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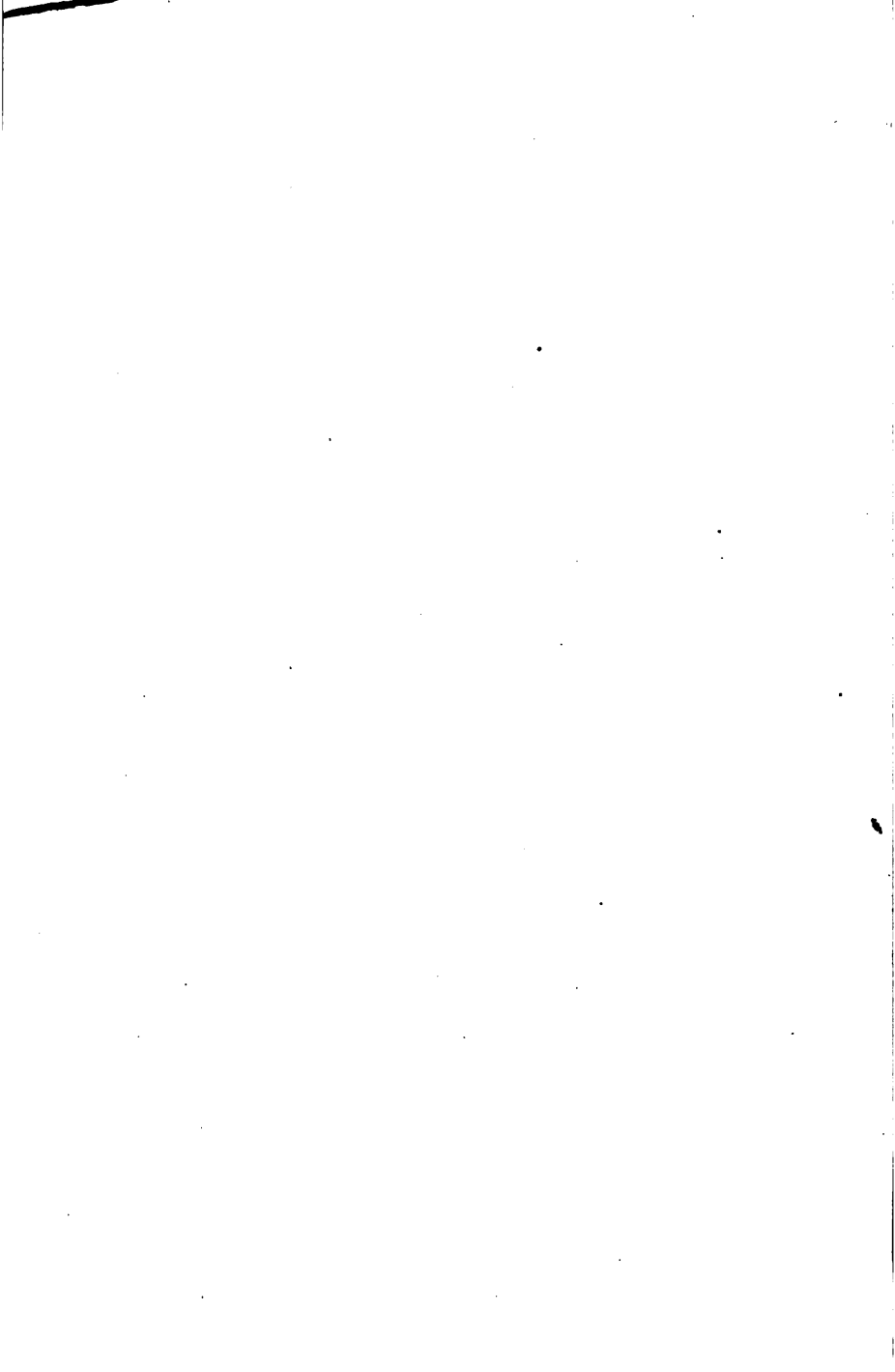
JANUARY 25, 1924



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THE

PAYSON, DUNTON, & SCRIBNER

Manual of Penmanship.

P., D., & S. Authors:

J. W. PAYSON, S. DUNTON, W. M. SCRIBNER, G. H. SHATTUCK,
A. S. MANSON.



NEW YORK AND CHICAGO:

WOOLWORTH, AINSWORTH, AND COMPANY.

1872.

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P R E F A C E.

OUR object in this Manual is to present to the teachers of our public schools and seminaries a strictly practical hand-book on the art of teaching penmanship. We have severely abstained from all fine poetic flights, and even from the discussion of mooted points; and have simply aimed to present the condensed results of the actual experience of the authors of the Payson, Dunton, and Scribner's system of penmanship with scholars in public and private schools throughout the length and breadth of the land.

It is not intended for "business-colleges," where the students practise writing two or three hours every day, and where the teachers are supposed to be professional penmen, — though we think even they will find some useful hints, — but for the schools in which writing forms only one of the many branches of instruction which are all to be taught by one person.

The instructions given in the copy-books themselves are so full, that, if faithfully followed, they can hardly fail of insuring satisfactory results. Still, so many teachers desire to have a brief and comprehensive text-book on the subject, that it seems desirable to furnish one meeting the wants of all who teach writing, but especially adapted to our series of copy-books.

The table of contents will enable the teacher to see how complete is our treatment of the subject better than any enumeration of topics we could here present. Yet there are one or two points to which we would invite particular attention. One is the method of instruction in which we have presented the true, because the scientific, form of all teaching applied to this art. Another is the illustrations for bringing peculiar difficulties before the scholars on the blackboard. Also the critical points of the principles and letters which embrace those features which are essential in each case. The value of these can hardly be over-estimated, as they are

the result of philosophical observation, and have been confirmed by a vast experience. Once more: it will be observed that in this Manual every point of importance is not only treated of in the text, but is fully presented to the eye by illustrations.

In conclusion, we wish to say a few words on a widely-prevailing error. Every new system which makes its appearance, and some of the old ones, base their claims for adoption on the statement, that their peculiar methods will turn out business-men from the schools. It is, perhaps, a pity that they do not point out some average school, where only the average time is given to writing, in which the majority of the scholars prove their assertions. It is further said, that it is an "oft-repeated remark of merchants, that, when boys come from the public schools to the counting-room, their handwriting is impracticable, and soon undergoes an entire change." The merchants do not say that the writing is bad, but that it is "impracticable." It "soon undergoes an entire change;" in which developed state we presume it is entirely satisfactory. Observe the word "soon." It tells the whole story. The change takes place, and that almost immediately, simply because there is constant practice; and this concurs with the thorough knowledge of the forms and previous training in movement, which only left the hand "impracticable" from lack of the element which is now supplied. Let a lad who has never had the admirable discipline in writing which is now given in all our large public schools enter the merchant's office, and we fancy his "soon," as related to the acquisition of a business-style, will be prolonged to a very indefinite period.

Is it really considered how short a time is generally given to this branch in our schools? One hour and a half a week is a fair average. Suppose the schools to be in session forty-two weeks: that gives sixty-three hours, — ten days of six hours each in the whole year to learn writing. Suppose, further, that the scholar enters at eight, and leaves at fourteen; and the enormous time devoted to learning writing is six times ten such days! In a business-college, they write, during the fall and winter, three hours a day; that is, a third more in one month when their age is from eighteen to twenty-five than our children from eight to fourteen do in a whole year! It is time that this error was exploded.

We shall, therefore, continue in the belief, that if true movements are

carefully inculcated, and the scholars are thoroughly drilled in the knowledge and execution of the exact forms of the letters, a sure foundation is laid for the development of a fine business-hand as soon as sufficient practice affords the opportunity. At the same time, we know from experience that those who have a natural aptitude for writing — the artistic faculty — will acquire a business-hand even while at school.

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MANUAL OF PENMANSHIP.

INTRODUCTORY REMARKS.

OUR aim in this system is to teach the scholars of the public and private schools of our country a practical hand-writing. To do this, we supply a carefully-graduated series of Copy-Books, with special directions at the head of the page, and further instructions on the covers; this Manual, for those who wish complete information as to our method; and Blackboard Tablets, exhibiting the accurate forms of the letters and the more prominent features of their analysis, of sufficiently large size to present to a class.

The use of copy-books with lithographed copies at the head of the page has very great advantages. It economizes the time of the teacher; prevents change of hand should the teacher be changed; gives a better system, the result of a larger and more varied experience than is possible to an individual; and causes a very trifling increase of expense. Hence such copies are now almost universally used; and, where once adopted, are never superseded.

Next give the illustrations which will be found in the description of the letters, and call attention especially to the critical points. The latter should be impressed on their minds till they are thoroughly familiar and can be readily stated.

4. The forms and critical points of the principles should be fixed on their minds.

(1.) By example. — Let them be drawn correctly on the board.

(2.) By contrast. — Let the opposite be drawn.

(3.) By comparison. — Let erroneous forms be made; not all possible ones, but those that illustrate the various points in the description, especially the critical points.

REMARK. — It should ever be borne in mind, that a clear mental conception of the form to be written is an absolute necessity before it can be easily and correctly executed.

And, further, it should be remembered that time and varied presentation are necessary to enable the mind to form the required conception.

The use of our Blackboard Tablets will also be found extremely advantageous. They are described in another place.

Secondly, With regard to the Manner of Executing, we would suggest, —

1. That the teacher should show it by example.

Let him take a large book, — a geography, for instance, — and place his right arm and hand on it in the correct position, with the pen properly held. Let the scholars view this on all sides. In the same way, let the movements be illustrated.

2. That the scholars should learn it by experiment.

For instance, it is directed that the corner of the thumb should be opposite the first joint of the fingers, and a little under the holder; and it is stated that the object of this is to keep the holder above the knuckle. Let them try with the thumb at the end of the fingers, and it will be found that the least pressure on the pen causes the holder to sink down. A like result follows if the thumb is placed at the side of the holder, instead of underneath it.

The scholar, thus proving the facts by experience, will see the value of the directions given, and remember them; for he will perceive that they are not mere arbitrary rules, made and enforced to gratify a fancy, but that they teach the best and most convenient way of attaining certain necessary ends.

METHOD OF TEACHING EXECUTION.

With regard to teaching Execution, it may be worth while to make a few observations.

1. Let the teacher determine that he will have correct execution; that the precise forms of the copy shall be accurately made, not merely by the few who have natural aptitude, but by all. This can be achieved; for it has been again and again.

2. It will be well also to settle in the mind that correctness of form is preferable to mere rapidity of execution.

Therefore let the scholars proceed very slowly at first. As soon as the forms are correctly made, they may then advance more rapidly, but not faster than is consistent with accuracy.

3. Whilst they are writing, let their attention be frequently called to position, penholding, rests, and movements.

REMARK.— It is very important that they should aim at writing successively the principles of which the letters are composed, instead of writing the letters as wholes.

They should understand that the modern style is based upon the oblique straight line and very short turns, formed by an up-and-down or forward-and-backward movement of the pen, whether this is produced by the fingers or by the forearm. This movement should be dwelt upon to overcome the tendency to rounded down-strokes and "scooping" turns.

METHOD OF TEACHING CRITICISM.

With regard to the art of Criticism, we remark,—

1. The scholars should learn this art, and practise it themselves.

Experience has long shown, that whatever any one will do for us we are seldom inclined to do for ourselves. If, then, the teacher criticises for the scholars, they will not consider it their business to do so for themselves.

It is, besides, a very difficult thing to judge our own work fairly; and to children, especially beginners, their own writing seems so wonderful, that they cannot help thinking it excellent. The fact that they can actually read it, and that it can be read by others, confirms them in this idea.

Therefore the formation by them of the habit of criticism — that is, the training and constant exercise of the faculty of judging form — is of the highest consequence; in fact, it is one of the great secrets of success. A great many scholars at first, judging from our own experience, cannot distinguish between a straight line and a curve, or between the right and left curves: all varieties of slant are equally satisfactory; and a turn is a turn, whether it is as sharp as a knife, or as round as a hoop.

They must be trained, then, by every means to improve the deficient faculty, and to acquire the habit of always criticising their own work. It is very curious to observe how much more readily and accurately they will criticise any erroneous form the teacher puts on the board than they will their own.

2. Teach them to criticise, therefore, by questioning them successively on each particular of their knowledge. It will be found desirable to take up the Critical Points first; afterwards to go through the particulars of the letter in order.

Suppose a line written, the following questions should be asked: —

(1.) What are the critical points of the principle, or letter? Which is the first?

(2.) How many scholars have this right?

REMARK. — Instead of putting the question in these words, it is better to make it more definite. Thus, supposing the critical point to be that the down-stroke should be straight, the question should be, How many made it straight?

(3.) How many have it wrong?

REMARK. — This question should, in the case just mentioned, take the shape, How many did not make it straight?

(4.) What was the cause of the failure?

REMARK. — In the case mentioned, the answer would be, perhaps, Turning too soon.

(5.) How can it be corrected?

REMARK. — It is not enough to discover the fault. They must know what to do to make the desired change.

(6.) What, then, are you going to do next time?

REMARK. — This leads them to a definite object in writing the next line.

Another line should then be written, when the questioning should be thus resumed: —

(7.) How many have it right now?

(8.) How many still have it wrong?

(9.) How many have it better?

The teacher can also show on the board how the error was made, and what must be done to correct it.

Line after line is thus written and criticised, and thus each with a definite purpose.

3. Another excellent method is, as soon as a line is written, to ask, How many can point out a fault? One after another may be called upon to state the one he discovers; and all who observe a similar fault should raise their hands to acknowledge it when it is mentioned. The question should follow, What must be done to correct it?

This method may be varied by telling them to write another line, and leave out the faults they have noticed without asking what they are. The question may then be put, How many have written better than before? When the hands are raised, ask in what particulars they have made it better.

4. We consider this method of teaching them to criticise their own work as of the very highest importance; but it will still be necessary for the teacher to move constantly about among them, to observe whether they criticise correctly, and to aid their immature judgments by his own remarks.

We would suggest, that, whenever he discovers a fault, he should embody it in a question to the whole class; for there are sure to be several other scholars who have made the same mistake. He thus saves himself the labor of many repetitions.

5. Criticism should not contemplate merely the discovery of an error, but also the causes of failure, and the precise direction that the effort to correct it must take.

6. Our critical points and our analyses of the principles enable the teacher to bring the knowledge of them before his class in an orderly manner, and suggest the proper succession of questions in criticism.

The order may be as follows:—

Critical Points.—(1.) The main lines in their several particulars of straightness, slant, and height.

(2.) The turns as to their shape and width.

(3.) The connecting lines as to their curve and slant, determining width.

(4.) The connections.

7. A simple yet exhaustive rule for the teacher's guidance in criticising is this, — that the errors may always be looked for on each side of the truth. Is a line to be curved? — it will be curved the wrong way, too much or too little. Is a turn of a certain width to be made? — it will be too broad or too narrow. Is a line to be of a certain slant? — it will be slanted too much or too little.

8. Lastly, the teacher should rank the copy of every scholar, at the close or beginning of each exercise, or at the commencement of the next, according to its merit.

There are some advantages in preferring the commencement of the exercise, because the work is no longer so fresh a production of the scholar's, and he will therefore more candidly admit its faults; also because the criticism you make will be more immediately of use.

At the commencement of the exercise, then, we would have the books opened where they last wrote; and then, going backward down the first aisle, we would place with a lead pencil,

at the bottom of the last column written, a number which should mark its merit. Suppose 6 was adopted for excellent; then 5, good; 4, middling; 3, poor; 2, bad; 1, very bad.

The marks should be determined by the scholar's attention to and execution of the instruction specially given in the lesson on the copy and in previous lessons, and not merely for general appearance; for some copies, through fineness of lines, and accuracy of slant, will present a good appearance, while the turns are broad, connections bad, and so forth.

Our habit is to mark right and left as we go backwards down the first aisle, and the same as we come forwards up the third, and so on. Make your decision rapidly, and mark at once. A class of fifty or sixty may be thus ranked in two or three minutes. It is time well employed.

At the same time that you make the mark, you can drop a word of criticism; for instance, Turns too broad, Bad slant, Down-strokes not straight, and so forth.

Now, it seems that it would be a convenience to the teacher to remember at the next lesson what this criticism was, that he may observe whether it has been heeded. We have therefore devised the following simple and convenient plan by which he can place it on record. Certain significant signs easy of execution are placed beside the merit-marks, or where the fault occurs in the writing.

The meaning of these should be explained to the scholars.

/ Too heavy.

\ Bad slant. The mark slants the wrong way.

— Wrong spacing. The mark indicates width.

× Beginning or ending wrong.

|| Height not uniform.

= Width of letters uneven.

∩ or ∪ Upper or lower turns too broad.

∩ or ∪ Upper or lower turns too narrow.

(or) Curve instead of straight line.

S Element I. neglected in Principle 3.

∫ or ℓ Connection too long above or below.

A profitable way to use these is to mark one of them above a column, without saying any thing, as you go round and observe a fault. It can be done rapidly, is a standing warning to the scholar, and is a permanent record of your criticism.

We merely throw out these suggestions. Every teacher can modify, extend, or abbreviate them, as he pleases; or he can adopt some similar method.

It is hardly necessary to add, that where so many minute points require attention, as is the case in learning to write, the great secret of success lies in confining the attention to one point at a time. Thus, to make the right use of the corners of the boxes, to touch the top and base lines, to make straight down-strokes, to have correct slant, to place the down-strokes at correct distances, to make fine lines, and so forth, should be taken up in turn, and perfected, by devoting several lines to each, fixing attention on it, criticising it, and correcting as we have suggested.

If, in this statement of our method of instruction, we have seemed to dwell more particularly upon teaching beginners, it is because we feel that this will be particularly useful to teachers. This branch of education differs from other branches. The eye is to be trained to know peculiarities of form, the hand to execute them. In other school-studies, the mind is to be trained to know, to recall, to compare, to judge, and, by the voice, to produce. Observe the difference: here a sense is to be educated, and an organ trained to obedience. If, then, those who are required to teach this branch can only be induced to begin right, they will find little difficulty in carrying their scholars on to the most satisfactory results, working out our principles in their legitimate development to suit their own methods. Besides, farther on we give full instructions for teaching classes as they advance.

NECESSARY MATERIALS IN A WRITING-CLASS.

Copy-Books. — Experience has proved, that for a full course of instruction, and to afford sufficient variety to the scholars, about twelve numbers are required. This does not add to the expense of the system, because the scholar buys and uses but one book at a time. For the actual need of those who remain a shorter time at school, we have prepared the first six numbers, which are designated as

THE COMMON-SCHOOL SERIES.

No. 1, for beginners, commencing with the slanting straight line, and embracing all the short letters.

No. 2, for the next grade, reviewing the lessons of No. 1, with more attention to free movement, and including the whole small alphabet.

No. 3, the copies of smaller size, teaches both alphabets, and is ruled with guide-lines for the heights of the stem and loop letters and capitals.

No. 4 is ruled with double lines, to aid the scholars in keeping the size of the short letters while thrown upon their own resources for the heights of the taller ones. The words are given in columns.

No. 5 is a book of short sentences, with a word at each end, ruled with single lines.

No. 6 has sentences across the whole page, with a capital at each end.

The successive numbers are thus carefully graded to suit the wants of the several grades of schools or classes. They furnish a uniform style of writing and of instruction, simple and practical in their character. Sufficient directions for understanding and writing each copy are printed on the same page above it

in clear Roman type. The quality of the paper used in the books is unsurpassed.

The Ruling of the Copy-Books.— The pages in the copy-books are ruled in different ways. Some have double lines and boxes; others, double lines, and additional lines marking proportions of height; others, merely double lines; others again, single. Some are divided into columns; others are plain.

Columns are marked by vertical lines. Boxes are half the width of the column.

The object of this ruling is to aid the beginner in making the principles and letters correctly in respect to height and width. If he makes each stroke touch both top and base line, he secures the former. If he begins and ends in the corners, and makes the strokes extend and return to definite distances on these lines, as in the copy, he secures the latter, while at the same time he gets the right slants.

REMARK.— 1. In all cases where columns are ruled, it is intended that the scholar should write one column at a time, and not across the whole page. He should write as a newspaper is read.

In those pages where words are given, he should be called upon to notice how much of the word is contained in each box, and to write accordingly.

Another method of ruling is with double lines; but, instead of boxes, a single line is used in each column to give the slant of the first line of the letter or word to be written. Thus the pupil is thrown more upon his own resources.

Another style of ruling, still more advanced, has the top and base lines ruled in red: between these the short letters are written. Two blue lines above, and two below, mark the heights of the stem, loop letters, and capitals, aiding very materially in getting the correct proportions of the last.

2. The copies in our books are ruled like the pages, in whole or in part, so that the scholar can be taught without difficulty how the ruling is to be used. The most exact

observance of the way the letters are to be placed in the ruling should be required. We mention this because we have seen books in which letters half the proper size were placed in the centre of the boxes, not touching the ruled lines anywhere, — like little birds sitting in cages on invisible perches.

Pens. — Steel pens should be used, of the best quality. They should be fine, neither too flexible nor too stiff. These are necessary for beginners as well as for the more advanced. It is a great mistake to suppose that any thing will answer for the commencement. Scholars should not be allowed to use any pen but the kind selected by the teacher.

Penholders. — These must be long and light. Avoid any thing like iron or ivory: they should be simple in construction, hold the pen firmly, and allow it to be changed without difficulty. Never allow short holders to be used.

Ink. — The qualities of a good ink for schools are, that it should be thin, so that it may flow readily from the pen; and black, that the scholar may see at once how his work will appear. The rapid evaporation of the watery part of the ink must be met by frequently adding a small quantity of water, always taking care to mix by stirring. Fresh ink must be added when necessary to keep up the color. Take care to have the ink-stands closed when not in use. Have the ink-wells washed out as often as any sediment accumulates. Always have the ink properly attended to before the writing-lesson begins.

Caution your scholars in taking ink always to observe strictly what they are doing. The pen should be dipped very carefully, — for young scholars, only up to the pen's eye; while for older ones, especially where shades are to be made, the eye is to be filled. If this point is attended to, almost all blots may be avoided.

Penwipers. — Every scholar should have one to cleanse his pen when necessary. They may be conveniently made of two or three circular pieces of woollen cloth, stitched together in the centre. The pen should be wiped between the folds, so

that, if the penwiper should happen to be laid on the page, there may be no blot. They can be collected and distributed by monitors, or each scholar may keep his own in his desk.

Practice-Paper. — This is needed to try the pen on, to practise the copy a few times before writing in the books, or any letter that presents peculiar difficulty. We furnish it cut in slips, and ruled to correspond to the different numbers of the series. Common ruled letter-paper will also answer, if the other cannot easily be procured.

Blotting-Board. — A piece half the size of the book is large enough. It is well to have it tolerably stiff. When writing, it should be placed under the fingers of the left hand, which hold the book steady. When the writing is finished, it should be laid carefully on the page, not slid over it, and pressed to absorb the ink before closing the book. Do not allow the scholars to place it on each word as soon as written, or the color of the ink will be spoiled.

Covers. — A very nice and convenient cover may be made, for those who wish to keep their books in good order, by cutting a piece of Manilla paper the depth of the page, and four times its length. Fold this four times, place the back of the book on the middle fold, and lap the extreme parts over the cover or the pages when written.

Writing-Tax. — A good plan is to collect a small tax — three or four cents — from each scholar at the beginning of the term, for which pens, ink, penholders, and blotters are supplied.

Supervision. — The teacher ought to take charge of the books, pens, and other materials, so that all may be kept in the best and neatest state.

ORGANIZING CLASSES.

Since there are both graded and ungraded schools, it is evident that the method adopted must be different. It is presumed, that, owing to the efforts of authors and educational publishers, systematic teaching of writing is practised in all cities which have graded schools. It may, therefore, be very briefly stated, that the same room should have the same book, and that the series should be written in regular order. The first six books, forming the common-school series, furnish a three-years' course in the grammar-school. They are carefully graduated from the simplest element to the sentence across the page, thus supplying material for the acquisition of a good hand even to those whose time at school, owing to the necessities of labor, is limited; while the higher numbers afford advanced instruction and an agreeable variety for those who remain longer.

Ungraded schools present a problem far more difficult of solution. The perverse human nature of pupils and the prejudices of parents are factors that must not be lost sight of, as the wise teacher well knows. There are two plans which have hitherto been found most successful. The first is, to satisfy the above troublesome factors by allowing every pupil to have what number of copy-book he likes to amuse himself with, and then require all to have the same number, say No. 1, for a drill-book. Then teach writing in this book for the larger part of each exercise, and afterwards let the scholars write in their other books. If the teacher awakens an interest by the results of this method, he will have little trouble in introducing the second plan.

The second plan is, to divide the school into two classes. Pass round slips of paper, and dictate a short sentence to be written. Place the best writers in one class, and the poorest

in the other. Use No. 3 for the higher, and No. 1 for the lower. Have them all write at the same time. Give the lesson to one class, and direct them to write so many lines in the book, and then continue practising on their spare paper. Then give the lesson to the second class, and set them to work. Return to criticise the first class; let them again write a definite number of lines; then the second; and so on.

But now a question arises, What shall we do with scholars coming from other schools, who, well advanced in other studies, have yet never been taught to write? The following method, which we pursue ourselves, has always been attended with success: We allow the scholar, on entering, to take the book that his class are using; but, instead of allowing him to write the copies for the first few lessons, we set special ones for him. Remembering that the slanting straight line with the lower and upper turns is the fundamental form in the small letters, give him a copy of single *u*'s, calling his attention specially to the straightness and slant of the down-stroke, shortness of turn, and width of letter; next groups of *u*; then *n* and *m*, noticing the importance of carrying the up-stroke far enough over to make the down-stroke straight and slanting. Keep him on these forms till he masters the idea. Then show him the peculiarity of *a*, *c*, *e*, *r*, *s*, the change of slant in the upward movement for the stems and loops, and how to write the lower loops; always keeping in mind, that, as soon as he knows the principles, he knows the letters.

Then let him go on with the class, and in a short time he will, with a little special supervision, manage very tolerably.

Another question is asked, How shall we correct wrong penholding? We answer, Show the reasonableness of good penholding, and then try the effects of a resolute will.

How shall we correct bad position? Show the reasonableness of a good position, and use persistent effort.

How shall we interest our scholars? Qualify yourselves by a thorough knowledge of this **Manual**, instruct your scholars as directed, keep their attention fixed on one point at a time,

and insist on their doing as you tell them. Following our methods, you would find yourself able to interest a class for a whole month in the execution of simple straight lines. Scholars glory in perfection, if the possibility of it is only placed within their reach.

THE LESSON.

Under the head of Method of Instruction, we have given full directions for the teacher's guidance. We propose here to give a few particulars as to the lesson.

If possible, beginners in the grammar-school ought to write half an hour every day; more advanced classes, forty minutes four times a week. The time selected should not be immediately at the opening of the session or directly after recess, because then the scholars' hands are apt to be heated by the excitement of play.

The amount written must depend on the advancement of the scholars. At the first commencement, it may be only five or six lines of a column. After the first page, if that is carefully written, there will be little difficulty in writing half a page at a lesson. Later, as much should be written as can be done well. Much will necessarily depend on the control the teacher has over the scholars in enforcing immediate and exact obedience and lively attention, and also on the number of scholars in the class.

The books and other materials distributed as suggested in the next section, and the class in position, supposing penholding and finger movements already taught, the teacher requires them to read the directions at the top of the page; also any thing bearing on the lesson from the cover. He then questions them as to what is to be written, the name of the form, its parts and proportions. Having ruled lines like those of the

book on the board, he requires them to direct him where to begin, what to write, following their directions exactly. He should next give them such instruction as he finds in the **Manual**, and point out the true form on the **Tablets**.

The common-school series is sufficiently complete, by the fulness of directions at the top of the pages and on the covers, to enable the teacher to do his work successfully by their aid alone; but the **Manual** and **Blackboard Tablets** will be found very valuable auxiliaries by those who desire a thorough knowledge of the subject, as they are prepared for this very purpose.

When the scholars have acquired exact knowledge of what is to be done and how to do it, the next step is to have them write on their practice-paper by count, to trace the copy with dry pens, to criticise, and then to write in their books, to criticise and correct constantly in the way already directed.

After the first page is written, five minutes of each lesson should be spent on the movement-exercises given below.

We cannot too earnestly urge upon teachers the importance of class-instruction and class-criticism; it saves so much labor, and is so much more effective. Though individual instruction cannot altogether be dispensed with, let it nevertheless be reduced to the minimum.

OPENING AND CLOSING.

The great object in distributing the materials for writing, which should always be kept in charge of the teacher, is to save time. After trying a variety of methods, we think the following is the most rapid, and occasions the least disturbance.

A scholar is selected for each aisle, who distributes and collects the books right and left alternately. The piles are placed on the front desks: one scholar then collects the whole,

placing the backs of one pile on the fronts of the next, and so on alternately, afterwards carrying the whole to the place appointed for them.

As soon as the books are distributed, the scholars come to the teacher, who gives to each, in turn, the number of pens required for each aisle: they should always be carried with their points down. Or a handful of pens may be given to two scholars, who go down and up the aisles, meeting in the middle. They may be collected in the same way.

The penwipers may be kept in the desks.

During the distribution and collection, the scholars should all be in their usual position, with arms folded, or any other preferred. No interference with the distributors should be allowed.

When all is ready, the following method for opening and closing will give a pleasant uniformity: the teacher can give the words or the numbers, as preferred:—

OPENING.

1. Take position.
2. Adjust books.
3. Adjust arms.
4. Find copy.
5. Open books.
6. Open inkstands.
7. Take pens.

CLOSING.

8. Dry the pens.
 9. Lay down pens.
 10. Take usual position.
 11. Close inkstands.
 12. Close books.
- N.B. — Give the order "Take ink" when ready.

POSITION.

The position of the body is of very great importance to correctness and freedom of execution. The proper position of the arms, hands, and books, must also be carefully attended to. The accompanying cut gives an admirable illustration.

I. Of the Body.—1. Let the body be erect and self-supported.

2. Let the right side be turned exactly to the desk; and the feet be placed at the side of the seat, flat on the floor.

REMARK.—1. The relative position of the right fore-arm and book is thus most easily secured and maintained.

2. The front or back of the desk is a constant guide to the position of the fore-arm.

3. The body is more easily kept erect: there is less possibility of lounging.

4. The right fore-arm cannot get off the desk: both the rests must remain on.

5. The teacher can easily see the position of every hand and arm across the rows and down the files.

If this position has never been tried, we think the teacher will find it worth while to subject it to experiment.

The only objection that can be made to this position is, on the ground, that in business, when using large account-books, it is unsuitable. The answer to this is, that it possesses very important advantages for learners and for the teacher; and that, when the art of writing is acquired, any other position will be found equally available.

If, however, any other position should be preferred,—the body fairly fronting the desk, or with more or less inclination of the right or left side to it,—attention must be directed to the following points:—

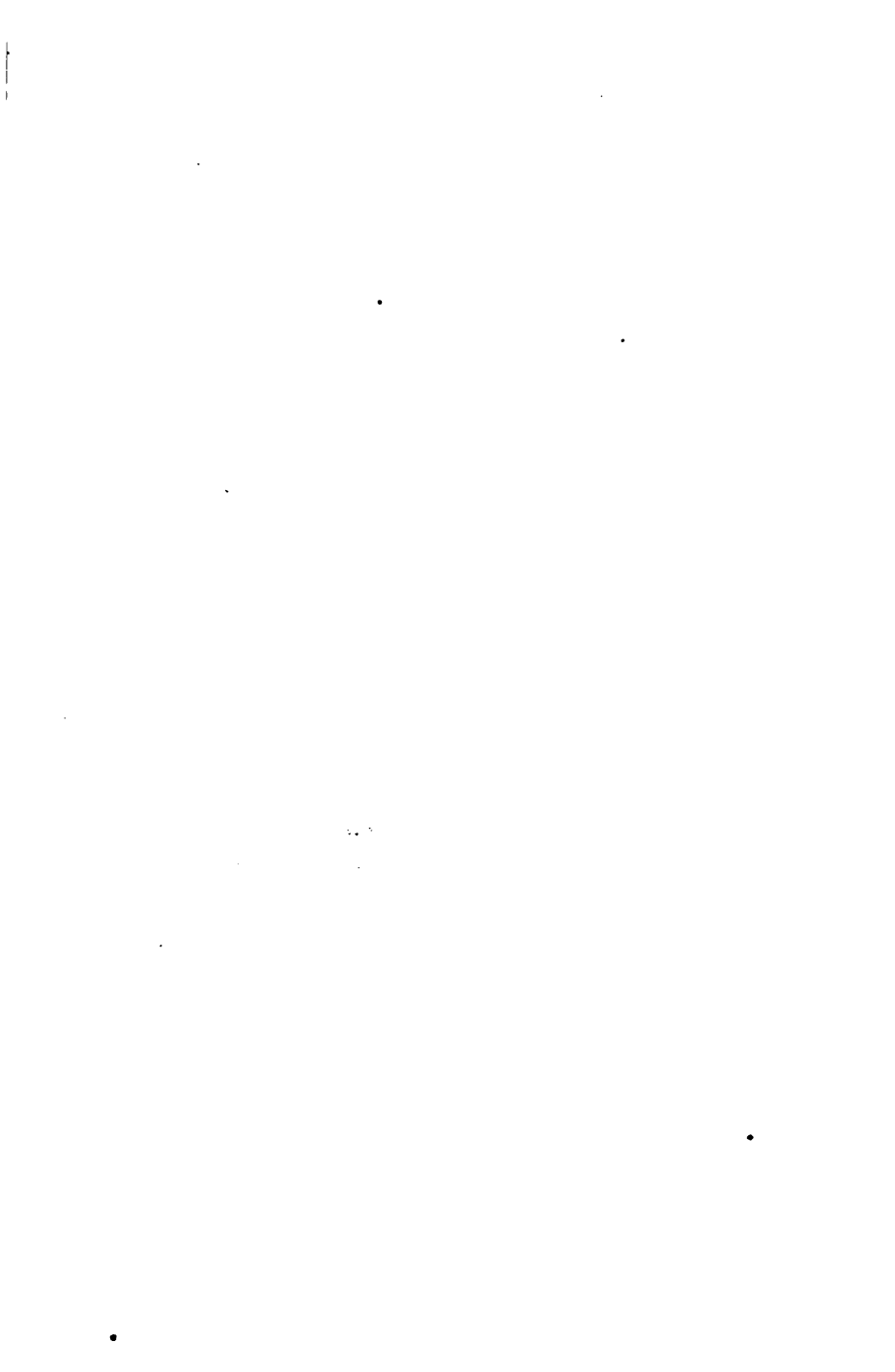
1. Keeping the right fore-arm on the desk at least as far as half way between the wrist and elbow. This is accomplished by pushing the book up every three or four lines.

2. Keeping the books at right angles to the fore-arm.

3. There must be no leaning against the desk, or resting on the right fore-arm.

II. Of the Arms.—1. Place the right fore-arm on the desk, parallel to the back or front edge.

Much attention must be given to this rule, to guard against projecting the elbow.





2. Bring the left arm across, and place the fingers on the left side of the page, to keep the book steady.

III. Of the Hands.—1. Keep the right hand in a line with the fore-arm.

2. Keep the fingers of the left hand on the left side of the book.

IV. Of the Book.—1. Turn the book, and place the upper left corner in the corner of the desk, the top at the left side. It is to be pushed up toward the back of the desk when the first column is to be written, and drawn down to the front or over it for succeeding columns, to suit the scholar's convenience.

2. Place the top of the book on the left edge of a single desk, and at the left edge and middle of a two-seated desk. This should be constantly attended to.

REMARK.—It will be found convenient to double the books back exactly at the stitching, and to place the inner flap of the cover over the written pages.

PENHOLDING.

The most effectual method of teaching scholars to hold the pen correctly is to impress on their minds the following simple rules.

For the **MIDDLE FINGER**, two rules:—

Rule 1.—End of the finger at the end of the holder, where the pen is inserted (**A**).

REMARK.—This allows the pen to project about three-quarters of an inch beyond the fingers, and keeps the finger out of the ink.

Rule 2.—Holder at the side of the finger, just under the corner of the nail. If preferred, instead of this, the holder may cross the finger at the root of the nail (**B**).

REMARK. — We prefer the former for beginners; because, if pupils are allowed to drop the end of the middle finger, they are apt to curl it up too much, and often to hold the pen with only the forefinger and thumb.

For the **THUMB**, two rules:—

Rule 1. — End of the thumb opposite the first joint of the middle finger (**C**).

REMARK. — This is secured by bending the joints of the thumb outwards.

Rule 2. — Inside upper corner of the thumb a little under the holder (**D**).

REMARK. — This is very important. If neglected, the holder will fall below the knuckle of the forefinger. The corner of the thumb, being under it, prevents this.

Two rules for the **FOREFINGER**:—

Rule 1. — Shut the forefinger down on the pen, and let it touch the middle finger throughout its whole length (**E**).

REMARK. — The first and second fingers are slightly bent outwards at the first and second joints.

Rule 2. — Let the holder cross the third section of the forefinger obliquely between the second joint and the knuckle (**F**).

REMARK. — The holder can easily be kept above the knuckle if the corner of the thumb is placed a little under it.

Two rules for the **HOLDER**:—

Rule 1. — It should make an angle of about 45° with the paper. If elevated too much, it is apt to catch in the paper; if not enough, clear lines cannot be made.

Rule 2. — The top of it should point slightly inwards to the shoulder. This is effected by turning the hand slightly to the right at the wrist. It is thus made to slant nearly like the writing, and the hand is kept from dropping down on the right side.

REMARK. — There is a constant tendency with beginners to let the hand fall over and rest on the little-finger side. Hence this last rule is very important; for, if the hand is allowed to so rest on the side, it will be found that the move-

ments are made by moving the whole hand from the wrist, which results in crooked and coarse lines, owing to the use of only the right nib of the pen.

Several methods may be used with advantage to teach the scholars how to hold the pen.



1. The teacher should take a position in front of his desk, and show the correct method with a pen in his own hand.

2. He should direct the scholars to take the holder by the end between the forefinger and thumb of the left hand, and to hold it vertically, with the point of the pen downwards; then to hold out the right hand, to curl the third and fourth fingers up against the palm, to extend the first and second, and to place the end of the thumb a little beyond the first joint of the forefinger; next, to raise the pen so that the holder may be in a horizontal position, and to move it sideways, and place it between the thumb and fingers along the whole length of the forefinger, the end of the holder next the pen at the side of the middle finger, or across the root of the nail. The holder thus placed, and still held at the top by the left-hand fingers, is below the knuckle: the fingers are still extended, and the thumb is underneath. Finally, he may direct them to raise the holder by the left hand above the knuckle, bending the fingers and the thumb at the first and second joint as they do so; and the true position will be attained.

REMARK. — Too much stress cannot be laid upon the necessity of holding the penholder gently. It must not be grasped or pinched, as this, by the tension of the muscles, destroys all freedom of movement, and soon causes weariness and pain.

RESTS.

There are two Rests, — one for the fore-arm, called the **Arm-Rest**; and one for the hand, called the **Hand-Rest**.

I. The Arm-Rest is the muscle at the thick part of the fore-arm, just below the elbow. By keeping the flat of the wrist well towards the desk, this muscle is brought under the arm.

It forms a yielding cushion, on which and from which, as a centre of motion, the fore-arm can play easily. By rolling the arm sideways on it, a lateral movement is obtained; and it also allows a projective and retractive movement of the whole fore-arm.

This rest should be looked upon as the true support of the arm; and the hand should be considered as held out at the end of the arm thus supported.

REMARK. — In order to have free motion of the fore-arm, the hand must be kept well up, $\frac{1}{2}$ that is, not leaning over towards the right, — and the wrist must not touch the paper.

II. The Hand-Rest is the name given to the corners of the nails of the third and fourth fingers, which are placed on the paper by bending the fingers well under at the first and second joints. It should be used only to steady the hand. The hand should not be allowed to rest heavily on it: if it does, the side movement of the hand will be arrested.

REMARK 1. — The fleshy cushion of the third finger should be on the nail of the fourth, and these fingers should be kept clear of the pen-fingers.

2. — Let the scholars hold out the fore-arm, and observe that the hand does not sink down for want of support; that it can be held out in a line with the arm without resting on any thing. Endeavor to fix on their minds that the arm is thus to hold out and sustain the hand when writing, and that the **Hand-Rest** is to be used only to steady it.

MOVEMENTS.

The force by which the pen is carried in different directions must work through some instrumentality. The action which results is termed a **Movement**.

In writing, the instruments used are the pen-fingers, the fore-arm, and the whole arm, giving rise to the three principal movements, named respectively the finger movement, the fore-arm or muscular movement, and the whole-arm movement.

The Finger Movement is made by the extension and retraction of the pen-fingers by flexion at the second joint of the first and second fingers, and at the first joint of the thumb, which also moves as far as its origin at the wrist.

To teach this to your scholars, hold a pen in your hand so that all can see. Call their attention to the fact, that the fingers are bent down at the second joint, and the thumb out at the first; thus holding the pen in a medium position, capable of being moved upwards or downwards. Show them, that, if the fingers and thumb were straight, the pen would be fully extended, and an up-stroke could not be made: if they were bent as much as possible, the pen would be fully retracted, and no down-stroke could be made. Hence the convenience of the medium position.

Next show, that, by straightening the thumb, the pen is pushed upwards; and that, when the thumb pushes, the fingers yield at the second joint. In this way an up-stroke is made.

Then show, that, by bending the fingers at the second joint, the pen is pushed downwards; and that the thumb, in turn, yields by bending at the first joint, and giving way as far as the wrist. In this way a down-stroke is made.

The scholars should now take their pens, and place them correctly in their fingers, holding them in the medium posi-

tion. Give the order "Thumb," upon which they are to push up with the thumb, and observe the upward movement of the pen; then "Fingers," when they are to push down with the fingers, and observe the downward movement of the pen. Repeat this slowly several times, then more rapidly.

After this has been done ten or twelve times, let them lay down their pens, as their fingers soon get tired, and their minds confused.

While they are resting, tell them that you shall begin with the same words, and then change to numbers; that, when you say "One," they are to make the upward movement; "Two," the downward. Let them take their pens again, holding them in the medium position; and after saying "Thumb," "Fingers," two or three times, begin "One," "Two," &c.

Critical Points. — (1.) The correct holding of the pen; especially that the penholder is in front of the knuckle. (2.) That the pen is in the medium position. (3.) That the hand is not resting on the right side. (4.) That the movement on the part of all the scholars is simultaneous.

REMARK 1. — Absolute obedience is necessary to success. Here is the beginning of that simultaneous work, which, carefully enforced, will enable you to handle the class as one individual.

2. — Do not continue this exercise too long. Remember your own experience when you began to write.

The **Fore-arm** or **Muscular Movement** consists of the forward-and-backward and of the lateral movement of the fore-arm on the arm-rest, — that is, the muscle below the elbow, — as the centre of motion. The combination of these two produces the oblique movements required.

The **Whole-arm Movement** is used mainly for striking large capitals and for flourishing. In this, the hand, steadied on its rest, is moved as required by the action of the whole arm from the shoulder as the centre of motion.

Combined Movements result from the union of any two or all of the above.

Practical Use. — **First,** For beginners, since the time generally allotted to writing is so short, and the thorough study of the forms of the letters so imperative, the simplest movements we can use are the best.

Two things are to be accomplished, — the up-strokes and down-strokes of the letters, and the keeping of the hand in the same relative position for each succeeding part by moving it to the right across the column. The finger movement secures the former, and the lateral part of the fore-arm movement the latter.



The diagram shows exactly how the movements are combined. The pen being correctly held, and the hand rightly placed, whenever the pen-fingers move up obliquely to make the up-stroke, the hand-rest, and by consequence the whole hand, is moved sideways by the action of the fore-arm. When the pen-fingers move down, the forward movement of the hand and its rest is stopped, because the down-stroke is towards the left, and no advance of the hand is needed.

The fingers make the up-strokes and down-strokes of the letter; the rest slides forward on a straight horizontal line for each up-stroke, and stops whilst each down-stroke is made.

Critical Points. — (1.) The position of the hand, keeping it well up, not falling over to the right. (2.) The separation of the hand-rest from the pen-fingers. (3.) The slide sideways without "hitching."

REMARK. — It is very difficult for scholars to acquire this combined movement. Care should be taken, therefore, that, in writing, they do not lift the point of the pen from the paper till the group of letters or the word is written; except in *p*, for which special directions are given.

Second, As soon as the hand is somewhat trained, and a tolerable degree of steadiness acquired, an advance in movement may be safely attempted.



The hand-rest should now be made to participate in the movements of the fingers. As they move obliquely up and down, it should do the same, describing a letter of the same form, but making it of less height, because part of the movement is made by the fingers.

Critical Points. — (1.) Making the hand-rest move with the fingers. (2.) Taking care that the wrist does not touch the paper.



Third, The muscular movement, which is the true business movement, may now be acquired. It consists in the use of the fore-arm mainly, the pen-fingers being used only to aid in making the extended letters.

For the short letters, the fingers are not moved at all. The fore-arm moves the whole hand to form the letter; and consequently the hand-rest describes a letter of the same form and size as the pen does.



For the extended letters, the fingers are extended or contracted to make those parts of the stems and the loops which are above or below the short letters. This is shown in the diagram by the dotted lines.

For the capitals, the movement of the fingers is combined

with that of the whole hand, to give the greatest possible ease to the curves and turns.

Critical Points. — (1.) Making the slightest possible movement of the pen-fingers, except in the extended letters and capitals. (2.) Using the muscle below the elbow as the centre of motion.

REMARK. — The muscular movement can only be acquired by persistent practice. Our own experience teaches us, that, if scholars are thoroughly drilled in the accurate execution of the forms of the letters, as soon as they have sufficient practice they run at once into a business-hand. The most superlative movement without accurate and graceful form is absolutely worthless; while, on the other hand, real grace and finish can only be secured by free and practised movement. Farther on, a section will be found giving a variety of exercises to facilitate the acquirement of this.

COUNTING.

As the appearance of the lines forming the letters should be uniform, equable movements are necessary in their execution; and, as there are a great many things for a beginner to think about in writing, some device for securing sufficient time for thought is very valuable.


For these ends, no method has yet been found superior to counting. It checks the sudden jerks with which beginners delight to strike off the final parts of letters, and it compels them to such a rate of progress as gives time for thought and care. Besides this, it urges the very slow to a proper speed, and checks the hurried rate of the nervous; while it exercises a peculiarly beneficent influence on the irritable.

It should always be remembered that it is merely a means to these ends, and not an end itself. If any one doubts its

utility, instead of speculating on its probable results, let it be subjected to the test of experience, and a wise decision can soon be arrived at.

When scholars begin the study of penmanship, the first five or six copies of No. 1 may be counted all through. Then it may be found sufficient to count the first column of each new combination; afterwards, merely half a column; later still, only two or three lines. As soon as equable movements are attained, and the class generally are drilled to a proper care, and avoidance of hurry, it may be dispensed with altogether. It will, however, be found useful for any new letter or peculiar combination, and for an occasional check on too rapid a rate of execution.

Our method is to count generally the odd numbers for the up-strokes, and the even numbers for the down-strokes.

Thus, in *u*, we count one, up; two, down; three, up; four, down; one, up.  We count one for the final connecting line, because, in a combination, it is the first line of the next letter.

Such a method of counting should be used as may best secure the end in view. Thus, in *r*, for beginners it is useful to count four, — one, up; two for the very short line returning on the same; three for the little vertical line; four for the oblique straight line, and bend of turn; one for the final connecting line. In this case, as the lines two and three are very short, the numbers may be counted a little more rapidly. When scholars are more advanced, and the writing is smaller, three may be counted. Thus, one, up; two for the head; three, the oblique down-stroke; one, up. •

The general rule for counting is, to use a fresh count for each principal change of direction in the lines.

Cross the *t* and *x*, and dot the *i* and *j*, after the group or word is finished, saying, "Cross," "Dot."

It will be found important, also, to show on the board precisely how much of a letter is made at each count. Thus, in

u, one, the whole up-stroke; two, the whole down-stroke, — that is, the oblique straight line, with the little bend at the bottom for the turn; three, the whole up-stroke; four as two; one as three. Remember to warn the scholars against stopping in the middle of the turn: the motion is continuous through the principle.

For the capitals the same method may be followed. Thus for *B*, with the full oval front, we may count, for stem, one, double curve down; two, up on left side to the middle of the turn; three, down and under to the left; four, over and down to the middle of the turn; five, up.

The figures for counting are marked above the copies in the earlier books.

MOVEMENT EXERCISES.

The accompanying exercises are designed, after a definite and scientific method, to train the hand in acquiring facility of execution for those movements which the actual forms of writing require. The common practice in many systems of giving a variety of unconnected exercises, leading to no given result, and arranged without rhyme or reason, has brought such exercises into disrepute with practical teachers. They will, nevertheless, be found a most valuable auxiliary when rightly arranged and faithfully used. We therefore call especial attention to the progressive arrangement and definite object of those here given.

It is desirable that the teacher should place them on the board and explain their object, giving exact directions for their execution, and requiring perfect obedience to his directions.

Let the pupils have half a quire of letter-paper or a spare blank-book, ruled, without copies; and insist upon the exercises

being written according to the directions given, as carefully as they write their copies, without any scribbling.

Careful attention should be given to correct position and penholding: without these the exercises will be of no value.

Exs. A, B. — As scholars are very apt to lean the hand over to the right, these vertical exercises are designed to correct the fault. Draw four horizontal lines on the board to represent the ruling of their paper. Begin at the top line; go vertically down to the fourth, up, down, &c., counting "one" for each movement: thus, "one," "two," &c., — six in all. Then begin again at a short distance from the last.

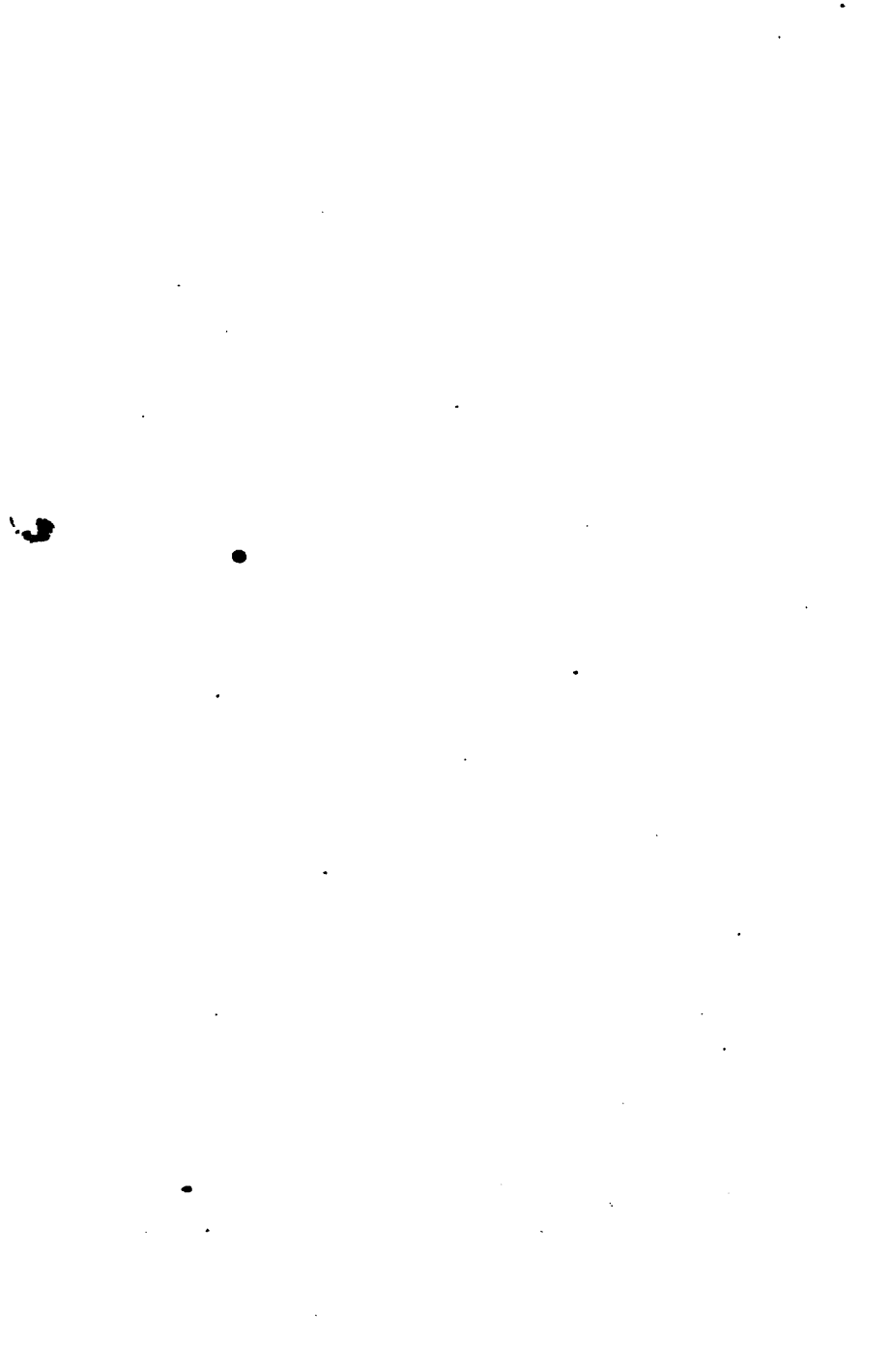
Watch the position and penholding. The movement should be made on the muscle in front of the elbow: the nails of the third and fourth fingers should accompany the movement of the fingers down and up.

The vertical oval should be written in the same way. In the diagram the lines are made separate, to show that there are several; but, in writing, they should simply overrun the first lines.

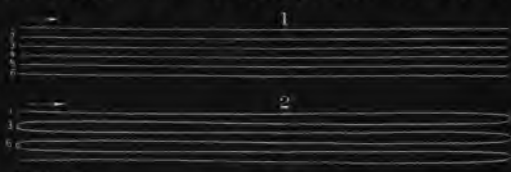
Ex. 1. — To acquire the sliding movement on the nails of the third and fourth fingers. Draw four lines on the board as before, long enough to represent the width of the page. Write the first line of the exercise on the first line, half across the page only, the next a little below, and so on, the sixth on the next ruled line below; then on the other half of the page; thirdly, begin on the next ruled line, &c. The muscle-rest remains stationary; the finger-rest slides forward. The straight line is made by a slight retraction of the fingers to counteract the tendency to curve.

Ex. 2. — For practice on the sliding movement. In this case, remember the object is the movement, and not the absolute straightness of the lines. Count as marked.

Exs. 3, 4, 5, 6, 7, 8. — These are drills on the sliding movement of the finger-rest up and down. Draw six lines on the board. Begin at the top, and write down to the third: when this row is completed, begin on the fourth, and write



P. D. & S's. Movement Exercises.



P. D. & S's Movement Exercises.

29



30



31



32



33



34



35



36



37



38

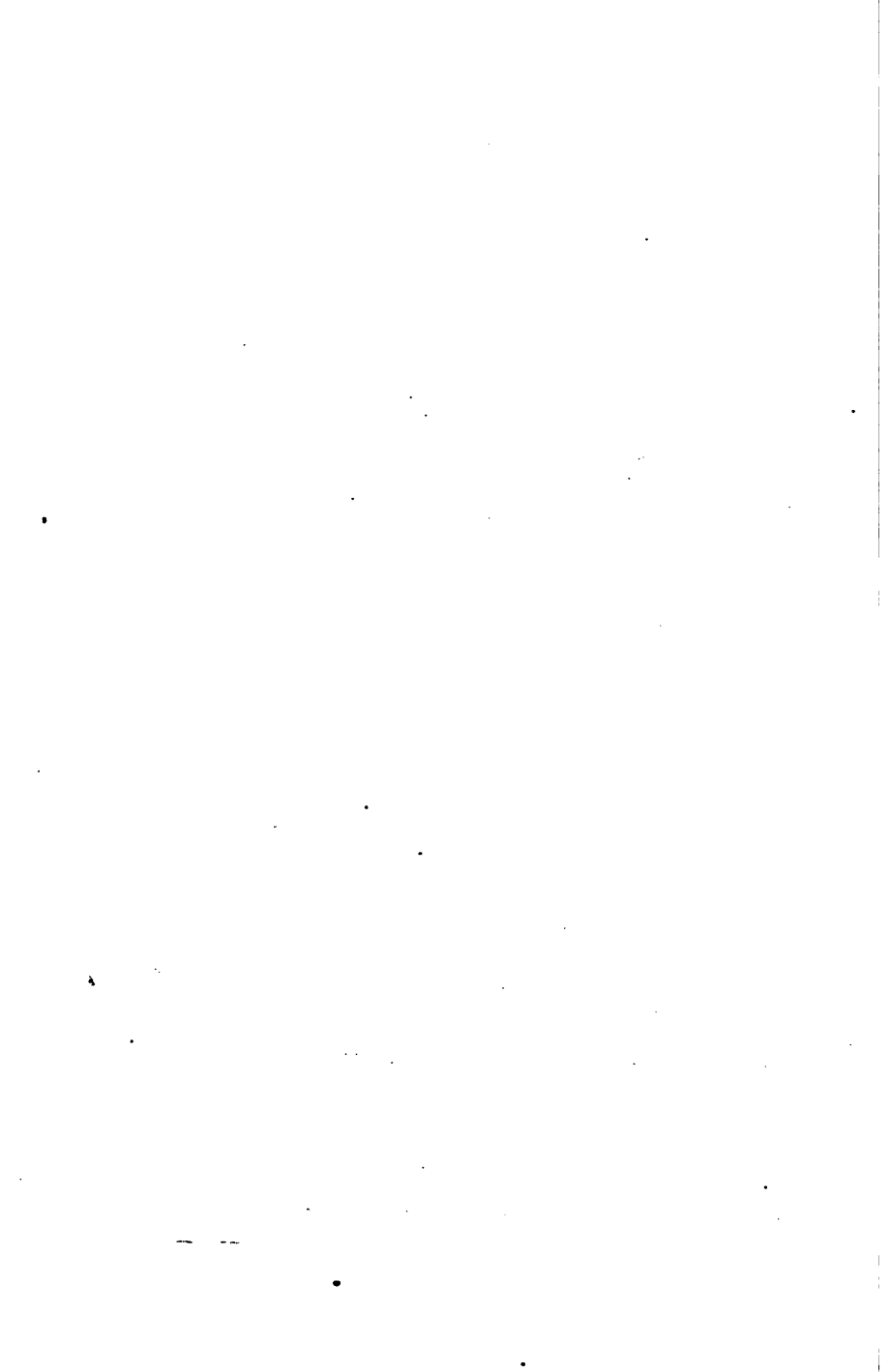


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40





down to the sixth. Require the lines to be made by movement on the muscle-rest without bending the fingers. In **Exs. 7, 8**, overrun the first oval, always using the fore-arm movement.

Ex. 9. — To combine the left-to-right and the up-and-down fore-arm movements. Begin on the second line and slide, slightly rising to half the height between the lines. Make the down-stroke without moving the fingers at the counts "one," "two," giving the order "Slide" as shown. Turn at the base-line. Let this exercise extend across half the page.

Ex. 10. — Condensing the last. Make four down-strokes across half the page.

Ex. 11. — This further condensation gives the letter *u*, showing the scholar that the exercise leads directly to a practical end. Write two groups, of three *u*'s each, half across the page. If beginners make longer groups, they are apt to get out of position. Count one, two, three, four, one, &c.

Exs. 12, 13, 14. — Similar exercises on the second and third principles, resulting in the letter *n*.

Ex. 15. — The *m*, for variety, may sometimes have the curve swung round it, as in **Ex. 18**; or the last line may be swung under, and two other groups written on the lines below, as **Ex. 36**. Do not try to have more than three lines written, as the arm-rest will not allow it for beginners. Count six. For the connecting-line of groups say "Round."

Exs. 16, 17, 18, 19, 20. — These are illustrations of the way in which all the short letters should be practised. The fore-arm movement is to be used throughout, without using the fingers; which will, however, slightly participate in the movement, as it is right they should. The object is to drill the scholar on the fore-arm movement; and therefore we concentrate his attention on that: the fingers will take care of themselves.

Exs. 21, 22, 23, 24. — To drill on the shades and extended movements in the stems and looped letters. Write the shades as directed in the chapter on Shading.

Exs. 25, 26, 27, 28. — Further exercises on the loops.

Ex. 29. — This is an exercise for the direct oval. It should be overrun between three lines. Width half the length.

Ex. 30. — This is intended to give the power of shading the left curve while the pen is kept in motion. Separate ovals follow, to be struck with a free fore-arm movement. Count one, down; two, up, &c.; later, one for the complete oval, &c.

Ex. 31. — An exercise for the indirect oval. Count one, up; two, down; three, up; four, down, &c.; the two and three a little quicker.

Ex. 32. — Varied exercises on the same, introducing the shade on the right curve.

Ex. 33. — For the capital-stem, to acquire the double curve. It should be overrun. Forms are also given to impart facility in making the shade on the lower curve of the stem.

Exs. 34, 35. — Drills to give power in shading.

Ex. 36. — An exercise on writing short words three times, each below the other, connecting them by a curved line swung under. A variety of words should be used.

Ex. 37. — A group of letters or a word may thus have an oval swung round them several times.

Exs. 38, 39, 40. — These are varied exercises on the direct oval. Capital-stem and indirect oval adapted to give freedom of movement, and power of shading.

SPACING.

Spacing treats of the width of letters, and of their arrangement in words at proper distances. The distances between words and sentences are also embraced under this head.

The width of each letter is given in the analysis and description of the letters: therefore nothing further need be said about it here. We have shown that the width of a letter

depends upon the slant of the up-stroke. It may be well to repeat, that a condensed style results from carrying up the up-strokes with very little more slant than the down-strokes, and a running hand from giving increased slant to the up-strokes.

We pass on, then, to the consideration of the combination of letters. The standard of measurement for width is the width of the letter *u* between its two upper points: this is termed a space, and depends on the slant of the up-stroke.

The governing principle in combining letters in a word is, that they should look about the same distance apart. This distance is most conveniently made when the up-stroke is oblique, by giving it the same slant as it has in *u*.

If the next letter begins with a turn, as *n*, it will be a little farther off than a space; but the correct slant of the up-stroke will place it right.

When the last line of a letter is a horizontal curve, as in *o* or *v*, it supersedes the first line of the next letter; and the question arises, How long should this horizontal curve be? We think, about three quarters of a space; because, this connecting curve being at the top, the space between the letters shows more than if it were crossed by an oblique line.

The simple rule, therefore, for spacing letters in a word is, when the last line of a letter is an up-stroke, write it with the usual up-slant, observing those exceptions which arise from any peculiarity of the following letter, — as *e*, for instance; but, when the last line of a letter is a horizontal curve, extend it three-quarters of a space, — that is, of the width of *u*.

In writing words in a sentence, begin the first line of a succeeding word vertically under the termination of the last line of the previous word.

REMARK. — It is a very common fault to place the words too far apart.

Sentences should begin close to the period which terminates the previous sentence.

Paragraphs should begin about half an inch from the margin.

In punctuation, the stops should be placed close to the word they follow.

Figures should be written about half a space apart.

SHADING.

Variety is an element of beauty. To have all the downstrokes in writing equally fine or heavy would become wearisome to the eye through sameness, and the happy effect of contrast would be lost.

Hence in the modern business style it is customary, while by far the larger number remain fine, to shade the remaining few.



A **fine line** (Fig. 1) is one made by simply moving the pen on the paper without pressure.

A **shaded line** (Fig. 2) is one made by pressing on the pen as it is moved.

PLACE OF THE SHADE.

I. On the Straight Line. — Whether diminishing or increasing, the shade on the straight line is placed wholly on the left, as illustrated by the dotted lines in the illustration.



Diminishing (Fig. 1), which begins heaviest at the top, and gradually diminishes to its close.

To make the top square, care must be taken to spread the points of the pen to the width desired before commencing the downward movement; then in descending, gradually lessen the pressure.

Increasing (Fig. 2), which is begun at the base-line, and gradually becomes heavier to its close.

To make the end of the increasing shade square, the downward movement must be stopped before the pressure is released, and the points of the pen are allowed to come together.

Where there is a turn at the base (Figs. 3, 4), the pressure should be wholly released before reaching the turn.

Where there is a turn at the top and base (Fig. 5), the shade diminishes equally towards the turns, being heaviest in the middle.

If the movement of the pen in making these shades is carefully watched, it will be seen how perfectly natural it is that the left point of the pen should spread out to form them, while the right point descends on a perfectly straight line and the usual slant.



II. Shade on the Oval.—(1.) On the left side of **Direct Oval** (Fig. 2), the dotted line shows that the shade is formed wholly on the left side of the true curve. This evidently results from the action of the pen's points, and produces true beauty of form; for the eye naturally compares the inside of the curve on the left side, which bounds the enclosed space, with the curve that forms the right boundary.



(2.) On the right side of the **Indirect Oval**, the shade is formed wholly on the right side of the true curve. The pressure must be made to fall on the left point of the pen, leaving the right point at liberty to spread and form the shade. In this case, also, the eye is satisfied with the result, as the inner and opposite lines of the curves bounding the oval are found perfectly symmetrical.



(3.) In the **Capital Stem** (Fig. 2), the shade falls wholly on the right of the curve. The right point of the pen begins the

down-stroke; but the roll of the hand throws the pressure on to the left point, owing to the direction of the shade, and the right is left free to spread and form the shade. The inner curves are thus kept symmetrical.

Execution of Shades. — All shades in capitals, to have a smooth and pleasing effect, must be made by a quick and firm downward movement of the whole hand, and not merely by pressure of the fingers.

All shades should increase and diminish gradually. On the ovals, it is generally heaviest at the point of extreme curvature.

The shades must not be sudden or abrupt, and great care must be taken that the shaded curves are not straightened.

The **Dot**, or **Bulb**, is sometimes preferred for the beginning or finish of letters. It is here given of larger size than is proper for ordinary writing, for the sake of illustrating its true form. Great care must be taken in forming it to give it a handsome appearance.



Figs. 1 and 4 illustrate it as the finish of an up-stroke. To make it, give a twist to the pen as the pressure is gradually increased, that it may have the shape of a pear.

Figs. 2, 5, and 6 illustrate it when preferred for the finish of a capital stem or other down-strokes. In making this, carry the fine line up and over; then give a twist to the pen towards the left as the pressure is suddenly increased and gradually diminished.

Fig. 3 illustrates it when preferred for the commencement of a letter. The method of formation is also by a twist of the pen, as before.

Shades, where used. — In ordinary writing, shades are used on the ovals of *a*, *g*, *q*, and on the stems of *t*, *d*, *p*, *q*. The lower part of *l* and *b* is often strengthened, and sometimes

the last down-stroke in *m* and the first in *w*, when it has a point at the top.

When double letters, which are usually shaded, occur, the practice is various. Sometimes both are made equally heavy; sometimes the second is made only half as heavy as the first: one's own taste must decide.

There is seldom more than one shade used in a capital letter. ●

THEORY OF PENMANSHIP.

Writing is the result of movement subjected to law. The law is determined by the forms required to be made. Hence there must be definite knowledge of the forms to be made. This requires analysis, — not merely the taking of the forms to pieces, but such a separation of them as indicates the function of each and the formation of the whole. Thus letters are found to consist of common parts made by similar movements, the knowledge of which is available for all the letters in which they occur, hence classified as principles. The principles, again, have common parts, — the main lines, the lines used merely for connection, and different ways of joining these lines. Hence a true and practical analysis observes also the elements, that the form they compose may be thoroughly known.

A true analysis must be exhaustive, setting forth the precise number of forms and their modifications, distinguished by the movements which produce them. That analysis is false, which, under pretence of simplifying, classes forms made by entirely different movements under the same head.

A good system must be carefully graded, beginning with single fundamental forms; then combining them, keeping constantly in view their similarity; and afterwards advancing to words and sentences. The most important part must be

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embraced within a few numbers for the instruction of those whose time for education is limited; while a larger and sufficient variety must be provided for those who enjoy greater advantages.

Under the head of Business Writing, we have explained our reasons for using the less simple forms for the standard letters; namely, because the simpler are contained in the more elaborate, and hence the acquirement of the latter enables the practised writer to form his own style in accordance with his natural taste. In a word, the acquisition of the standard forms trains the eye most effectually in the appreciation of curves, proportions, and beauty, and the hand in their execution, hence giving control over all other forms, and developing the power of originating them.

Our theory of penmanship would still be incomplete should we neglect to state what may reasonably be anticipated from school-training in this branch. Only extensive practice can form a business hand. There is not time enough given in school to this study to enable the scholar to acquire and to become confirmed in a free hand. The few who have peculiar natural aptitude may do so; but for the great majority we can only hope to lay such a solid foundation, that, should they ever have sufficient practice, they may then easily acquire it.

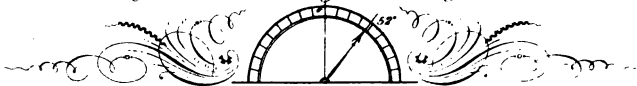
CLASSIFICATION OF LETTERS.

In introducing the letters for practice, it will be noticed that they are not taken up in their alphabetical order: they are, nevertheless, arranged on a definite plan, — that of grouping them according to their predominant form, and therefore unity of movement.

The straight line, with its appropriate slant, is the prevailing form in the small letters, being found in all except four. The short letters formed from it, as combined with curves in the

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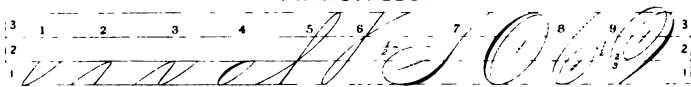
Analysis and Classification of Letters.



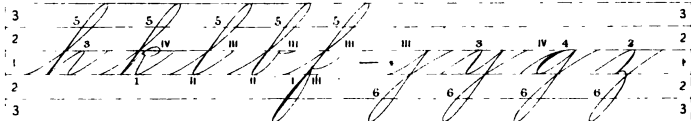
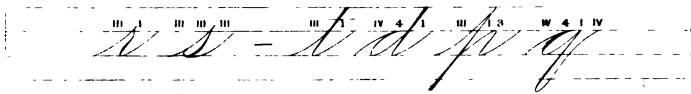
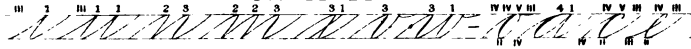
ELEMENTS.



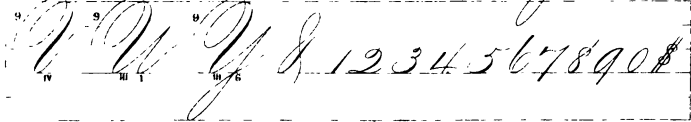
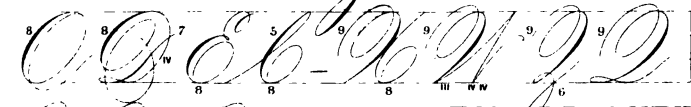
PRINCIPLES.

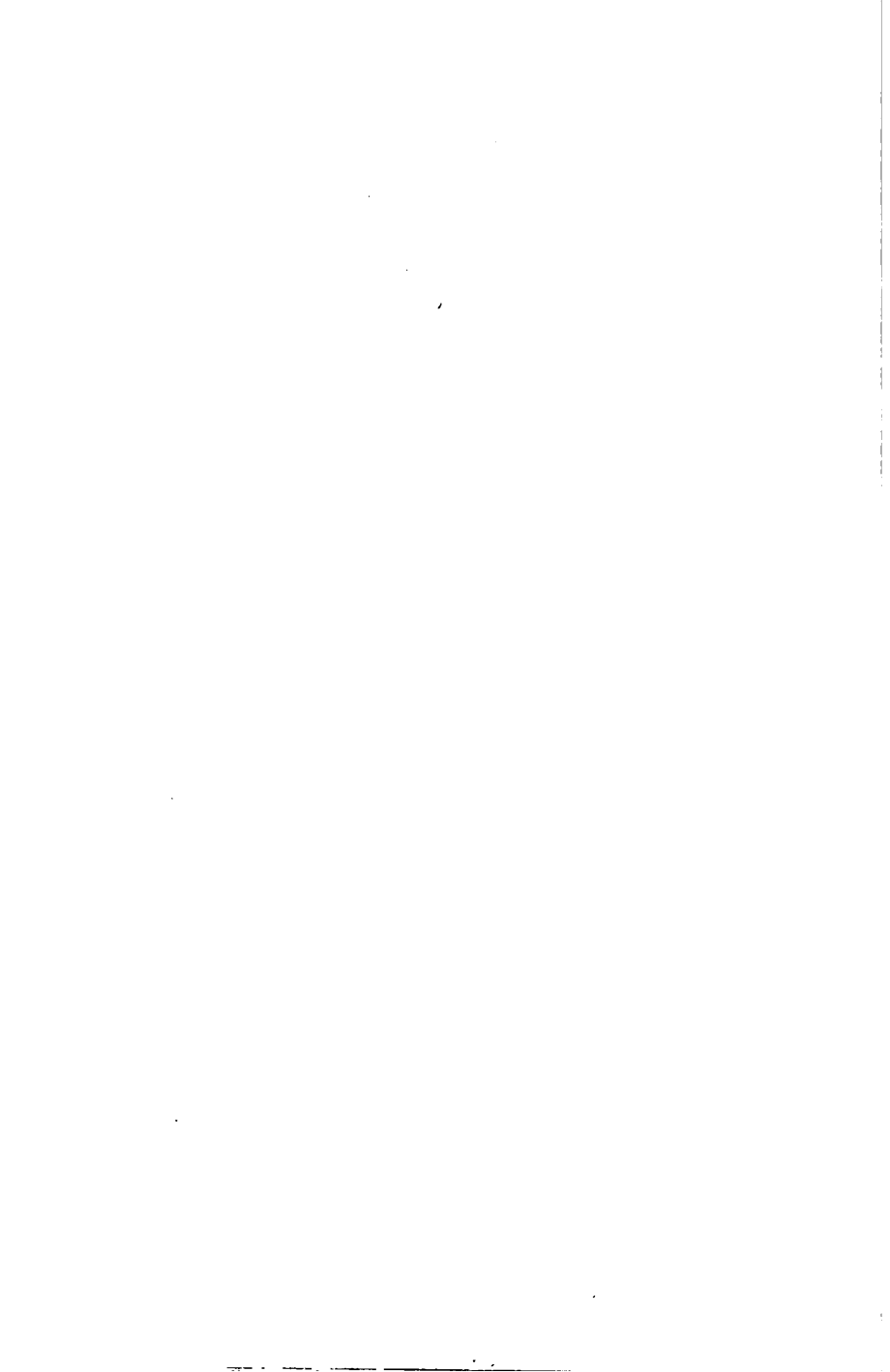


SMALL LETTERS.



CAPITALS.





first three principles, are, therefore, first given. The four short letters having a curved down-stroke come next; then *r* and *s*, which are exceptional, but still short. These are followed by the stem letters, which require a partially-extended movement. Lastly, the upper and lower looped letters, requiring fully-extended movement above and below the base-line.

The capitals are arranged according to the same plan. A glance at the accompanying plate will suffice to show the similarity of form, and therefore of movement, required in the several groups. The first six are based on the capital stem and its modifications, the seventh on the direct, and the eighth on the indirect, oval.

After the letters have been thoroughly learned, they are introduced in their alphabetical order.

SCALE OF PROPORTIONS.

As there are short, partially-extended, fully-extended, and capital letters, there must be some definite scale of proportions if they are to be made respectively of uniform size. Now, the longer letters are made of about the same size, whether the writing is larger or smaller, within moderate limits. If the hand is larger, the fully-extended letter and capitals are three times the height of the short letters; if smaller, four times the height.



This gives rise to the scale of thirds and the scale of fourths. The first is made by drawing six lines, including

five height spaces; the second, by ruling eight lines, including seven spaces. The short letters in both cases are written between the middle pair of lines.

In the scale of thirds, the stem letters extend two spaces above the base-line, the upper loops and capitals three spaces. Below the base-line the stems extend one space and a half, the loops two spaces. In the scale of fourths, these letters, though the same height as the others respectively, yet, owing to the smaller size of the short letters, extend, the stems two spaces and a half above the base-line, and two spaces below; while the loops and capitals extend four spaces above, and three below.

DEFINITIONS OF TERMS AND FORMS.

A **dot** is the smallest mark that can be made. Frequently a **bulb** is called a dot: it is described where it occurs.

A **line** is the path of a moving dot.

Lines are of two kinds, — **straight** and **curved**. They may have three directions, — upright, slanting, and level.

A **straight line** is one formed by the dot moving in the same direction.

It is **upright** when the direction is that of a plumb-line (Fig. 3).

It is **slanting** if inclined at any angle (Fig. 2).

It is **level** when its direction is parallel to the horizon (Fig. 1).

A **curved line** is one formed by the dot constantly changing its direction.

A **right curve** is one that curves towards the right (Fig. 1).

A **left curve** is one that curves towards the left (Fig. 2). These both resemble the lower right and the upper left curves of an oval, as shown in the diagram.

A wave-line, or double curve, is one formed by the union of two curves, whose curvatures are in opposite directions.

Curved lines may be written in the same directions as those named above for straight lines, — upright, slanting, and level.

The **base-line** is the level line, real or imaginary, on which the letters are written. — See the line under *m*.

The **top line** is the line, real or imaginary, parallel to the base-line, to which the short letters extend.

Up-strokes are those made by an upward movement, as in *m*.

Down-strokes are those made by a downward movement, as in *m*.

Main lines are the essential lines of letters, embracing all the down-strokes; to which must be added the second up-stroke in *o*, *b*, *v*, and the third in *w*.

Connecting-lines are those used to connect the main lines in letters or words; and are always curves, either slanting or horizontal.

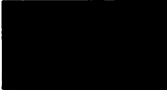
Parallel lines are those which are equally distant throughout, as in the down-strokes of *m*.


Similar curves are those whose curvature undergoes the same changes. Similar curves, when of the same size, cannot be parallel to each other; but they may have the same slant, as in *m*.

The **slant** of the down-strokes should be an inclination of fifty-two degrees to the base-line. This will be found the most convenient compromise between legibility on the one

hand, and rapidity of execution on the other.


Upper and lower angles are the joinings of two lines which have different directions in a point at the top and base lines respectively.

 **Upper and lower turns** are the joinings of two lines which have different directions by a continuous movement, which forms a narrow curve at the top and base lines respectively. A straight line and a curve, or two curves, may be thus united.


 A **space in height** is the vertical distance between the base and top line,—the height of *u*.

A **space in width** is the distance between the upper points in *u*. The letter *u*, therefore, is to be taken as the standard of measurement for a hand of any size. In a condensed or a large hand, the space in width is less than the space in height; in a running hand, equal to it, or greater.

The **short letters** are those which are written between the top and base lines, including *r* and *s*.

 The **stem-letters** are those which have a straight line extended beyond the top or the base line.

They are four in number, — *t, d, p, q*.

 **Loops** are those parts of letters which are formed by the crossing of two opposite curves.

The looped stem is shown (Fig. 2).



An **oval** is a form contained by similar and opposite curves (Fig. 1).

It is a **direct oval** when the downward movement precedes the upward (Fig. 2).

It is an **indirect or inverted oval** when the upward precedes the downward (Fig. 3).

ELEMENTS AND PRINCIPLES.

ANALYSIS OF LETTERS.

Analysis in penmanship is the separation of compound forms into their simple constituent parts. Its object is to present a single point to the mind, that it may be more accurately known, and thus made more available as a standard for execution and criticism. Thus, by analysis, knowledge is rendered no longer general and vague, but particular and definite.

THE PARTS OF LETTERS.

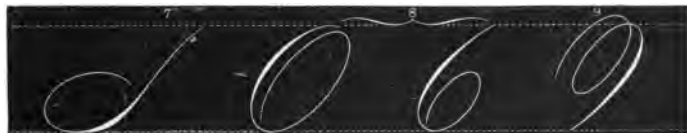
THE FIVE ELEMENTS.



THE SIX PRINCIPLES OF THE SMALL LETTERS.



THE THREE PRINCIPLES OF THE CAPITALS.



Two alphabets are used in writing, — the small and the capital. Each contains twenty-six letters.

The small letters are formed almost entirely from six principles, the capitals from three.

A **Principle** is a form common to two or more letters, and consists of a main line and such connecting-lines as are joined to it by turns.

The principles are formed from five elements.

An **Element** is a form common to two or more principles.

The elements and principles are somewhat modified in form or slant in some letters. If this modification can be executed by a corresponding modification of movement, we consider it to be the same element or principle modified, and not another element or principle. Thus, if the bend of a curve is to the right, and it is on a certain slant, we call it the third element; if it is made to curve more or less, or to change its slant in some letters, since these changes can be effected by a slight change of the movement required to produce a right curve, we call the form in each case the third element.

If this method be philosophical, that analysis of the letters is false, which, in order to give the appearance of simplicity to a system, classifies utterly opposite forms under the same head.

The advantage of this analysis into principles is, that it is necessary to know nine forms only, and their modifications, instead of making a separate study of fifty-two; whilst the distinction of the elements leads to the accurate knowledge of the principles.

REMARK 1. — When the principles are once thoroughly known, it is not necessary to refer any more to the elements.

2. — If any teacher prefers to use the descriptive names of the elements, instead of designating them by their numbers, it is just as well, and for their scholars, when beginning, perhaps better. In describing them, therefore, we give both.

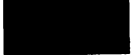
THE FIVE ELEMENTS.

The numbers designating the Elements are given in Roman; those of the Principles, in common figures.


The forms of the elements and principles and the movements required to execute them are fully described in con-

nection with the letters in which they occur. We shall here give merely a description of them for convenience of reference, and add a few remarks on them which will be found very useful to the teacher in enabling him thoroughly to appreciate the principles formed from them.

Element I. is the **Slanting Straight Line.**

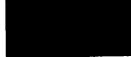
 This is the fundamental line in writing. It forms the main line, in whole or in part, in twenty-two out of the twenty-six small letters; in all, except *c, e, o, s*. As soon as the scholars can make it fine, really straight, and with uniform slant, their writing begins to look well. To these three points, therefore, the teacher's attention should always be especially directed. •

Element II. is the **Lower Turn.**


 The form of this is oval. It is important to observe that the bend of the turn is wholly on the left side before the downward direction of the movement is changed. In a very bold, large hand, this element begins one-fourth from the base-line; in smaller hands, very near it.

It is important to notice that the width of the turn depends upon the height at which it begins. The sooner the turn begins, the broader it is; and the nearer the base-line, the narrower, as shown in the illustration.

Element III. is the **Right Curve.**


 This is the right side of an oval, and may be known by its bending outwards towards the right hand. This curve is written both upwards and downwards, and is generally a connecting-line, though sometimes the whole or part of a main line, as in *o, s*.

Element IV. is the **Left Curve.**


 This the left side of an oval, and may be known by its bending outwards towards the left hand.


This curve is written both upwards and downwards, and is generally a connecting-line, but sometimes the whole or part of a main line, as in *c, e, o, s*.


Element V. is the Upper Turn.

 In this turn, the bend of the turn is wholly on the right side after the direction of the movement has been changed. It can scarcely be too often repeated, that the up-stroke must be carried well over to form this turn correctly.


THE SIX PRINCIPLES OF THE SMALL LETTERS.

 The **First Principle** is the straight line and its connecting-line, the right curve, joined together by the lower turn. Its parts, therefore, are Elements I., II., III.


 It is found in ten letters,—in *i, r, t, u*, the second part of *a, d, k, w*, and the lower part of *b, l*. When the straight line is higher than the short letters, the principle is said to be extended.

 The **Second Principle** is the left curve, as connecting-line, joined to the straight main line by the upper turn. Its parts are Elements IV., V., I.

It is found in three letters,—in *n, m*, and the upper part of *z*.


 The **Third Principle** is the straight main line, joined to a left and a right curve as connecting-lines, one on each side, by an upper and a lower turn. Its parts are Elements IV., V., I., II., III.

It is found in eight letters,—in *v, x*, the first part of *w, y*, and the last part of *n, m, h, p*.


 The **Fourth Principle** is an oval form, modified by a pointed projection on the upper right.

This is for convenience in joining it to the second part of the letter.

It is found in four letters,—*a, d, q, g*.

 The **Fifth Principle** is the **Upper Looped Stem**. The up-stroke is the connecting-line, joined by a narrow turn to the down-stroke, which is the main line, and consists of a very slight left curve, ending below the crossing in a straight line. Hence its parts are Elements III., V., IV., I.

It is found in five letters, — *b, h, k, l*, and the upper part of *f*.

 The **Sixth Principle** is the **Lower Looped Stem**. The down-stroke, consisting of a straight line changed to a very slight right curve below the crossing, is the main line. It is joined by a turn to the left curve. Its parts, therefore, are Elements I., III., II., IV.

It is found in four letters, — *j, g, y, z*.

THE THREE PRINCIPLES OF THE CAPITALS.



The **Seventh Principle** is the **Capital Stem**. It is a double curve, finished with an oval. This principle is variously modified, as is fully explained below in the description of the letters.

It is found in fifteen letters, — *A, B, D, F, G, H, I, K, L, M, N, P, R, S, T*.

The **Eighth Principle** is the **Direct Oval**.


It is found in five letters, — *C, D, E, G, O*.

The **Ninth Principle** is the **Inverted Oval**.

It is found in seven letters, — *Q, U, V, W, X, Y, Z*.

REMARK. — Some parts of the capitals are formed from the principles of the small letters, as is fully explained in the analysis of the letters in which they occur.

FORMATION OF ELEMENTS, PRINCIPLES, AND LETTERS.

 **Element I.**, or the slanting straight line, is the fundamental line in writing the small letters. It is found in twenty-two out of the twenty-six; in all, except *c, e, o, s*. In five of the principles it forms the stroke immediately above the base-line.

It is also the simplest form, and is made by the simplest movement: therefore every system ought to begin with it. It is the first copy recommended for practice.

REMARK. — It will be found convenient to set apart a space of three or four feet in length on the blackboard for illustrations of penmanship. Let it be selected where it can be best seen by all the scholars. On it rule the scale of thirds, the distance between the lines being three inches. (See diagram.) The boxes may be made by ruling vertical lines a little more than ten inches apart.



Divide the top and base lines into four equal parts by placing three dots on each, and show how the straight lines are placed at even distances, and made with the same slant by writing them from the upper dots and corner to the lower corner and dots, as shown by the illustration. The other copies may be illustrated in the same way.

The advantage of this boxing is its aid to the scholar in acquiring correct judgment of spacing and slant; and to the teacher, giving clear and definite illustrations.

When two or more letters are given in combination, it is to show the modifications necessary to effect it.

In all books ruled in columns, the scholar should be required to write down the column, and not across the page, as he is thus perfected in one thing at a time.

Knowledge. — Matter. — (1.) There are four slanting straight lines in each box. (2.) The first begins at the top line, one-fourth the distance across, and descends into the lower left corner; the second, one-fourth farther, or in the middle; the third, one-fourth farther, or half way to the corner; the fourth begins in the upper right corner: in a word, the lines are placed at even distances apart. (3.) All touch the top and the base lines. (4.) All are uniform in slant. (5.) The lines are to be very fine.

All these particulars should be drawn from the scholars by questions whilst they examine the copy.

Manner. — (1.) Position and penholding are to be correct. (2.) A simple downward slanting movement of the pen is to be made by bending the first two fingers at the second joint, and making the thumb yield at the wrist, and by bending at the first joint. (3.) The pen is to be held as gently as possible, and the paper touched lightly, without pressure.


Criticism. — Each of the eight points given above should be criticised in turn. The faults will be found on one side or the other of that which is correct. Thus, if there are to be four lines in a box, some scholars will make too many; some, too few. Again: if all the written strokes are to touch the top line, some will be found above it, some below it.

The faults may be discovered by a few simple questions, leading the scholars to criticise their own work. First, what is right? second, how many have it wrong? third, in what respect is it wrong? and, lastly, what must be done to make it right at the next attempt?

Critical Points. — (1.) The straightness and slant of the down-strokes. (2.) Making the lines fine. (3.) They should be placed at even distances apart. (4.) They should touch the top and base lines.

REMARK. — If it be thought that the above method is too

complicated and elaborate, we reply, that it is important to start right. When the teacher insists, at the start, on exact compliance with his directions, having made his instruction so plain that it is fairly within their comprehension, he places his scholars on the right track. Something is learned in each successive copy which is available for the future. For instance, beginning or ending in the corners, writing down the column, placing the letters in the boxes as they are in the copy, touching top and base lines, and making fine lines, — this is taught in the first copy. If carefully enforced there, these particulars hold good for all succeeding lessons, and will only need to be occasionally reviewed and criticised. Hence the instruction really embraces fewer points as we advance.

 Element III., the right curve, as connecting-line, is joined to the straight line in a point at the top, forming with it the **Upper Angle**.

Knowledge. — Matter. — (1.) The first line is the right curve written upwards: the second is a slanting straight line written downwards. (2.) Begin in the lower left corner, and make a very slight right curve to the middle of the top of the box; stop, and then descend with a slanting straight line, as in Copy 1. Be sure to make a point at the top. (3.) For the second angle, begin at the middle of the bottom of the box, and carry the right curve to the corner; stop, and descend with slanting straight line, as before.

ILLUSTRATION. — In teaching this copy, much pains must be taken to impress on the scholars' minds the idea of the right curve. One of the best methods is to draw a straight line of the required slant on the blackboard, and then draw the curve from one point to the other. Be careful to make the curve very slight.


The scholars must also be shown that the down-stroke slants less than the up-stroke, and joins it in a point, not running back on it at all.

Manner. — (1.) Position and penholding are to be correct.

(2.) The right curve is to be made by a slanting upward movement of the pen, sinking it a little downwards towards the right as it ascends. This is accomplished by straightening the thumb at the first joint, so as to push the pen up; and straightening the first two fingers at the second joint, allowing them to yield to the push of the thumb. The whole hand should at the same time move forward a little; the third and fourth fingers, which are used to steady the hand, sliding a little towards the right on the paper.

Criticism. — This should embrace, as before, the particulars of knowledge applied in their work.


Critical Points. — (1.) Joining the up-stroke and down-stroke in a point, and keeping the angle open to the point.
(2.) The up-strokes and down-strokes touching the top and base lines at even distances across the box.

 The straight line is here joined to Element IV., the left curve, in a point at the base-line, forming with it the **Lower Angle**.

Teach, illustrate, and criticise, as in the previous copy. Be careful especially to enforce the change in movement necessary to make the left curve.

Critical Points. — (1.) Joining the down-stroke and up-stroke in a point, and keeping the angle open from the point.
(2.) The down-strokes and up-strokes touching the top and base lines at even distances across the box.

THE FIRST PRINCIPLE.

 The straight line is here joined to Element III., the right curve, by a short curve forming the **Lower Turn**, Element II., on the base-line.

This is the **First Principle**. Its form is angular, with the point changed to a turn.

Analysis. — The parts of the First Principle are Elements I., II., III.

Knowledge. — Matter. — (1.) The slanting straight line descends nearly to the base-line; (2) then turns as short as possible, (3) and joins a right curve.

Manner. — Make the down-stroke as directed for the straight line; when near the base-line, move the pen downwards and forwards till the base-line is reached; then, without stopping, commence the upward movement at once.



Critical Points. — (1.) The straightness and slant of the down-stroke. Place the first three forms of the diagram on the blackboard: Fig. 1, curved down-stroke; Fig. 2, too much slant; Fig. 3, too upright.

To secure the straightness, be sure the turn is not begun too soon. Illustrate this on the board.

(2.) The width of the turn. It must not be too broad, on the one hand (Figs. 4 and 5); nor pointed, on the other (Fig. 6).

The first fault is caused by turning too soon on the left (Fig. 4), or by sagging on the right side (Fig. 5). Illustrate on the board.


The second figure in the box given above is the letter *i*.

Analysis. — The parts of *i* are Element III., First Principle, and a dot placed above it.

Formation. — Join the parts in a point at the top line, and place a dot at one space; that is, at the height of the letter above it on the slant of the down-stroke.

Critical Points. — Review all the particulars of knowledge already acquired in preceding copies as to the upper angle, the formation of the curves, and straightness of the down-stroke, which are to be made use of here.

The even distances across the box at the top and base lines will be found very useful, and should be carefully observed in forming the letters.


Analysis. — The parts of *u* are
 Element III. and First Principle repeated.

Formation. — Join the parts in points at the top line, keeping the angles open. Begin the letter in the lower left corner, and end it in the upper right. Observe the Critical Points of the First Principle, given above.

REMARK. — We refer thus to the Critical Points of the First Principle, not only because we thus save space, but especially because we wish to impress upon the teacher's mind the great value of a thorough knowledge of the Principles and their Critical Points. They are the standard by which all the letters can be criticised. How much easier is it to learn six forms and a few modifications than twenty-six?


The width of *u* between the upper points is called a space, and is used as the measure of width for all the other letters.

This is a good opportunity for impressing on the scholars' minds that the width of letters depends on the slant of the up-stroke.

 This may be illustrated by writing the First Principle on the board, and then adding additional up-strokes to show increased or lessened width. If, then, they have written the *u* too wide, they must make the second up-stroke slant less; if too narrow, more.

Critical Points. — Those of the upper angle and of the First Principle.

THE SECOND PRINCIPLE.

 The left curve, Element IV., is here joined to the straight line by a short curve forming the Upper Turn, Element V.

This is the **Second Principle**: its form is angular, with the point changed to a turn.


Analysis. — The parts of the Second Principle are Elements IV., V., I.

Knowledge. — Matter. — (1.) The left curve is carried well over; (2) then turns as short as possible, (3) and joins a slanting straight line. (4.) The lines touch at even distances across the box at the top and base lines.

Manner. — Carry the curve well over at the top line; then move slightly forward and downward for the turn, and finish with the slanting straight line.


Critical Points. — (1.) The straightness and slant of the down-stroke.

This can only be secured by carrying the up-stroke well over.

 This point is so important, that we give the accompanying diagram to show the very common fault of not carrying the up-stroke far enough over. A curved down-stroke is almost sure to result.


(2.) The turn having the same width as the turn of the First Principle.

THE THIRD PRINCIPLE.

 The left curve, Element IV., is here joined to the straight line by the upper turn, Element V., as in the Second Principle; and the straight line is then joined to the right curve, Element III., by the lower turn, Element II., as in the First Principle.


This is the Third Principle. Its form is angular on both sides, the points changed to turns.

Analysis. — The parts of the Third Principle are Elements IV., V., I., II., III.

 **ILLUSTRATION. —** Place the accompanying diagram on the board to show how the Third Principle is formed from the Second and First.


The instruction for these two Principles is to be used for the Third.

Critical Points. — (1.) The slant and straightness of the down-stroke. (2.) Carrying the first up-stroke well over at the top. (3.) Not turning too soon in the down-stroke.

 **Analysis.** — The parts of x are Third Principle and Element I. as the cross-line.

Formation. — Write the Third Principle, and cross it upward with a straight line through the centre on the slant of the curves.

Critical Points. — (1.) Those of the Third Principle. (2.) Crossing the Third Principle through the centre.


 **Analysis.** — The parts of n are the Second and Third Principles.

Formation. — Join the parts in a point at the base-line, keeping the angle open. Make the curves slight, turns uniform, and the down-strokes straight, with the same slant.

The width is one space. This is secured by simply making the up-stroke slant the same as in n . It is measured across the middle.


Take care that the letter is placed in the box as it is in the copy, that it begins and ends in the corners, and that all the lines are fine. Watch the position, penholding, and movements.

Critical Points. — (1.) Those of Second and Third Principles. (2.) Straightness and uniform slant of the down-strokes. (3.) Turns at top and base lines alike in width.


 **Analysis.** — The parts of m are Second, Second, and Third Principles.

Formation. — Join the parts in points at the base-line. The first three curves are similar, the four turns equal in width, and the straight lines and curves slant alike respectively. Width two spaces, secured by the slant of the up-strokes.

Critical Points. — Those of Second and Third Principles.

 **Analysis.** — The parts of v are Third Principle modified, dot, and a level curve.

The Third Principle is modified by carrying up the last curve closer, so as to make the width of v about half a space.

 **ILLUSTRATION.** — Draw the Third Principle on the board, add the dot and connecting-line, and show that the *v* thus made would be too wide. Then make the modified line, and impress it on the scholars' minds.

REMARK. — It is to be remembered, that, by previous practice, they have formed the habit of writing the up-strokes with a certain slant. Fix on their minds that a special habit is to be formed in writing this up-stroke for *v* and *w*, that these letters may be made narrower as required.


The dot begins even with the upper turn, and is formed by retracing the curve for a very short distance without pressing on the pen.

The level curve is carried from the bottom of the dot to the top line.

When *v* is followed by itself or another letter, the level curve supersedes the first connecting-line of the letter following, and joins the main line either in a point or turn.

The distance between the top point of a *v* and the turn of a *v* following is exactly the width of the top of the letter.

Critical Points. — (1.) The carrying-up of the third line closer. (2.) Making the dot small.

 **Analysis.** — The parts of *w* are Third Principle, First Principle modified, dot, and level curve.

Formation. — The First Principle is modified by carrying up the last curve about half a space closer, as in *v*. The width of *w* across the top is about one space and a half. The instruction given for *v* applies here.

Critical Points. — (1.) The modification of the last up-stroke of *w*. (2.) Joining the principles in a sharp angle at the top line, and keeping the lines separate, except at the point.

REMARK. — Be careful to have the letters placed in the boxes exactly as they are in the diagram. This will be found very helpful in getting the right slants and widths.

THE OVAL.

Two features — the straight down-stroke and the increased slant of the up-stroke — characterize the first three principles. In the oval the down-stroke is curved, and the two sides are parallel.

Analysis. — The parts of *o* are Elements IV., IV., II., III., V.

Formation. — Carry the first up-stroke as far over as the beginning of the bend of the turn in *n*, return a little on this line to get the beginning of the curve, continue the down-stroke as a curve, make a short turn, continue the up-stroke to the top line, and join the down-stroke; finish with a level curve.

ILLUSTRATION. — Give this diagram on the board to show the joining in a point, as in *u* (Fig. 1); in a turn, as in the first part of *n* (Fig. 2); and the different habit now to be acquired of running back a little on the up-stroke to get the curved down-stroke (Fig. 3). Also to show the angular form of the First Principle (Fig. 4), and the parallel sides of the oval (Fig. 5).

Critical Points. — (1.) Running back a little on the up-stroke. (2.) The curved down-stroke. (3.) The parallelism of the two sides. (4.) Closing at the top.

When *o* is joined to another letter, the directions given for the connecting-line in *v* apply.

When *o* is followed by *o*, the distance between the tops of the *o*'s is exactly one space. This is a guide for making the level curve, used as connecting-line, of the right length.

THE FOURTH PRINCIPLE.

Analysis. — The parts of *a* are Element IV., Fourth and First Principles.

An oval modified by having more than the usual slant, the top pointed and projecting on the right side, is the **Fourth Principle**.

Formation. — Continue the first curve well over, touching the top line as far forward as the second point of a *u*; return half a space on this line, and make a curved down-stroke with enough slant to carry it back to the first lower turn of *u*; then ascend like the inner line of *u*, and finish like *u* with the First Principle. Width, one space.

ILLUSTRATION. — Draw the letter *u* on the board. Change the first up-stroke to the left curve, and carry it over and forward to the second point of the *u*, — that is, over like the first line of *u*, but not touching the top line so soon, and then forward one space; next, return on the same line half a space, and slant back into the first turn of the *u*; after this, continue and finish exactly like *u*. It adds to the force of this illustration if the *u* is made with white chalk, and the *a* with red.

The down-stroke of the oval has more than the usual slant.

Critical Points. — (1.) Carrying the up-stroke over, and then forward one space. (2.) The increased slant of the down-stroke, that the letter in which it is used may be one space wide on the base-line.

REMARK. — It should be observed, that two special habits are here to be formed, — (1) of carrying the first line forward, and (2) of giving the increased slant to the down-stroke. Both of the movements necessary to effect this are peculiar to the Fourth Principle.

Analysis. — The parts of *c* are Elements IV., V., IV., II., III.

Formation. — Begin like the Second Principle, — left curve, turn and descend straight and slanting one-fourth a space; stop short, retrace the turn, form the left side and lower turn of an oval, and finish with the right curve on the usual up-slant to the height of the letter.

REMARK. — Take care that the down-stroke of the turn at the top is on the down-slant; that it is not made heavy, or carried down too far. It is also a very common fault to make the back of *e* too round. This arises from the fact that the down-stroke is a curve. Illustrate on the board, contrasting the correct form and the error.

Critical Points. — (1.) Narrow top. (2.) Slightly-curved down-stroke, not turned too soon. (3.) Narrow lower turn.

Analysis. — The parts of *e* are
 Elements III., IV., II., III.

Formation. — Begin with a right curve having more than the usual slant; at one-third of the height from the base-line change this to the down-slant, that the sides of the loop may be parallel; at the top line make a narrow turn to the left, descend, and finish like *c*, crossing the up-stroke at one-third from the base-line.


If another *e* follows, slant low, and then slant up as before. The low slant must be carried far enough to place the second *e* one space from the first.

ILLUSTRATION. — Draw the letter *u* on the board. Call attention to the uniform slant of the first and of the second up-strokes. Make a mark on each of the down-strokes of *u* one-third of a space from the base-line. Then draw the first line to this point, and notice the increased slant; in other words, how low the line must be that it may be crossed one-third from the base-line. Next carry the line up, and join it to the top of the *u* by a narrow turn. Notice that the slant here is less than the usual up-slant. Compare the forms of the two up-strokes, writing them separately on the board, and asking the scholars which you have made. Repeat this for the second *e*. Use red chalk, if convenient, for filling in the *e*'s.

Critical Points. — (1.) Slanting low, and then lessening the slant at one-third from the base-line. (2.) Making the down-stroke with a slight curve, and not turning too soon. (3.) End the last up-stroke at the height of the letter.

REMARK. — Observe the special habit which must be formed for the execution of the first up-stroke as it is found in this letter alone.


Since *e* is one of the letters which most frequently occur in the English language, it is very important that it should be well made; and yet no letter will give the teacher more trouble. Scholars, unless constantly watched, make it with a round back, nearly upright, and ending on the base-line. Be especially careful, therefore, that the three Critical Points are observed in practice.

 **Analysis.** — The parts of *r* are Element III., dot, slight vertical curve, and First Principle.

Formation. — Begin with the right curve, lessening its slant very slightly, and rise one-fourth of a space above the top line. Then retrace a little without pressure to form the dot, and go directly down to unite with the First Principle just below the top line. The width of *r* at half the height is half a space.

Place the *r*'s in the box as shown in the copy.

REMARK. — It will be observed, that, in the Analysis, we say "slight curve;" and in the formation, "go directly down." The former is the true form: the latter is used to prevent the scholars, whilst beginners, from making the head project in an awkward manner in front, as is their too-common habit.

 **ILLUSTRATION.** — Write *u* on the board; then, as in the diagram, carry up the first line with lessened slant one-fourth higher, and make the head, joining it to the *u* a little below its point. Repeat for the second *r*. Use red chalk, as before suggested.

Critical Points. — (1.) Small dot and short vertical down-stroke of the head. (2.) Straightness and slant of the down-stroke. (3.) Ending at the usual height.

This letter will always need special attention.

Analysis. — The parts of *s* are Elements III., III., II., dot, and III.

Formation. — Make the first up-stroke as in *r*, with slightly-lessened slant, and to one-fourth above the top line. Retrace to the top line, and then form the right side and lower turn of an oval, rising one-fourth of a space from the base-line on the left side. Retrace downward to form a dot on the first up-stroke, project the last up-stroke a little before ascending, and finish at the usual height.

ILLUSTRATION. — Make an oval on the board; draw through it with red chalk the first up-stroke, as in the diagram, cutting the left side of the oval at one-fourth from the base-line, and rising to one-fourth above the top. Retrace this, and join to the right side of the oval. Bend the up-stroke of the turn on the left side down a little to form the dot on the up-stroke with its slant. Show that, if the last up-stroke did not project a little at the base, it would be too close to the *s*, as in the dotted line.

The letter *s* occurs so frequently in writing, and requires attention to so many points, that it will be found worth while to use the accompanying diagram for further illustration.

Draw on the board the double lines. Make each of these errors in turn, and require those scholars who see any thing wrong to raise their hands; then inquire what it is. It will be observed that the erroneous forms are not made at random or arranged promiscuously, nor are all possible faults given, but that a selection is made with a definite purpose, to enforce the knowledge of the letter in its particulars by contrast with error.

The answers will be as follows: Not above the line (Fig. 1);

turn not brought down to the line, making the base double (Fig. 2); too high (Fig. 3); not retraced at top (Fig. 4); too sudden a swell for the oval (Fig. 5); left side of turn projecting instead of going up, and being bent back on the first up-stroke (Fig. 6); not retraced at the base, but looped (Fig. 7).

Critical Points. — To go up on the left side of the lower turn, and to bend down the line so that the dot may be on first up-stroke.

THE STEM-LETTERS.



The four stem-letters, *t*, *d*, *p*, and *q*, are so named from the extended straight lines which are found in them. The length and straightness of these stems render them peculiarly adapted for

shading: hence they are among the most showy letters in writing.



Analysis. — The parts of *t* are Element III., the Right Curve, as connecting-line, the First Principle extended, and the crossing.

Formation. — Begin at the base-line with the right curve and the usual up-slant to the height of one space; then change the slant to that of the down-stroke, and carry it to one space more in height. At the desired height, spread the points of the pen by pressure to the width required for the shade before the downward movement is begun; descend with a slanting straight line on the usual down-slant, gradually diminishing the pressure; and finish like the first principle, at one space in height. Cross it at one-third from the top with a very fine horizontal line one space long, and of even length on each side of the stem.

To make the crossing level, it must be executed by moving the whole hand sideways, sliding on the finger-rest.

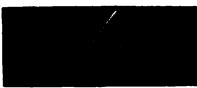



ILLUSTRATION. — Place a *u* on the board. Call attention to the fact that the up-strokes slant more than the down-strokes. Continue the first up-stroke to another space in height without changing the slant. Next draw the upper part of the extended First Principle, and thus show the necessity of changing the slant of the up-stroke at the height of one space from the base-line, that it may be retraced half its height by the down-stroke.




Show further, that, if the slant is not changed, one of three faults must result: either the stem will form an angle at the top with the up-stroke (Fig. 1), or it will have too much slant (Fig. 2) or a very broad turn (Fig. 3).

REMARK. — Wherever there is any thing peculiar in a form, there must be a corresponding change in the habitual movement to execute it. Hence especial care is needed to see that the new habit of movement is acquired. Remind the scholars of the force of the old habit already formed, and that it is only by intelligent watchfulness that the change can be made.

Critical Points. — (1.) Changing the slant of the up-stroke from the height of one space upwards. (2.) Making the turn the same width as the lower turn in other letters. (3.) Crossing level by moving the whole hand. (4.) Diminishing shade. (5.) Height.

Whenever in any small letter the up-stroke is carried above one space in height, the slant must be changed.



Analysis. — The parts of *d* are Element IV., Fourth Principle, and First extended.

Formation. — Begin like *a*. Change the slant of the up-stroke of the Fourth Principle as in the up-stroke of *t*, and finish as *t* without the crossing.

The Fourth Principle in *d* is not shaded.

Critical Points. — Those of the Fourth Principle and of *t*.



Analysis. — The parts of *p* are Elements III., I., and Third Principle.

Formation. — The up-stroke, according to the rule given under *t*, since it is carried above one space, slants less than usual. This change is to be made from the base-line, and not at the height of one space, as in *t*, in order that the angle may be kept open to the top point, instead of having the up-stroke retraced. Ascend two spaces from the base-line, stop, and descend straight and slanting to one space and a half below the base-line, beginning to shade at the centre, and increasing the shade to its termination. When the stem is made, stop the movement, then release the pressure to make the end of the shade square, raise the pen, begin again where the stem crosses the base-line, and add the Third Principle.

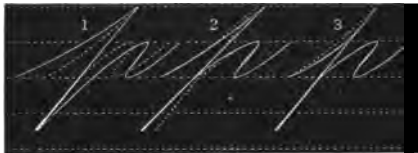


ILLUSTRATION. —

Draw the scale on the board. Write the up-stroke as in Fig. 1, with the usual up-slant, to the height of

two spaces; then the down-stroke with its proper slant; call attention to the too great width at the base-line. It would be well to write the syllable *ap* with the last up-stroke of *a* carried up as described, and notice that the *p* is, in consequence, too far off from *a*. Returning to the scale, without raising the pen from the bottom of the stem, write the up-stroke with its usual slant, and finish the Third Principle (see Fig. 1). Notice the double stem thus formed, and the distance between the stem and the Third Principle. From this show the advantage of raising the pen at the termination of the stem, and beginning again at the base-line.

Draw the up-stroke as before (see Fig. 2), and then bring down the stem at the correct distance from it on the base-line,

and observe that the stem has now too much slant. This is a very common fault, and arises from not changing the slant of the up-stroke.

Draw the up-stroke as in *t* (see Fig. 3), changing the slant at the height of one space. If the stem is now written on the correct slant, the up-stroke will be retraced through one space, as in *t*. By adding the up-stroke with the slant lessened from the base-line, show how all these errors are avoided.

REMARK. — Remember the remark under *t* as to the force of habit. The movement for the up-stroke of *p* is peculiar to this letter, and used in no other. There must, therefore, be a special act of the mind whenever *p* is written, — at the beginning of a word, to change the slant of the up-stroke; when following a letter, to change the slant of the last up-stroke of the letter. This act of the mind must be repeated till the habit is formed, and the mental act becomes no longer a conscious one.

Critical Points. — (1.) Lessening the slant of the up-stroke from the base-line. (2.) Increasing shade of stem from its centre. (3.) Raising the pen at the termination of the stem, and beginning again on the base-line.



Analysis. — The parts of *q* are Element IV., Fourth Principle, and Elements I., II., IV.

Formation. — Begin as in *a*, continue the straight line of the stem downwards one space and a half below the base-line, make a narrow turn, ascend with the left curve nearly parallel to the stem as far as the base-line, thence branch off with the usual slant.

Critical Points. — (1.) Those for the Fourth Principle. (2.) Carrying up the lower part of the last up-stroke parallel to the stem.

REMARK. — The common fault, arising from the force of habit, is to slant this up-stroke too much from the turn upwards. It will also require much care to join this letter in a point to the letter *u*, by which it is always followed.

THE FIFTH PRINCIPLE.

The upper looped stem is the **Fifth Principle**.

Analysis. — The parts of the Fifth Principle are Elements III., V., and IV., ending in I.

Formation. — Begin with the right curve, as in *i*, thence lessening the slant according to the rule under *t*; carry it to two spaces above the top line; make a narrow turn to the left; descend with a very slight left curve, so as to cross the up-stroke exactly on the top line; finish with the slanting straight line.

The object of changing the slant in the up-stroke is to make the loop on the down-slant; in other words, to prevent it from falling over in the ungraceful way in which it is generally written.

ILLUSTRATION. — Draw the scale on the board. Write an *i* without the dot. Continue the first two lines two spaces above the top line, with

the proper slant of each, as in Fig. 1. Notice the divergence of these lines, and show that it is necessary to modify one line or the other to make the loop.

Repeat the same form, and make the loop on the up-stroke, as in Fig. 2. Notice that now the loop has too much slant. It would offend the eye accustomed to the regular slant of the down-strokes.

Repeat again, and lessen the slant of the up-stroke so as to make the loop on the down-stroke (Fig. 3); after the upper turn, make a very slight curve on the left side of the straight line. Observe that the loop is half a space in width, and that two-thirds of this width are on the right side of the straight line, and one-third on the left. Point out the object of this slight curve on the left, — to make the loop more graceful. Finally, notice the change from the curve to the straight line.

Critical Points.—(1.) Lessening the slant of the up-stroke from one space in height upwards. (2.) Crossing exactly one-third the height of the letter. (3.) Ending with a slanting straight line. (4.) Making it three spaces in height.

THE UPPER LOOPED-STEM LETTERS.

Five letters have the upper looped-stem, — *h, k, l, b, f*.



Analysis.—The parts of *h* are the Fifth and Third Principles, joined in a point at the base-line.

Critical Points.—Those for the Fifth and Third Principles.



Analysis.—The parts of *k* are the Fifth and First Principles united by Element IV. and a loop.

Formation.—Make the Fifth Principle as before directed; carry up the left curve closer to the stem than in *h*, and one-fourth of a space higher than the top line; turn; form a small loop on the slant of the up-stroke, and finish with the First Principle slightly bent to the left at the top. The width of the lower part is about one-third of a space.



ILLUSTRATION.—Write *h* in the scale on the board. Then make the left curve closer to the stem than that of the Third Principle; carry it one-fourth above, and well out to the right; make the loop, and finish it on the top of the First Principle. The last down-stroke should, however, be a third closer to the stem: it adds to the beauty of the letter.

Critical Points.—(1.) Carrying up the second up-stroke closer to the stem than in *h*. (2.) Making the loop one-fourth higher, throwing it well over, and coming well under with it. (3.) Making the last down-stroke slant the same as the stem, and a third closer than in *h*.

Analysis. — The parts of *l* are the Fifth Principle finished with Elements II. and III.

Formation. — Make the Fifth Principle; turn, and finish like the First.

Critical Points. — (1.) The same as the Fifth Principle, especially the straightness and slant of the lower part. (2.) Making the turn the same width as in the short letters.

Analysis. — The parts of *b* are the Fifth Principle, Elements II., III., dot, and level curve.

Formation. — Make the Fifth Principle as before; turn, and finish like *v*. The width of *b* is about half a space.

Critical Points. — Those of the Fifth Principle and of *v*.

Analysis. — The parts of *f* are the Fifth Principle and a loop, formed by continuing the Fifth Principle two spaces below the base-line, folding it up in



front, drawing it in to the base-line, and finishing it with Element III. (Fig. 3.)

Formation. — Make the Fifth Principle; continue the straight line with a very slight left curve, having a swelling shade to two spaces below the base-line; make a narrow turn to the right, ascend with the right curve, and draw it in to the stem at the base-line; finish with the right curve. The width of the upper and lower loops is the same.

ILLUSTRATION. — Place the scale on the board. Draw a slanting straight line (Fig. 1); draw the Fifth Principle, and continue the straight line (Fig. 2); then show the perfect letter (Fig. 3). Contrast the error of a curved form with the slanting straight line (Figs. 4 and 5). This is a difficult letter, and requires close attention.

Critical Points. — (1.) The change of slant in the first up-stroke is especially important. (2.) The general straightness of the letter.

THE SIXTH PRINCIPLE.

The lower looped stem is the **Sixth Principle**.

Analysis. — The parts of the Sixth Principle are Element I., continued with Elements III., II., IV.

Formation. — Begin with the slanting straight line to the base-line, continue on the same slant with a very slight right curve two spaces below, make a narrow turn to the left, ascend with the left curve, cross the down-stroke at the base-line, and finish with the same curve and the usual up-slant.

It will be observed that this Principle is the Fifth inverted and reversed.



ILLUSTRATION. — It will be well to place on the board the four errors shown in the diagram. They are

those most frequently made. (1.) Running the down-stroke off to the left. (2.) Making a projection to the left at the turn. The narrow turn must be made by reversing the movement of the pen, with only sufficient movement to the left at the bottom of the turn to avoid a point. (3.) In changing from the straight line to the curve, a shoulder is made by curving too much. (4.) The curve of the lower part of the down-stroke, that it is not begun at the base-line.

Critical Points. — (1.) Keeping the same slant throughout. (2.) Making a narrow turn. (3.) Crossing exactly at one-third from the top of the letter. (4.) Length.

The size of the looped letters renders them a prominent feature in writing: great pains should therefore be taken to execute them accurately.

THE LOWER LOOPED-STEM LETTERS.

Four letters have the lower looped-stem, — *j, y, g, z.*



Analysis. — The parts of *j* are Element III., Sixth Principle, and dot, as in *i*.

Formation. — Begin with the right curve as connecting-line, and add the Sixth Principle. Place a dot one space above it, on the slant of the straight line.

Critical Points. — Those of the Sixth Principle.



Analysis. — The parts of *y* are the Third and Sixth Principles.

Formation. — Unite them at the top in a point.

Critical Points. — Those of the Third and Sixth Principles.



Analysis. — The parts of *g* are Element IV., and the Fourth and Sixth Principles.

Critical Points. — Those of *a* and the Sixth Principle.



Analysis. — The parts of *z* are the Second Principle and a short turn uniting it to the loop of the Sixth Principle.

Formation. — Begin like the first part of *n*; and, when the base-line is reached, form a short upper turn, and descend and finish with the loop of the Sixth Principle.

Critical Points. — (1.) Making the down-stroke of the Second Principle straight and slanting. (2.) Being sure to let it rest on the base-line.

This closes the analysis and explanation of the principles and letters of the small alphabet. Care must be taken that the scholars do not neglect the small letters when they begin the capitals. They must be constantly criticised.

THE SEVENTH PRINCIPLE, OR CAPITAL STEM.



Analysis. — Left curve, right curve, and left curve.

This principle is subject to several modifications. They will be explained under the letters in which they occur.

REMARK. — It is very important to start right on this Principle; for it occurs in fifteen letters, — *A, N, M, T, F, H, K, S, L, I, P, B, R, G, D.*

Formation. — Begin at three spaces in height, and from the top descend with a left curve to half the height of the stem; then, without stopping, change into a right curve, continue to the base-line, and make a broad turn upwards with the left curve; carry it well over to form a slanting oval, rising to half the height of the letter. The width of the oval is about half its length, and the upper curve ends near the stem.

The curves on the upper and lower sides of the oval are similar and reversed. The slant of the oval, shown by the long diameter, is a little below the middle of the letter.

The shade is made on the lower part of the stem, and increases and diminishes gradually, the widest part being in the middle of the curve.

Movement. — Do not grasp the pen. Let the hand move freely and lightly. The fore-arm movement of the whole hand and finger-rest should accompany the finger-movement. The movement should be uniform throughout. Beware of stopping when the base-line is reached; also of throwing the last curve over with a jerk, consequently flattening the upper curve of the oval.



ILLUSTRATION. — On the board draw four horizontal lines, as in the diagram. In these draw with a fine mark two ovals touching one another in the middle. Their widths should equal half their lengths. Mark the point where the second oval touches the top line.

Start from this point with red chalk if convenient, and strengthen the line to the middle, forming the left curve. Pass now to the lower curve of the first oval, make the swelling shade, run out a little beyond the left side of the first oval, and finish with the right curve carried over half the height, and ending near the stem.

This will be found very useful in showing the scholars that they can get the upper curve of the stem by beginning like an *O*; also in showing the precise nature of the change of the curve at the middle. Again, in illustrating the obliqueness of the final oval, and the way which the curve must be carried forward after the base-line is touched. It also affords a beautiful illustration of the precise slant of the capital stem in its normal form.

Exercise. — The scholars should now be drilled on Movement Exercise No. 33.



Analysis. — The parts of capital *A* are Seventh Principle, Element IV. very slightly curved, and a crossing curve.

Formation. — The capital stem is here modified by making the upper curve very slight, in order to give an agreeable form when the second down-stroke is added. It must also have more slant than the down-strokes generally do, as may be seen from the above diagram.

For the second part, begin again at the top, and make a left curve, very slight indeed, and nicely adapted to the stem. It slants a very little less than the usual down-slant. To finish, begin close to the right side, make a short left curve downwards, cross half a space from the base-line with a level curve, and carry it to the top line. Observe the width of the letter carefully.



ILLUSTRATION. — Draw two straight lines, in a scale of three spaces, from the top downwards, on the slant respectively of the two sides of *A*. Then write the capital stem on

the first line, and show the very slight upper curve, and how the lower curve runs off from the straight line to give the proper slant to the oval.

Next observe how ungraceful the straight line on the right side is, and write the proper curve, noticing how very slight it is.

REMARK. — It interests the scholars very much to draw a Roman A on the board, and then show what changes are made to adapt it to the requirements of writing. The same method may be followed with all the other capitals.

Critical Points. — (1.) Slight upper curve, and full slant of the stem. (2.) The oval finish of the stem, similar on both sides, half the height of the letter. (3.) The width of the letter.



Analysis. — The first two parts of the capital *N* are the same as in *A*. The last part is Element IV., ended at two-

thirds the height of the letter.

Formation. — Make the first two parts as in *A*, with the lower part of the second down-stroke curved a very little more than before. When the base-line is reached, move the pen forward very slightly to take off the sharp point, and then carry up the left curve the same distance from the **second down-stroke** as that is from the first at half the height, and end at two-thirds the height of the letter with increased curvature.

Across the middle, then, we have two equal distances.

Critical Points. — (1.) The same as in *A*. (2.) The distance of the last line, its height, and increased curvature at the top. (3.) Connection of the curves at the base-line.



Analysis. — The parts of *M* are the Seventh Principle, and Element IV. three

times repeated, the last finished with Element II. and a wave-line one space in height.

Formation. — Make the first three lines as *N*, extending the third to the same height as the first, and making them a little closer together; then the left curve, very slight, as in the second down-stroke, at the same distance as before, ending with a turn and a wave-line to the height of one space. Observe the distances across the middle of the letter.

REMARK. — The capitals *K, L, M, Q, R, U*, when written singly, without being joined to the following letter, may be handsomely finished with a simple turn and a wave-line. If joined, the last line is modified as required. The letters *J, Y, Z*, are also finished with a wave-line.

Critical Points. — (1.) Those of *A* and *N*. (2.) Carrying the third line a little over at the top. (3.) Narrow turn at the bottom of the fourth line. (4.) Three nearly even distances across the middle.



Analysis. — The parts of *T* are the Seventh Principle, and the top, formed by a small inverted oval and a horizontal double curve.

REMARK. — The capital stem in *T* and *F* differs from that in *A, N, M* in four particulars. (1.) It is shorter. (2.) It is more curved. (3.) It has a little less slant. (4.) The oval finish is a little shorter.

Formation. — Begin at the height of two and a half spaces, and make the capital stem with its curvature a little increased, and the oval a little shorter. Observe that the first curve forming the front of the top is one space from the stem. Therefore, allowing for this distance, begin one space and a third from the full height of the letter, and continue the left curve to the top, turn and descend with the right curve one space and a third, turn and make the left curve one-third of a space inside the first, cross a little below the top, and make a horizontal double curve about two spaces long.

Movement. — To make the top handsome, it is necessary, after making the oval with the finger-movement, to move the

whole hand to the right with a wave motion, sliding on the finger-rest. Let the scholars practise on this movement on their spare paper.

Critical Points. — (1.) Make the stem half a space shorter than the full height. (2.) Make the front of the top on the slant of the writing, and close to the stem. (3.) Do not let the top rest on or cross the stem. (4.) Fore-arm movement for the top.



Analysis. — The parts of *F* are the capital stem crossed through the centre, and this line crossed by a short straight line on the right side of the stem; and the top.

Formation. — Make the stem as in *T*; carry the upper line of the finishing oval across the stem, and cross it on the right side with a short slanting straight line. Make the top as in *T*.

Critical Points. — The same as for *T*.



Analysis. — The parts of *H* are Element III., Seventh Principle modified, Element IV. and a crossing-curve.

REMARK. — The capital stem is modified by being made half a space shorter, and making the upper part almost straight instead of curving it.

Formation. — For the first part, begin on the base-line and make the right curve two spaces and a half high, descend nearly straight and slanting, run under with the right curve, and finish as in the capital stem. For the second part, begin at the full height, and descend with a full left curve, straightening it gradually to the base-line. The width of *H* at the height of one space is three-quarters of a space. Make the crossing-curve as in *A*.

Critical Points. — (1.) Making the stem half a space

shorter, and the upper parts straight. (2.) The width of the letter. (3.) Gradual straightening of the last curve from the top.



Analysis. — The parts of *K* are Element III., Seventh Principle modified as in *H*, and Element IV.

joined to the First Principle by a small loop at the centre of the letter.

Formation. — Make the first part as in *H*. For the second part, begin at the full height, make the left curve, turn under and back at half the height, and cross the stem; make a narrow loop pointing upwards to the left, and finish with the First Principle, giving it a little less slant and broader turn than usual, and changing the up-stroke to a wave-line one space high.

Critical Points. — (1.) The stem as in *H*. (2.) The double curve of the second part above the loop. (3.) The loop at half the height, pointing upwards at the left.



Analysis. — The parts of *S* are Element III. and the Seventh Principle modified.

REMARK. — The Seventh Principle is modified by increasing the curvature of the upper half.

Formation. — Begin at the base-line with the right curve, having increased slant to half the height of the letter; thence lessen the slant to the full height to make the loop on the slant of the writing; make a narrow turn, descend with the left curve to half the height, cross, and change at the crossing to the right curve, run under, and finish as capital stem, with the oval a little shorter. Begin the shade below the crossing.

Critical Points. — (1.) Bold sweep of the up-stroke, and change of slant for the loop. (2.) Crossing at the middle to make the loop half the length of the letter. (3.) Change from left to right curve at the crossing.

REMARK. — This letter is one of those, which, from the simplicity of their construction, depend upon the accuracy of their execution for their beauty. Especial attention is therefore necessary to each particular of the Critical Points.



Analysis. — The parts of *L* are Element III. and the Seventh Principle, finished with a horizontal loop and double

curve instead of an oval.

Formation. — Form and shade like *S* from its beginning to the base-line; then make a horizontal loop and double curve rising with a wave-line to one space in height.

Critical Points. — (1.) The same as for *S*. (2.) Making the loop horizontal, and being careful that the double curve touches the base-line on the right side of the stem.



Analysis. — The parts of *I* are Element IV., a loop, and Element IV. forming the head, and the Seventh Principle.

Formation. — Observe the distance of the beginning of the curve from the stem, and regulate the slant of the curve accordingly. Begin at one space in height, far enough to the right hand to allow for the final oval; ascend another space with the left curve, rounding it well over; make a broad loop by rounding the underneath line. Let the loop point downwards to the right, and its lower curve cross the upper at one space from the top of the letter; then carry a slight left curve up with moderate slant to the full height. This forms the head. Without stopping, move the pen very slightly to the right to take off the sharp point, and descend nearly straight and slanting through the middle of the loop; shade below the loop, run under, and finish as capital stem.

Critical Points. — (1.) The slant of the last up-stroke of the head. (2.) Making the upper part of the capital stem nearly straight. (3.) Passing through the middle of the loop.

REMARK. — The first of these is all-important. On it the

whole set of the letter depends. The tendency from the usual slant of the up-stroke is to slant it too much. If this is done, one of these errors must result in the stem: (1) It will slant too much; or (2) it will be a double curve; or (3) it will, if made nearly straight and with the correct slant, pass to the right of the loop. It will be well to illustrate this on the board, and impress it thoroughly on the scholars' minds. If the slant of that little line is right, they are almost sure to make a good letter.



Analysis. — The parts of *J* are the head as in *I*, and a descending nearly straight line ending in the Sixth Principle.

Formation. — Begin and form it as *I* to one space above the base-line; there continue

the straight line as the Sixth Principle, — the lower looped-stem, — shading the right side of the loop.

Critical Points. — (1.) The slant of the last up-stroke of the head, as in *I*. (2.) Making the lower curve in the loop of the head one space from the base-line, and the crossing of the Sixth-Principle loop on the base-line.

REMARK. — It is a very common error to make the loop of the head rest on the base-line.



Analysis. — The parts of *P* are the capital stem and the left and right curves.

Formation. — Begin half a space below the full height, make the capital stem with a little more slant than the writing; when the base-line is reached, make a broad oval turn to the left, and form the left side and top of an oval; finish at half the height with a small line carried in through and back to the stem, forming a small dot. The width in front of the stem is one space and a third; of the lobe on the right, half a space. Make the shade on the lower half of the capital stem.



ILLUSTRATION.—Make an inverted oval on the board whose width is half its length. Put in the capital stem and the finishing lobe.

Exercise.—Drill the scholars on Movement Exercise No. 31 before writing *P*, *B*, and *R*.

REMARK.—In writing *P*, *B*, and *R*, scholars are very apt to run to the left on the base-line, from the habit acquired in forming the finishing oval of the capital stem, and thus make an awkward projection which leads to two other bad errors,—the flattening of the oval at the upper left, and then making a peak on the right side of the stem before descending for the lobe.



A moment's reflection will show that the last two faults are almost unavoidable if the first is made; for if, from the projection to the left, a curve were carried up on the proper slant, the width of the front would be enormous. The only resource, therefore, is to flatten the oval; but, when this is done, they cannot descend till the peak is made beyond the stem. This is so important, that we give an illustration.

The simple means for avoiding these errors is to move upwards immediately after touching the base-line. Of course, a curve can touch a straight line only in one point.

Critical Points.—(1.) Turning upwards as soon as the base-line is reached. (2.) The width of the front and lobe. (3.) Finishing the lobe at the middle.



Analysis.—The parts of *B* are the capital stem, left curve, right curve, narrow loop, right and left curves.

Formation.—Begin and form like *P*; and, instead of the finish, make a narrow loop extending across the stem, and pointing upwards; descend with the right curve far enough below the base-line to allow the left curve to be carried up one space from the stem at its farthest distance, and let it end near the narrow loop.

Critical Points. — (1.) The same as for *P*. (2.) The narrow loop pointing upwards on the left. (3.) The slant of the right curve in the lower lobe. (4.) Going below the base-line. (5.) Left curve one space from the left side of the stem.



Analysis. — The parts of *R* are the same as those of *B*, except that, after the loop, it is finished with the First Principle bent a little to the left at the top.

Formation. — Make *R* like *B* till the narrow loop is made; then, with a very slight curve, run into the First Principle, which finishes with a wave-line rising one space in height.

REMARK. — The upper part of the stem slants more, and the upper lobe is a little wider, than in *B*. The down-stroke of the First Principle has a little less slant than usual. The turn is a little broader, and it ends with a wave-line.

Critical Points. — (1.) The same as for *B*. (2.) More slant given to the upper part of stem than in *B*. (3.) A little more width to the upper lobe. (4.) A little less slant to the down-stroke of the First Principle.



Analysis. — The parts of *G* are the loop of Fifth Principle, and Seventh Principle modified, joined by a turn.

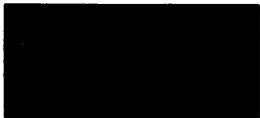
REMARK. — The capital stem is modified by being made one space shorter, and making the upper part almost straight, similar to *H* and *K*.

Formation. — Begin at the base-line, make the right curve with a bold sweep, and at one-third the height lessen the slant, ascend to the full height, make a narrow turn to the left, descend with the left curve two-thirds, turn to the right with a bold turn, ascend to one-third from the top, and finish with the modified capital stem.

The width of *G* is one space; of the loop, half a space.

Critical Points. — (1.) Change of slant in the first up-stroke. (2.) Crossing of the loop at one-third from the base-line: this is the level of the turn. (3.) Making the stem two-thirds of the height. (4.) Straightness of the upper part of stem. (5.) Running the lower part of the stem under, and making the finishing-oval half the height of the letter.

THE EIGHTH PRINCIPLE, OR DIRECT OVAL.



Analysis. — The parts of the Eighth Principle, or Direct Oval, are the left, right, and left curves.

This principle is subject to some modifications, which will be noticed under the letters where they occur.

REMARK. — This principle is found in five letters, — *O, D, E, C, G.*

Formation. — Begin at the top, make a full left curve, with a swelling shade heaviest in the middle of the curve, then a broad turn, ascend with the right curve similar to the left, turn a little below the top, and descend with a left curve one-fourth of the width from the first, ending near the base-line.

The width of the oval on its short diameter equals half its length.

REMARK. — It should be especially noticed that the sides of the oval are parallel.



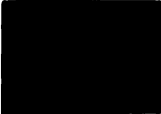


ILLUSTRATION. — 1. Place a simple oval on the board, having the required proportions. Draw its long diameter, and then a horizontal line through its centre. Call attention to the character of the several curves thus separated. Fig. 1 is long, and comparatively slight; Fig. 2 short, fully curved, and forming the bend of the turn; Fig. 3 long and slight, like the first; and Fig. 4 short, fully curved, and forming the bend of the turn, like the second.

This will be found very helpful to the scholars in writing

this letter. The two great difficulties are, moving out to the left at the beginning to get the curvature of the first curve, and turning soon enough in the lower curve to get a broad turn.

 2. The force of habit is here strikingly illustrated, and the scholars should be cautioned accordingly. What is the general habit we have striven to form? Is it not to make a straight down-stroke, a narrow turn, and the curved up-stroke with increased slant? Our second illustration shows the *O* generally made by scholars in their first attempts. It is really the First Principle turned into an *O*. Place the error on the board, draw the First Principle on it, and give the required warning. Then write the First Principle, and turn it into the incorrect *O*, so that they may fully comprehend the idea.

 Next place the First Principle again on the board, and write the *O* over it, noticing the curved down-stroke instead of the straight one, the broad turn instead of the narrow one, and the parallel sides of the oval instead of the angular sides of the principle. Show that none of the lines coincide.

Exercise. — Drill the scholars on Movement Exercises Nos. 29, 30.



Analysis. — The parts of *D* are Seventh Principle modified, horizontal loop, Element III., and Eighth Principle.

Formation. — Begin the Seventh Principle one space from the top, and write it with increased slant; at the base-line make a horizontal loop as in *L*, touch the base-line again on the right side, ascend with the right curve, going well over to the left to reach the full height on the left side of the stem, and finish with the Eighth Principle slightly modified in size.

By reference to the diagram of width given above, which

should be placed on the board, it will be perceived that the width of *D*, on the short diameter of the oval front produced, is divided into five equal distances, — one between the left curves, two between the inner left and the right, and one on each side of the stem.



ILLUSTRATION. — Place an oval with broad turns, two and a half spaces wide, on the board. Introduce the stem, horizontal loop, and line touching the base-line on the right, then the oval front. Use red chalk, if convenient, for the first oval, shown by the dotted line; and fill in the *D* with white.

This illustration shows that the general outline of the letter is a broad oval.



REMARK. — The force of habit here again asserts itself. The back of the *D* is carried up on the usual up-slant: this makes a peak at the top on the right side of the stem, before a turn can be made to descend for the front, which is, consequently, also spoiled. This fault will be avoided by noticing that the back of the *D* is the right side of an oval, as indicated by the dotted line in the diagram.

Critical Points. — (1.) Slant of the stem. (2.) Touching base-line on right side of stem. (3.) Narrow lobe, half a space wide. (4.) Highest point to the left of the stem. (5.) Full front of correct proportions as to width and depth.



Analysis. — The parts of *E* are an oval top, joining loop, and Eighth Principle modified.

The Eighth Principle here is nearly two-thirds the height of the letter.

Formation. — Begin at the top, with the left curve slightly shaded; descend two-thirds of a space; make a narrow turn; ascend with right curve; turn at the top to the left, and descend with left curve, dropping it a little as it comes forward as far as a slanting line through the right curve of the top; make

the narrow loop, throwing the curve well over to the left; and finish with the Eighth Principle modified in size.

The width of the top oval is half that of the lower. The top is placed over the middle of the lower oval (see the second part of the diagram below). The joining loop is one-third of the height of the letter from the top.

The joining loop points downwards towards the right. The downward inclination of this little loop is the key to the whole letter, as will be shown in a succeeding illustration.



ILLUSTRATION. — Draw the scale on the board, place in it an oval two spaces high, and then a small oval one space high, and half the width of the lower oval, intersecting the larger oval, as shown in the diagram. Then make the *E* in it.

This shows that the outline of the letter arises from two intersecting ovals, and that the joining loop points downwards.

This latter point being, as we have said, the key to this very difficult letter, the accompanying diagram is given to prove it. If the lower curve of the loop is carried up, which is the natural tendency, or even made level, it is evident that it is impossible to carry the upper curve of the loop over in such a way as to form the rounding back of the lower oval half a space beyond the left side of the head. The diagram (Fig. 1) shows that the line will so descend as to make the whole back of the letter on the same straight line; and the more an effort is made to carry the line back, the worse is the result. Another error also necessarily arises, — making the lower oval slant out too much in front.

The whole difficulty will be avoided if the top is made as in the diagram (Fig. 2), with the lower line of the loop descending and reaching forward as far as a line on the slant through the front of the top.

Critical Points. — (1.) Making the top one-third and the lower oval two-thirds the height. (2.) Making the joining

loop incline downwards to the right. (3.) Broad turn at the bottom.

Analysis. — The parts of *C* are the loop of the Fifth Principle and the Eighth Principle modified.

REMARK. — The Eighth Principle is here only half the height of the letter.

Formation. — Begin on the base-line with the right curve, give it full slant, and at one space in height lessen the slant, as directed for the Fifth Principle; ascend to the full height, make a narrow turn, descend with the left curve, cross, and begin the turn at one-third from the base-line, make the turn broad, ascend with the right curve, turn at half the height, and finish with the left curve, ending near the base-line.

The width of the loop is half a space; of the oval, one space and a third. The length of the loop is two-thirds the height of the letter. The distance between the left curves is one-third the width of the oval.

Critical Points. — (1.) Changing the slant of the first up-stroke at the height of one space. (2.) Crossing one-third from the base-line. (3.) Broad turn at the base. (4.) Making final oval half the height.

THE NINTH PRINCIPLE, OR INVERTED OVAL.



Analysis. — The parts of the Ninth Principle, or Inverted Oval, are the left, right, left and right curves.

This Principle is subject to modifications, which will be noticed as they occur.

REMARK. — This Principle is found in seven letters, — *X*, *Z*, *Q*, *W*, *V*, *U*, *Y*.

Formation. — Begin at half the height of the letter; make the left curve upwards; turn to the right a little above the

height of the main part of the letter; descend with the right curve, and turn to the left one space above the base-line; ascend with the left curve two-thirds of the distance across the oval; turn to the right, and cross a little below the top of the first oval; and descend with the right curve shaded, ending on the base-line.

The length of the oval is, therefore, two-thirds of the height of the letter. The width of the Principle across the short diameter of the oval is about two spaces; the distance between the sides of the looped part, one space; and between the curves on either side, half a space.

The shade is heaviest opposite the centre of the oval front.



ILLUSTRATION. — The force of habit again leads the scholars into error. They usually make the curvature and slant of the first up-stroke like that of the Second Principle, as shown in the diagram. To correct this, the first line must have the full curvature and the slant of the first side of an oval.

EXERCISE. — Drill the scholars on **Movement Exercises** Nos. 31, 32.

Critical Points. — (1.) The curvature and slant of the first up-stroke. (2.) The proportions.



Analysis. — The parts of **X** are the Ninth Principle, and the Eighth modified, the two parts touching at the middle.

Formation. — Make the Ninth Principle as before directed. Next begin well out to the right at the top, make the left curve touching the first part in the middle, and finish with the direct oval, as in *C*, rising to half the height of the letter. •

The width of this final oval is one space and a third.

Critical Points. — (1.) Those of the Ninth Principle. (2.) Those of final oval in *C*.



Analysis. — The parts of *Z* are the Ninth Principle, and the Sixth joined to the upper part by a loop and turn.

Formation. — Make the Ninth Principle, and, when the base-line is reached, ascend on the left side to form a loop half a space high, turn to the right, and make the lower looped-stem.

REMARK. — When one *Z* comes under another, care must be taken to slant the main down-strokes correctly, and to place the head of the lower *Z* beside and close to the lower loop of the upper one. If this is not attended to, each succeeding *Z* will be farther to the right, and the appearance of the copy will be spoiled.

Critical Points. — (1.) Making the last down-stroke of the upper part slant under enough. (2.) Keeping the lower loop on the proper slant.



Analysis. — The parts of *Q* are the Ninth Principle, a horizontal loop, and double curve.

Formation. — Make the Ninth Principle, carrying the lower part of the last down-stroke a little more under; go forward to make the horizontal loop, return to the base-line on the right side, and finish with a double curve rising one space above the base-line, as in *L*.

Critical Points. — (1.) Those of the Ninth Principle. (2.) Carrying the down-stroke well under and forward. (3.) Touching the base-line again on the right side of the main down-stroke.



Analysis. — The parts of *W* are the Ninth Principle, the right curve, and the left curve repeated.

Formation. — Begin with the Ninth Principle, and from the point on the base-line make a slight right curve extend-

ing to the full height; descend with a slight left curve, giving this line a little bearing to the right; at the base-line move the pen forward very slightly to take off the sharp point, and finish with the right curve to two-thirds the height. The curvature of this line is somewhat increased in the upper part.

The extreme width of the letter, as will be seen in the above diagram, is three spaces. Across the middle are three equal distances.

Take care to keep the lines separate, except at the point at the top and base line.

Critical Points. — (1.) Those of the Ninth Principle. (2.) Keeping the successive parts separate except at the joining point, and yet close enough to it. (3.) The set of the third part. (4.) The even distances across the middle.



Analysis. — The parts of *V* are the Ninth Principle, turn, and left curve.

Formation. — Make the Ninth Principle, and, when near the base-line, make a narrow turn to the right, and finish with the left curve at one space from the top, as in *W*.

Critical Points. — (1.) The main down-stroke: take care not to twist it. (2.) Ending the last line at two spaces in height.



Analysis. — The parts of *U* are the Ninth Principle, turn, right curve, and First Principle extended an additional space.

Formation. — Begin with the Ninth Principle, and turn on the base-line, as in *V*; ascend with the right curve two spaces in height, finish with First Principle, terminating with a wave-line one space above the base-line.

Critical Points. — (1.) That of the first part, as in *V*. (2.) The width between the main down-strokes.



Analysis. — The parts of *Y* are the Ninth Principle, turn, right curve, and Sixth Principle with the straight line extended an additional space.

Formation. — Begin with the Ninth Principle, and, when near the base-line, turn as in *U*, and ascend with the right curve two spaces in height; descend with a straight line, and finish with the Sixth Principle. Observe carefully the width of the letter.

Critical Points. — (1.) Those of the Ninth Principle.
(2.) Those of the Sixth Principle.

THE FIGURES.



The figure *1* is about one space and a half high. It is generally written as a simple slanting straight line, beginning fine, with increasing shade to the base.

The figure *2* begins a little higher than one space, descends with right curve to half the height of the figure, ascends with left curve to about one space and a half, descends with shaded right curve, and is finished like *Q*. Its head is an inverted oval.

The figure *3* begins like *2*; but its head occupies one-third instead of half the figure. A small loop is formed, projecting a little to the left; and it is finished with the shaded right curve and the left curve. The general form of the lower part is oval.

The figure *4* begins one space high, with a slanting straight line to one-fourth of a space from the base-line; then a horizontal straight line is projected to the right. The latter is

crossed by a slight left curve one space and a half high. The first line has a decreasing shade.

The figure 5 is like 3, except that the top is a straight line instead of an inverted oval. It has also a small curve from the top of this upper straight line. Its height is one space and a half.

The figure 6 begins one space and three-quarters in height, descends with a slanting straight line having a decreasing shade, and is finished with a direct oval one space high.

The figure 7 begins about one space and a quarter in height with a short and slight right curve, having a decreasing shade; from the bottom of this starts a double curve; and the figure is finished with a left curve having an increasing shade extending half a space below the base-line.

The figure 8 begins at the height of one space, with the right curve carried over to the left to the height of half a space, then a double curve shaded in the lower half, and is finished with a left curve crossing the double curve through the middle.

The figure 9 consists of pointed oval, as in *a*, extending from one space and a third to a third of a space from the base-line; and is finished with a straight line, having an increasing shade, to half a space below the base-line.

The figure 0 is a simple oval, one space and a half in height.

ON TEACHING SENTENCES.

The directions hitherto given have been especially directed to elementary instruction, and apply more particularly to the first four numbers of our series. The scholars, if our directions have been faithfully followed, will have a thorough knowledge of the letters and their critical points, as well as of their combination in words; and ought also to have acquired

the ability to execute them accurately with a tolerably easy movement.

The two following numbers introduce them to sentences. These are much more difficult, on account of the much greater variety of combinations. The work of the teacher now assumes a more general aspect. He directs attention to what have been neatly termed the five *S*'s, — size, slant, shape, spacing, and shading.

The first two or three copies may be written with especial attention to size and slant, remembering that size includes, besides the uniform height of the short letters, the correct extension of the stems and loops above and below, and the height of the capitals; while slant must not be confined to the short letters and capitals only, but must include the stems and loops.

Then shape may assume prominence in its various features of straightness of down-strokes, shortness of lower turn, carrying the up-strokes well over for the upper turn, making the side of the oval and fourth principle parallel, correct loops, and capitals.

Next, spacing may be taken up for criticism, according to the directions we have already given.

Lastly, shading should receive especial attention, according to our previous directions.

We need scarcely say that we do not mean that any of these should be neglected at any time by the scholars, but that the teacher will do well to concentrate the attention of the class, and his criticism, now on one point, now on another.

The sentences should, of course, be written across the page, and not word by word down it, or the very purpose of the training will be defeated. The words must be kept exactly under each other.

The position, penholding, and movements of the scholars should be carefully watched, and frequently criticised.

•

DIFFICULT COMBINATIONS.

In writing sentences, a few difficult combinations of letters occur, which will require special attention. When the right curve at the end of a letter unites with a left curve at the beginning of one following, the curve is changed at the middle of the height, as when *n* follows *u*.

If the lower looped stems, which are generally finished with the left curve, are joined to letters which begin with the right curve, the latter supersedes the former from the crossing, as in *h* or *i* following *g*.

To write *e* after the level curve-finish of *b* or *o*, the curve must be dropped half a space, and then carried up with the down-slant to form the loop of *e*; which is, therefore, a little shortened for accommodation. In combinations like *or*, *os*, care must be taken to make the level curve very short, and not to carry it too high for the *r* and *s*. The curve must be made short, and the slant changed, when *t* or *p* follow this curve, as in *ot*, *op*. When *a* follows, the curve must be carried far enough forward to make the pointed projection of the fourth principle.

The double letters *bb*, *ll*, *ff*, will require much care, in accordance with the principles already laid down.

BUSINESS PENMANSHIP.

When the eye and hand have been well trained on the accurate and elaborate forms of the standard letters, continued practice naturally runs, from the urgency of business, into simplicity: therefore, in the course of this chapter, it will be seen that the forms given for business are more simple than those for the standard letters.

It may naturally be asked why the more simple forms

should not be given first. We answer, Because they are derived from the standard forms by modification or contraction; and hence a knowledge of the latter conduces to a handsome execution of the former.

It will be found that the essential movements are the same in the execution of both; hence there is nothing to unlearn: and attention to the almost mathematical exactness of proportion in the forms of the standard letters prepares admirably for the thorough perception and the free and rapid execution of the exquisite curves of a business style.

It should always be borne in mind, that the more simple the letter, the greater is the perfection of form needed for its beauty of appearance.

In our series of copy-books, Nos. 7, 11, and 12 are devoted to the exhibition of business-writing. No. 12 gives a great variety of letters used by business men; No. 11, various words and short forms, such as ledger-headings used in business; while No. 7 contains forms of notes, due-bills, receipts, and accounts.

We now proceed to show the various forms which our best penmen use, and which are valuable for their grace, ease, and rapidity.



The forms
Figs. 1, 2, 4, 5,
may be used

generally, if preferred. The *w* has the first lines united in a point like *u*; *r* begins like *n*, but the second up-stroke leaves the main line at the shoulder, to prevent its being mistaken for *v*; *x* is crossed by a line parallel to the down-stroke, just to the right of the lower turn; *c* is written by returning a little on the up-stroke, which in this case is the right curve, then forming the head, and crossing the up-stroke like the *e*, from which it is distinguished by the semi-loop in the head.

The forms Figs. 3 and 6 are used for final letters. The *r* in this style makes a very graceful finish to a word; and the *s* is used in this form at the end of words for the sake of rapid-

ity, the lower turn and dot and the usual finishing up-stroke being omitted.



These forms, except Figs. 2, 3, and 6, are used only as finals: those excepted may be used in any position. Observe that stems ending square on the line are made with an increasing shade, and that the shade is transferred from the stem to the oval in the forms Figs. 4 and 5.



This *p* and *q* can be used anywhere, as preferred: the *f* is a final. The stems are straight, with graduated shade and very narrow turn. The up-stroke must be carried up

close to the stem.



These are very commonly used in a free hand as finals, and are applicable to all the lower looped stems. In Fig. 1 the loop is changed into a simple straight and shaded line, as shown; in Fig. 2 it has a narrow turn, and is carried up on the right side; in Figs. 3 and 4, curved more or less, and shaded; and in Fig. 5, swung under with a fine unshaded stroke.

The stem given in Fig. 2 cannot, of course, be used for *q*, as it would then become a *q*.



The looped stems, if preferred, may be begun and finished with a waved line. Figs. 1 and 2 show how happily they ac-

cord when thus made. The length of the initial and final lines is in this case somewhat increased. Figs. 3 and 4 show elegant forms of initial and terminating lines. The double curves are as easily made as single ones; and are certainly more graceful, and agreeable to the eye. The accomplished penman will not be satisfied without them. They are especially suited for ladies.



This diagram shows various beginnings and terminations, which may be used for

those letters to which they are adapted.

Fig. 1 is an off-hand beginning to such letters as usually begin with a single curve, as shown by the curve below (see *C, G, H, K, L, S*, in the standard forms). To a practised hand this is quite easy, and should be written with a free fore-arm movement. It will be observed that the lower curve crosses the final oval of the stem through the middle.

Fig. 2 is a smaller beginning, and is suited for letters written with a straight stem, as shown below in *P, B, R, H, K, W*. For these same letters Fig. 3 may be used, if preferred: it should begin below the base-line. Sometimes, also, a simple curve is used, as below. In the selection, natural taste, and facility of execution, should be the guide.

In writing the oval beginnings, it is important to observe their slant, and to take care that they do not sink down or project on a level, but have their long diameter on the same slant as that of the oval termination of the capital-stem.

Figs. 4 and 5 show a strengthened termination to an easily-struck line, used by many writers to increase the firmness of character, or to avoid an unfinished appearance. It is not a dot or bulb, but simply a shade arising from a slight and gradual increase of pressure ended abruptly.

Fig. 7 is the oval finish used in standard letters. For greater rapidity, this has been superseded by Fig. 8, — a turn

of medium width finished by a wave-line. Sometimes Fig. 6, the last down-stroke of the letter, is carried downwards and forwards below the base-line, and thrown back through the letter, completing an oval form. Succeeding small letters may be begun close to the down-stroke, and written through the up-stroke without objection.

The capital *O* may be finished in the same way; or, for the sake of variety, the up-stroke may be thrown back with a wave-line. Another method of finish for this letter is to carry the last down-stroke through the base of the letter, and go up on the right side like the wave-finish (Fig. 8).



The standard capital-stem is frequently changed, as above, to one written downwards, nearly straight, and with increasing shade. It is sometimes begun with a single curve (Figs. 3, 4); or with a wave-line, as in Fig. 3 of previous diagram. In some letters it has a narrow turn and up-stroke on the right, as shown in Fig. 4 and in the next diagram.



This diagram illustrates the application of the changed capital-stem to various letters.



Further adaptations of the capital-stem are here shown. In writing this *L* (Fig. 1), the dot is made by a downward movement, and retraced. In Figs. 2 and 3, the connecting line is carried from the dot below the base-line to the next letter. Fig. 4 shows a rapid style of stem for the *F*, in which

the oval termination is written nearly on the usual slant of the writing. The last letter shows a convenient head for *T* (Fig. 7); while 5 and 6 show how it may be finished with a dot, or with an oval and dot.



The natural variations of the standard form (Fig. 1) arising

in rapid writing are here shown. The tendency is to diminish the size of the loop; and, in very rapid business-writing, to dispense with it altogether. Fig. 3 is especially recommended for ladies: it is very elegant.



We here illustrate the application of the fourth form of the last diagram to various letters, for the convenience of business penmen.



The same principle further illustrated, showing the tendency in business-writing to dispense with all superfluous lines. We have added a very handsome and popular form of *S* and *G*.



These letters are formed from the standard direct oval modified. They are the natural results of free movement in

rapid writing, necessitated by the urgency of business. They are all derived, as may be easily seen, from the standard forms given in previous pages; except *A*, which is a capitalized form of the small *a*.

In writing this form of *D*, carry the stem down to the line, and make the loop point downwards: the final line is carried down on the right of the stem, instead of passing over to the front.

MARKS, SIGNS, AND ABBREVIATIONS.

We here append certain marks, signs, and abbreviations which are generally used in business, with such explanations as may be useful to those unacquainted with them.



Fig. 1 is the business abbreviation for "at:" for

instance, two pairs of shoes *at* three dollars a pair. The *a* should be written smaller than the figures, and the final up-stroke swung easily and gracefully over and round it. Fig. 2 is the abbreviation for "cents:" the *c* should be made nearly at the height of the figures, as shown; and small, like the *a*. Fig. 3 is a common form for "per cent." Observe the position, size, and connection of the *o*'s. Fig. 4 is the usual abbreviation for the Latin words "et cætera," meaning "and so forth." The first form is sometimes called the "ampersand," and stands for "et," and; the "c" for "cætera," "so forth," or "the rest." The ampersand is begun on the right-hand side.



Fig. 1 is the sign used for the word "number" on boxes

and in bills of lading: it is formed by drawing two parallel lines, and crossing them by two oblique parallel lines. Fig. 2 illustrates an abbreviated method of writing "one-half:" in Fig. 3 the half is expressed fractionally. Fig. 4 shows the sign for the United-States dollar: it was probably derived from one of the pillars with a scroll on the Spanish dollar; but on this point antiquarians are not agreed.



We here
append a
few forms of

figures frequently used by business-men, which will be appreciated for their freedom and beauty.

VARIETY OF CAPITALS.

Our object in the three accompanying plates under this title is to show the natural modifications and developments of the standard forms of the capitals. The first three lines show those of the three principles; then the letters themselves are given in alphabetical order.

We have already called attention to the fact that our present script is derived from the Roman letters through the Italic. This is important; because, whatever variety of form we may invent, we must always be careful to preserve the distinguishing characteristics of the Roman type, or the identity of the letter will be lost. It also furnishes us with a guide as to the directions in which we may give free play to our fancy. We shall merely indicate these, without going into an examination of the whole.

Take the capital-stem for instance, as shown in the first two lines. It is the script representation of the vertical straight line in the Roman letter. As to form, it may be waved, straight, or simply curved. As to commencement, it may be

made without an initial line, with one, or, in a letter like **H**, may begin with a small inverted oval. As to termination, it may end with a simple or compound oval, with a dot, or be devoid of any. Shade may be variously used, or altogether dispensed with. It may be made of different heights. Yet in all these varieties it will be observed that the stem-character is preserved.

If we consider a letter, the same fact is apparent. The Roman B consists of a stem and two lobes: whatever form we invent for it in script, these features must be retained.

For practical use, the teacher may place these varieties of form in order on the board, and point out their modifications and developments as a stimulus to the inventive powers of the scholars, and a guide to their taste, allowing them to use those which they think most beautiful.

OFF-HAND CAPITALS.

The subject of Penmanship would hardly be presented in a complete shape unless a few words were said on Off-hand Capitals, of which a complete set is given in the accompanying plates.

In these the attainment of practical writing culminates. They are the adornment of business-penmanship, besides affording a most valuable training for the hand in acquiring perfect movement.

They should be written with the whole-arm movement. The shoulder, in this case, is the centre of motion; and no part of the arm should touch the desk or paper except the nails of the third and fourth fingers, used to steady the hand. They should be struck with a bold and fearless movement, and practised constantly, without being discouraged by failure to obtain handsome forms at first. Care is needed to keep the

pen in a good position, so that the points may, by a roll of the hand, be constantly kept at right angles to the changing direction of the shade.

The Movement Exercises should be used in connection with these capitals. The principles involved are the same as in the standard letters, — the capital-stem, the direct oval, and the inverted oval.

Watch the movements, and adapt them to the work. Study the examples given; endeavor to acquire a clear mental conception of them; then aim to produce them. Criticise the work done; try and discover the causes of failure in any particular; consider definitely what must be done to correct it; then make the effort. Do not hesitate to allow the natural play of the fingers and wrist in connection with the movement of the arm. Persistent practice will certainly lead to success.

LADIES' HAND.

We are satisfied, from experience, that it is desirable for girls to write the six numbers of the Common-school Series with the same thoroughness and drill as are required of boys. They may then take up the special numbers (Nos. 8, 9, 10) prepared for them.

No. 8 contains a drill on the small letters, words beginning with capitals, and short sentences.

No. 9 consists partly of single sentences, and partly of couplets from standard authors.

No. 10 contains notes of hand, and of invitation and reply, bills, and extracts, both prose and poetry.

The accompanying plate shows the proportions of the letters for our Ladies' Hand; gives a set of standard capitals, and also of those most frequently used by writers of acknowledged taste. To these is added a suitable style of figures.

The small letters are given singly, so that each represents the connecting-line to be used either for beginning or ending a word. This line, it will be seen, begins or ends a little below or above the letters. For the loops a wave-line is used, as peculiarly adapted to the natural grace of a lady's style.

A few other features may be noticed. In the capitals the shades are more delicate, because less muscular power and movement are employed in their execution, and more of finger and hand, than in business-writing. For this reason, also, the shades are placed higher on the stems, and the indirect oval beginnings are made smaller. In the advanced style of capitals they will be found very much reduced in size,—the natural tendency of a rapid style.

We would add the caution, to beware of writing too small; for it should always be remembered that legibility is of the first importance. Rapidity and beauty, valuable as they are, hold but the second place.



Variety of Capitals.

PARTS OF LETTERS.

The Seventh Principle and modifications.

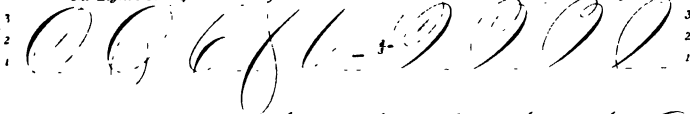


Parts used for the Seventh or Ninth Principles.



The Eighth Principle and modifications

The Ninth Principle modified.



Variety of Capitals.

F F F F F F F F

G G G G G G G G

H H H H H H H H

I I I I I I I I

K K K K K K K K

L L L L L M M

N N N N N N N

O O O O O O O

P P P P P P P



Variety of Capitals.

P P P P Q Q Q

R R R R R R R

S S S S S S S

T T T T U U U

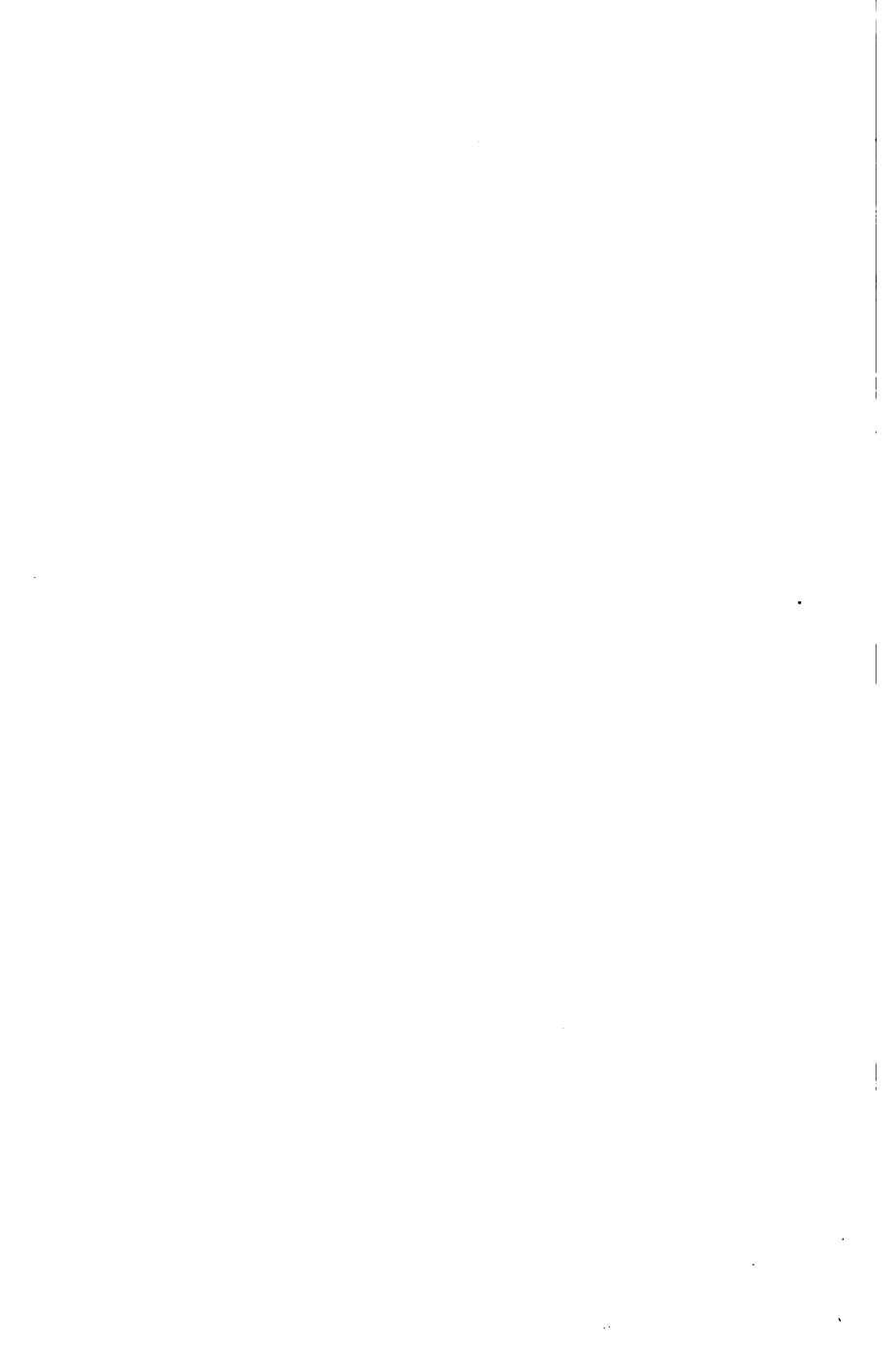
V V V V W W W

X X X X Y Y

Z Z Z Z

I I I I J J J

K k L l



Off-Hand Capitals.

A A A

B B B

C C C

D D D

E E E

F F F

Off-Hand Capitals.

Q R S T

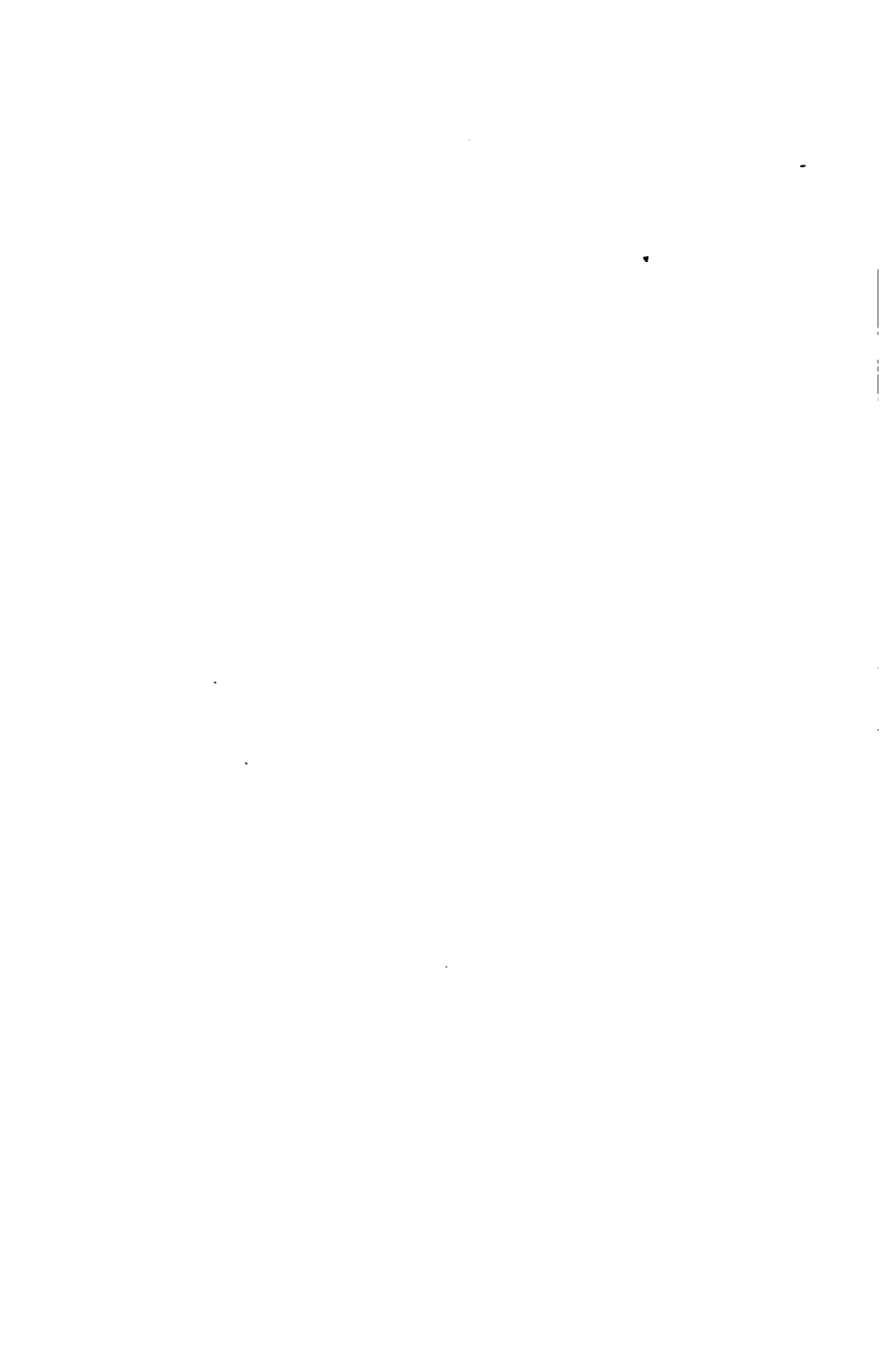
U V W X

Y Z

Q R S T

U V W X

Y Z



Ladies Hand

1 2 3 4
a u m n v r u w o a z z s

4 3 2 1
t d f g h k l f j g y z
3 2 1 2 3 4

A B C D E F G H I

J K L M N O P Q R

S T U V W X Y

A B C D E F G H I

J K L M N O P Q R

S T U V W X Y

Z 1 2 3 4 5 6 7 8 9 0

