Saxon, combining the Roman, Lombardic, and Saxon letters; and the elegant Saxon, which was introduced in the 10th century, and did not become obsolete until the middle of the 12th. The Norman tyle, quaint, illegible, affected, and composed of letters nearly Lombardic, came in with William the Conqueror.

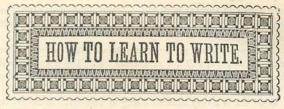
The modern Gothic dates in England from the 12th century; the old English, from the middle of the 14th. The English court had a barbarous corruption of the Norman, which was contrived by the lawyers of the 16th century, and lasted till the reign of George II., when it was abolished by law.

The utmost diversity exists among different nations in the manner or direction of writing; but in general the Semitic races wrote from right to left, and the Aryan from left to right.

In form ancient manuscripts were either rolls, volumnia, or flat pages like our printed books, codices. The Egyptian papyri are usually in rolls of an indefinite length, according to the subject matter, but some of the smaller ones are flat.

The transcripts of manuscripts were committed by the Greeks and Romans principally to slaves, who were esteemed of great value when they excelled in the art. There were also at Rome professional copyists, some of whom were women. About the 5th century, associations of scribes, who worked under stringent rules, were formed. In the middle ages copying was almost exclusively in the hands of ecclesiastics, who were called clerks, clerici. In the Imperial library at Vienna is a Roman calendar executed in the first half of the 4th century. In the Vatican there is a fragment of a Virgil of the 4th century. The most ancient manuscripts extant are the papyrus rolls from the tombs of Egypt, where the dryness of the climate and of the sand beneath which they were buried preserved them in an almost perfect condition for thousands of years.





EGIN with good paper, good pens, good ink.

In a good copy the letters should be of elegant form, and constructed on natural principles. Every letter should be as perfect as it is possible for human skill to execute, that wherever it occurs it may present an unvarying model to the pupil. The turns and slopes should be alike, the loops of the same length and width, the

the loops of the same length and width, the proper distances between the letters carefully ob-

served, and shade duly distributed.

Curlicues, flourishes, and ornamental capitals, may delight an amateur in a show-case; a thorough business man detests them in his correspondence. In a lady's writing they are simply vulgar.

The course of instruction given in the copies should constitute a system, arranged in that order of progression which is indicated by a careful analysis of the forms of the letters and of the powers of the human hand, so that each advance may prepare the way for the next, and the steps not be farther apart than the necessities of the case compel. To this end, the simpler forms should precede the more complex; the short, the long. Those that have similar curves and turns and identical parts should be together. Words should precede sentences. The columns should be first narrow, then broader, to accustom the hand by degrees to move easily on the given rests across the longest word. These columnar sections, intended to be written down, are the gradual preparation for the sentences, which occupy the width of the page. The selection of the words for the columns should be in accordance with the same principle of progressiveness,-first the easier, then the more difficult combinations. In them the loops should so occur that when the copy is written they may be handsomely distributed, and the general appearance of the page be

A good paper costs more, but it is indispensable. It should be tolerably thick, well laid, with a smooth surface, moderately glazed; so that the ink will not show through when dry, and that there may be no roughness or little hairs for the pen to pick up, and that the pen may glide along without jar on the muscles or nerves of the fingers and hand,—a very important consideration now that steel pens are used, as paralysis has in several instances resulted from their use, and their injurious effect must needs be greater on a rough surface. A white paper is generally to be preferred to a blue, indeed is almost invariably used.

The pen should be fine-pointed, so that a good hair-line can be made, and have a good springy nib, that the shades may be cleanly cut, and that the writing may not be rendered stiff, a result inevitably following the use of a "hard" pen. They should be of a uniform character as much as possible,—not one



very hard and another very soft. Slight differences cannot be avoided; those that vary least are the best, if they are right in other respects.

A new pen is often greasy, owing to a certain process in the manufacture, and will not retain the ink. Dip it and raise it from the ink slowly, then wipe it; repeat this two or three times and the trouble will be removed.

Good ink is a very difficult thing to procure. It should be sufficiently fluid to flow easily from the pen, dark enough to enable the pupil to see at the time what he is writing, and to judge of hair-strokes and shades. It must not evaporate rapidly from the inkstand, nor leave a layer of mud in it; neither should it mould. Frost should not affect it. Ink should stain the paper in order to be permanent. Its color when thoroughly dry should be a deep black, which neither time nor exposure to the sun can change.

Pupils will learn by experiment that, if they raise the pen from the ink suddenly, it will be too full, and apt to blot; if very slowly, the attraction of the fluid will leave none in the pen; and, therefore, a moderate motion must be used. One experiment is worth hours of talking. Attention to this will save many a blot. Cleanliness is as absolutely necessary for the well-being of the pen as for our own.

Pens should be carefully cleaned at the close of the exercise. Always dip and wipe a new pen two or three times before it is written with, or it will be very likely to make a blot. To avoid the same mishap, the pen should never be wiped on the outside of the pen-wiper, but always between the leaves of it. Should the pen-wiper then happen to get on the book, no damage will be done.

A stiff blotter will last the longest, but common blottingpaper, or a piece of newspaper, or any paper, will answer, not indeed for blotting, but for the use we now designate. The copy-book must be kept perfectly clean, and the blotter is to be used for that purpose. The right hand does not soil the book, for it rests on the nails of two fingers and only touches the page with them. It is the left hand that does the mischief. To obviate it, place the blotter so as to cover each column as soon as it is dry after being written, and rest the left hand on that, and not on the page.

Position, Rests, and Movements.

HE immediate human instrument in writing is the arm. It consists of three parts, the upperarm, the fore-arm, and the hand. The two connections of these are the elbow and wrist. The arm is attached to the body by the shoulderjoint. The position of the body must, thereevidently depend upon the use we wish to

fore, evidently depend upon the use we wish to make of the arm and hand. This use, then, must be determined first. Various ones have been advocated by different teachers. The three following are the most strongly distinguished; the others arise from combinations of two or more of them. First, considering the shoulder as a point of suspension, and moving the whole arm without any support and without any motion of the finger-joints. There are, however, very few who possess sufficient muscular strength and steadiness of nerve to write thus. It is the true movement for striking large capitals and flourishing. Secondly, resting the fore-arm near the elbow and on the nails of the third and fourth fingers, and forming the letters by its movement without any help from the pen-fingers. Thirdly, resting the fore-arm and hand as in the last, while the letters are formed by the movement of those fingers only which hold the pen. This generally leads to a feeble, constrained style.

There Must Be Freedom of Style .- This condition can only be fulfilled by keeping the arm free from all unnatural constraint. This precludes it from affording any support to the body. Again, the letters are to be written across the page on a horizontal line. A requirement of beauty is that this line should be straight. This is secured without much difficulty where the base is ruled. The only important thing is to keep on it. If, now, we take pen in hand, use the elbow, placed opposite the middle of the page, for a pivot, and move the hand across, we find that the arc of a circle is described, touching the base line in only two points. In the middle it rises a full half inch above the base line. This is a difficulty to be overcome. Once more, whilst mere form does not demand consideration here, because readiness in shaping letters can only be acquired by practice, yet uniformity of slope and similarity of turns, which are required, will evidently greatly depend upon the maintenance of the same relative position of the pen, hand, and fore-arm for each letter. If we now observe a little farther the movement above described, we find that in it the position of the hand in relation to each succeeding letter is changed, and assumes a new direction. How can this difficulty be overcome? Again, it is clear that we shall be able to write much faster, if the pen touches the paper lightly, than if it presses on it heavily: this also contributes greatly to freedom of style. Finally, in order to boldness of style, powerful muscles must, if possible, be brought into play in aid of the slight muscles of the fingers, while forming the letters. This would also help to prevent fatigue. To sum up, the essentials of the work to be done are: long continuance, freedom, forming the letters on a horizontal straight line across the page, uniformity of slope and similarity of turns, rapidity and boldness. The conditions we have found to be hereby imposed on the arm are: avoidance of unnatural constraint, relief of all unnecessary pressure, movement of the hand and fore-arm across the page with the same relative position to each letter, and counteraction of the curve arising from this movement, adequate support, and use of powerful muscles.

The Human Instrument.—A little in front of the elbow, at the thickest part of the fore-arm, we find a mass of muscle. If the arm is placed on the desk, suspended from the shoulder, and resting lightly on this mass as a support, we find an excellent ability for moving the fore-arm on it with freedom from left to right and back again, within a certain limited distance,



the muscle rolling under the arm. We will name this support the rolling rest. It is of the highest importance to observe the peculiar movement of the fore-arm on this rest. It is not to be so used as that, when the hand passes to the left, the elbow moves to the right, and vice versa. The fore-arm moves sideways as the muscle rolls under it, with sufficient play, when it is placed at right angles to the base line and opposite the middle of a word or short clause, to carry the hand across from one end of it to the other without changing its direction. Bending the wrist sideways to the right—a most cramping movement, and painful if frequently repeated—is thus rendered quite unnecessary, and should be carefully watched against.

By turning the third and fourth fingers under, so that the hand can rest on the corner of their nails, or, if preferred, on the little finger only, another support, like the runners of a sleigh, is provided, capable of moving freely over the paper. We name this the *sliding rest*. To avoid friction, the wrist should not touch the desk; by means of the two rests, it may easily and comfortably be kept a little raised.

These, then, we conceive to be the natural positions and rests,—namely, the right hand and fore-arm in the same straight line, at right angles to the line of writing, and opposite the middle of a long word or a clause of moderate length. The fore-arm is supported on the rolling rest, the hand on the sliding rest, and the wrist slightly raised.

The left fore-arm and hand are placed at right angles to the right fore-arm, with the fingers on the blotter, which covers the part already written, to steady the book, and move it when necessary. The left fore-arm is therefore in the direction of the line of writing.

What now are the movements of the right fore-arm and hand? On the rolling rest the whole fore-arm moves, so as always to be parallel to its first position, and carries with it the hand supported on the sliding rest. The rolling rest is stationary; the sliding rest glides along the paper on a horizontal line,—that is, parallel to the line of writing: this is its only movement. The whole fore-arm and hand move gradually to the right in this way, with a nearly continuous motion, for the formation of the successive letters, so that their relative position to every letter is the same. All stoppages of the nails and jerks to get the hand forward are to be absolutely forbidden. This movement of the hand is named the sliding movement; the movement of the fore-arm we have named the comital movement (Lat. comes, a companion), because it accompanies the hand.

Since the conatal movement is more or less limited, some further means must be found of keeping the fore-arm and hand in the right relative position to the letters. Two methods offer themselves to us for selection. One is, to draw the paper to the left as we write. The other, which we prefer, is, by means of a lift from the shoulder, to place the fore-arm and hand in a position farther to the right: this should be done only at the end of a word. To distinguish this movement, we have named it the lateral movement. In performing it, the hand slides as before. Experiment will now demonstrate that, by the adoption of the rolling rest and the lateral movement, the difficulty mentioned above, of the curve formed by the hand crossing the page, is entirely done away with.

For the attaining of Boldness of Style, the powerful muscles of the fore-arm must be brought into action by a slight play of the whole fore-arm forwards and backwards, in direction of the slope on the rolling rest, over the sliding rest,—fixed point, so far as this movement is concerned. This gives a full heft, through the medium of the hand, to the fingers which move the pen, and, as a consequence, boldness of style; just as a large and massive stone rolling down a hill maintains its course over considerable inequalities of surface, while the slightest obstacle diverts a small and light one. This play of the fore-arm we name the muscular movement. The resulting play of the hand, as the medium of its transmission to the penfingers, we name the medial movement.

We are now prepared to form a correct judgment as to the best position of the body for the accomplishing of these movements most naturally, and consequently with the least fatigue. It may be summed up in two words. The body must be upright and self-supported. Its relative position to the desk is a matter of comparative indifference; only, all the pupils should conform to one plan. Each position has its advantages and inconveniences. The simplest division of positions is twofold; the right side to the desk, and the face to the desk.

Where we adopt the former, we direct the pupil to turn on his seat, so that his right side may be directly to the desk without touching; the body to be erect, and supported by the spinal column; the left foot slightly advanced. The book is adjusted with the back to the front edge of the desk, and at a two-seated desk, the top edge of one at the outside edge of the desk, of the other in a line with the inkstand. When opened, the left side of the page to be written is to be placed at the edge of the desk. The left hand is brought across, and the fingers placed on the left side of the page to keep it steady. The right fore-arm is placed on the desk, parallel with the front edge. If necessary, from short-sightedness or bad adaptation of the height of the seats to the desks, the body may be inclined forward from the seat,-never by rounding the back and contracting the chest, -and the head may be bowed somewhat forward by bending the neck. The advantages of this plan of seating the scholars are: the perfectly natural position of the body; the freedom of the right arm from all avoidable weight, and its ability to form the movements required; the certainty that both rests are on the desk; and the facility with which the teacher can look down the files and along the lines in large classes, and see that every pen is rightly held, and every movement correctly made. An objection to this position is made on the ground that, in business, when using large account-books, it is impossible. We reply, that we adopt this position for learners, because it is very convenient for the teacher. When the art is acquired, the position becomes comparatively a matter of indifference.

Where we adopt the second method of seating, namely, the body fronting the desk fairly, or with more or less inclination of the right or left side to it, we take care of these two points: that both rests of the right fore-arm shall be on and be kept on the desk, and that the book is at right angles to the right fore-arm. The following troubles are apt to arise: A tendency to sprawl over the desk, and, as a necessary consequence, to press the chest against it,—a practice most injuri-

ous. The book gets turned from its proper position at right angles to the right fore-arm. When writing down a column, a habit we strongly commend for learners, the book must be continually pushed up, or the back rest of the arm will get more and more off the desk. Indeed, pupils are sometimes found actually resting the wrist on the front edge of the desk. On the other hand, this is often the only position the seats admit of; it is the position that must be adopted, when writing in large account-books; and there is no necessity that the above faults should prevail. They certainly will not under the care of a faithful teacher. We conclude, then, that the position of the body at the desk is matter of indifference, provided it is upright and self-supported.

The next point which claims our attention is the manner of holding the pen, and the movement of the pen-fingers. We have seen that the hand is supported on the sides of the nails of the third and fourth fingers. Their ends, being bent under, are separated from the others, and there is room for the execution of the pen-finger movements. The fingers should touch one another at the second joints, as far as the shape of the hand permits: this gives unity and support.

The pen is held by means of the thumb and the first and second fingers. Place the right extremity of the holder against the left side of the second finger just below the nail; the end of the finger will thus be above the pen. Next, adjust the holder obliquely across the left side of the third portion of the first finger, just behind the second joint, the middle finger being at the same time slightly bent. The first two portions of the forefinger may now be closed down on the holder, which will be found to cross and touch them diagonally. The first and second fingers touch throughout. Next, let the upper corner of the fleshy part of the thumb, near the nail, be placed, by slightly bending the thumb, against the lower half of the left side of the holder, opposite the first joint of the middle finger, and the pen will be found in a secure and natural position, both for extension and retraction. It will be observed that we have given the medium position of the pen. The fingers and thumb with the joints slightly bent outwards, straightening them would extend the pen; bending them still more would retract it. The pen is really held between three points,-the side of the end of the second finger, the side of the third portion of the first finger behind the second joint in front of the knuckle, and the side of the end of the thumb. The first finger is like the lid of a box placed on it to keep the pen from jumping out; it is also the principal agent in effecting the pressure for the shades. As to movement, the thumb may be regarded as a spring. The first and second fingers, by contraction of their muscles, press against it; we relax its muscles, and it yields by bending: thus the downward strokes are made. By relaxing, in turn, the muscles of the fingers, and straightening the thumb by calling its muscles into action, it pushes back the fingers, and the up-strokes are formed. The movement is twofold and alternate, extending and retracting, to form oblique lines, ovals, or horizontals.

The pen must be held with the least possible grasp. It is to be at right angles to the base line, and thus in a line with the fore-arm. Great care must be taken to guard against a wrong position of the hand and pen. The pen must be so held

that the right side is turned a little down, so that the right nib touches the paper first when the pen is put down. With this right nib the hair-strokes are made. The nibs, so to speak, are at right angles to the slope; not horizontal. By this means the shades can be made smooth. When it is neglected, the shades will be "scratchy," or rough on one side. A glance at the holder tells the teacher in a moment if the hand is right. With beginners, it will be found almost as variable as a weathercock. Now it is inclined to the right, showing that the hand is lying down,—a fault requiring constant watchfulness, and arising from neglect of the comital movement of the fore-arm; now to the left, showing that the hand is turned too far over in that direction. Now the end points outwards, showing the elbow has got away; again, it points inwards, showing that the wrist is bent to the right.

The body with the right side to the desk, or directly facing it, or with either side more or less turned to it. It is to be upright and self-supported.

The fore-arms rest lightly on the desk at right angles to one another. The right is supported by the rolling rest, and the hand by the sliding rest. The left arm has the fingers on the left side of the book, to steady it and to move it when necessary. The copy-book is placed with its vertical lines in the direction of the right fore-arm, and its horizontal lines in that of the left. It must be kept far enough on the desk to allow the rests also to be on. This position of the book at right angles to the right fore-arm is invariable, whatever direction the arm may be in on the desk.

The rolling rest is the muscle in front of the elbow; the sliding rest, the corners of the nails of the third and fourth fingers bent under.

The movements of the fore-arm are three. The comital, which accompanies the sliding movement of the hand, and is made sidewise on the rolling rest. The muscular, which causes the medial movement of the hand, and gives heft to the pen-fingers. It is a play of the arm forwards and backwards on the rolling rest. The consequent medial movement of the hand is made over the sliding rest, of which the only movement is in a horizontal line. The lateral is the lifting and moving the whole fore-arm and hand to the right; it is rendered necessary by the limited scope of the comital.

The simplest movement for beginners is to form the letters by the motion of the fingers, moving the hand and arm along by the united sliding and comital movements, which should be nearly continuous. When thoroughly familiar with these, after considerable practice, the medial and muscular movements may be added to give freedom and boldness of style. The lateral will not be needed until sentences are written.

The movements of the pen fingers are in different directions, by extension and retraction: thus are written oblique straight lines; ovals, direct, inverted, and alternate; and horizontal lines. The shades are made by pressure. As to these, great care is needed. They must be made in ovals, with a gradual increase and diminution of pressure. The usual fault is to make them too abrupt, or with the greatest thickness too long continued. The moment the thickest point is reached, the pressure should begin to diminish. Special directions are given in the analysis of the letters, where needed.



ORDS are represented in writing by a single letter, or by a combination of letters. Letters are complex; they can be resolved into forms common to several of them: thus, the form repeated in u is found also in i and w; or, they are expressed by one such form as j, found in g and y. In some there are parts not found in any other.

In writing, the letters are placed on horizontal lines, either ruled or imaginary. Some of the letters and parts of others are longer than the rest. The letter o, which is the pure oval, is taken as the standard of size. We name the line on which the writing rests the Base Line. Suppose a line parallel to this to be drawn so as to touch the top of the o. This, whether ruled or imaginary, is named the Head Line. The distance between the base and head lines is called one space, and gives the height of the first four principles, wherever they enter into the formation of letters. The dot of the r, the point of the s, the top of the second part of the k, are one-third of a space higher.

Suppose, now, six lines parallel to the base line to be drawn, three above the head line, and three below the base line, at intervals equal to the first space. We shall have eight parallel lines bounding seven equal spaces in a vertical direction. We call the middle space the first; the next above and below, the second; the next, the third; and the last, the fourth. One of these spaces is taken for the unit of measurement.

Rule.—Loop letters are four spaces, and double loops seven; ℓ and d two and a half, q three and a half, p five, two above and two below the first space. All the rest are one space, except r, s, and the second part of k, which are one and a third.

The capitals are four spaces.

It will be observed that f, long s, and p extend as far above the first space as they do below; and that the top of p is a little higher than that of t and d, and the bottom of q a little lower than that of p.

The commencing and ending lines of the letters are always to begin and terminate at the base and head lines respectively.

There are two grammatical divisions of letters, distinguished by their forms: the small letters, which form the main body of writing, and the capitals, which are used on special occasions. We shall begin with the analysis of the small letters, because they occur oftenest and because their forms are simpler. We shall not take them up in their alphabetical order, but in that which gives the easiest first, and shows their similarity, arising from the possession of common principles. This is the method adopted in our copy-books, in order to render our system of teaching gradually progressive.

THE CAPITAL LETTERS.

GENERAL RULES.

The height of the capitals is four spaces, the same as the loop letters.

A. This letter has three parts. The first part is generally written upwards, the upper curve very slight. The second part is very slightly curved to one-third from the top, then it is a straight line, of which the shade gradually increases. The third part is the cross. It starts from the right foot, coincides for a half space, crosses to the left and forms a loop, the center of which is one-third the height of the letter, and on the double curve line. A line from the top through the center of the letter would be on the main slope; hence it will be seen that the second part, or down-stroke, has a little less than the main slope, the first part a little more. Observe that the width of the letter gradually increases from the top to the base, and regulate the first up-stroke accordingly.

N. This letter consists of three parts. The first two are the same as in A, except in slope; at the bottom of the second a very narrow turn is made, and and a curve carried up from it, parallel to the first upstroke, four-fifths the height of the letter. The spaces on a horizontal line across the middle are equal. The shade begins as in A, and is heaviest just before the turn. A line drawn through the centre of the letter, dividing it into two equal lateral halves, would be on the main slope. Observe the gradual increase and diminution of width in the two sections. See the cautions on A.

M. This letter has four parts. The first three are the same as N, except that the third stroke is carried to the full height. The fourth part is curved from the top, and closes with the direct oval. Observe the shades carefully. A line through the centre, dividing the letter into equal lateral halves, would be on the main slope. The widths at the top and the two at the base are equal. On a horizontal line through the middle there are three equal spaces.

T has two parts. The strongest curve is in the lower section. There is no shade except in the third principle and dot.

F is T crossed in the middle by a small double curve placed horizontally, which is itself crossed by a small straight line on the main slope.

P. This letter has two parts, the stem and the cap. It is on the main slope. The cap begins with the inverted oval, two-thirds the height, on the main slope, crossing the stem at right angles, the highest point of the cap being in the middle of the line between the section of the oval and the stem; it is continued with the right curve, and terminates on the stem in a dot at half the height of the letter. On the short diameter of the first oval produced to the stem, there are four equal spaces; on a parallel line from the left curve of the oval crossing the stem to the other curve, two equal spaces. A line on the main slope through the oval would pass through the dot.

B. The stem and cap are like P, only that the right side is carried down one-third instead of a half, and the dot is omitted. The separation between the upper and lower sections of the right side is made by a horizontal loop. The lower curve ends with the inverted oval. A straight line drawn on the main slope, touching the right side of the upper curve, would pass through the center of the lower oval; the lower right curve, therefore, projects beyond the upper. Across the first oval to stem on its short diameter produced, there are four equal spaces similarly as to the last oval, three. On a parallel line from the right side of the first oval to the right side of the upper lobe, there are two equal spaces.

R is like B as far as the separating loop, which is here made at right angles to the main slope. After that the descending curve is turned back to finish with the direct oval. Across each of the two ovals to the stem on their short diameters produced, there are four equal spaces. On a parallel line from the right side of the first oval to the right side of the upper lobe there are two equal spaces. A line on the main slope through the oval would pass through the dot.

X. The capital-stem is made first, writing downwards. Then the inverted oval and direct oval joined by a straight line on the main slope. The two parts of the letter coincide through half the height, commencing at one-fourth from the top. Across the ovals there are four equal soaces. The remark on the dot applies also.

O. Begin with the inverted oval, and end like L. The oval is on the main slope. C. Begin with the left curve from the base line to half the height;

next, make a loop half the height; end with the direct oval. Take care that the loop does not pitch over too much. It necessarily has more

than the main slope.

E. Begin with the left curve a little distance from the base line, carry it two-thirds high, and make a loop one-third; continue the curve to form a small separating, nearly horizontal, loop to the right, and closs with the direct oval. The separating loop is a little inclined down to the right, to correspond to the lower oval.

G. Begin with the left curve; then, a loop two-thirds the height of the letter; continue the down-stroke as the bottom of an oval, whose width is twice that of the loop, the bottom of the turn being one-fourth from the base line. End with a double curve and dot : the double curve is half the height of the letter. Both parts of the letter are on the main slope. A line through the length of the loop would pass through the

V. This letter begins with the inverted oval, continues like third principle to one-fourth from the base line, but the lower turn much narrower than the upper, and ends with the double curve and dot;

height, two-thirds.

U. Begin with the inverted oval; continue as Y, except that it rests on the base line. The second part is a straight line ending with a direct oval. The top of the second part lower than that of the first. Its width is two spaces.

S. Begin from base line with the right curve on the slope of the connecting lines to half the height of the letter, then form a loop on the main slope, half the height, complete a double curve, and end with a dot on the commencing line. The dot is half a space high, and on the main slope. The double curve is the essential part of this letter. Notice how the loop is formed on the upper part, and the greater intensity of curve is on the lower part. Let the shade begin just below the loop, and be nicely graduated. Give much attention to the lower turn and the dot. An oblique line through the loop lengthwise has similar curves formed on the double curve, on the upper left and lower right side.

L. This letter begins like S, but the double curve, instead of making a turn to end with the dot, is carried to the left to form a horizontal loop, which rests on the base line, and whose thickness is half a space; it descends on the right side to touch the base line at precisely the same distance from the crossing as on the left side, and ends with the direct oval incomplete. The lower curve of the stem is stronger than the upper. It will be observed that the upper curve of the horizontal loop, and the curve to the right which touches the base line, together form a double curve. The right section only of the direct oval is used. The shade begins as in the S, below the loop. The bottom of this letter, which may be termed the L-foot, occurs also in D, Q, and one form of Z. Take care that the direct oval is made on the main slope.

I. Begin with the left curve at the height of one space from the base line, carry it round to the right to form a circular loop, and continue to curve to the height of the letter. The second part of the capital-stem and dot passing through the center of the circular loop, whose center is also in the middle of the stem. Take care that the upper part of the head is not made too broad. Modify the curve gently to accord with

the upper part of the stem.

%. This letter begins as the I, but the circular loop is not so high; its lower curve is one space from the base line, and the double curve is carried down to form a loop, the same length as j, three spaces below the line. The left curve of the loop crosses at the base line. A line through the length of the loop should pass through the upper part of the letter. Notice the slight intensity of the curve in both parts of the stem. The heaviest shade is in the middle of the right side of the loop. The loop is one space wide.

H. The commencement is the third principle. Next, the double curve with a loop, the hair-stroke of which is carried across and upwards, on the same slope, to form another loop similar to the first; this side is finished with the direct oval. The first section is a little lower than the second, which is the full height. The middle of the hair-line between the two stems is half the height of the letter; hence each loop is a little less than half the height. An oblique line through the center, dividing the central space equally, would be on the main slope. The width between the down-strokes at the middle is one space. The second loop is longer than the first.

K. The first part is T. The second part consists of the left curve turned back to make a small separating loop, then continued symmetrically with the upper part, and closed with the direct oval. The separate curve is inclined as in R, and is one-third the height of the letter from the top. The slope is the same as in H.

V. Commencement. Next, down-stroke straight, shaded heaviest near the turn, which is narrow, like those of the small letters. Then, up-stroke parallel to previous one, branching off into the left curve, and terminated at the same height as the top of the introductory part. An oblique line through the centre, dividing the letter into two equal parts, would be on the main slope.

W. Commencement. Next, double curve down, ending on the base line; then, double curve up with more slope. The second down-stroke is like the second of A, very slightly curved one-third, and then straight. The final stroke is the left curve, as in N. The spaces on a horizontal line drawn through the middle of the letter are equal. A line from the middle point at the top through the center of the letter would be on the main slope.

Z. Commencement. The down-stroke and foot like L, except that the lower curve of the stem is a little less intense. It has the main slope.

D. This letter begins with the double curve, commenced at the height of the letter; its foot is like that of L until it touches the base line on the right side, whence it is carried up as the right side of an oval, crosses the stem near its top, and ends with the direct oval. The highest part of the letter is well in front of the stem.



LASSIFICATION relates to the arrangement of the letters in groups, according to their possession of common forms. Since every letter must have something peculiar to distinguish it from others which have a common principle, classification includes a description of this peculiarity, which is termed the characteristic.

CLASSES OF SMALL LETTERS.

The most natural and convenient division of the small letters seems to give four classes. Some letters will be found to belong to two of them. The reason of the position here assigned is obvious.

FIRST CLASS.—Those letters which consist chiefly of the first, second, and third principles, i, u, n, m, v, w, x.

SECOND CLASS.—Those formed from the oval, or the fourth principle, 0, a, c, e.

These two classes contain all the short letters except two.

THIRD CLASS.—Those which have stems formed of the first element, & q, t, d. These are called the Stem Letters.

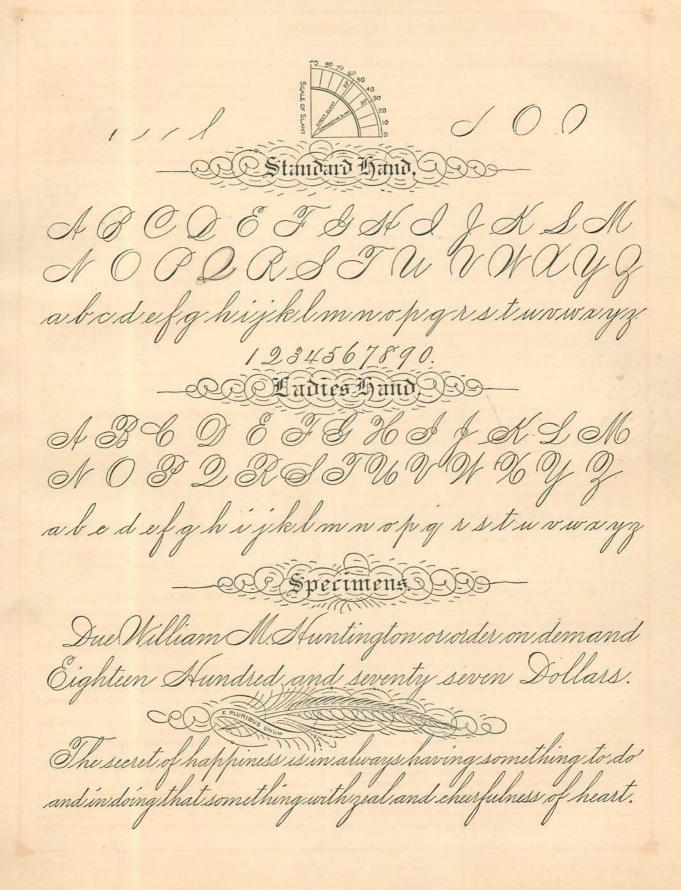
FOURTH CLASS.-Those which have the fifth and sixth principles, &, &, l, b, j, g, y, z, f, long s. These are the Loop Letters.

Besides these, there are two letters whose forms are anomalous, r, s.

CHARACTERISTICS.

The characteristics of the letters are as follows:

In the First Class. Of i, one straight line with turn at the bottom and the dot above it ;-of u, two straight lines with turns at the bottom ;of n, two straight lines with turns at the top ;-of m, three straight lines with turns at the top ;-of v, its two nearly parallel sides and the dot ;-



of w, its alternately parallel sides and the dot; of x, the straight line forming the cross.

In the Second Class. Of o, the oval ;—of a, the addition of the first principle ;—of e, the dot ;—of e, the loop.

In the Third Class. Of p, the third principle affixed;—of q, the fourth principle prefixed;—of t, the cross;—of d, the fourth principle prefixed to the t-stem without the cross.

In the Fourth Class. Of k, the third principle affixed;—of k, the knot or kink;—of l, the turn at the bottom;—of l, the parallel sides of the lower part and the dot;—of l, the dot;—of l, the fourth principle prefixed;—of l, the third principle prefixed;—of l, the second principle and shoulder; in the other form, the zig-zag;—of l, the knot.

In the anomalous letters. Of r, the dot and shoulder;—of s, the twist on the right side.

OF CAPITALS.

We give the Capitals in the order of their introduction. $O, -A, N, M, P, F, -P, B, R, X, -S, L, -I, \mathcal{I}, -H, K, -V, W, -Z, D, Q, -C, E, -G, V, U.$

OCCURRENCE OF PRINCIPLES.

The capital-stem, or line of beauty, ending with a dot, occurs in four-teen letters, A, N, M, T, F, P, B, R, X, S, I, K, G, Y.

The capital-stem is written :-

Generally upwards and light, in three letters, A, N, M.

Downwards and light, in eleven letters, T, F, P, B, R, X, H, K, W, Z, D.

Downwards, light and short, in two letters, G, Y.

Downwards and shaded in the lower curve, in three letters, I, L, S.

Downwards, prolonged into a loop, shaded on the right side, in one letter, \mathcal{F} .

The third principle of small letters is used for the commencement of seven letters, T, G, H, K, V, W, Z.

The direct oval, when of full size, forms the O.

Four-fifths of the vertical height, it is the end or front of D.

Half the height, it terminates eight letters, M, R, X, H, K, C, E, U. One-third the height, it ends L, Z, Q.

The inverted oval, two-thirds the height, commences seven letters, P, B, R, X, Q, U, Y.

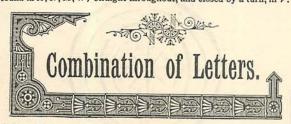
Half the height it ends one letter, B.

A curve and circular loop are used for the head of I, F.

The loop, half the height of the letter, is found in six letters, $S, L, \mathcal{F}, H, C, G$; one-third the height, in E.

The knot, kink, or small separating loop, is found in three letters, B, R, K; turned in the opposite direction, in E.

The horizontal loop, or L-foot, is found in four letters, L, D, Q, Z. The first element, very slightly curved to one-third from the top, is found in A, N, M, W; straight throughout, and closed by a turn, in V.



OMBINATION treats of the arrangement of letters in words at proper distances. This is generally spoken of as Spacing. It is effected by the connecting lines of the two letters running into one another, and thus forming one line, which may be distinguished as the Combining Line.

Good taste requires that the letters in a word should look about the same distance apart; in other words, that the space on the line which the word occupies

should be evenly filled. If this is neglected, the writing will look "patchy,"—crowded in one place, scattered in another. We propose, therefore, to give rules for these distances, and to point out the reasons on which they depend.

Every letter ends with a straight line, having a diagonal connecting line with a turn, as u, or without a turn, as j, q; or is an oval with a horizontal connecting line; or is open on the right side, as c and e. Every letter begins with a straight line, having a diagonal connecting line without a turn, as u, h, p, or with a turn, as u, y; or is an oval, as, o, a; or is open on the left side, as s, in which the up-stroke is merely the connecting line. The combinations of these different classes of letters may be determined by the following rules:

Rule 1.—When two straight lines, or a straight line and an oval, are united by one turn and a combining line, or by a combining line only, the distance between them is one space, the height of o_i as ii, ni, ii, ih, ip, io, ie; gi, go, qu, etc. Between is, us, etc., the distance is really the same, because the width of s equals that of o_i but since we have to measure to the right side, it is a space and a half.

REMARK.—In $i\bar{i}$, $i\hbar$, $i\bar{p}$, where the combining line joins the straight line at one-half, one-third, and the top, respectively, the distance is kept by giving less slope to the combining line. In gi, qu, etc., the same means are used.

Rule 2.—When two straight lines are united by two turns and a combining line, the distance is one space and a half; as, in, ir, nu, my, fn, etc.

Remark.—This gives room enough to make the turns properly, and the line crossing diagonally prevents the distance from seeming too wide.

Rule 3.—When two ovals, or an oval and a straight line, are united by a combining line only, or by a combining line and turn, the distance is three-quarters of a space; as, oo, oc, od, ba, ve, wo; oi, ot, oh, op, vi; on, vn, etc. The last part of b, v, w, is equivalent to the oval. In os the distance is really the same, since s is the width of o; but as we measure to the right side, it is a little more than one space.

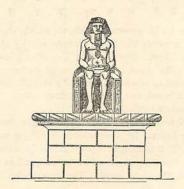
REMARK.—A full space for the distance mentioned in the first part of this rule would be too much, because, as the connecting line is horizontal, there is nothing to disguise it. We have, therefore, to bring the main lines nearer.

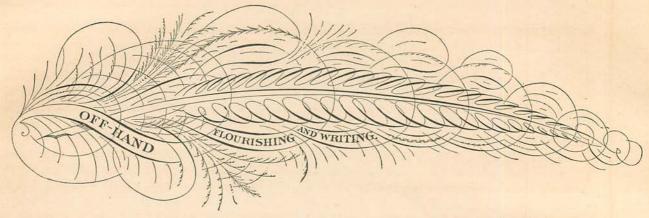
Rule 4.—When c or e precedes a letter beginning like u, or an oval, the distance is one space and a half; as, ci, ei, cl, el, cp; co, eo, ce, ee, etc.

Remark.—The distance in this case is measured from the left side of the c and e, and is crossed by the combining line diagonally.

GENERAL REMARK.—The combining line does not have an invariable slope, but is determined by the necessities arising from the rules of combination.

Rule 5.—Words are written about one space apart. This, however, depends very much on whether we wish to give the writing a free or a condensed appearance.





Whole Arm Capitals.



Ledger Hand.

Merchandise Commission

Medium Hand,

Good writing is a passport to success in life.

Corresponding Hand.

Every rone should write an easy, rapid and graceful hand.