the Strassburg MS.

The MS. of Eraclius is regarded as not being later than the thirteenth century, the first two books being very early and quoted by Theophilus.

In these MSS. it is plainly stated that the colours were generally mixed with either gum-water or egg. White of egg was often used, but occasionally the yolk. For example, it seems to have been used as a medium for vermilion and orpiment. These MSS. contain a lot of information very similar to that in the MS. of Theophilus.

Lakes were, in the earliest MSS., prepared in a similar way to that used in the classical period, and are described in this manner in the MS. of Eraclius. In the MS. of Jehan le Bègue, however, there are several recipes that have been compiled by him from the MSS. of Alcherius, of the fourteenth century, which are practically the same as the modern method.

The MS. of Le Bègue is also of interest, as it contains a recipe for the preparation of real ultramarine.

Perhaps the most interesting MS. of all is that known as the Book of the Art of Cennino Cennini. This is a most delightful treatise on the methods then in use. Cennino Cennini was an Italian painter and was living in Padua in 1398. The MS. in the Vatican is dated 1437, but this is in all probability merely the date attached by the copyist. It is evident that the colours and methods that he mentions were in use during the fourteenth century.

As this was a period when some of the finest examples of illumination were produced, it is interesting to note the various colours used, so they are given in detail.

The reds mentioned by him are sinopia, cinabrese, cinnabar, minium, amatisto, dragon's blood, and lake. Sinopia is a similar colour to light red, either native or prepared by roasting yellow ochre. Cinabrese is a mixture of sinopia with chalk. Cinnabar, as mentioned before, is mercuric sulphide, which, when artificially prepared, is termed vermilion. There is hardly any doubt that the variety Cennino was familiar with was the artificial kind, for he remarks that it "is produced by alchemy, performed in an alembic." Minium is red lead, while amatisto is probably hæmatite. Dragon's blood, as already referred to, is a resinous colour, and lakes were prepared from various dyes.

The yellow pigments were ochre, giallorino, orpiment, risalgallo, zafferano, and arzica. Giallorino is supposed to have been a native mineral yellow pigment. It is described by Cennino as a volcanic product. Some, however, think this to be similar to the pigment that used to be known as Naples yellow, which was a compound of the oxides of lead and antimony. Risalgallo realgar, or red orpiment, was prepared by gently heating orpiment. Zafferano was saffron, while arzica was a lake prepared from weld, which is wild mignonette.

The greens that he refers to are verde terra, verde azzurro, and verderame. Verde terra is the natural earth known also as terra verte. In all probability verde azzurro was a native copper carbonate, similar to green bice. Verderame was verdigris.

The blues used were azzurro della magna, azzurro oltre marino, and indaco baccadeo. Azzurro della magna was a copper-blue similar to the azurite of the classical period. Azzurro oltre marino was the genuine ultramarine. Cennino's description of the preparation of this pigment from the *lapis lazuli* is very similar to the recipes that are given in other MSS. Indaco baccadeo was indigo from Bagdad.

The white pigments were bianco sangiovanni and biacca. Bianco sangiovanni was whiting or chalk, while biacca was white lead.

The blacks were "a soft black stone," black "made of the young shoots of the vine, which are to be burnt, and when burnt, thrown into water, and quenched, and then ground like other black pigments." Another black pigment "is made of the shells of almonds, or of peach-stones." Lampblack was also used.

The colours were mixed with gum arabic or egg.

Cennino also makes mention of the use of the *pezzuole* colours, or clothlet tints, which were used a great deal in the Middle Ages. These were pieces of linen stained with transparent pigments. When required for use, a small piece was cut off and soaked in water to make a tint of the colour, a little gum being added.

Cennino also treats of tinting parchment with various colours. This was not done, as was the custom in the earlier period, by staining the vellum with a dye, but by washing a colour over it with a large brush.

It may be noted that practically all the permanent colours mentioned in these MSS. are in use to-day. Some of the colours used in the Middle Ages can hardly be recommended to-day. The copper blues, for instance, are not reliable, as impure air is very liable to change them into copper sulphide. Orpiment is an unsafe colour to use, while kermes will fade in a strong light, besides being no longer an article of commerce. Both dragon's blood and saffron are notoriously fugitive colours.

It is hoped that these few brief notes with regard to the colours used by the mediæval artist may be of interest to the student. If he wishes to study this subject further he is referred to the various works mentioned.

CHAPTER XIV

COLOURS: THEIR COMPOSITION AND PERMANENCE

One of the characteristics of the mediæval artist was that he had a good knowledge of the different materials that he employed in his work. One cannot help being struck by this fact when reading some of their writings that have come down to us. They seem to have known all the various properties of the different colours and materials that they used. It is probable that the chief reason for this was that it was absolutely necessary for them to be able to prepare the materials for use, as it was practically impossible to buy them ready prepared.

The artist of to-day can buy so many things ready prepared for him by the artists' colourman that he is very liable to give little or no attention to their composition and quality. It is as well, however, that the artist should have some knowledge of the materials that he uses, so that he may be able to select the best for his purpose.

It is important that he should understand something, at any rate, about the composition of the various colours that he uses, and that he should be able to distinguish permanent colours from those notoriously fugitive. Of course, it must not be understood by this that it is necessary for the artist to subject all his colours to chemical analysis; if he buys his colours from any reliable artists' colourman he can rely on the colours being true to their name.

There are, however, some students who have not the slightest idea of the character of the different colours that they are in the habit of using. It is a great pity when good work is completely spoiled by being executed with fugitive colours through the ignorance of the artist. Good work should be as lasting as it is possible to have it, and this is not practicable if one is not certain whether the colours are likely to fade or change in any way.

The following notes as to the composition and permanence of the different colours may be of service to the student.

YELLOW PIGMENTS

Aureolin, Cadmium Yellows, Chrome Yellows, Gamboge, Raw Sienna, Yellow Ochre, Naples Yellow.

Of these colours, Aureolin is the most expensive, but it is a very beautiful colour, and has the advantage of being permanent. It is sometimes called Cobalt Yellow; it is prepared from cobalt and potassium nitrites.

The Cadmium Yellows are sulphides of cadmium, and are in various shades from pale yellow to orange; they are also permanent.

Chrome Yellows are all chromates of lead, and they darken very quickly in an impure atmosphere, especially when used in water-colour painting. These colours are very cheap, and, at the same time, very brilliant, but they should be avoided in all cases where permanence is desirable. They also produce serious changes when mixed with other colours; for example, a green made by mixing chrome yellow with prussian or antwerp blue is notoriously fugitive in character.

Gamboge is a gum-resin from the East Indian tree *Garcimia Cambogia*. It forms a bright opaque yellow solution with water, requiring no grinding or mixing in any way, owing to its natural gum. It is fairly permanent and works well in water-colour, but is not quite so satisfactory in body-colour painting.

Raw Sienna and Yellow Ochre are both natural earths containing iron oxide. They are quite permanent.

Naples Yellow is generally prepared by mixing Cadmium Yellow with Zinc White.

RED PIGMENTS

Vermilion, Rose Madder, Scarlet Madder, Alizarin Crimson, Crimson Lake, Carmine, Indian Red, Light Red, Burnt Sienna.

Vermilion is one of the most important colours for the illuminator. It is prepared from sulphide of mercury. There are various kinds, which are termed Orange Vermilion, Scarlet Vermilion, Vermilion Extract, Vermilion, etc. Probably that known simply as Vermilion is most useful to the illuminator.

Most vermilions are manufactured in this country, but that known as Chinese Vermilion is imported from China.

Although vermilion is indispensable to the illuminator, it cannot be guaranteed as being absolutely permanent. Cennino Cennini, writing about this pigment, says: "But remember that vermilion is not durable when exposed to the air; it is more lasting on pictures than on walls, because, by long exposure to the air, it becomes black when applied to walls."

It is a fact that vermilion does change in this way, but it is debatable whether it is affected by the air. It is thought by some that the action of the sun's rays is a more likely cause of change. There are two varieties of mercuric sulphide, the red and the black; unfortunately the red is liable to change into the black. No chemical change is necessary for this, as they are both identical from a chemical standpoint. In the diffused light of a room this colour seems to be quite permanent, but it is liable to turn black suddenly when exposed to direct sunlight. There is conclusive proof that vermilion, when not placed so that the rays of the sun come into direct contact, is quite permanent by the fact that in the illuminated MSS. produced centuries ago the vermilion is still bright.

Most authorities are of the opinion that genuine Chinese vermilion is more permanent than the English variety. There are two methods employed at the present day in the manufacture of this colour—the wet and the dry process. The dry method is used in China and the other in Europe. The wet method is more economical, but it is generally admitted that vermilion produced by the dry process is more permanent than the other kind. Unfortunately the Chinese vermilion that is obtainable in this country is often rather poor in quality.

Rose Madder and Scarlet Madder are lakes prepared from the madder root. These are very beautiful colours and are permanent under ordinary conditions. They should not, however, be exposed to direct sunlight.

Alizarin Crimson is a permanent crimson with a coal-tar origin.

Crimson Lake and Carmine are lakes prepared from cochineal; they are quite fugitive and should not be employed for serious work.

Indian Red is a variety of iron oxide and is permanent.

Light Red and Burnt Sienna are prepared by burning Yellow Ochre and Raw Sienna; they are both quite permanent.

BLUE PIGMENTS

Cobalt Blue, Cerulean Blue, Ultramarine, Ultramarine Ash, French Ultramarine, New Blue, Prussian Blue, Antwerp Blue, Cobalt Violet, Purple Madder.

Cobalt Blue is a fine colour prepared from cobalt oxide and alumina. This is quite permanent under ordinary conditions.

Cerulean Blue, made from cobalt and tin oxides, is also a permanent colour.

Genuine Ultramarine is a beautiful permanent colour obtained by grinding the *lapis lazuli*. Cennino Cennini, in his treatise, gives interesting particulars concerning the method then used to prepare this colour. Ultramarine Ash is a second quality of this same blue. Unfortunately the great cost of genuine ultramarine debars the majority of artists from using this colour. Happily, under the name of French Ultramarine, it is now made synthetically. By this means a good permanent colour is produced at a cheap rate. New Blue is a pale variety of French Ultramarine.

Prussian Blue is ferrocyanide of iron. Antwerp Blue is a weaker variety of the same colour containing alumina. These colours are not altogether reliable, as they are subject to change.

Cobalt Violet is a purple colour made from cobalt, and is quite permanent.

Purple Madder is usually prepared from the madder root, and is permanent under ordinary conditions. Sometimes, however, it is prepared from Crimson Lake, in which case it is fugitive.

GREEN PIGMENTS

Chromium Oxide, Viridian, Emerald Green.

Chromium Oxide is, as its name implies, an oxide of chromium; this is an opaque variety. Viridian is also an oxide of chromium, but is transparent. Both these are quite permanent.

Emerald Green is aceto-arsenite of copper, and a somewhat dangerous colour to use; it is darkened by impure air, but this is not so serious as are its effects upon other colours when mixed with them. If used at all, it should be used quite by itself, as if it is mixed with other colours it is sure to have a bad effect on them. It turns some colours black very quickly.

BROWN PIGMENTS

Raw Umber, Burnt Umber, Sepia, Vandyke Brown.

Raw Umber is a natural earth, containing oxide of manganese; it is quite permanent. Burnt Umber is the same colour burnt, by which it becomes darker and richer in colour.

Sepia is generally prepared from the ink of the cuttle-fish, although occasionally a natural earth is substituted. Vandyke Brown is also a natural earth; both these colours are permanent.

BLACK PIGMENTS

Ivory Black, Lamp Black, Indian Ink.

Ivory Black is made from ivory and bone charred to blackness.

Lamp Black is a smoke-black, being a finely divided soot formed by the incomplete combustion of hydrocarbons.

Genuine Indian Ink does not come from India, as might be supposed, but from China. There are, however, several other varieties in liquid form. It is generally admitted that carbon-black forms the bulk of all these.

All these black pigments are quite permanent.

WHITE PIGMENTS

Zinc White, Flake White.

Zinc, or Chinese, White is an oxide of zinc. This pigment is quite permanent and should be used always when a lasting white is needed. Unfortunately this white does not photograph its true value, so for process work it is best not to use this.

Flake White is prepared from lead carbonate and hydrate, and may be used for process work in place of zinc white. It, however, should not be used for work that is required to be lasting, as when used as a water-colour it soon turns black. As, however, it has more body than zinc white, it photographs better. A white is sometimes prepared for process work from barium sulphate. This is permanent, but does not work quite so well from the brush.

CHAPTER XV

COLOURS: THEIR PREPARATION AND USE

It is practically needless to say that the colours used for illuminating are water-colours. These are sold by the artists' colourmen, ready prepared, in three different forms, *viz.*, in cakes, pans, and tubes. These consist of powder colour ground with gum arabic, or senegal (a brown variety of the same gum), to which a portion of honey and glycerine is added.

The best prepared colours are undoubtedly those sold in the form of cakes, as they are the purest. The other forms contain a considerable amount of glycerine, which does not improve the colour, but enables them to be kept moist for quite a long time—a greater advantage to the artists' colourman than to the artist.

Tube colours contain more glycerine than those sold in pans. The great advantage, however, that tube colours possess is their convenience. A small quantity of clean colour can be squeezed out and the cap replaced on the tube, thus keeping the rest of the colour free from dust. The admixture of so much glycerine with the colour, however, often prevents it from drying quite flat when used as body colour.

One word of warning may be useful here: gum should not be mixed with water-colours. This is often [132] recommended in books on illumination, but it is not only unnecessary but it entirely spoils the appearance of the colour. There is always quite sufficient gum mixed with the colour, and there is nothing specially beautiful about the shiny appearance caused by an excess of gum in the colour.

Without a doubt the best colours for the illuminator to use are powder colours. They are mixed with gum arabic and water. Care should be taken to get the right quantity of gum mixed with the colour. If there is not sufficient to bind the colour it will rub off when dry, while, on the other hand, if there is too much, it will dry patchy, and if very much in excess it will present a shiny appearance. Experience will soon show the exact amount necessary.

One very great objection that is often urged against the use of powder colours is their inconvenience, but if these are prepared in the manner described below they should not be more inconvenient to use than the ordinary ready-prepared water-colours.

For illuminating, where the work is required to be lasting, none but permanent colours should be used; but when making designs which are for temporary use only it is foolish to use expensive colours like aureolin and cadmium yellow when the same effect can be obtained with the various shades of chrome yellow, which is much cheaper, although notoriously fugitive.

It is best to buy the colours ready ground. A china slab or a piece of plate glass may be used to mix the colours on, or the back of a large white plate might serve in lieu of these. When it is necessary to grind the [133] colour a muller is used for this purpose. (See Fig. 29.)
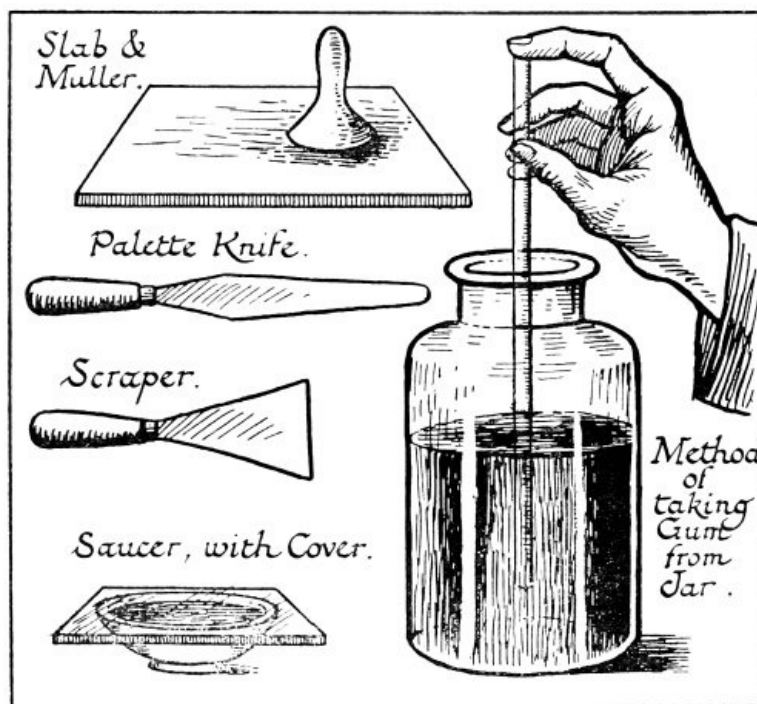
Slab & Muller.
Palette Knife.
Scraper.
Saucer, with Cover.
Method of taking Gum from Jar.

Fig. 29.

Gum arabic is prepared in a very simple manner for mixing with colours. Some pieces of this gum are placed in a wide-mouthed jar and covered with cold water. It should be given a stir occasionally, and the following day it will probably be dissolved. It may be strained through muslin if necessary. A few drops of carbolic acid added to it will prevent this solution from becoming sour. It is as well also to provide a loose-fitting cover for the jar to keep dust from the gum.

For mixing the colour a palette-knife is required. A little of the powder colour is placed on the slab and mixed with the palette-knife to a stiff paste with water and a little gum. A glass tube may be used to take the gum from the jar. If this tube is placed in the jar of gum, and the finger placed over the top of it, a small quantity of gum can be easily removed and may be dropped on to the slab by removing the finger. (See Fig. 29.) This is a much better method than dipping the palette-knife into the gum, as this is very likely to get contaminated with the colour if this is done.

It is not advisable to mix the colour too thinly with water before adding the gum, as one of the effects of the gum is to make the colour flow much easier, and if there is a fair quantity of colour on the slab it is liable to flow over the edges.

After it has been well mixed up with the palette-knife it should be tested to see if it has sufficient gum in it. The student should take a clean brush and paint a small square with the colour on a piece of paper. When this is quite dry it is very easy to tell if it has the proper quantity of gum in it. As mentioned before, if it has too much the colour will look patchy or shiny. To find out if there is enough gum in it, take a small piece of rough paper and rub the patch of colour vigorously with it; if there is insufficient gum to bind the colour it will rub off on to the paper; if there is too much gum, more colour should be added; while, on the other hand, if there is not enough a little more should be mixed with it.

When painting a fresh square of colour for testing purposes it is essential that the brush should be thoroughly washed before painting the new patch. If this is not done the result will be that the colour will be mixed with that already in the brush, and the test will not be a true one. Another important thing is to see that the colour is well mixed with the gum, otherwise one is very liable to get one brush full of colour that is nearly all gum and another with insufficient gum in it.

When the colour is well mixed up with the right quantity of gum it should be thinned out with water and is then ready for use. It should be placed in little saucers, which may be obtained from any artists' colourman. A small square of glass may be placed over the saucer to prevent the evaporation of the water from the colour, as, if left exposed to the air, this will soon dry quite hard. If it is desired to keep the colour moist for any considerable time, a small quantity of glycerine and honey should be added to it. The colour, however, does not work so well when used as body-colour if this is done.

The following is a good method of keeping body-colour in a convenient form. The colour should be painted on large pieces of glass or slabs of porcelain and allowed to get perfectly dry. It can then be scraped up in the form of a fine powder. An old chisel-knife, or a broken palette-knife, makes a good scraper. This powder requires only a little water to be added to it and the colour is ready for use. It dissolves very quickly in water to form an easy-flowing colour, much superior to colour that has glycerine and honey added to it to keep it moist. Especially is this the case when working on vellum. It dries with a dull, velvet-like surface which shows in strong contrast to brightly burnished gold. If the colour, when scraped up, is not very finely divided it should be rubbed up, in its dry state, on the slab, with the palette-knife or muller, until it is quite fine, as the finer the powder the more quickly will it dissolve.

A complete set of colours for illuminating may be prepared in this way and put into small bottles until required. No gum should be added when using them, as each small grain of colour has its own portion of gum which binds it to the surface on which it is painted.

When it is required to use any of the colours prepared in this way, a small quantity of the powder should be placed in a small saucer and a little water added. It should then be worked up with the finger-tip until it is fluid enough to work well with the brush.

Colours prepared in this way work very well also in the pen, vermilion especially working very well indeed. It is not advisable to use a brush to mix the colour up with, as this method not only quickly spoils a brush, but also it does not mix the colour up nearly so well as the finger-tip.

If a little colour is left in the saucer after using it, it can easily be moistened up again with a little water. It is not, however, advisable to mix up much more than is required, as it dries rather hard and requires soaking some little time if a considerable quantity is left to dry.

When mixing colours in this way it is as well to label carefully the bottles in which the colour is stored. If this is not done, one is very liable to mistake a fugitive colour for a permanent one, and *vice versâ*. Cadmium yellow may easily be mistaken for chrome yellow, and crimson Lake for permanent crimson.

CHAPTER XVI

THE GILDING METHODS OF THE MIDDLE AGES

The most casual observer cannot fail to notice the gilding that is such a prominent feature of the MSS. of the mediæval period. Brightly burnished gold, which appears as if it had been laid and burnished quite recently, although centuries have passed since the work was completed, cannot fail to impress and arouse one's curiosity as to the gilding methods employed when this work was produced.

Some of the old MSS. that treat of painting and the preparation of colours give also some information concerning the various methods of gilding, and our knowledge of these methods is chiefly derived from these MSS.

Dr. A. P. Laurie has made careful examination of the different forms of gilding employed in illuminated MSS., and in his book, "Pigments and Mediums of the Old Masters" says that gold was used in three distinct forms: as gold-leaf laid on the surface, and in the form of gold paint, prepared by grinding leaf-gold to powder; the other method seems to have been a paint made of rounded granules of gold. He suggests that this gold was probably obtained from river washings, and that the only preparation has been to sift out the finer grains. He says, further, that when it is examined under the microscope this form of gold paint is easily distinguished from that prepared from leaf-gold, which presents the appearance of little particles of gold with sharp corners and edges, while this shows rounded granules. ₁₃₉

The art of gold-beating is of very great antiquity. Pliny, in his "Natural History," states that one ounce of gold was made into 750 leaves, each leaf being four fingers square. This is about three times as thick as the ordinary gold-leaf of the present day. It is very difficult to form any idea as to when and where it originated. Some think that it arose amongst Oriental peoples. It certainly has been practised amongst these since quite remote periods. Some of the coffins of the Egyptian mummies have gilding on them evidently done with gold-leaf in a similar way to modern methods. Some of the books of gold-leaf used by the ancient Egyptians are in existence to-day, there being one at the Louvre in Paris.

Pliny says, "Gold-leaf is laid over marble, etc., with white of egg, on wood with glue properly composed; they call it leucophoron." In another place he states that leucophoron is composed of sinopia (a red earth colour), light sil (yellow ochre), and melinum (a white earth). Evidently this was mixed with size to form a ground upon which to lay the leaf.

The Lucca MS., of the eighth century, gives instructions how to prepare gold for writing by reducing the metal to a fine powder to form a gold paint.

The following recipe is from the "Mappæ Clavicula," a MS. of the twelfth century: "If you wish to write in gold, take powder of gold and moisten it with size, made from the very same parchment on which you have to write; and with the gold and size near to the fire; and, when the writing shall be dry, burnish with a very smooth stone, or with the tooth of a wild boar. Item, if then you wish to make a robe or a picture, you may apply gold to the parchment, as I have above directed, and shade with ink or with indigo, and heighten with orpiment." ₁₄₀

Parchment size is prepared by boiling parchment or vellum cuttings with just enough water to cover them for about two hours. The size is then poured off and sets in a firm jelly when quite cold. When required for use a small portion is placed in a jar, which is put into a basin of hot water, the size then quickly becoming liquid.

In the writings of Theophilus, of about the same period, he gives a good deal of information concerning the mediæval methods of gilding. In Chapter XXIV. he gives directions for hammering out gold-leaf. The next chapter, which is quoted, explains how the leaf is laid on. "In laying on gold, take the clear part of the white of egg, which is beat up without water, and then with a pencil paint lightly over the place in which the gold is to be placed, and, the handle of the same pencil being wetted in your mouth, touch one corner of the cut leaf, and so elevating it, lay it on with the greatest quickness, and spread it even with a brush. And at that moment you must beware of a current of air and refrain from breathing, because if you blow you lose the leaf and with difficulty recover it. When this is laid on and dried, superpose another upon it, if you wish, in the same manner, and a third likewise, if it is necessary, that you may be able to polish it more brightly with a tooth or a stone." ₁₄₁

Evidently this was the general method of gilding, for he states that the leaf can be laid in the same manner on a wall or ceiling.

In Chapter XXX. he describes the method of grinding gold for books. This is done by first filing the gold very finely and then gradually grinding it until it is an extremely fine powder. In the next chapter, which is entitled, "How Gold and Silver are Laid in Books," the method of applying the gold is given. This is as follows: "Afterwards take pure minium and add to it a third part of cinnabar, grinding it upon a stone with water. Which being carefully ground, beat up the clear of the white of an egg, in summer with water, in winter without water, and when it is clear, put the minium into a horn and pour the clear upon it, and stir it a little with a piece of wood put into it, and with a pencil fill up all places with it upon which you wish to lay gold. Then place a little pot with glue over the fire, and when it is liquefied, pour it into the shell of gold and wash it with it. When you have poured which into another shell, in which the purifying is kept, again pour in warm glue, and, holding it in the palm of the left hand, stir it carefully with the pencil, and lay it on where you wish thick or thin, so, however, that there be little glue, because, should it exceed, it blackens the gold and does not receive a polish. ₁₄₂ But after it has dried, polish it with a tooth or bloodstone carefully filed and polished, upon a smooth and shining horn tablet. But should it happen, through negligence of the glue not being well cooked, that the gold pulverises in rubbing, or rises on account of too great thickness, have near some old clear of egg beat up without water, and directly with a pencil paint slightly and quickly with it over the gold; when it is dry, again rub it with the tooth or stone. Lay in this manner silver, brass, and copper in their place, and polish them."

In this early period this form of gilding was certainly used a good deal, but soon after this the raised gilding, which was produced by laying the leaf on a raising made of gesso, was in general use. A number of different

recipes have been found. Probably the most important, however, are those given by Cennino Cennini in the early part of the fifteenth century. Chapter CLVII. is entitled, "How You Must do Miniature-Painting and Put Gold on Parchment." It is quoted in full. "First, if you would paint miniatures you must draw with a leaden style figures, foliage, letters, or whatever you please, on parchment, that is to say in books; then with a pen you must make the delicate permanent outline of what you have designed. Then you must have a paint that is a sort of gesso, called asiso, and it is made in this manner; namely, a little gesso sottile and a little biacca, never more of this than equals a third part of the gesso; then take a little candy, less than the biacca; grind these ingredients very finely with clear water, collect them together, and let them dry without sun. When you wish to use some to put on gold, cut off a piece as large as you have need of, and temper it with the white of an egg, well beaten, as I have taught you. Temper this mixture with it; let it dry; then take your gold, and either breathing on it or not, as you please, you can put it on; and the gold being laid on, take the tooth or burnishing-stone and burnish it, but hold under the parchment a firm tablet of good wood, very smooth. And you must know that you may write letters with a pen and this asiso, or lay a ground of it, or whatever you please—it is most excellent. But before you lay the gold on it, see whether it is needful to scrape or level it with the point of a knife, or clean it in any way, for your brush sometimes puts more on in one place than in another. Always beware of this."

The next chapter is also quoted, as it gives another method of laying gold on parchment. "If you would like another kind of asiso—but this is not so good, but may be used for putting on gold grounds, though not to write with—take gesso sottile, and a third part biacca, a fourth part Armenian bole, with a little sugar; grind all these very finely with the white of an egg; lay on the ground in the usual manner, and let it dry; then with the point of a knife scrape and clean the gesso. Put the previously mentioned tablet under the parchment, or a very flat stone, and burnish it; and should it by chance not burnish well when you put on the gold, wet the gesso with clean water with a small minever brush, and when it is dry burnish it."

Gesso sottile was plaster of Paris that had been thoroughly slaked by long soaking in water so that it had lost all its setting properties. As mentioned in a previous chapter, biacca was white lead. The white of egg is prepared by beating it thoroughly to a thick froth and letting it stand one night to clear itself. Armenian bole is a red earth colour which seems to have been used a great deal to give colour to the ground for gilding. In some of the MSS. where the gold has been slightly rubbed off, the red colour of the raising preparation plainly indicates that is one of the ingredients used.

In Chapter CLX. instructions are given on "How to Grind Gold and Silver, and How to Temper Them to Make Foliage and Embellishments." Evidently in this case the gold was prepared by grinding the leaf-gold—not, as was the case in the earlier descriptions, by first filing the metal and gradually reducing it to a fine powder.

The powder gold was, however, generally used only for painting in fine gold lines and heightening miniatures, although in the latter part of the fifteenth century matt gold grounds were often used as borders round miniatures, etc.

The raised gilding was, however, used more often, and the various recipes given in the different MSS. are generally very similar to those given by Cennino. Sometimes chalk or pipe-clay is used instead of gesso, and occasionally parchment size or fish-glue is recommended as a medium for mixing it with.

Endeavouring to work from these recipes is no easy matter, and the student is not advised to waste too much time in experimenting in this direction. Although there is a certain amount of fascination in trying the various preparations and methods, there is so much that is important that should claim the attention of the student that it is hardly profitable for him to spend a lot of time trying to work from these old formulas when it might be better employed.

One cannot help being interested, however, in these old recipes and directions for applying gold to vellum.

CHAPTER XVII

THE USE OF GOLD

Gilding, in illuminated work, is done with either gold-leaf or shell gold. Gold-leaf is the metal that has been beaten out into thin sheets, and shell gold the same ground up and mixed with gum and honey. Shell gold is so called on account of the fact that it is sold in small shells ready for use.

The student is especially warned against using any of the varieties of gold paint for work that is desired to be permanent. These are mixed up with powdered bronze, and, in course of time, will turn black.

Shell gold is painted on in the same way that other colours are. A small brush should be used, so as not to waste any more than is absolutely necessary. It is also essential that quite clean water should be used, to ensure the gold being as bright as possible, as if the water is contaminated with colour it will dull the gold when mixed with it. The great disadvantages of shell gold are lack of brilliance and also the expense. It is, however, very useful for putting in very fine lines, which are difficult when using gold-leaf.

The use of gold-leaf for gilding purposes has been known since quite an early period. Some of the early manuscripts were written with gold and silver letters on purple vellum. Silver-leaf is prepared in a similar manner to gold-leaf; unfortunately, however, it quickly turns black when exposed to the air. The best substitute for silver-leaf is undoubtedly platinum, although it is very expensive. Aluminium leaf is sometimes used, but it is rather too thick for fine work. Sometimes aluminium paint is used where silver work is required. This, however, has the same objection as shell gold in lacking brilliance.

Without a doubt the use of leaf, raised and burnished, is the ideal method of gilding. If the student examines any of the old MSS. of the best periods he is bound to be struck with the brilliance of the raised gold, and he will notice how superior are the results to any produced by means of gold paint. Gold-leaf gilding, even if it is unburnished, is infinitely more brilliant than either gold paint or shell gold. Some difficulty may at first be experienced in handling the leaf, as, being so thin, it has an unpleasant habit of blowing about. It is sold in books containing twenty-five leaves. It is best to get that known as "double fine gold," specially prepared for illuminating. For large masses of gold, a thicker leaf may be used, known as "quadruple."

The student should be careful to use only the best gold-leaf. Some of the cheap foreign leaf is very poor in quality. He should be careful also to avoid the leaf known as "Dutch metal," which is not gold at all.

A gilder's cushion should be obtained with a knife and tip. (See .) The cushion is generally about nine inches by six in size, and is made by stretching a piece of soft leather over a piece of board slightly padded. A piece of parchment is fastened on one end, which acts as a shield to prevent currents of air from blowing the leaf about. The student should be extremely careful to prevent touching the surface of the cushion with his fingers, as, if it becomes greasy in the slightest degree, he will experience trouble through the leaf sticking to it.
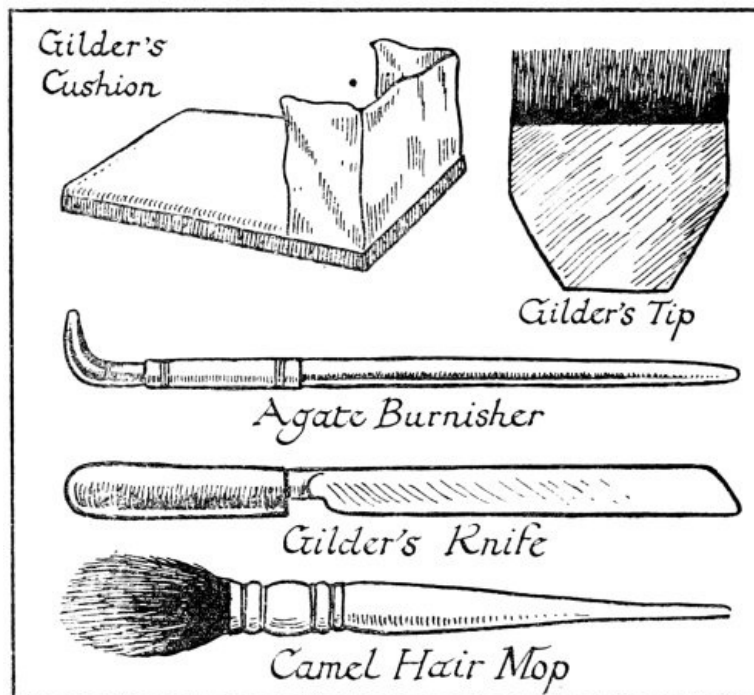
Guilder's Cushion
Guilder's Tip
Agate Burnisher
Guilder's Knife
Camel Hair Mop

FIG. 30.

The best way for the beginner to learn how to handle the gold-leaf is to get an experienced gilder to show

him how to use the cushion. If this is not possible he ought, by carefully following the directions given here, to be able to manage the leaf after a little practice.

The best way is to take the book of gold-leaf and open it very carefully. It is then turned over so that the leaf rests on the cushion. The back of the book is then gently tapped with the finger-tips; if it is then carefully lifted up the leaf will be found lying upon the surface of the cushion. If it is not lying quite flat and even, it may easily be smoothed by blowing gently on the centre of it. It is as well, however, not to be too vigorous, or the result may be to crumple the leaf up worse than before.

The student should be careful not to touch the leaf with his fingers, otherwise it will stick to them and the whole leaf will probably be spoiled. He should also avoid breathing upon the surface of the leaf, or it will probably roll up in a hopeless tangle, or else go floating off into the air, as the slightest puff of wind tends to do this.

It is hardly necessary to point out that it is not wise to attempt handling gold-leaf for the first time with the doors and windows open, as the slightest draught will carry the leaf with it.

The gilder's knife must not be sharpened, as, if this is done, the result will be that instead of cutting the leaf it will probably tear it and cut the cushion. One important thing to remember is that the fingers should be kept from touching the blade, otherwise the leaf will stick to it owing to the slight amount of grease left on it. Also if the blade is allowed to get rusty it is liable to tear the leaf instead of cutting it properly. The knife should be kept clean, and the edge should occasionally be burnished with the back of a pen-knife, or something similar, to remove any roughness that may prevent it from giving a clean cut. If it is found that the leaf sticks to the blade of the knife, it is because there is a slight amount of grease on it; this may be removed by rubbing the knife on a board with a little powdered bath brick.

The leaf is cut by placing the knife carefully down on to the surface of the leaf, and moving it backwards and forwards with a sawing movement. The knife should be pressed down firmly on the cushion when cutting, and great care should be taken not to rumple the leaf in so doing.

It is as well not to endeavour to be too economical when cutting the leaf up. A piece of leaf should be cut large enough to cover the part that it is required to gild. If the student tries to be too exact in cutting, he is very liable to cut the piece too small, and then other pieces have to be cut to patch the parts not covered with the leaf. When this is the case, apart from the extra time taken up, it is false economy, as more leaf is required than if a slightly larger piece was cut at first.

After the leaf is cut, it is conveyed from the cushion to the work by means of the gilder's tip. (See Fig. 30.) This is a kind of brush made by fixing a thin layer of hair between two pieces of card, which are pasted or glued together. This tip is used by first rubbing it on the skin or hair, and then placing it on the piece of leaf, which will then adhere to it. It can then be carried and placed in position where it is needed. The reason that the gold adheres to the tip is because by rubbing it on the skin or hair the tip becomes slightly greasy and attracts the leaf.

If any leaf is left on the cushion after finishing the gilding, it should be carefully replaced in the book. This may be done by putting the top of the blade of the knife down flat on the cushion and pushing it under the centre of the leaf. By this means the leaf may be lifted and carried to the book. The tip should not be used for this purpose, or some difficulty may be experienced in inducing the leaf to leave this for the book. When pushing the knife under the leaf, however, it should be pressed firmly on the cushion, otherwise the result will be to crumple the leaf and spoil it.

For dusting the loose leaf away after gilding, a large camel-hair mop similar to that shown in Fig. 30 is useful.

For burnishing the gold, an agate burnisher is required. The best shape is shown in Fig. 30.

For commercial work it is hardly worth while using gold-leaf, and bronze powder is recommended instead. A method of using this will be explained later when dealing with commercial work.

CHAPTER XVIII

ILLUMINATION WITH GOLD AND COLOURS

The best material for the illuminator to work upon is undoubtedly vellum. No paper has ever been made that is equal to it. The chief drawback that this material has is, of course, the expense. Parchment is cheaper, but not nearly so nice.

In selecting vellum for illuminating, the ordinary thick kind, generally known as illuminators' vellum, is to be avoided. This presents too much the appearance of shiny cardboard, the surface being much too hard and horny. This kind is prepared calf-skin, and it is most objectionable to work upon. A very fine vellum, known as "Roman Vellum"—probably prepared lamb-skin—has an ideal writing surface. It is perhaps best to get a slightly heavier vellum if it is intended to cover it with a lot of heavy work.

A very curious statement has found its way into a number of books on illumination to the effect that it is impossible to remove pencil-marks from the surface of vellum. It has been stated that all attempts to remove a pencil-mark with rubber or bread result only in producing a greasy smudge. The present writer has worked on a considerable quantity of vellum, but he has never come across any from which he has experienced any difficulty in removing pencil-marks. Of course it is not advisable to use a very soft pencil, such as a 4 or 6B, very freely on a piece of vellum, especially if it is at all inclined to be greasy. The use of carbon-paper is often recommended for transferring a design to vellum, but, generally speaking, the use of this material is not desirable. It is generally somewhat greasy, and it certainly is difficult to remove these marks from the surface of the vellum. The best way is to cultivate the habit of working straight away on to the vellum. Work that is carried out in this manner is generally characterised as having more vitality and displaying more freedom than when it is traced off from another drawing.

Some of the fine hand-made papers, specially prepared for writing and illuminating, make excellent substitutes for vellum, although, of course, paper is never as durable as vellum. Cold tea makes a very good and quite harmless stain with which the paper can be tinted a similar shade to vellum. When tinting the paper with tea, it is best not to use too strong tea for this purpose, otherwise the result may not be altogether satisfactory. The paper should be carefully fastened to a board with drawing-pins. A broad, flat camel-hair brush is useful for washing the tint on, care being taken to get this quite even. If the paper is needed to be used for a MS. book, both sides should be tinted, but this is hardly necessary if one side only of the paper is to be worked upon.

When using paper for large, important work it is best to stretch it before commencing to work upon it. This is done by damping it freely until it becomes quite limp. The margin is then coated with paste for about half an inch all round. It is then stuck on to the drawing-board by means of this pasted margin while the paper is still wet. Care should be taken that the pasted margin dries hard before the rest of the paper begins to dry, otherwise, when the paper starts to contract, it will come away from the board. This is obviated by re-damping the centre of the paper, so that the margin has a chance of becoming firmly attached to the board before the paper begins to pull.

The beginner is not advised to attempt to stretch vellum in this manner. It requires considerable experience to stretch vellum satisfactorily, and it is quite easy to spoil a large sheet in an unsuccessful attempt at stretching it. The best way is to fasten it to the drawing-board with plenty of drawing-pins. If the sheet of vellum is placed in a damp place for some little time before pinning it on to the drawing-board, or placed for a short time between damp blotting-paper, it will, if stretched tightly on the board with the drawing-pins while it is slightly damp, be found to be stretched quite well enough for all practical purposes when dry.

Perhaps it would be as well here to have a word to say about brushes. The best kind for the illuminator are red sables. These are made both in quills and with metal ferrules. Some prefer one kind and some the other. Two or three of the smaller sizes should be selected, with a larger one for bolder work. The student will soon find out which size is most convenient for him to use. The present writer uses a No. 1, metal ferrule, for most of his work, using a larger brush for filling in broad masses of colour and larger work. To ensure getting the best service out of brushes they should be taken care of. After using, they should be carefully washed by shaking vigorously in a jar of clean water. Brushes soon spoil if they are put away dirty. The colour gets between the hairs and prevents the brush from coming to a point. If the colour dries in the brush it is very difficult to get it quite clean afterwards. One would think it was hardly necessary to state that brushes should not be placed so that they are resting on their points, but they are often left in this way by careless people. When a brush has been used for Indian ink it will be found that washing in ordinary water will be insufficient to clean it. In this case soap and water may be used, carefully washing the soap out afterwards with clean water.

Vellum is generally pounced before working upon it. A very good pounce may be prepared by mixing equal parts, by measure, of pumice powder and french chalk. When pouncing vellum it should be spread out flat on a board covered with a sheet of clean paper. The pounce is sprinkled over it and rubbed in with the palm of the hand. Care should be taken not to pounce too long, or the vellum will be roughened and spoiled. After the vellum has been well pounced, the pounce is shaken off and the vellum carefully dusted with a soft handkerchief.

If the surface of vellum is examined very carefully it will be noticed that one side is different from the other. The side which was originally the hair side of the skin is rougher than the flesh side. The smoother side is nicer for writing upon, although, when using one side of the vellum only, it is not advisable for the beginner to use the flesh side, as it is so difficult to make an erasure on this side, without spoiling the skin. Of course, it is much better to endeavour to avoid making mistakes, but still it is almost impossible to prevent them occasionally. When it is necessary to make an erasure a *very* sharp knife should be employed with the least possible pressure. For erasures on the flesh side of the vellum the kind of rubber known as kneaded rubber is very useful. This erases very slowly, but at the same time very efficiently. When using a knife for erasures on vellum it is essential that it should be extremely sharp and that scarcely any pressure be put on it. It is best, however, to

avoid the use of the knife on the flesh side of vellum.

A simple but effective style of illumination is shown in . This is based, to a large extent, on pen-work. The block of the initial P may be blue, with the centre red. The initial itself is of raised gold, as also are the buds and centres of the small flowers in the surrounding decoration. The fine scroll-work may be in black or brown, the decoration on the initial being white.

Fig. 31.

After the lettering is completed, the decoration should be drawn in carefully with pencil. The scroll-work may then be drawn in with the pen. The page should then be carefully cleaned with a piece of soft rubber, removing all pencil-marks that will not be covered with colour. The next step is the gilding. Various preparations are sold by different artists' colourmen for this purpose. When buying gold-size, however, the student should see that he gets the kind specially prepared for illuminating. There are many varieties on the market, some of which are useless on vellum. For example, it would be foolish to try and gild on vellum with oil gold-size or japanners' gold-size. Also the different kinds of water gold-size, used by decorators and picture-frame gilders, are difficult to use on vellum, as the gold is laid by flooding the surface of the size with water and then applying the leaf. The result of this is to cockle the vellum in a most unpleasant fashion.

Most dealers sell raising preparation and water gold-size. The raising preparation is generally sold in two distinct forms by different makers, one in the form of a thick paint and the other a thick jelly, which requires heating to liquefy ready for use. The former kind will be found the most satisfactory.

A small ichneumon brush may be used for applying the raising preparation. Before filling in the parts that it is desired to raise it is not a bad plan to roughen the surface of the vellum slightly in these parts. This will help to prevent the raising from scaling off when it dries.

Difficulty is often experienced through air-bubbles in the raising preparation. In drying, of course, these show as tiny holes. In this case prevention is better than cure. These bubbles are generally introduced into the preparation by means of the brush. The brush being full of air is used to stir the preparation, and the air leaves the brush in the form of bubbles, which mix with the raising preparation. The best way to use the raising preparation is to take a small quantity out of the bottle and place it in a small saucer. It should then be carefully worked up with the finger-tip with a little water until it is about the consistency of cream. It is much better to use the finger-tip to mix it up with rather than a brush. Using a brush for this purpose is a fruitful source of air-bubbles, besides spoiling the brush. Before using the brush to lay on the preparation with it should be shaken vigorously in water and squeezed out, thus displacing the air and preventing the formation of bubbles. All the parts that it is desired to gild should be given a fairly substantial coating. It should be almost dropped from the brush. It is not desirable to raise it too high, or the effect will be somewhat tawdry. The student should use the work of the mediæval artist as his guide in this direction. When this is all filled in, the work is placed in a room free from dust for the raising to dry firm and hard. The surface is then scraped carefully with a knife until it is quite smooth, all little irregularities being removed.

It is then given a coat of water gold-size, and when this appears dry on the surface it is breathed upon until it becomes tacky. The leaf is then cut to size and laid on at once, pressed down with cotton-wool and left to dry. The superfluous gold is then brushed away with a camel-hair mop. On the following day it may be burnished. If the burnisher does not work freely on the surface, its action may be facilitated by rubbing the surface of the gold with a soft cloth that has been slightly smeared with beeswax.

When using the water gold-size it is most important that this should be kept free from dust, and especially small hairs and pieces of fluff that often float about in the air. It is impossible to gild successfully if the size is

full of these. After painting on the size it should not be allowed to get thoroughly dry before laying the leaf—it should only *appear* dry on the surface. If it is allowed to get properly dry it will be next to impossible to make it tacky by breathing upon it.

It is just possible that after the gilding has been done it will be noticed that the gold-leaf has adhered to the 160 surface of the vellum in parts where it was not intended. Brushing the surface with the camel-hair mop is not sufficient to remove this. It, however, can generally be cleaned by means of kneaded rubber. There is no need to use any friction; if it is pressed on the parts and lifted again it will pick up the leaf from the vellum. Care should be taken, however, to avoid touching the surface of the raised gold, as it is very liable to spoil the appearance of it.

After the gilding is completed, the colouring should be proceeded with. The large masses of colour are laid in first, then the white lining on the colour, and finally the outline. If the surface of the vellum is at all inclined to be greasy it may be advisable to use a little oxgall with the colour.

The various other suggestions shown in [Fig. 31](#) practically explain themselves; (*b*) and (*c*) are different methods of spacing the decoration. Two more initials are shown, also the construction of the decoration and other suggestive details.

Illuminated Altar Tablet.

CHAPTER XIX

THE FURTHER DEVELOPMENT OF ILLUMINATION

The style of decoration suggested in the previous chapter was based, to a large extent, on pen-work. The examples indicated in Fig. 32 show a further development, in which brush-work plays a more prominent part.

A suggestion for an illuminated version of the Twenty-third Psalm is shown in (*d*). The decoration here may appear somewhat stiff, but it is difficult to show in black and white the effect that colour gives. This simple and somewhat severe type of decoration is, however, much easier for the beginner than the freer kind of ornament.

It is rather difficult to suggest in writing the exact colouring, as so much depends on the various shades used to form the general colour scheme. Possibly the following notes may be useful to the student as indicating roughly the colours that may be used.

FIG. 32.

The writing is in black with the capital letters in red. The background of the initial and border, *viz.*, the parts indicated by horizontal shading, should be blue. This colour should be neither too dark nor too light, also it should not tend towards either purple or green. The student should take special note of the blues used by the mediæval artists. The large initial T should be painted in a warm shade of red, not quite so vivid as vermilion, nor yet a cool crimson. The centre of this initial and also the centres of the blossoms, with the background of the small circles formed by the stems, are of raised burnished gold, as also are the small buds in the line work. The stems should be painted in a neutral tint and may be heightened up in places with touches of clean bright colour. The leaves may be green shaded with a lighter tint of the same colour. The flowers might be a pale creamy tint with the centres shaded with orange. The scroll-work on the colour may be painted either in white or in a lighter tint of the background colour upon which it is painted. The initial T may be treated in this way, and also shaded with a darker red.

In (*e*) an arrangement is shown for a page with the border completely surrounding it. Some endeavour should be made to get good pattern with the masses of gold and colour. In the page suggested in (*f*) the decoration is formed down one side, springing from the initial P. The initial B that is shown here is in raised gold, the flowers in the centre also being in gold, as well as the berries in the pen-work springing from the letter. The background of the letter is blue and red—blue where the shading is indicated by horizontal strokes and red where vertical strokes are used.

A study of plant form is very useful to the illuminator. The decoration used by the mediæval artist was practically all based on natural forms, and some of the best advice that can be given to the modern illuminator is that he should study nature. In doing this the student should remember that the object is primarily decoration and not representation. He should not degrade this art into a mere realistic rendering of sprays of flowers, insects, etc., but rather aim at producing decoration as the direct result of his study of nature. As an example, some of the ivy-leaf decoration that was so much used during the fourteenth century is shown here. The importance of study from nature cannot be emphasized too strongly. Drawing from plant-form is one of the best exercises the illuminator can have. Possibly a few hints on this important study will be of service to the student.

In the first place, when drawing a plant, or indeed any natural object, one should be careful to avoid drawing it like drawing a map, *i.e.*, without realising that it is form. If this is persisted in, the result will be that the drawing will be lacking in vitality, besides being not nearly so intelligible. If the endeavour be made to keep constantly before the mind the fact that it is *form* that one is drawing, and everything is carefully reasoned out

before attempting to draw it, the finished drawing will not only have far more life in it, but it will also be much easier to understand.

One should also strive to draw with feeling; there is a great difference between a *living* plant and an artificial reproduction of it. The drawings of plants and flowers made by some students remind one of paper flowers and foliage, as they are drawn in such a hard and severe manner. A natural leaf is a thing of beauty, there is nothing rigid or stiff about it, but one that is cut out of paper is dead and unyielding in every respect and is absolutely devoid of all feeling. One should get all the life and feeling possible into one's drawing, and this comes from plenty of practice in careful and thoughtful drawing from nature.

When making plant studies for one's own use in design there is no need to limit oneself by making outline drawings in pen and ink, as when they are intended to be reproduced by means of line-blocks. The aim of the artist should be to make the drawing as much as possible like the original. It is not advisable to go in for sketchy effects; everything should be made perfectly intelligible so that it is possible to understand every detail of the drawing.

Of course, some parts of the plant should be painted in colours, so as to form a record of the actual colours, but for general drawing a soft black-lead pencil, such as a 3 or 4B, is very useful. One should be careful to observe all the details, such as the way the branches attach themselves to the main stem, also the manner in which the leaves and flowers arrange themselves. The feeling of unity which runs throughout the whole of the plant should be carefully noted, how there is a distinct relationship between every leaf and bud with the main stem.

There is no need to confine one's nature study to actual plant-drawing. If one's powers of perception are trained to observe, there is a great deal to be learned from a walk in the country. Attention should be given to the pattern that abounds everywhere in nature; flowery banks and hedgerows are rich in suggestion. The meadow spangled with buttercups and daisies is a delightful example. A field of barley when it is just beginning to change colour offers a wealth of possibilities both in pattern and colour. Then take trees, their different structure and foliage. No two species of trees are exactly alike in the arrangement of foliage, etc. One should not, however, give too much attention to detail to the neglect of considering things as a whole. For example, a tree as a whole should be noted, attention being given to the way in which the trunk springs from the ground and the general massing of the branches and foliage.

The use of a sketch-book for noting things down is very useful, but too much reliance should not be placed on this. If one's powers of perception are trained to observe, the memory will be stored with an abundance of suggestions and ideas from the study of nature that has been going on almost unconsciously day by day.
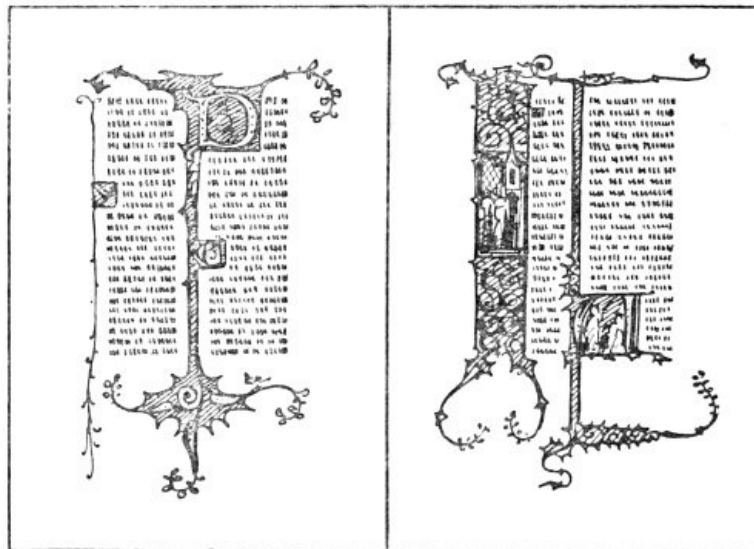
FIG. 33.

As well as nature study, the student should also make careful study of some of the best illuminated work of the mediæval period, especially on the lines indicated in the chapter on the Initial Letter. The use of a note-book will prove to be very serviceable for this purpose. Quick sketches of the arrangement of the pages, as suggested in <u>Fig. 33</u>, should help the student very much in arranging the decoration of the page. Of course, the drawing of details is also useful, as by carefully copying some of the initials and decoration he is able to gain some experience of the mediæval artists' methods of working.
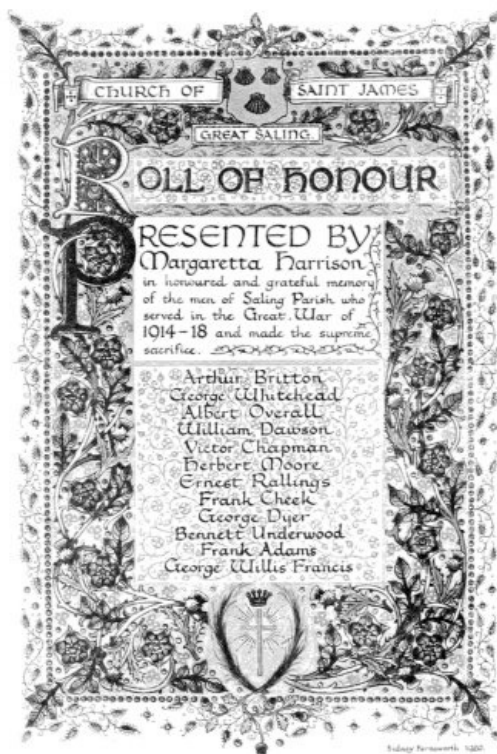
A Roll of Honour.

By kind permission of
Miss Harrison, of
Little Waltham Hall.

Possibly it may be as well to say a few words about miniature painting in connection with illumination. As has often been explained, the term "miniature" when used with reference to illuminated MSS. must not be confounded with the modern idea of miniature painting, *i.e.*, painting on a small scale in a minute fashion, as the word "miniature" is derived from the Latin word *minium*, the red pigment used in the decoration of MSS., therefore the original meaning is writing or painting with minium. There is also no reason at all why miniatures, when painted on vellum and used in conjunction with illumination, should be stippled and worked up in the minute fashion that is usual with the ordinary miniatures on ivory.

It is not advisable to paint these in a similar way to the ordinary water-colour painting. It is very difficult to paint on vellum in this way. Undoubtedly the best way is to paint fairly direct, using body colour. The miniatures should be nicely finished without any excessive laboured finish produced by stippling or other similar methods.

A miniature should always be treated as part of the decoration, and not as a picture added to it. If the student examines carefully the best work of the mediæval period he will notice that it is practically impossible to separate the miniature from the rest of the decoration. A strong feeling of unity runs throughout the whole. The greater part of modern work, however, differs in this respect. The miniature is often quite good, so also is the decoration, but they are independent of each other. It would be quite possible to replace the miniature by another totally different. The ideal that he should endeavour to attain to is to make the miniature with the rest of the decoration form one harmonious whole.

Although the miniature should be essentially decorative, there is no need to make it too rigid and conventional. A fair amount of sketching from nature will go a good way towards preventing this. It is not a bad plan for the student to practise making small quick sketches in oils from nature, treating the subject broadly and going for colour. This will help him very much in painting his miniatures in a direct fashion, and, if this is combined with plenty of careful drawing, it should enable him to develop his style of decoration considerably.

With regard to the decoration as a whole, it has often been said that it is impossible to teach one how to design, but that it is possible to direct one in the right way; and there is no better method than that suggested above, *viz.*, a study of nature combined with good examples of work that has been done in the past.

ILLUMINATED ALTAR TABLET.

When designing, it is a great mistake to strive after originality. The way to be original is to be natural and do the work in the best way that one is able. If the artist does this he is certain to be original, as he cannot help himself. If he strives after originality the work produced will be of an unhealthy type, and will show signs of affectation which will be anything but pleasant.

Imitating someone else is equally foolish, as an imitation can never be equal to the real thing. Art is worth nothing unless it springs spontaneously from the joy of working, without any concentration on its æsthetic aspects. Therefore the thing for the modern illuminator to do is not to imitate either ancient or modern artists, but simply seek to do his best, giving the best workmanship that he is capable of. There are untold possibilities in the future for the development of schools of illumination as great as any of those that have existed in the past.

There are quite a number of different ways in which illumination might be used in the present day. Perhaps it might be useful to suggest a few of these.

The Illuminated Address and the Illuminated MS. Book are so important that separate chapters have been devoted to these.

One of the most important things that illumination can be used for is for the service of the Church.

Altar tablets offer plenty of scope for the modern illuminator. They should, of course, be on vellum and be framed quite simply.

Service Books, such as the Communion Service, also provide another application for illumination. Books should be written in sections. (See Chapter 25 on the Illuminated MS. Book.) A Service Book may either be fairly elaborate or may be written simply in black and red. It is as well to use red for the Rubrics, so as to make a distinction between these and the rest of the text.

The Marriage Service is another thing that may well be written out in good script and illuminated. This should have the size of the pages on the small side, as in this case it would be for the use of a private person and not for the clergy.

Texts for churches, the Creed, Commandments, etc., are also subjects suitable for illumination. These should be bold and distinct.

Permanent Notices in churches and other buildings would be much more attractive if, instead of the usual printed form being used, they were executed with beautiful lettering, preferably with a reed pen, and possibly illuminated. These should, however, not be overburdened with decoration, as it is necessary that they should be as distinct as possible. Black and burnished gold makes a very effective combination.

Another use to which illumination might be utilised is Family Trees and Pedigrees. These are likely to give plenty of opportunities for the illuminator, as good decoration may easily be formed with coats of arms and other symbols.

Many other things will probably suggest themselves to the artist as subjects suitable for illumination.

Keep thy foot when thou goest to the House of God.

WHOSOEVER thou art that entereth this Church, leave it not without a Prayer to God for thyself, for those who minister, and for those who worship here.

Surely the LORD is in this place.
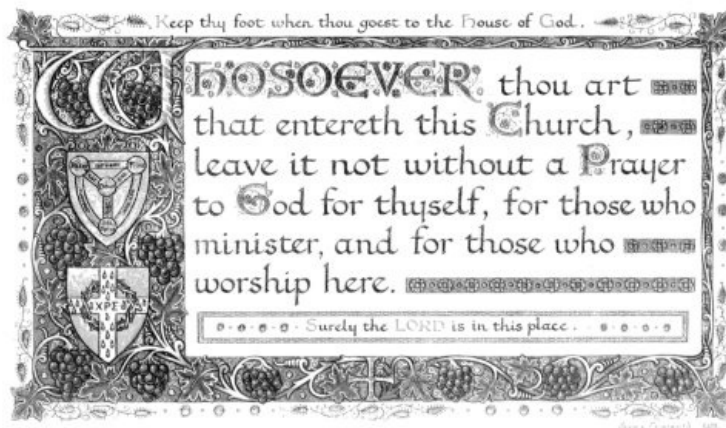
A Church Porch Text.

CHAPTER XX

THE ILLUMINATED ADDRESS

The illuminated address is the form which most modern illumination takes. The greater number of these cannot, even by the widest stretch of imagination, be called works of art. Not only are they generally executed with vivid and crude colour schemes, but also the style of decoration is usually extremely bad. Some of the letters are painfully contorted. Others are represented as if they were solid blocks throwing shadows, and are drawn in false perspective. Meaningless flourishes abound. Occasionally a little bit of decoration, that has been copied from some mediæval work, is introduced. This, however, is mixed up with a lot of straggling ornament which it is impossible to conceive as having been produced by any artist of the Middle Ages.

One can quite understand how this is so when one considers how so much of the work is done. Illuminated addresses are often executed by people who have had practically no training at all. One can scarcely complain if they are in bad taste when such is the case. If one has had a good grounding by studying the work of the ancient illuminators it is practically impossible to produce this type of work. Therefore, before attempting to 172 work in a modern style, the student should make a careful study of the work of the mediæval period.

When one receives an enquiry regarding an illuminated address, a definite understanding is necessary as to the form which the address is to take. Those generally employed are the Framed Address, the Book form, and the Vellum Scroll. (See Fig. 34, *a*, *b*, *c*.)

Fɪɢ. 34.

One should be able and willing to give advice and help in the matter of wording. It is advisable to guard against the usual foolish and somewhat bombastic manner of wording testimonials. The first or third person is generally employed, but it would be much better if it took the form of an ordinary letter expressing appreciation and good wishes. Whichever form is employed, care should be taken that these are not confused in any way. 173

It is a good plan to make, first of all, a careful copy of the wording, and get it checked with the original before commencing to work. This will prevent mistakes being made. Then the artist should find out if any coats of arms, etc., are needed to be introduced into the decoration. The approximate size is then decided, and the whole is roughed out in pencil on detail paper to find the exact spacing of the lettering and decoration.

The form that the address should take depends on the matter to be introduced. If, for example, 500 names are required to be appended, a framed testimonial is clearly out of the question. For the same reason one in the form of a scroll is useless. The only practical method is to do it in book form.

When executing an address in this manner, the best way is to write it in sections composed of two folded sheets. After the work is completed, the whole is carefully bound by an experienced binder. Another method is to write it in a blank album, but, if this is done, care should be taken that the paper is of good quality and suitable for writing and illuminating. The paper of which these albums are generally made is unfortunately rather poor in quality.

If the scroll form is employed, it is best that large masses of raised gold should not be used in the decoration, owing to the likelihood of this cracking when the vellum is rolled. When completed, the scroll is generally enclosed in a cylindrical case or a metal casket. Of course, the latter, if made by a good craftsman, is 174 much to be preferred.

For a framed testimonial the best kind of frame is undoubtedly a black one, as this serves well to show up

the brilliance of the gold and colours. It is also a good plan to frame it with a cut mount, so that the vellum does not touch the glass.

A word of warning is possibly needed here. When having illuminated work on vellum framed, it is most important that the frame-maker should not be allowed to mount it. If he does this he is almost certain to spoil the work, as, when the back of the vellum is damped, the moisture soaks through and softens the raising preparation, thus spoiling the raised gold work; also the chances are that the vellum will be spoiled at the same time. It is very annoying, after spending a considerable time on the work, to find it completely ruined by an unsuccessful attempt to mount it.

If a list of names is wanted at the end of an address it should be ascertained if signatures are needed or a carefully-written list of names. If signatures are required, it is best to get these before completing the decoration. Lines should be ruled faintly with a sharply-pointed H.B. pencil to act as a guide for the various writers. The signatures should all be written under the artist's personal supervision. It is a great mistake to allow the work to leave one's hands before it is properly finished. If it is carried here and there by various people it is very liable to become soiled, to say nothing of mistakes made and signatures written in ink of various shades. A good fluid Indian ink, the same as that which the lettering is written with, should be provided. A number of pens of different styles should be to hand, with paper for the subscribers to try the pens on before signing the actual address.

Signatures certainly have a more sentimental value than a mere list of names. A neatly-written list of names, however, looks much better and is more in keeping with the decoration. It is best to place the names in alphabetical order.

If the names are to be put in by the artist, he should first of all, as mentioned before in the case of the wording, make a copy of these and get it carefully checked before writing them in.

It is very usual to include coats-of-arms in the decoration. When this is done, great care should be taken that these are blazoned in the correct colours, and also that they are properly drawn. A good handbook on Heraldry should be consulted. The illuminator should have, at any rate, an elementary knowledge of this subject, as he is so often called upon to make use of it.

After he has carefully ascertained by means of the rough drawing the measurements and spacing, he should start work straight away on the vellum. It is not necessary to go into details as to how to set about this. Explanations have already been given, in a previous chapter, concerning how to set out an illuminated page.

In the case of a beginner who has not sufficient confidence in himself to work direct on the vellum, the first drawing may be made on a sheet of tracing paper. If this is pinned over a piece of white paper it is quite easy to work upon. When the drawing is completed, the tracing paper should be reversed, and the whole of the decoration should be traced on the back of it with a finely-pointed H.B. pencil. This is referring to the decoration only. The lettering should in any case be written straightway on to the vellum, after the necessary measurements and calculations have been made.

After the whole of the decoration has been traced through the tracing paper should be carefully placed in position on the vellum. It should be fastened with drawing-pins down one side. The traced decoration can then be easily transferred to the vellum by rubbing the back of the tracing paper with a burnisher or paper-knife. Care should be taken that the paper does not shift about during this process. It should be held firmly, lifting it up occasionally to see if a clear impression is being made.

It is just possible that the illuminator may be asked to submit a rough sketch. He should bear in mind that the object of this is to give some idea of the finished work. This should be executed in a bold fashion on cartridge paper with a soft pencil. A few words may be written in the script that he intends to use, and it is as well to finish a small portion of the decoration in colours. This should enable his client to understand something of what the finished work will be.

A simple but very effective form of address is that having a coat-of-arms at the top, with the matter in plain lettering with a fine initial, as indicated in (*d*). A still simpler form might consist of a nice piece of lettering with a plain initial either in raised gold or vermilion, omitting the coat-of-arms at the top.

CHAPTER XXI

THE VARIOUS METHODS OF REPRODUCTION

It is essential that the artist who does work for reproduction should have some knowledge of the different methods employed. A lack of knowledge in this respect is responsible for a large number of drawings made which are quite unsuitable for the purpose. It is not necessary that the student should be able to reproduce his own work by the various methods used, but he should be familiar, in a slight degree, with the processes used.

For black-and-white work, the two processes largely used by publishers in magazines, etc., are known as Line Process and Half-Tone. The former is used for the reproduction of pen-drawings, and the latter for tone drawings.

The line process is the most useful for the class of work that the illuminator is likely to do. In this case the method of procedure is briefly as follows: The drawing is made with good black ink on white paper. It is then photographed. A piece of polished zinc is given a thin film of fish-glue in which some bichromate of potash has been dissolved. The effect of the bichromate is to make the fish-glue insoluble when it has been exposed to the light. The zinc plate is dried rapidly in a subdued light, and is then exposed behind the negative. The light, penetrating through the clear parts of the negative, renders these insoluble. The zinc is then given a thin coating of soft, greasy ink with a roller. It is then placed in a dish of water to develop. The effect of the water is to dissolve the fish-glue that has been protected, and is therefore still soluble. This leaves the design on the surface of the zinc in ink. While the ink is still tacky, it is dusted over with resin. This is fused over a stove, and the background of the zinc is etched away in an acid bath, leaving the design standing in relief.

This is, briefly, an outline of the process of making a line block. Of course, it must be understood that many details are omitted in this description. These, however, although most important to the block-maker, are not necessarily essential to the artist. The chief thing that he should be careful to ensure is that his drawings should be executed with an absolutely black line on white paper. By this means he will have done his part to help the block-maker to obtain a clear negative, which is unquestionably vital to the production of a successful process block. Drawings executed with a weak, washy kind of ink on yellow-toned paper do not give the block-maker a chance. The thing, then, for the artist to remember is to see that his drawing consists of firm black lines on a white surface, with no half-tones, unless these are produced by means of lines.

For drawings executed in tone, the other method, known as the half-tone process, is used. In this case the drawing is photographed with a glass screen in front of the negative. This screen is ruled with fine lines in such a manner that the tints of the original are broken up into dots. The print is obtained on the metal, and the block is made in a somewhat similar manner to that of a line block. In etching, the metal is bitten away round the edges of the various dots more or less, according to the strength of these. This gives a similar effect of light and shade to the original. An examination, with a magnifying-glass, of any reproduction of a photograph or tone-drawing in any of the magazines of the present day will show this quite plainly.

When working for this process, drawings should be rather more vigorous than are required in the finished production. The reason for this is that the photograph generally softens down everything, so it is as well to forestall this by making the original stronger.

It is also important that the half-tones in the drawing should not tend towards being a bluish grey, as blue does not photograph well. The result of a reproduction from a drawing of this kind would be that the half-tones would be much weaker than in the original.

In colour reproduction, a method largely used is that known as the three-colour process. This is a development of the half-tone process. In this case, however, the drawing is photographed three times in succession on different plates. In each case a colour filter is placed in front of the lens, which allows only the red, yellow, or blue rays to pass through. By this means the three negatives obtained are records of the red, yellow, and blue used in the drawing. Three blocks are made, and are printed in red, yellow, and blue ink respectively, superimposed over each other. This, if carefully done, gives a fairly faithful reproduction of the original. Sometimes an extra block is used, and in the case of the reproduction of illuminated work, a special block is used to print the gold. It can easily be understood why this is necessary, as, when printed from the three blocks only, this comes out as a colour in the printing.

When working for this form of reproduction there is no need to limit oneself in the number of colours used. Work that has been executed with about twenty different colours can be reproduced as easily as that in which only four or five colours are used.

As in half-tone, the work should be stronger and more vigorous than is needed in the finished reproduction. The colours also should be bright and clear, and the modelling should be strongly accentuated, as this process has a tendency towards flattening everything. If the original appears flat and washed-out in treatment, it will certainly look much worse when reproduced.

Another process, largely used for commercial work, is lithography. This is quite different from any of the previously mentioned processes. In all these the blocks are in relief, and are printed in a typographic press. For the general form of lithography, a species of limestone is used. This process depends on the absorption of grease by this stone, and on the mutual antipathy of grease and water. The design is drawn on the surface of the stone with a greasy ink. The grease is absorbed by the stone. The stone is then damped all over; the greasy ink of the design repels the water, but where there is no design the surface of the stone becomes wet. An ink-roller is then passed over the stone while it is still damp. As this printing ink is of a greasy nature, it will leave the roller only for the lines of the design, which remain quite dry. The moist surface of the stone repels the ink. After the stone has been inked up, a print is obtained in a lithographic press.

For general work the surface of the stone is highly polished, but for the reproduction of chalk drawings and for shading purposes it is given a grain.

Zinc and aluminium plates are often used as substitutes for stone. These, although not as good as stone, have the advantages of being cheaper and more portable.

Colour printing by this process is known as chromo-lithography. A separate stone is used to print each colour. A careful tracing is first made of the outline of the drawing, and this is transferred to the surface of the stone. This forms the key-stone from which the other colour stones are prepared. When it is desired to print gold, the stone is rolled up with a very sticky kind of ink. A print is obtained in this medium, and while this is still tacky it is dusted over with powdered bronze, which adheres to the print and gives the effect of gilding to some extent. For very special work real gold is occasionally employed instead of bronze powder.

It can easily be understood that the larger number of colours used, the more costly this process is. Students often wonder why designs are sometimes not accepted by firms who use this process. Very often one of the most important reasons is that too many colours are employed. If a design is shown that can be produced with a striking effect with two or three printings only, it will certainly be considered before one requiring ten or twelve.

Lithography is used for the greater bulk of commercial work, such as posters, labels, Christmas cards, etc.

The great thing to remember when doing work for reproduction by chromo-lithography is to get a good effect with as few colours as possible. There is no need in this case to make the drawing more vigorous than is required, as the lithographer will endeavour to get exactly the same effect as in the original.

The student who is ignorant as to the different methods of reproduction employed should at any rate, after paying a little attention to the descriptions given, avoid making designs that are almost impossible to reproduce satisfactorily. The object of this chapter is not to teach the student how to reproduce his drawings by means of the processes described. The only reasons for dealing with the subject are to enable him to produce workable designs, and at the same time to give him an added interest in his work by an elementary knowledge of the methods of reproduction.

DESIGNS FOR CHRISTMAS CARDS.

By kind permission of
Messrs. Raphael Tuck & Sons, Ltd.

CHAPTER XXII

CHRISTMAS CARDS

In the application of illumination for purposes of reproduction, designing for Christmas cards occupies a prominent place. Although these are not all necessarily of the illuminated type, a great number are of this kind. All varieties have lettering as an important part of the design. There is plenty of scope for the illuminator in this direction. If he can produce effective designs that can be easily printed, and are likely to be saleable when reproduced, publishers of Christmas cards will always be pleased to see his work.

When designing, there is no necessity for using permanent colours, as the original is seldom kept after it has been printed. The same thing applies to the use of gold-leaf for gilding. This can be done with bronze powder. Gold paint can be readily made by mixing the powdered bronze to a stiff paste with gum-water, then thinning it out with water so that it flows freely from the brush. Care should be taken to get the right amount of gum in it, as if there is too much it will present a shiny appearance and will turn black quickly. If, on the other hand, there is not enough to bind the particles of bronze together, it will rub off when touched. The best way is to test before proceeding with the work, by painting on a small piece of paper and noting the effect when dry.

When it is desired to produce raised gold, this also can be done with bronze powder. For this purpose some raising preparation, of the kind sold in the form of a thick paint, should be used. A little should be placed in a small saucer, and a drop of honey added to it with some water. It should then be carefully rubbed up with the finger until it is about the same consistency as cream. Care should be taken not to add too much honey, otherwise the raising will not dry at all, but will remain a sticky mass.

The parts that are intended to be raised should be filled in with this, in the same manner as described for leaf-gilding in a previous chapter. After this has become dry on the surface, it should be breathed upon until it becomes tacky. The bronze powder is then dusted over it with a small piece of cotton-wool. After leaving for a little while, the superfluous bronze is dusted off with a clean piece of cotton-wool. Any parts where the bronze powder has not attached itself can generally be covered by again breathing upon the surface and applying the bronze. No attempt should be made to burnish gilding done in this way.

Christmas cards are nearly always produced by means of chromo-lithography, as described in the previous chapter. Occasionally they are produced by means of line and three-colour blocks, but, generally speaking, chromo-lithography is the process employed.

Cover.   First page.

A Christmas Card.

By kind permission of
Messrs. Raphael Tuck & Sons, Ltd.

When about to make a design, the student should endeavour to visualise the completed design before commencing work. If he cultivates this habit he will find it much better than worrying a design into existence—a method very often employed.

It is a good plan, when setting out to design, to ask oneself a series of questions: "How is it to be reproduced?" "What style of design is needed?" "What is the general taste of the buyers of this kind of thing?" etc. If one asks oneself a number of similar questions to these, it should, at any rate, be the means of ensuring that the design is suited to its purpose.

A very common fault in designing Christmas cards is making them too heavy in treatment. It is essential that the finish should be light and dainty.

Designs may be either for the complete card or merely for the outside cover. Several suggestions are shown in Fig. 35. Of course, it will be understood that these are only rough sketches. They do not pretend to be designs.

The one represented by (*a*) is for the general type of illuminated design. This is for the outside cover only: a short greeting with an illuminated initial and decoration. When selecting words for this purpose, one should be careful to choose something not too trite. On the other hand, it is as well to avoid using some copyright quotation.

The designer must be up-to-date: he must not expect to sell his designs if he gets his ideas from Christmas cards that were published twenty years ago.

There are no special sizes to work to, as cards of all shapes and sizes are produced. It is best, however, not to get them too large.

The style of card indicated in (*b*) is a very usual kind. The centre is left blank for a small picture, or a monogram, to be inserted.

If the artist is able to paint little landscapes or girls' heads, he could insert them himself as shown in (*c*). He should, however, avoid getting these heavy or crude in colour.

FIG. 35.

The designer will always find that he is much more likely to sell his designs if they represent new ideas. The publisher is always on the look-out for something new.

For example, the idea might be a small booklet containing a brief anthology on "Happiness," or some other like subject.

If a small booklet is designed, it is as well to remember that all the pages should not be fully illuminated. The cover and the opening page might be illuminated in gold and colours, while the rest might be in black and red only. If the booklet was executed with all its pages fully illuminated it would probably be rejected on the score of expense of reproduction. It is little things like this which, if taken into consideration, would prevent a good number of the disappointing refusals that are so often received.
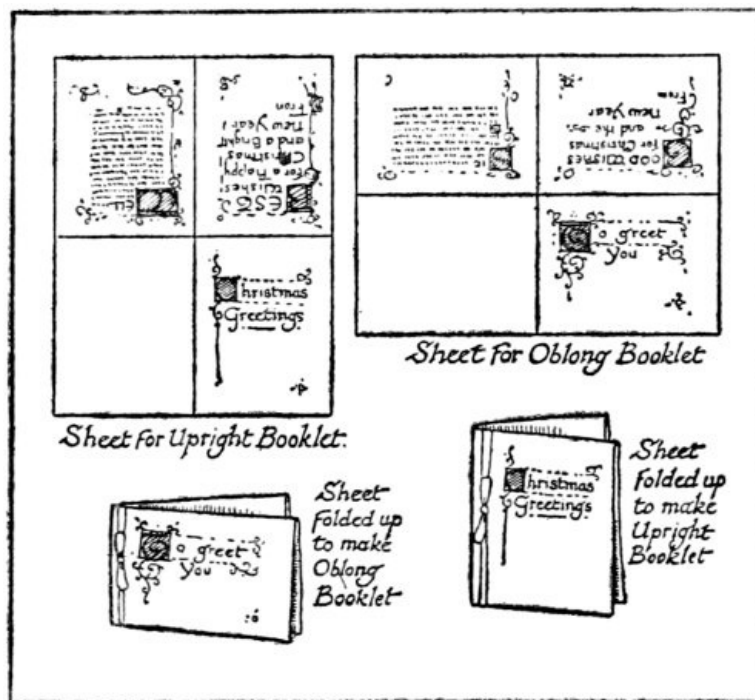
Fig. 36.

A very attractive form of card is shown in (*d*). This has a cover design, a greeting with a space for name, and a quotation. When a card of this type is designed it should be arranged as shown in Fig. 36. By this means the card, when opened out, has the design all on the same side of the paper, and is much more convenient. Some may be made upright and others oblong in shape, as in Fig. 36.

The prices paid for Christmas card designs may be anything from 10s. 6d. to £3 3s. Of course, higher prices than these are often paid for good work, when there is a demand for the work of the designer. A good average price for a design, however, is £1 1s.

It is a mistake to mark designs at a low figure, with the idea that the publisher will be more likely to take them. This is quite a wrong impression, as, if the publisher wants the designs, he will not be slow to make an offer if the price is too high; while, on the other hand, if they are not suitable for his purpose, he would not take them as a gift.

When sending designs, it is as well not to write long letters of explanation. Letters should be as brief and pointed as possible.

Apart from designing for publishers, the illuminator ought to be able to produce a series of hand-written Christmas cards. There ought to be a demand for cards well written in fine script on nice hand-made paper. A little simple decoration might be added in colour, and the modern illuminator ought to be able to produce these quite quickly, and therefore cheaply.

Designs for Programme and Progressive Whist Card.

Invitation cards for select parties are amongst numerous other things that suggest themselves for production in this manner. Of course, for large gatherings, where a good number of invitations are sent out, writing them by hand is out of the question. But when this is the case, one copy could be nicely written in black and a zinc line block made from this. The edition could then be printed off. An invitation card written in well-formed lettering would make a pleasant change from the usual type of card.

Possibly a number of other opportunities will suggest themselves where fine pen-formed lettering might be substituted in place of the ordinary style of thing.

Possibly a number of other opportunities will suggest themselves where fine pen-formed lettering might be substituted in place of the ordinary style of thing.

CHAPTER XXIII

LETTERING FOR COMMERCIAL PURPOSES

AN ATTRACTIVE ADVERTISEMENT.

By kind permission of
Messrs. Benn Bros, Ltd.

The ability to produce good lettering is of the utmost importance to the artist employed in commercial work. The list of things that require lettering seems almost endless. To mention just a few, there are posters, catalogue covers, showcards, labels, boxes, packages, displayed advertisements, calendars, title-pages, book covers, magazine covers, letter headings, maps, diagrams, etc. This list might be extended considerably and yet not include all the many things for which lettering is absolutely necessary.

DESIGN FOR BOOKLET COVER.

By kind permission
of the House of Vanheems
and Messrs. Clarke
& Sherwell, Ltd.

In fact, when one begins to consider the number of things that require lettering of some description, one begins to realise how essential it is that the artist should be able to produce good and well-spaced lettering.

As mentioned before in an earlier chapter, there is nothing like having plenty of practice with the reed and quill pen to help the student towards ability to mass and arrange lettering in the best possible way. The difference between the lettering done by one who has had plenty of practice with the reed or quill, and one who has had no experience in this direction, is most noticeable. The one is able to design with words, while the other is concerned only with the shapes of the letters. To be able to produce well-arranged lettering it is necessary to be able to design with words, and familiarity with the reed or quill gives this facility better than any other training. No matter how the letters are formed afterwards, the experience gained in massing letters together in this way to form words will be found to be of great service.

The arrangement of letters to form words is of the utmost importance; in fact it might be said to be as essential a factor as the formation of the individual letters.

A well-arranged inscription often adds greatly to the finish of a drawing, and with the latter it often happens that it is incomplete without a heading or title of some description. But this, if badly done, may completely spoil the appearance of the drawing.
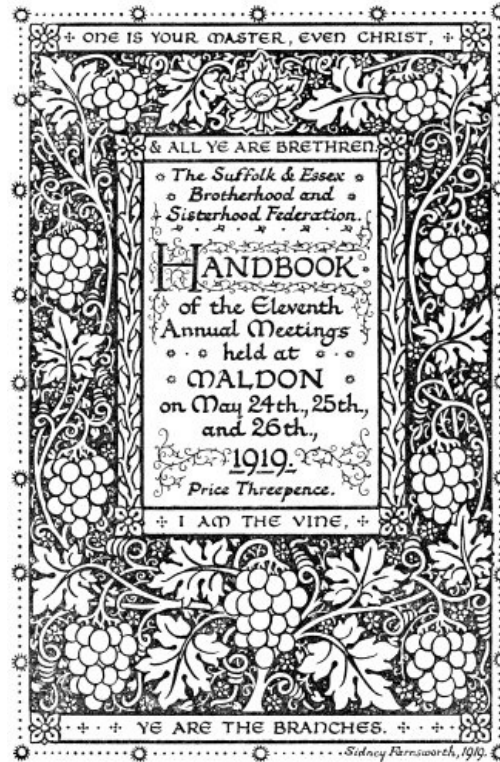
A Handbook Cover.

Maps and diagrams require a simple form of lettering that is distinct and at the same time can be written in a fairly quick manner. The style of Roman lettering, formed with simple pen-strokes, shown in a previous chapter, might be used for this purpose; or the simple pen-formed italics might be used. For writing these a sharply-cut quill pen is required.
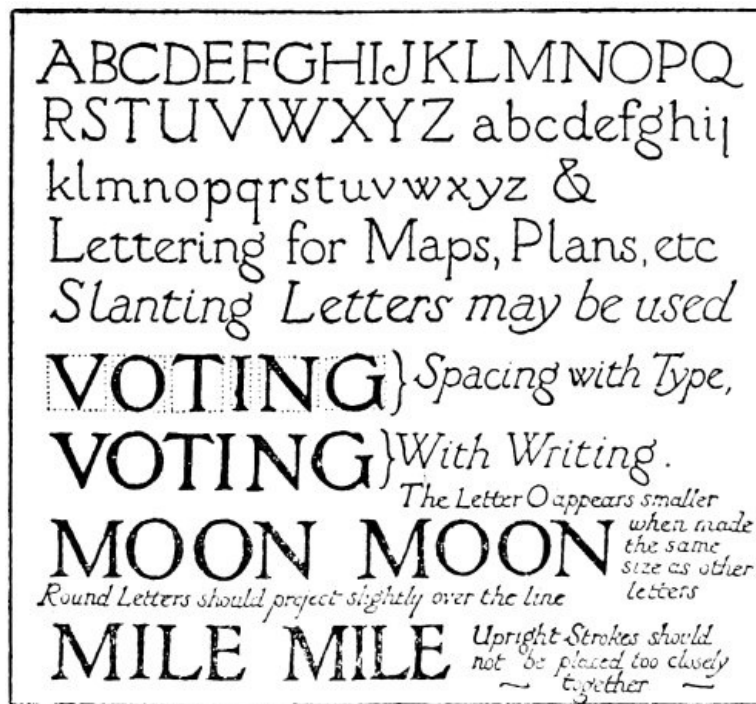
FIG. 37.

In Fig. 37 an alphabet is shown which is formed with all strokes of equal thickness. This is a very useful kind of lettering for illustrations, maps, and diagrams. It has one distinct advantage: that is, it can be written with the same pen that the drawing is made with. If this style of lettering is used, however, it is as well to make sure that all the strokes are of equal thickness. It should not look like quill-pen writing badly done. This type of lettering may be upright or slanting. Until the student is quite familiar with this lettering two lines may be used. The writing should be done very carefully and the words should be well spaced. This kind of lettering should be used only for names on maps, notes on diagrams, or references under illustrations. When a title is needed for an illustration, or a heading is required, carefully-drawn Roman lettering should be used. Each letter should be exact in finish, and at the same time there should be good arrangement.

For poster work it is essential that the lettering should be bold and decisive. For hand-written posters, that need to be produced quickly, the Roman alphabet, formed with simple pen-strokes, given in a previous chapter, will be found useful. A large reed pen should be used for this purpose. By using red and black inks very effective hand-written notices may be produced. If the poster is to be displayed out-of-doors, waterproof inks only should be used for writing it with. However, this will be dealt with in the next chapter.

A Design for a Certificate.

BY SIDNEY FARNSWORTH.

*By kind permission of the
National Institute for the Blind,
and the Byron Studios.*

For lettering on a poster that is to be reproduced, a good strong Roman type of lettering is the best. The type shown in Fig. 38 is a very suitable kind. It must be strong, bold, and well displayed. The principal words must show up strongly defined. For this, and, indeed, all kinds of commercial design, the lettering must be firm and exact to a nicety. The looseness that is suited to illumination will not do for this kind of work. The little accidental turns and twists, which are one of the charms of illuminated work, would be entirely out of place in commercial work, which must be firm and strong in every detail. Penscript is not used to any large extent. The greater part of the lettering used in commercial design is carefully drawn in an extremely accurate manner.

Fig. 38.

When lettering a poster, some endeavour should be made to get a certain amount of display in the lettering. For example, if the object is to advertise "Brown's Tea," or "Smith's Cocoa," great prominence must be given to

these words. The lettering should be so arranged that it is practically impossible to avoid seeing the name of the commodity that is being advertised.

Two Designs for Labels.

Another important thing when lettering advertisements is to see that each letter is quite distinct. For example, C must not be mistaken for a G, and *vice versâ*.

For good arrangement in lettering the mistake should not be made of taking type as a model, as, owing to each type letter being in the form of a block, it is impossible to space it with the same facility that is possible with writing. Note the examples given in [Fig. 22].
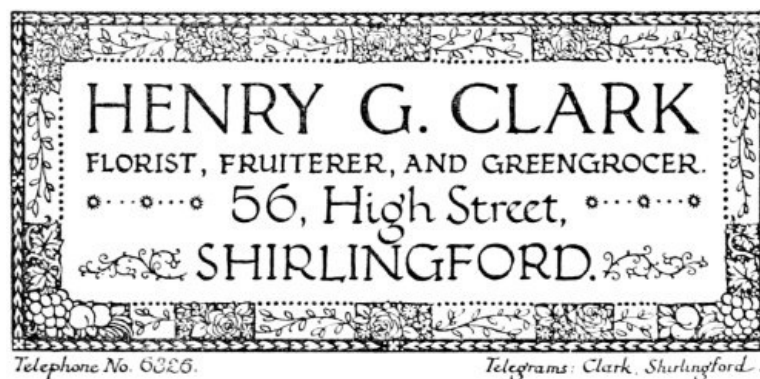
A Design for a Letter Heading.

One or two further hints may be useful. It is never advisable to put two upright strokes too closely together. Also in the case of round letters, such as O, C, G, etc., these should project slightly over the line, otherwise they will appear smaller than the other letters. This should, however, be very slight, as it is easy to overdo this kind of thing.

When lettering a diagram, if possible keep all the lettering the same way, so that there is no need to turn the page round to read it. This is, of course, not always possible, but if it is at all practicable it is quite the best thing to do.

It is never wise to jumble a number of different styles of lettering together in one inscription, as is sometimes done. The practice of this kind of thing tends to make the lettering less readable, besides making it look somewhat freakish. Sometimes the use of two styles of lettering together, such as an upright form of Roman lettering and an italic, helps to emphasize certain words; but when a variety of different forms is used the only result is to make the lettering look confused.

For the greater part of commercial work a form of Roman lettering is used. The student who intends to practise this kind of work should study some of the best modern work. He will have no difficulty in getting plenty of examples.

When designing a cover for a magazine, one of the first things to be taken into consideration is how to make it stand out in a striking manner so that it will be noticed on the bookstall.

A Design for a Music-cover.

Designs for magazine covers may be roughly divided into two classes, *viz.*, those which occupy the whole of the cover, and those where the design is in the form of a heading. In any case, however, it is best that the title should be prominently arranged at the top of the cover, so that it can readily be seen when the magazine is placed on the bookstall, and is generally in that position partly covered through other magazines and books overlapping it. The great thing to remember is that the object of each design for a magazine cover should be to make it stand out distinct from all the other magazines on the stall, so that it can be recognised in an instant.

A Design for a Bookplate.

One important piece of advice in this kind of work is to avoid making the lettering look freakish by forming some of the letters quite tiny and others excessively large in the same word. This is one of the most prominent signs of the amateur.

CHAPTER XXIV

HAND-WRITTEN POSTERS, ETC.

It is very useful at times to be able to produce quickly a hand-written poster. It is not always desirable to have printed ones, especially when one or two copies are all that are required, and a hand-written poster can be very effective even if it is produced hurriedly. It is, however, very essential that these should be written as quickly as possible, as the price that the writer would have to charge for a poster that he had spent a whole day in writing would make it quite prohibitive. Therefore speed of production is an important factor that must be considered in connection with the hand-written poster.

It is well to remember that a poster must attract attention. Unless there is something arresting about it, comparatively few people will stop and read it, however well it may be written. Of course all posters do not depend upon the lettering alone to attract, but in any case the lettering should be distinct and prominent. However, the type of poster described here is composed of lettering alone, and so depends entirely on the display of this to catch the eye.

An Attractive Piece of Lettering.

By kind permission of Messrs. Marshall & Snelgrove, Ltd.

A poster that is written comparatively badly may attract attention much more than one that is written well but without any display, because the badly-written poster may have something striking about it that compels attention. The thing to aim at is to make the poster prominent without annoying people by offending their artistic susceptibilities.
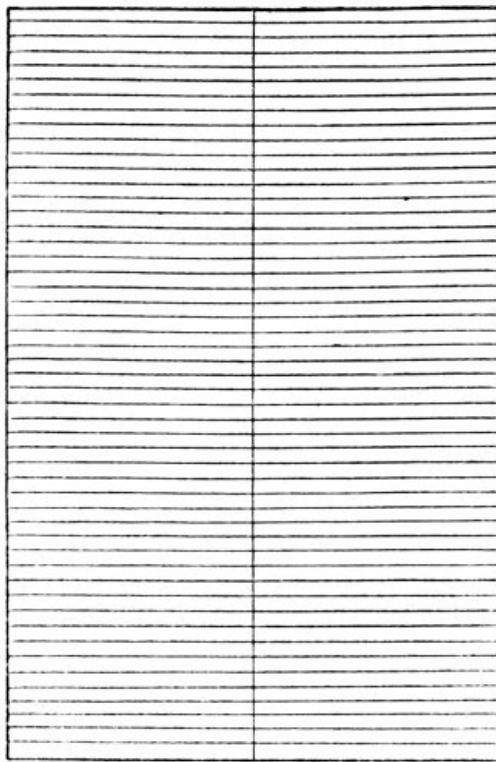
FIG. 39.

The following is a good method of quickly writing a poster. A sheet of paper is ruled, in the manner shown in Fig. 39, with a soft black-lead pencil. The lines should be ruled lightly and fairly closely together. If the poster is to be written on thin paper, it is not a bad plan to rule these lines boldly in ink on another sheet, so that if this is placed under the paper upon which the poster is to be written these lines will show through quite plainly enough to act as a guide to the writer. It is a good practice to have a number of sheets of various sizes ruled out, so that when a poster is required of a given size one of these can be utilised and the poster written quickly.

The lettering may be roughly sketched in either with a soft black-lead pencil or a piece of charcoal. It may then be written straight away with the pen or brush. When the lettering is quite dry the pencil-marks may be cleaned off with bread or soft rubber, or if charcoal has been used this may be dusted off quite easily; the poster is then complete.

As is plainly obvious, the poster shown in Fig. 40 is produced by means of the pen. The best type of pen for poster-writing is undoubtedly the reed pen, especially if the writing is needed to be fairly large. When this form of pen is used it is advisable to cut it with a fairly long slit; this will ensure the pen working much easier.

When writing with black and red inks, one pen should be kept for black and the other for red. If this is not done, the pen should be carefully washed after it has been used for black ink before using red ink, otherwise the black left in the pen will mix with the red and make the colour dirty. Undoubtedly the best way is, as already mentioned, to use a separate pen for each colour.

FIG. 40.

As most posters have to be exposed to the weather it is well to use only fixed inks. Fixed inks are generally prepared by being mixed with shellac which is dissolved in a solution of borax. Ordinary water-colours may, however, be made waterproof quite easily by the following method. A saturated solution is made of some bichromate of potash, and a few drops of this solution are added to the colour just before using it. As this chemical makes a bright orange solution it will alter some colours slightly, but for blacks and reds it will not be noticeable. This chemical has the property of making glue, size, or gum insoluble when it is mixed with them, after exposure to the light, and, as water-colours are mixed with gum, it has the same effect in this case. If, therefore, the poster be exposed to the light of the sun for a short period after it has been written, the colour quickly becomes insoluble and therefore waterproof. The best way is to mix as much colour as will be required in a small saucer, adding the bichromate solution. It is quite easy to understand that if any of this colour dries in the saucer it will have to be thrown away, as the light quickly affects it when dry and it will be quite useless owing to its insolubility. Possibly it will be noticed that a yellow stain will show on the back of the poster when the bichromate has penetrated. As, however, in this case one side only of the paper is used, this will not matter in the least.

Larger posters may be written with the brush (see Fig. 41), or partly with the pen and partly with the brush. A brush that is very suitable for quick writing is a Japanese brush like the one illustrated in Fig. 41. This can be used almost in the same manner as the pen, and it is possible to write very quickly with it.

A
CONCERT
will be held in the
TOWN HALL
on
Wednesday, June 24th.

Doors open at 7.30 p.m.
To commence at

8 p.m.

PROCEEDS IN AID
OF THE HOSPITAL.
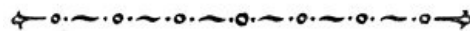
Japanese Brush.

Fig. 41.

THE CHINTZ LUNCHEON ROOMS.

SOUP
Thick Ox Tail .... 6d.

FISH
Fried Sole 1/6
Fillet of Plaice ... 1/3

ENTREES
x Egg Cutlet .... 9d.
x Chicken Cutlet 1/-
Ham Omelet 1/6
Cheese Omelet .. 1/6
Savoury Omelet ... 1/6
Poached Eggs 1/3
Scrambled Eggs ... 1/3
Mutton Cutlets ... 1/9
Devilled Chicken .. 2/-
x Currie Madras ... 1/6
Braised Tongue and
...... Spinach 1/6
x _____
x _____
x _____

x These are ready

ROAST
x Mutton 1/3
x Beef 1/3
x _____
x _____

GRILL (15 Min.)
Fillet of Beef 1/6
Mutton Chop 1/6
Thick Cutlet 1/6
_____

COLD
x Ham, Tongue 1/3
x Fowl 1/6 2/-
x Roast Beef 1/3
x Roast Mutton 1/3

VEGETABLES
Potatoes .... 4d.
Spinach ...... 4d.

Potato Salad .... 4d.
Mixed Salad .... 6d.

SWEETS
x Caramel Pudding .. 6d.
x Apple Tart ...... 6d.
Sweet Omelet 1/6
x Cream Meringue .. 6d.
x Fruit Salad and ...
.. Devonshire Cream 7d.
x Peach and Cream .. 7d.
Rice Pudding .... 4d.

SAVOURIES
Sardines on Toast .. 1/-
Scotch Woodcock .. 1/-
Bombay Toast ... 1/-
Ham Toast 1/-
Tongue Toast 1/-

BEVERAGES·
Tea (China or Ceylon) 5d.
Coffee .... 6d.
Chocolate ...... 6d.
Cocoa ...... 6d.
Lemon Squash ... 6d.
Ginger Beer, Ginger Ale 4d.
Horlick Malted Milk 6d.

SUNDRIES
Sandwiches ..... 2d.
Biscuits ...... 3d.
Roll and Butter .. 2d.
Cheese .... 2d.
Bath Bun ..... 2d.
Cream Bun .... 3d.
Pastries ...... 3d.

TABLE D'HOTEL LUNCH 3/-
(Soup, Fish, Joint, Sweet.)

We shall appreciate it if you will kindly refrain from
offering a gratuity to the waitress.

DESIGN FOR A MENU.

*By kind permission
of Messrs. Marshall
& Snelgrove, Ltd.*

For very careful writing the best brush is the kind known as a sable writer. This is a sable brush with rather long hair. Practice is necessary before the student becomes expert in the use of it, but it will be found that the long sweeping curves of the round letters, as also the straight strokes of the other letters, may be formed much more easily with this type of brush than with the ordinary kind used for painting.

Writers are generally in quills, so perhaps a word may be useful here with regard to the method of fixing a quill brush on a handle. It is not wise to take the quill as it comes from the shop and push it on to a stick. The quill is very liable to split if pushed on too tightly, while, on the other hand, if it is not fixed securely it will drop off, probably whilst doing some important work, and will almost certainly spoil it if it falls off when well charged with colour. The proper way to fix a quill brush is, first of all, to soak the brush well until the quill becomes quite soft. The stick is then carefully tapered with a sharp knife until it exactly fits the quill. Then, while the quill is still soft, it is carefully fitted on to the stick. The result of this method is that when the quill gets dry and hard it will be found to be fitted quite tightly on to the stick, and will certainly not fall off; while, at the same time, there is no danger of splitting the quill.

When writing posters in black and red, the red should be used to give emphasis to words that are important.

For example, in the specimen shown, the word "CONCERT" may be in red; also the place, date, and time may well be written in this colour to make them more conspicuous. A simple border may be added composed of some slight decoration formed with direct brush strokes if so desired. This may be either in one or two colours.
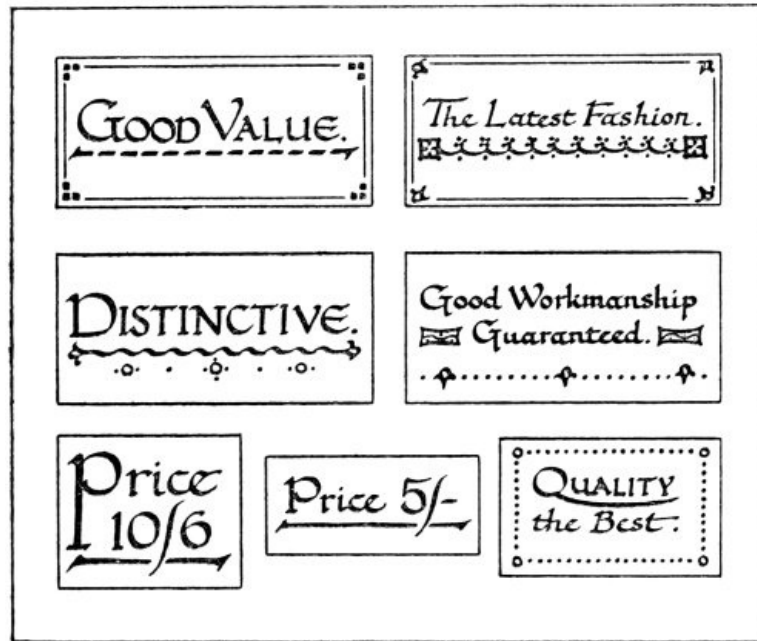
Fig. 42.

Large notices that are required to be lasting may be written on canvas, using oil-colours.

Some examples of window-tickets are shown in Fig. 42. These may be written with the quill pen. The use of black and red is very effective for these, but any colours may be used. It might be a good idea to write a quantity of tickets according to a special colour scheme for a particular window display. This, however, could best be done by working in conjunction with the one who is responsible for dressing the window. Some tickets might be written in white on a dark background. It will be found that, for use in the pen, colours that have been mixed with gum and water without any addition of honey or glycerine will flow much better than ordinary water-colours. When these are used they tend to clog the pen. There is no necessity in this case to fix the colours as they will not be exposed to the weather, so therefore will not need to be waterproof.
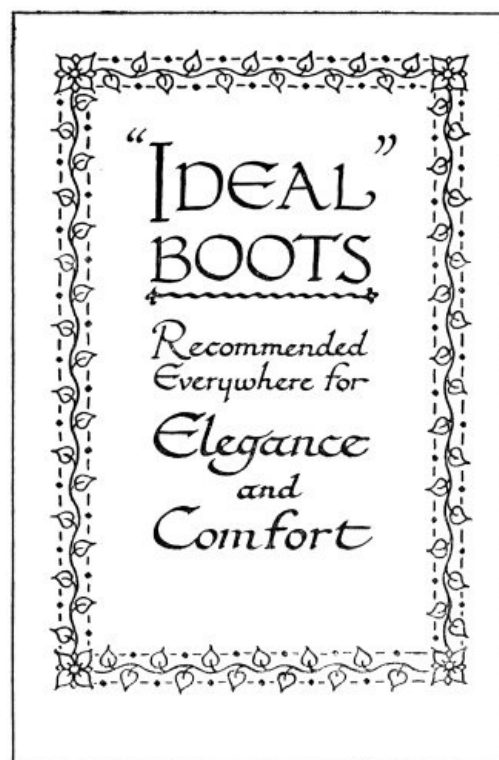
Fig. 43.

If the student has become familiar with the use of the quill pen he should be able to write these fairly quickly

and therefore cheaply. The use of simple decoration formed with the same pen that the lettering has been done with may be employed, but this should not be overdone.

In an example is given of a show-card that has been written with the pen in a simple, straightforward fashion. A simple border has been added which may be quickly and easily formed with the pen or brush. For writing small show-cards the quill pen may be used, but for larger ones the reed pen will be more serviceable.

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CHAPTER XXV

THE ILLUMINATED MS. BOOK

In the Middle Ages the illuminated MS. book occupied a very prominent position. The printing-press was not then in existence, so the manuscript book was without a rival. To-day the printing-press is to the forefront and the manuscript book is practically unheard of. There is, nevertheless, no reason why the art of illumination should not be practised in the same manner as was formerly the case. It is true that beautiful books are produced by the printer, but there ought also to be a demand for books beautiful, written and illuminated by artists of the present day. An illuminated manuscript has many advantages over the printed book, one of which is the fact that it is unique instead of being one of many. There is no need to enumerate the many other advantages that the manuscript book possesses.

The best material upon which to write a manuscript book is undoubtedly vellum, although fine hand-made paper may be substituted if it is not desirable to go to the expense of procuring vellum for this purpose. A paper that is soft and flexible should be selected in preference to one that is hard and stiff. Anything approaching cardboard should be avoided.
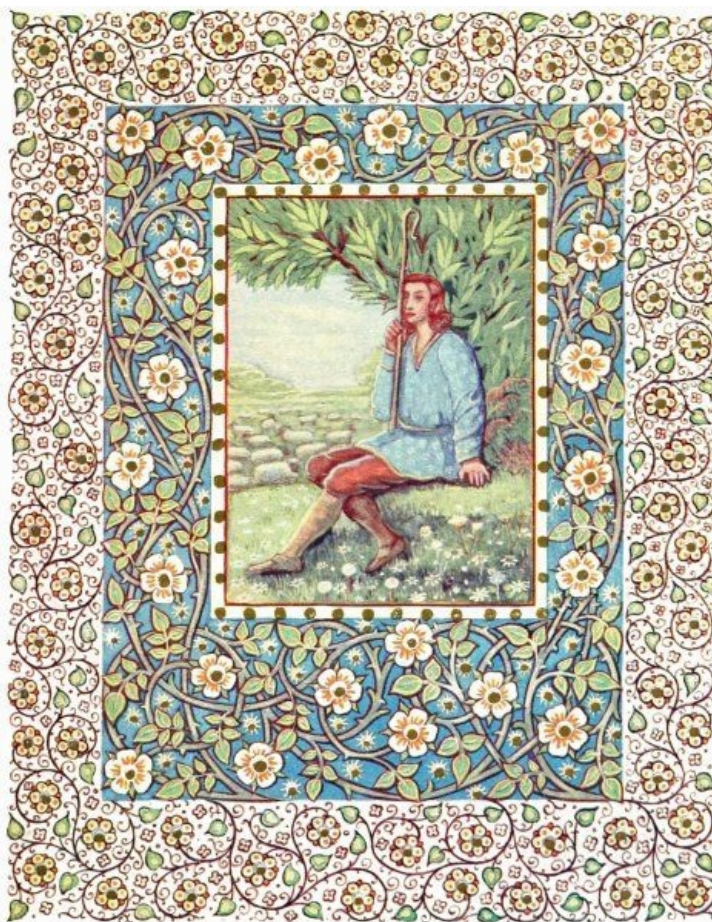
FRONTISPIECE OF ILLUMINATED MS. OF BLAKE'S "SONGS OF INNOCENCE."
BY SIDNEY FARNSWORTH.

The first thing to decide in writing a manuscript book is the size of the page. After this is settled, the size of the lettering should be taken into consideration. If the manuscript is to be on vellum this should be bought ready cut to the size required. It is much cheaper to buy vellum in this way than to buy the skin and cut it for oneself. The reason for this is because the manufacturer can cut up a more or less imperfect skin into small pieces, but when a whole skin is required this must be perfect in every respect.

The best vellum for manuscript books is the kind known as Roman vellum, a very soft and flexible kind of vellum. For title-pages, and any other pages which are likely to be covered with elaborate work, a slightly heavier vellum may be advisable.

For general purposes a good size for the page is 10 in. by 7½ in., *i.e.*, the vellum sheets should be cut 10 in. by 15 in. It is as well to leave a slight margin for drawing-pins in addition to this. One of these sheets should be ruled out, as shown in (*a*), Fig. 44, with a sharply-pointed H.B. pencil. The lines should be ruled very lightly so that they may be erased with the slightest possible touch of the rubber. After one sheet has been carefully ruled out in this manner, the others can be marked out in a similar fashion by pricking through.

Manuscript books are generally written in eight-page sections, formed by folding one sheet within the other, as in (*b*).

The proportion of the margins may vary according to circumstances, but it is best to make them fairly wide. The inside margin is made smaller than the outside one, because the two inner margins come together, thus forming a wide margin between the two pages of lettering. It should, however, be made wider than half the size of the outside margin, to allow for the folding of the leaves when the book is bound. A good arrangement for the commencement of a MS. book is shown in Fig. 44 (*b*), (*c*), or (*d*). The title is written on page 1. Pages 2 and 3 are blanks. The frontispiece and title-page occupy pages 4 and 5. Page 6 is another blank, and the manuscript starts on page 7. The title may be written simply in red, or red and black. This should not be written quite in the centre of the page, a larger space should be left at the bottom, as if this is equal with the top it will look as if a larger space had been left at the top.
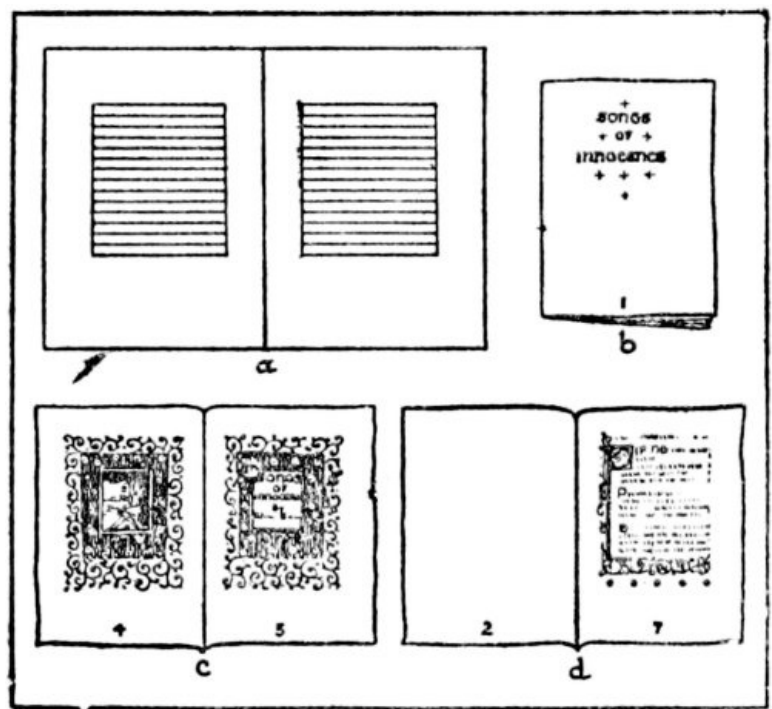
FIG. 44.

For the frontispiece a miniature may be used, illustrating some passage in the book; or a coat-of-arms or some symbol may be worked in surrounded by decoration. The title-page should have the title and the author's name, but the artist should not put his name here. When he has finished the MS. he may write at the end a colophon, stating his name, and when and where the book was written. It is best when writing out the manuscript to leave the title-page and frontispiece until the rest of the matter has been written.
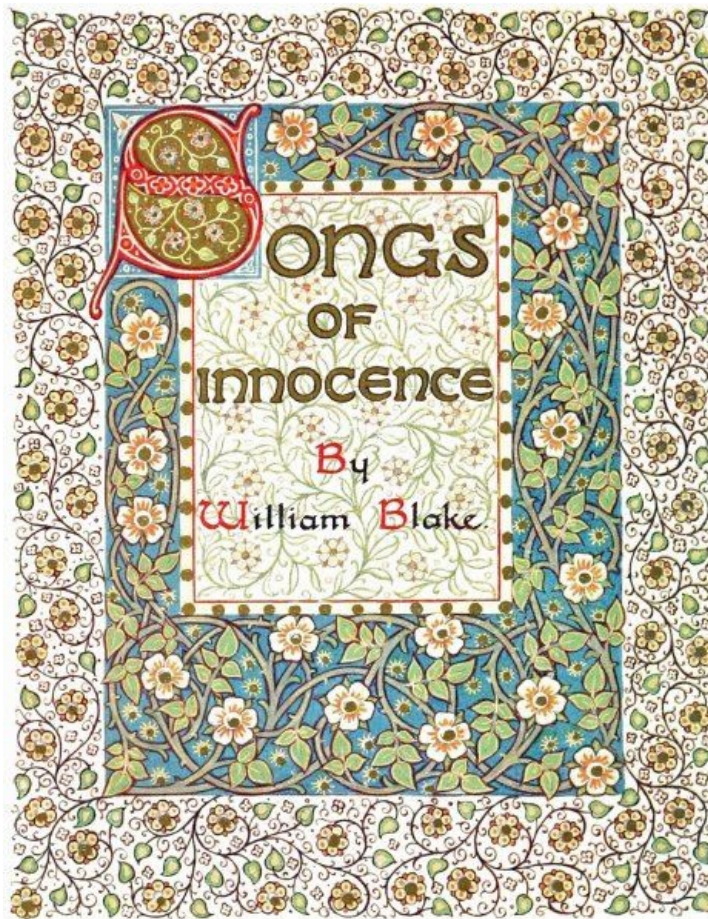
No elaborate planning of pages is necessary. A good number of pages should be ruled out with lines ready for writing, and the manuscript should be written straight away with the quill pen. Spaces are left for initial letters, miniatures, etc., as the writer feels they are fitting and necessary. The student should be very careful to write out the pages in the proper order, as it is very easy to make mistakes by writing on the wrong pages. For example, if he is not careful he is very liable, after having written the second page of a section, to go on writing on page 7, instead of page 3, which is on another sheet of vellum folded inside the first. A good method for avoiding this is to number the pages lightly in pencil with large figures at the head of each page.

When writing out the words, the vellum should be fastened to the drawing-board with drawing-pins, a pad formed with several sheets of blotting-paper being placed under the vellum to ensure easy writing. If possible, place the copy just above the writing level, where it can easily be seen.

If it is necessary to find out how many pages the manuscript is likely to run into, a rough calculation can easily be made by ruling out a sheet of paper and lightly pencilling in a page of the writing. It will then be an easy matter to count up the number of words to form an estimate of the number of pages required.

The student should always, before commencing to write, read through the matter and decide what initials he will have, also whether he will have any miniatures, etc. In fact, he ought to be able, before he commences work, to visualise the whole of the manuscript completed. If his mental image of the finished book is a grand one he will be inspired to do his utmost to make the actual one as much like the one in his imagination as possible.

After the writing has been done, the initial letters, borders, etc., may be drawn lightly with pencil. After this, the next stage is the gilding. Before this is done, however, the vellum should be carefully fastened tightly to the drawing-board with a large number of drawing-pins to prevent it from cockling.

When the gold has been laid and burnished, the colouring is proceeded with, and the page is finished.

The colophon is written at the end, a blank page being left between it and the last page of writing. This should be in quite simple lettering without any ostentatious show of decoration. The wording may be as follows: "This book, written out by me —— in ——, for ——, was finished on the —— day of ——, Anno Domini, 19—."

Of course, there is no need to word the colophon always in this manner. This is merely a form suggested. In the case of a book where several have taken part in the work, mention should be made of this. It is not a bad plan also to include the name of the binder, in the event of the book being bound by a good craftsman. Some examples of colophons are shown in Fig. 45.

It is a mistake to make all the pages elaborate in style; in fact it is best to make the majority of them quite simple in treatment, with here and there one that is more ornate in character.

Fig. 45.

The writing is the principal thing in the book, therefore nothing must be added that will in any way detract from this. If the addition of decoration has this effect it would be much better to leave the writing quite plain. It is impossible to lay down any rules to govern the use of decoration in the manuscript book. It is largely a matter of feeling one's way. If the decoration is well-considered and suited to the words it will help, rather than detract from, the lettering.

It should be remembered that the primary object of a book is to be read. If the book fails in this respect it will also most certainly fail from the standpoint of beauty. One of the first essentials of anything that lays claim to beauty is that it shall serve its purpose. Therefore care should be taken that nothing be done that will, in any way, tend to make the book less readable.

The decoration should be strongly influenced by the subject-matter of the book. Some illuminators appear to have one idea only with regard to illumination. No matter what the words are, the same kind of decoration is used. They seem to make no distinction whether the subject is a mediæval romance or something quite modern. This is a great mistake, and shows a lack of thought and imagination on the part of the artist. The ideas expressed in the words should also be felt in the decoration; in fact, the book when completed should form one harmonious whole.

When miniatures are introduced these also should harmonise with the decoration. It is not advisable to make these resemble small water-colour paintings that have no connection with the rest of the ornament. On the other hand, these should not be drawn in too conventional a manner. They should be essentially decorative in treatment, and careful study from nature should prevent the student from making these too hard and rigid in character. Complete unity should run throughout all the work.

Two Pages from the Illuminated MS. of Blake's "Songs of Innocence."

BY SIDNEY FARNSWORTH.

Even in the writing itself it is possible to express something. For example, some prose looks best if written with a fairly heavy massed writing, whilst other of a lighter character seems to be best if written with the lettering less heavy and more loosely arranged. Poetry generally seems to require to be written with a lighter type of letter and with the lines of lettering wider apart. It is, however, not wise to lay down hard and fast rules with regard to this: one should be able to feel what is the best thing to do.

When writing the MS., and, indeed, right through every stage, absolute quiet is necessary to concentrate one's mind on the work. One should endeavour to give it one's undivided attention.

A test as to whether an artist has succeeded is to observe, when the book is shown to anyone, whether the words are noticed at all, or if the decoration only is admired without any apprehension as to what the words are about. If the latter is the case, then, to some extent, the artist has failed. A manuscript that has been illuminated

in the right spirit should enable the reader to understand and appreciate the words better.

After the MS. is completed it should be carefully bound by an experienced binder. It is as well to choose a good craftsman for this purpose, and one who has had some experience in binding manuscripts containing raised gold, as it is very easy for a binder to spoil the manuscript if he is not accustomed to handling work of this kind. To make the whole thing a success it is necessary that the binder should be an artist as well as the illuminator.

A simple method of binding MSS. in limp vellum, without special appliances, is described in the next chapter.

CHAPTER XXVI

A SIMPLE METHOD OF BINDING MSS.

The method of binding described in this chapter is not intended to take the place of proper binding in leather. However, it is sometimes useful to be able to put the MS. in a cover when it is not desirable or convenient to go to the expense of having the book bound in the usual way. Binding with stiff boards is an art that requires considerable experience as well as skilled training, but there is no reason why MSS. should not be bound in limp vellum in the manner described here. No special appliances are needed for this method, and the writer should be able to complete his MSS. by binding them without any difficulty if the directions given here are carefully followed.

Two additional sections of plain paper or vellum should be made, to serve as end-papers, one at each end of the book. If the MS. is on vellum, the end-papers should be of the same material, but if on paper the end-papers should be made of paper of the same kind as that used for the rest of the book.

Four strips of binder's vellum should then be cut, these being about 3/8 in. wide and four inches long. The sections should be knocked up quite squarely, and should be marked on the back with a soft black-lead pencil in the manner shown in Fig. 46, using a square to get the lines accurate. The sections should all be marked quite distinctly so that each section shows the divisions quite plainly. This gives the position of the four strips of vellum and the kettle-stitches at each end. The mark for the kettle-stitch should be about ½ in. from each end, although sometimes at the bottom a little more than this is allowed. The position of the vellum strips should be in the same proportion as given in Fig. 46.
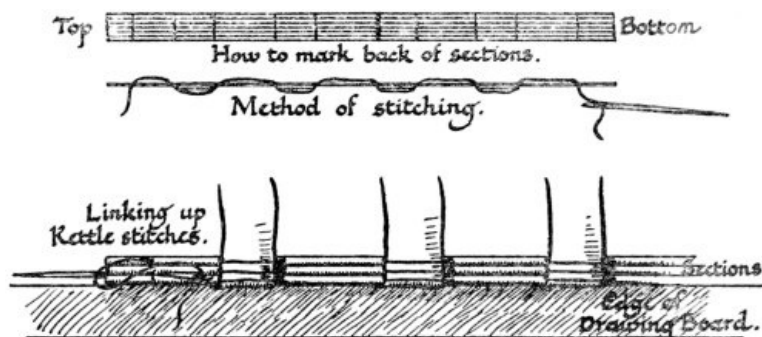
FIG. 46.

When ready to sew the sections, take the four vellum strips and fold each one about 1½ in. or 1¾ in. at right angles from each end, according to the thickness of the book. Then take a drawing-board and place on the edge of it the first section face downwards, with the four strips placed in position with their shorter ends underneath. Get a needle, threaded with good silk or unbleached thread, and insert it at the top kettle-stitch mark from the outside, bringing it out again at the first mark for the vellum strip. Bring the thread round the strip and re-insert the needle on the other side, bringing it out again and round the next strip, and so on until it comes out at the bottom kettle-stitch. When this is done it should have the effect, shown in Fig. 46, of a continuous thread passing in and out and round the vellum strips. Now take the next section and place it in position and sew in the same manner, continuing with the same thread but in the reverse manner. Upon coming to the loose end, where the needle was first inserted, this should be tied up with it. Then add another section, going backwards and forwards, adding section by section until the whole is completed. Each kettle-stitch is linked up as shown in Fig. 46, and it is a good plan also to link up the threads that cross over the vellum strips in the same manner.

To keep the sections in position while stitching, a small paper-weight is useful. The thread should be drawn fairly tightly, a fresh needleful of thread being tied on to the end of the other when it is exhausted, and when the stitching is completed the end should be carefully tied up with the last kettle-stitch. The back may then be covered with thin glue and lined with a piece of thin leather or tough paper, and the MS. is then ready for covering. (See Fig. 49.)

A piece of binding vellum is cut for the cover and marked with a folder on the underside, as shown in Fig. 47. The two lines marked down the centre represent the thickness of the sections. The two spaces on either side, exclusive of margins, should be slightly larger than the size of the sides of the book. The wide margin that extends all the way round may be approximately 1½ in., while the additional narrow margin on two sides may be ¼ in. in width. The corners should be cut along the dotted lines with a sharp knife.
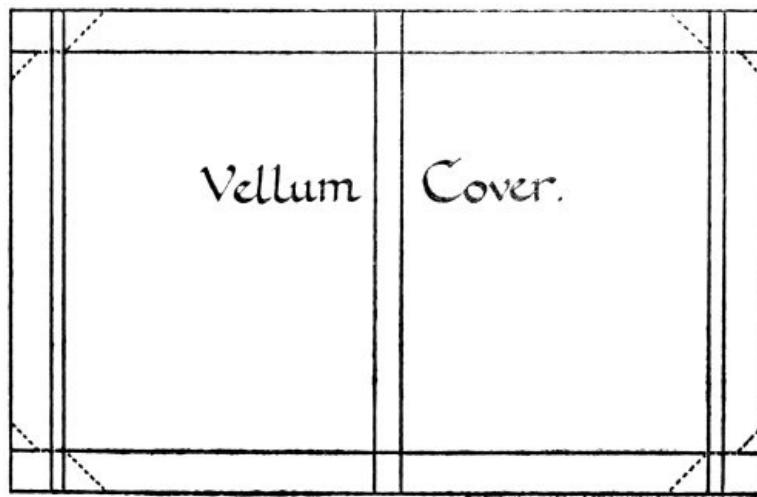
Vellum Cover

F<small>IG</small>. 47.

The cover is then folded up in the manner shown in <u>Fig. 48</u>. It is as well to stick the edges down with a little stiff quick-drying paste. The two narrow margins should be marked with the folder and folded over to form two flaps on the fore-edge of the book. All these folds should be made very carefully so as to ensure them being quite even. Some people find it best to make a cover of stiff paper first, and, when this fits correctly, they make the vellum cover exactly the same size. It is possible by this method to avoid spoiling the vellum through cutting it so that it does not fit.
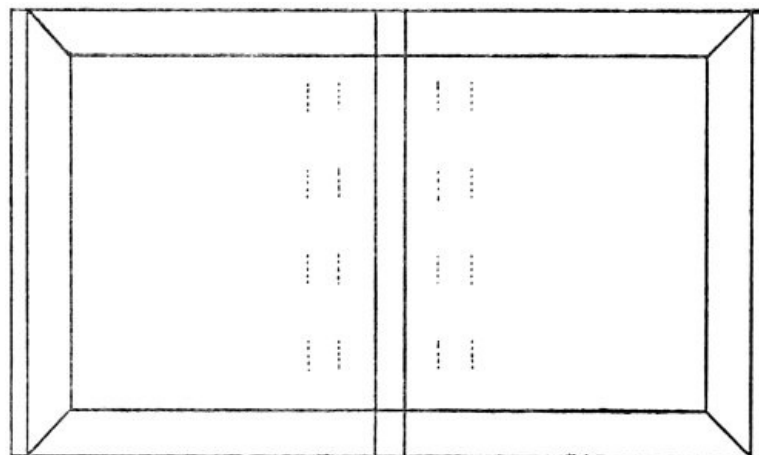
Cover ready for binding the MS.

F<small>IG</small>. 48.

The next thing to do is to mark the places on the inside of the cover for the vellum strips to be laced through. These should be made about ¾ in. from the creases of the back. Another mark should be made about 3/8 in. away from the first mark. If the book is now placed in the cover it will be quite an easy matter to mark exactly where the vellum strips intersect these lines, and slits may be cut with a sharp knife in the cover in the places marked with dotted lines in <u>Fig. 48</u>.

The vellum strips may now be laced through these slits and the ends stuck down with strong paste. Some pieces of good silk ribbon may be attached to the top and bottom strips and laced through the cover, leaving the ends to tie, or the book may be left without these.

The two outside end-papers may then be pasted down on to the inside of the vellum cover. This will cover up the ends of the vellum strips. It is, however, essential that for all this a quick-drying paste should be used and not one that is very liquid, as this would quickly strike through and cockle the vellum. The end-papers should be pasted down very neatly and then the book should be placed under pressure until it is quite dry. One or two heavy books make a very good press for this purpose.
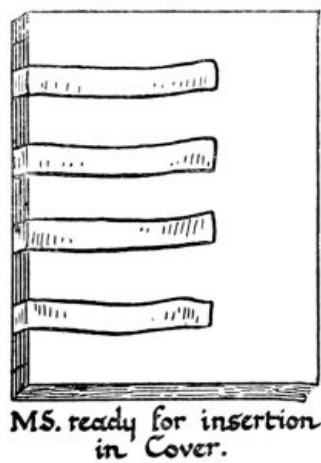
MS. ready for insertion
in Cover.

Finished Volume.

FIG. 49.

When the book is quite dry the decoration of the cover may be proceeded with. The title may be written on it with quite plain lettering or it may be decorated in a more elaborate fashion. It is better not to use raised gold, as it is very liable to get damaged on the cover of the book. However, some very good effects can be obtained with flat gilding. The vellum strips that are laced through the cover offer scope for decoration. If it is desirable to write the title on the back of the book it is better to do this before the book is bound, as it is rather a difficult matter to write here when the book has been bound.

If it is desired to do so, the cover may be made of thin card or stout paper in this way and then have a cover of vellum folded over it. If this is done, the vellum strips will, of course, be covered up on the outside, as well as the inside, of the cover.

Generally the books most suitable for this style of binding are small ones, although larger MSS. are sometimes bound in this way.

The same remarks that were made with regard to the style of decoration in the MS. itself apply equally here. The subject of the book must decide, to a large extent, what style of ornament is to be used. For example, a volume of modern poetry will require quite different treatment to that of a mediæval romance.

It ought to be possible for the illuminator to make some very charming little volumes in this manner.

CHAPTER XXVII

THE ILLUMINATION OF THE PRINTED BOOK

As already mentioned in an earlier chapter, some of the early printed books were enriched with fine illuminated initials, borders, etc. These books were printed with spaces left for the artist to insert these, and this seems to have often been the custom during the early days of printing.

There ought to be a demand for books produced in this manner in the present day, and the modern illuminator should be able to do good work in this way.

When it is intended to apply illumination to the printed book, it is well that the book selected should be worthy of being illuminated, both with regard to subject-matter and also the way in which it is printed. It should be beautifully printed on good paper. Some choice editions have been printed on vellum, but these are few and far between. However, if possible, the book selected should be printed on good hand-made paper. The illuminator should carefully avoid so-called "art" papers, which have a clay surface and are by no means durable, besides being far from ideal for working upon. The book should be printed from good type, with nice wide margins so as to leave plenty of scope for decoration.

Fɪɢ. 50.

Illuminating a book after it has been bound is a rather difficult matter, so it is better to procure the sheets, if possible, before they have been bound. It is much more convenient to work upon them when they are unbound, as each page in turn can be fastened to the drawing-board in the usual way. A good edition of any book can generally be obtained from the publishers in sheets if application is made. In the case where it is possible only to work on the book after it has been bound, it is best to tie the pages back with a piece of narrow tape in the manner shown in Fig. 50. A piece of stout cardboard is placed at the back of the book, and the book is tied to this by means of the tapes. This not only prevents the pages from turning over, but also precludes the possibility of the book accidentally closing.

One thing is extremely important in connection with the illumination of the printed book, and that is that the decoration should be in keeping with the modern type used in printing. The book should not look as if the text ought to be written in Gothic script. The illuminator must endeavour to preserve a feeling of unity about the book. If the book is illuminated like a thirteenth-century missal, the ordinary Roman type will look out of place. It is hardly necessary to add that Gothic initials should not be used, as they would be entirely out of keeping with the type. A good form of Roman capital may be used instead.

If illustrations in the form of full-page plates form part of the book they may be mounted on good stout hand-made paper and have the titles nicely written underneath. For writing the titles under illustrations a simple form of Roman script should be used, so as to be as much in keeping with the type as possible. It is not advisable to add any decoration to the page on which the illustration is mounted. The inscription alone is sufficient and should be nicely written in well-formed writing.

For the title-page of the book this may either be substituted by one entirely done by hand, or the printed one may be slightly decorated. It is best not to make this too elaborate, especially if the printed one is used. In fact it may be best to leave it practically plain, but this is a point that must be decided by one's own good taste.

The opening page may be made important by using a fine initial letter. By the use of body colours it is possible to paint this in on top of the printed letter. The first word, which is generally printed in capitals, may also be painted in the same way, either in gold or colours. The decoration should be suited to the subject-matter of the book and should not be carried to excess. It is much better for the decoration to be somewhat too simple in character than for it to look too ornate and crowded.

The decoration should be kept quite free in character and every endeavour should be made to prevent it from getting hard and severe. All the poetry and sweetness possible should be put into it.

Every page should not be covered with decoration; this should not be attempted. All the variety possible should be got by making some pages quite simple in treatment, others may be more elaborate, while some may

be left quite plain. Too many heavy borders should not be introduced.

The use of illuminated tail-pieces affords a good opportunity for the illuminator to add to the interest of the page, and there is generally plenty of scope for these at the end of chapters, etc.

Generally speaking, the printed book should not be used for illuminating when it is possible to write out the words, as a manuscript book is certainly preferable to a printed one. But in cases where a book is too long to be written out, the application of illumination to typography is certainly a great advantage if judiciously used.

At the end of the book the illuminator may add his colophon, stating that the illumination in the book was executed by himself, and giving the date of its completion and other interesting details.

A complete edition of the works of a favourite poet is a good example for illumination in this manner. It would take far too much time, as well as being too costly, for the modern illuminator to write out a large volume of poetry, but it might be nicely printed and illuminated in this way. By these means a beautiful book might be produced that ought to appeal to the lover of choice books.

Doubtless there will be many books that will suggest themselves for treatment in this manner, although it is to be feared that a great many of the books written in the present day are hardly suitable for illumination. No one would dream of illuminating a treatise on surgery to-day, and yet even this was done in the Middle Ages. There is in the British Museum an illuminated MS. of a French treatise on surgery of the thirteenth century which is quite charming in style. This kind of thing is, however, quite impossible to-day. Still, there is quite a large number of books that are suitable in every way for illumination.

Service books for use in churches may well be made subjects for decoration in the form suggested here. These alone ought to offer plenty of scope for the modern illuminator. A service book beautifully printed on fine hand-made paper and illuminated should form an ideal gift for a church.

A well-printed edition of a favourite author, illuminated with fine initials and borders, might occasionally be substituted for the usual illuminated address. This would probably be appreciated very much more than the ordinary type of testimonial which is generally given. In this case an inscription may be written at the commencement of the book giving particulars concerning the presentation.

CHAPTER XXVIII

PRINTED BOOK DECORATION

There ought to be plenty of scope for the modern illuminator in printed book decoration. His training in writing and illumination ought to be of the greatest service to him when he is called upon to produce decoration for the purpose of printing with type.

Without a doubt, the ideal form of printed decoration is that produced by means of wood-blocks that have been engraved by the artist. If he is able to engrave blocks from his own designs it will be possible for him to get much more human interest in his work. As a direct method of artistic expression wood-engraving has merits far above that of the mechanical methods of reproduction. Wood-engraving is, however, so important as to require a separate treatise, it being quite impossible to deal with it here.

By far the greater part of printed book decoration is produced from line process blocks, and it is with this form of reproduction that it is intended to deal in this chapter.

One of the most important parts of the book, from the point of view of decoration, is undoubtedly the title-page. In Fig. 51 some of the forms that this may take have been suggested. In making a design for reproduction by this process it is not advisable to make the drawing much larger than it is required to be when reproduced. The decoration loses much of its individual charm when it is reduced too much. A successful reproduction should represent the original drawing of the artist as nearly as possible, and if it is reduced a great deal there will probably be a considerable difference between the reproduction and the original.

Fig. 51.

In designing a title-page a great deal depends on the style of book it is intended for. A book on architecture or engineering would require quite different treatment from a volume of poetry.

A very simple form of title-page is suggested in Fig. 51 (*a*). This consists of nicely-arranged lettering with a printer's device or some symbolical ornament. If desired, the larger lettering may be drawn and the rest printed from good type well arranged. It is hardly necessary to add that the lettering should be in keeping with that used in the other part of the book.

A title-page with the lettering printed from type and suitable decoration added is a very satisfactory form.

The next one, shown in (*b*), is one where the lettering is enclosed within a border. This may be either quite simple or elaborate, as desired.

The style indicated in (*c*) is one in which the lettering is incorporated with the design. This is a form often employed for an elaborately decorated edition, such as a volume of poems.

The next one (*d*) is the pictorial type: nicely-arranged lettering with a picture in the centre. This may be either in line or colour, but generally it is in line, treated rather boldly. A woodcut illustration with red and black lettering makes a very effective title-page.

The last suggestion, given in (*e*), is for the double form of title-page. A good number of richly decorated volumes are of this form.

Another type that is often used is where the lettering is placed on a tablet, scroll, cartouche, or other ornamental device; or the page may be a combination of lettering, border, and illustration. Instead of a border that is rigidly defined it may have a border that is quite loose in character.

Possibly several other variations will suggest themselves to the artist.

Another important part of book decoration is the initial letter. As mentioned in the previous chapter on the illumination of the printed book, these should be of the Roman type. Gothic initials should never be employed with modern type. Above all, the initial letter should always be distinct. A puzzle is all right in its place, but this is not the place for it.

In some examples are given of bad forms for the student to avoid. It would have been easy to have filled quite a large number of pages with letters of this character. The letter A shown here is a type of initial that was very familiar in books about fifty years ago. Occasionally one sees it now, but not often. Most of these bad forms arise from a misconception as to the nature of the letter. A letter is simply a sign intended to convey a meaning to the reader; there is no reason why it should pretend to be something else. The sign may certainly be a thing of beauty, but surely making it look as if it is formed with branches like a rustic bridge is not making it beautiful.

Another bad type of letter is shown in the initial B. This form of letter is largely used by sign-writers even in the present day. In this case the letter is apparently conceived as a solid block, which is drawn in false perspective so that it may throw a meaningless shadow.
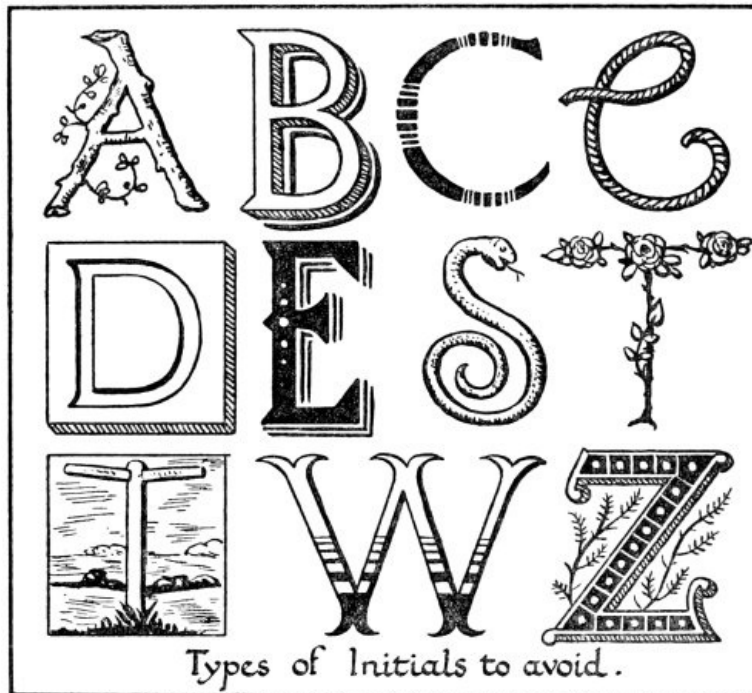
Types of Initials to avoid.

FIG. 52.

Sometimes the surface of the letter is broken up, as in the letter C. In the case of a stencilled letter, breaking the surface of the letter is, of course, unavoidable (although even in this case it would not be broken up like this example), but for a printed letter, where there is no necessity, it is extremely foolish.

The other C is another example sometimes seen, formed with a coil of rope.
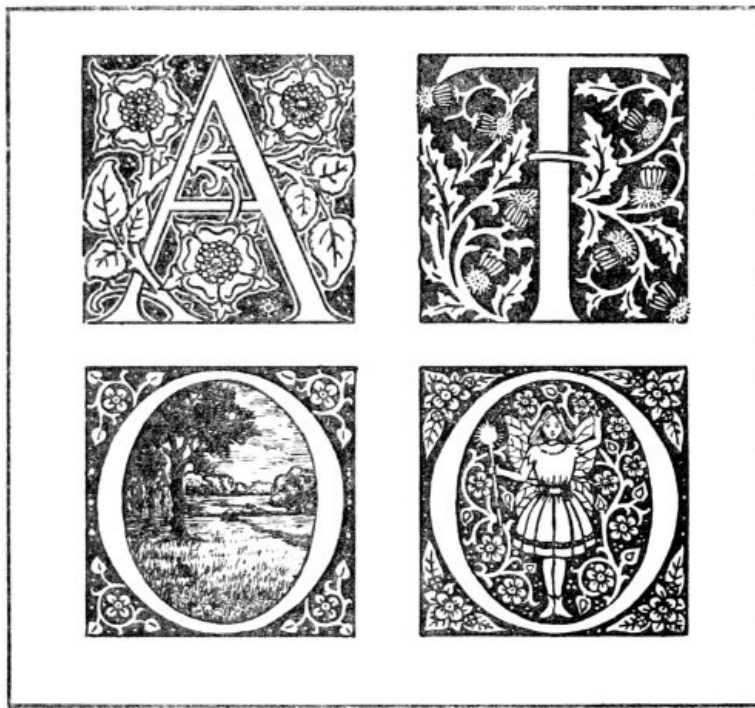
FIG. 53.

The other shapes are all equally bad, and no one with a training in really good forms of lettering could possibly originate them. They all practically err in the same direction, *i.e.*, in pretending to be something that they are not. It is curious that this tendency should so develop.

Another bad form of initial, not illustrated here, is that formed by contorting figures into shapes to represent various letters. All this sort of thing cannot be too severely censured.

It is far better to have initials quite simple in character rather than forms like these, which are absolutely debased in style. A fine form of Roman capital with little or no ornament added is much to be preferred.

In Fig. 53 some elaborate examples are given showing how it is possible to produce striking initials without resorting to any of the devices illustrated in Fig. 52.

The A and the T are examples of initials filled with decoration based on plant-form. This makes a very good style of letter.

One of the O's has a decorative landscape placed in the centre. Of course, only the round letters can be treated in this fashion.

The other letter O has a fanciful style of decoration very suitable for the commencement of a fairy tale. In fact this initial was designed for that purpose, the story commencing in the usual way, "Once upon a time."

In Fig. 54 some suggestions are given for tail-pieces which are used to fill up when a chapter ends half-way down the page. These may be of various shapes, such as triangular, rectangular, lozenge-shaped, or irregular. They may consist merely of decoration or they may embody the words, "The End," "Finis," "Conclusion," or "Here ends the story of——."

A small decorative scene may be employed as suggested here. Another way often used, and also indicated here, is for the lettering to be separate, with a band of ornament beneath it.

Borders for illustrations should be in keeping with the style of the illustration.

Fig. 54.

Chapter headings may be either well-arranged lettering enclosed within a border, or the lettering may be placed on a scroll, cartouche, etc. Another form may be that in which a picture is incorporated with the decoration. Generally, chapter-headings are used more in magazines than in books. If one is designed for a special page in a magazine it should be definitely for that particular page.

When making a design that is to be reproduced in two colours, in which both colours are distinct—*i.e.,* they do not overlap—the drawing should be made all in black. A sheet of tracing-paper is then pasted on the top edge at the back and folded over on the face of the drawing. The parts that are intended to be printed in the second colour should then be painted in with vermilion on the tracing-paper. This indicates to the block-maker the parts to cut out when making the blocks. The reason for doing this is because it is much easier to make the line-blocks from the drawing if it is all in black. Of course, this only applies when the two colours are quite distinct. When they overlap, the best way is to make two separate drawings in black. This can be done quite well by making a pencil drawing first, then painting in one colour in black on this drawing; the second colour is then painted on a piece of tracing-paper which is placed over this drawing for the time being. A small cross should be placed at each corner of the drawing and traced through on to the second one to act as register marks for the block-maker.

Generally speaking, all designs for book-decoration should be in line. The great disadvantage of the half-tone process is that the blocks cannot be printed well on a paper that has the slightest tendency towards being rough on the surface. The best results are undoubtedly produced when they are printed on art paper. Art paper is, however, far from durable, and should not be used for books that are required to be lasting. Apart from this, the half-tone process is not nearly so satisfactory as the line process. A good line block will give a fairly faithful reproduction of the original drawing without losing detail. This cannot be altogether claimed for the half-tone process. Three-colour process blocks, being a development of this, are open to the same objections. When the student has seen some of his work reproduced by these processes he will be able to appreciate the difference.

If colour is required in the decoration, a much more satisfactory form of colour reproduction is that produced from several line blocks, but, of course, if this process is used there must be no attempt at wash effects.

This chapter is intended to be merely suggestive of the developments in printed book-decoration that ought to be quite possible for the modern illuminator.

CHAPTER XXIX

CONCLUDING REMARKS

It may be as well again to emphasise the fact that it is imperative, if one desires to succeed in the art of illumination, that it should be taken up in a serious manner and not merely as a pleasant pastime. It is an art which is worthy of the best that time and careful study can give to it, and it may serve as useful a purpose in the present day as it has done in the past.

There is no royal road to success: this can only come through steadily plodding along the lines suggested. The methods of study that have been outlined in the previous chapters are the result of what the writer has learned in the hard but excellent school of experience.

Good, well-formed writing comes first and foremost, making use of the reed and quill pen in the formation of letters. The method of practice, commencing with simple pen-strokes, that is given in the early part of this book, ought to enable the student to produce good lettering if he works with the exercises in the manner suggested. After he has become familiar with the use of the pen in this way he will be able to study the various forms of lettering that were used in the past in a much more intelligent fashion than would be the case if he had no knowledge concerning the manner in which the letters were formed. He should continue this study on the lines suggested in [Chapter 6](#), and should not be content with the examples given here but should study the original manuscripts for himself.

Careful attention should be given to the way in which the lettering is arranged and the manner in which the letters and words are massed together. The student cannot have too much practice with the reed and quill pen.

The many good historical forms of Roman lettering should not be neglected. Roman lettering is, without doubt, the most useful form of lettering for general inscriptions, and it is necessary that the modern illuminator should be familiar with the beautiful forms of this style of lettering. He should note the general arrangement of these letters when used in inscriptions, etc. He will experience no difficulty in getting photographs of some of the important Latin inscriptions that were executed with letters of this style.

He should endeavour to form these letters in a direct manner with the pen and brush, and, if he has worked consistently with the quill and reed pen in the manner described, he will find that he will soon acquire dexterity in forming these letters. The practice that he gets through forming these letters with the brush will be most helpful to him when the time comes for him to make use of the brush for painting in decoration.

It is hoped that the very brief sketch that is given of the history of illumination may arouse some interest, so that the student will study this subject for himself, going into detail that is quite impossible here. Even if the whole of this volume had been devoted to the history of this art it would have been impossible in this limited space to deal with it in an efficient manner. The object of this short survey has been merely to act as an introduction to the study of this important subject.

Making use of a simple colour scheme such as red and black, as is suggested in [Chapter 12](#), is likely to act as an excellent training in taste. If the student starts straight away with a full array of colours, the chances are that the result may be anything but pleasant and agreeable. If he is able to produce good pattern with black and red, he will probably be able to do good work with gold and colours. However, if he cannot make good pattern with these, he will find it difficult to do it more successfully with less limited means.

The student will never regret the time spent in the study of the best work of the Middle Ages. By this means he is brought face to face with examples of the work of artists who were masters in this particular craft. The study of the best work that the mediæval artists have produced, combined with plenty of study from nature, is, without doubt, the finest training that the modern illuminator could possibly have. One would hesitate to recommend the one without the other, as the general tendency of the illuminator who neglects nature study, going to ancient examples only, is to produce weak imitations of mediæval work. If this is the case, there can be no opportunity for real living art. On the other hand, if the study of the best work of the mediæval period is neglected, he loses the benefit that may be gained by a close study of the methods of working employed by the artists of the Middle Ages. The same problems that confront him were before the mediæval artist, and, although there is no necessity for him to produce imitation thirteenth-and fourteenth-century illumination, he is able to build on the foundation that these artists have laid and help to carry forward the traditions of the craft in the best way that he is able.

That there are abundant ways in the present day in which the modern illuminator may make use of his craft has been amply exemplified in the preceding pages. The work of the craftsman, of course, stands first and foremost, but it must be remembered that the machine has come to stay, and the artist must endeavour to realise something of the great possibilities that there are in this direction. Although the product of the machine can never equal that of handcraft, there is no reason why, if there is intelligent co-operation between the artist and the manufacturer, the greater part of the work produced should not be infinitely superior in character than is so often the case.

There are numerous ways in which the machine is employed in which it would be quite impossible adequately to deal with the matter from a craftsman's standpoint. To mention just one branch alone: Christmas cards and calendars. It would be quite impossible to do all these by hand, and yet it is certainly desirable that they should be done in the best possible taste and in as efficient a manner as possible. It is here that the opportunity for the properly trained artist arises, and, if he gives of his best workmanship, the finished production should be all the better through his influence.

This is surely a sufficient excuse for dealing with the various developments of illumination commercially.

Book decoration, both in connection with MS. book and the printed book, is, however, the thing most in keeping with the true spirit of illumination. Illumination seems to be bound up with book production, and, if the

modern collector could only see that a fine illuminated manuscript was a work of art as desirable as a picture for a permanent possession, there ought to be a fair demand for the work of the modern illuminator.

The illuminated MS. book is, without doubt, the ideal work for the illuminator, and it seems a pity that there should not be a greater demand than there is at the present time. Certainly an illuminated manuscript book, specially written, would be much better for a presentation than the average illuminated testimonial, and it would probably meet with far more appreciation.

No one would be so foolish as to wish to do away with the printed book, as this has now become a necessity, but surely the manuscript book should not be altogether a thing of the past!

Some people are of the opinion that it is a waste of time producing illuminated manuscripts in the present day. Still, is time ever wasted in producing beautiful workmanship? Surely not. The time spent in the production of any real work of art is never wasted.

Poetry, when mixed up with commercial matter and obviously printed by commercial methods, loses considerably because the surroundings are uncongenial. However, the illuminated manuscript enhances it by presenting it in an artistic form.

Probably nothing offers a better opportunity for the illuminator, as a subject for an illuminated volume, than poetry. The illuminated rendering seems to give it an extra quality. The antiquity of the illuminated book, and the fact that it was a means of presenting the romances of the Middle Ages, makes it the natural vehicle for the poetic message.

Its value for liturgical purposes is also of importance, and certainly it has been more generally used for this purpose than any other in the past. Probably the reason why it is so suited to this is owing to the conservative nature of liturgy demanding antique associations.

No doubt, like most other hand methods of production, the demand for this must necessarily be limited, as the modern craze for cheapness renders the price impossible to any large extent. Therefore it can never be expected to enter into competition with the printed book. Also printing has now become a separate art—at least, the style of lettering and decoration owes little or nothing to the illuminated manuscript as was the case with the earliest European printed books. The art of printing has, however, developed considerably since those times, and, the character now being totally different, consequently there is no reason why the printed book should be an imitation of the manuscript.

Illumination and printing should both develop along their special lines, the developments of both depending on the exigencies of the materials employed. Thus, in relation to the printed book, the printing process should be developed to get the best results possible.

Probably the ideal printed book would have the decoration printed from wood-blocks engraved by the artist himself. If the decoration and illustrations take the form of reproductions of drawings there can never be the same life and vitality as when the whole is the direct creation of the artist.

Of course, this is mentioned merely as an ideal of what the printed book should be. In practice, however, one is not always able to work up to this standard. Reproduction by means of line blocks is probably one of the best forms of process work that can be employed in book decoration.

Any peculiar qualities that the form of press or machine used is able to give should be used to advantage. The printer should seize every opportunity which occurs that may help to render his work more effective.

Although it is not desirable that the printer should imitate the work of the illuminator, there is certainly no reason why they should not work together as suggested in Chapter XXVII, the illuminator adding illuminated initials, borders, and other decoration so that the completed volume represents the work of the printer and the illuminator. This was often done in the early days of printing, and there is surely the possibility of good work being done in this way at the present time.

There certainly ought to be plenty of opportunities for the illuminator even in the present day. It is, however, of the utmost importance that he should be able to produce high-class workmanship. Weak, amateurish efforts have no commercial value. To attain perfection patient and sincere effort is required.

CHAPTER XXX

NOTES ON BOOKS

In this the closing chapter of this book it may be as well to suggest a few books that might be useful for further study. It is not intended, by any means, to give anything like a complete bibliography on this subject, but merely to refer to a few of the books that the writer has found to be of service to him. Some of the books mentioned may possibly be out of print, but copies may be seen in most of the larger public libraries.

The following books treat the subject of illumination broadly from the historical standpoint: *English Illuminated MSS.*, by Sir E. M. Thompson, *Illuminated MSS. in Classical and Mediæval Times*, by J. H. Middleton, and *Illuminated Manuscripts*, by J. A. Herbert. Another most useful book for the student is the *Historical Introduction to the Collection of Illuminated Letters and Borders in the National Art Library*, by John W. Bradley.

Reproductions of some of the illuminated MSS. in the British Museum have been published by the Museum authorities. *Illuminated Manuscripts in the British Museum*, by G. F. Warner, contains a series of plates beautifully reproduced in gold and colours. These give as nearly as possible in a reproduction some idea of what the originals are like. Three sets of fifty collotype plates, *Reproductions of Illuminated Manuscripts*, are also published of the illuminated MSS. in the British Museum. *A Guide to the Manuscripts* in the British Museum also contains a number of half-tone reproductions, and *The Catalogue of Illuminated Manuscripts, Part 2, Miniatures, Leaves, and Cuttings*, published by the authorities of the Victoria and Albert Museum, has a good number of illustrations. The series of excellent photographic facsimiles published by the Palæographical Society are also most useful for reference.

For students who wish to give special attention to the work of any particular schools of illumination, such as the Byzantine, Celtic, or Winchester Schools, the following books are recommended:

Byzantine School.—For a general history of Byzantine art, *Byzantine Art*, by O. M. Dalton, and *Manuel d'Art Byzantine*, by Ch. Diehl. Both of these writers deal with illuminated manuscripts as well as other branches of Byzantine art. For a work dealing exclusively with Byzantine MSS. the *Histoire de l'Art Byzantin considere ... dans le Miniatures*, by M. Kondakoff, may be recommended.

Celtic School.—*Early Christian Art in Ireland*, by Margaret M. Stokes, is a very useful book. Other helpful books are *The Fine Arts and Civilization of Ancient Ireland*, by Henry O'Niell, and *Celtic Art in Pagan and Christian Times*, by J. Romilly Allen. *An Enquiry into the Art of the Illuminated Manuscripts of the Middle Ages. I. Celtic Illuminated Manuscripts*, by Johann Adolf Bruun, deals with the Celtic MSS. in a fairly comprehensive manner. This book is illustrated with reproductions from some of the manuscripts referred to. *Facsimiles of the Miniatures and Ornaments of Anglo-Saxon and Irish Manuscripts*, by J. O. Westwood, contains a number of chromo-lithographic reproductions of these manuscripts. *The Book of Kells*, recently published by the publishers of *The Studio*, contains a large number of the pages and initials from this well-known manuscript which have been reproduced by means of the three-colour process. The Introduction to this volume has been written by Sir Edward Sullivan.

Winchester School.—An account of one of the most important manuscripts of this school, *viz.*, the famous Benedictional of Æthelwold, is given in Vol. I. of the *Bibliographical Decameron*, by Dr. Dibdin; also Dr. Waagen gives a description of it in Vol. III. of *Treasures of Art in Great Britain*. In Vol. XXIV. of the *Archælogia*, pages 1–117, there is also *A Dissertation on St. Æthelwold's Benedictional*, by John Gage Rokewood. This is illustrated with thirty-two plates of reproductions of the pages of this manuscript. The same writer gives, in pages 118–136, *A Description of a Benedictional or Pontifical, called Benedictionarius Roberti Archiepiscopi*. Thus two of the most famous of all the Winchester MSS. are here described in a most careful and painstaking fashion.

Lettering, especially in its application to illumination, is dealt with very thoroughly in *Writing and Illuminating and Lettering*, by Edward Johnston. This book is well illustrated with diagrams, and the instructions given on how to cut and use the reed and quill pen are very clear. It is a very useful book for the student. Other books on the subject of lettering that will be found to be of service are *Lettering in Ornament*, and *Alphabets, Old and New*, by Lewis F. Day, also *Alphabets*, by Edward F. Strange. For those who wish to study lettering from the standpoint of palæography, *Greek and Latin Palæography*, by Sir Edward Maunde Thompson, is a good introductory work on this subject.

The following books may be of interest to the student who is desirous of further information concerning the colours and methods of working employed by the mediæval artist: Mrs. Merrifield's *Ancient Practice of Painting*, the *Schedula Diversarum Artium* of Theophilus, and *The Book of the Art of Cennino Cennini*. Mrs. Merrifield's book contains a number of translations of the early manuscripts that describe the technical methods employed by the mediæval artists. The treatise of Theophilus has been translated into English by R. Hendrie, and the best translation of Cennini's book is that by Mrs. Herringham. *Materials of the Painter's Craft*, and *Processes, Pigments, and Vehicles*, by Dr. A. P. Laurie, are books that deal with this subject in a very interesting and helpful manner.

As the study of Heraldry is very important to the illuminator, the following books are mentioned: *Complete Guide to Heraldry*, by A. C. Fox-Davies, *English Heraldry*, by Charles Boutell, and *Heraldry*, by W. H. St. John Hope. *The Stall Plates of the Garter, 1348–1485*, also by W. H. St. John Hope.

Didron's Iconography of Christian Art, and *Emblems of the Saints*, by F. C. Husenbeth, are books that are most useful to the illuminator when doing work that is ecclesiastical in character.

*   *   *   *   *

The list of books that is detailed here is necessarily incomplete, but the student will find that by studying these he will be referred to others, and so will be able to continue the study.

Now then, you of noble mind, who are lovers of this good, come at once to art and adorn yourselves with this vesture,—namely, love, reverence, obedience, and perseverance. And as soon as thou canst, begin to put thyself under the guidance of the master to learn, and delay as long as thou mayest thy parting from the master.

+ CENNINO CENNINI +

INDEX

*** END OF THE PROJECT GUTENBERG EBOOK ILLUMINATION AND ITS DEVELOPMENT IN THE PRESENT DAY ***

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