Directions and Suggestions for Using

The CALIGRAPH

Please read every word of these directions and suggestions, before commencing to use the machine.

LOWE & CO., PRINTERS 266 FULTON STREET, NEW YORK.
2

PREPARING FOR WORK.

1 Insert the edge of the paper close down and evenly between the printing cylinder and the paper-guides. Turn the cylinder by hand from you, which will carry the paper to the proper position for printing. Roll the paper in sufficiently far to give desired margin, and see that pointer at the front of the carriage is at "O" on the scale on the front of the machine,—that is, when it is desired to commence writing at the left-hand side of the page.

TOUCHING THE KEYS.

2 Strike the desired key with sufficient force and promptness to throw the type against the printing cylinder, being careful to touch but one key at a time, and to release that one before striking another. The carriage can be raised at any time to observe results.

TO REGULATE THE SPACE BETWEEN THE LINES.

3 The space between the lines may be changed by means of the small lever above the carriage lever, at right hand of printing cylinder. To make narrow space, turn the lever from you, and to make the wider space, pull it towards you. After the line space lever has been set to the desired position, pull the carriage lever to the stop; this will move the paper; then, with the carriage lever, pull the carriage back, ready to commence a new line.

SPACE KEYS.

6 The wide black keys at each side of the key-board are the space keys. These may be depressed with either hand, as desired, to make the proper space between words or sentences.

TO CORRECT MISTAKES.

7 If a wrong letter has been written, it may be erased and corrected. In order to find the position of a missing letter, note its number on the scale on the under side of the platen or printing cylinder, then move the carriage to such a position that the pointer in front of the wheel is over the corresponding number on the front scale, then insert the desired letter.

THE RIBBON MOVEMENT.

8 It will be observed that when the carriage moves, the ribbon winds from one spool to the other. When it is all wound on one spool, its motion must be reversed. This is done by moving the small lever just below the front scale to the right or left as desired. A lateral movement may be given the ribbon by pressing the spools sidewise on their axles. Exert this pressure near the spool axle, and not at the edges of the wheel flanges, lest you bend them. This should be done as often as the writing becomes too faint.
THE CARRIAGE TENSION.

9 It will be observed that underneath the machine is a long spiral spring, which is connected with the carriage by a rod or arm. A small ratchet-wheel will be observed on the front end of the rod around which the spring is coiled. If the carriage moves too sluggishly, clean the guide-rail on which it runs. If this does not remedy the difficulty, increase the tension on the above spring by winding it up at the ratchet wheel. This is done by turning the ratchet with a key or screw driver provided for the purpose. It is of the utmost importance to keep the guide-rail perfectly clean. It is also important to use the machine with as light a tension as possible.

10 THE FINGER-KEY TENSION.

may be increased or diminished by loosening or tightening the spiral spring on the hinge or rocking-bar rod at the back of the No. 1 machine, and by turning the screw connected to the spiral spring at the back part of the disk in the Nos. 2 and 3.

11 PRESS COPIES.

can be taken in the copying press by the ordinary method. Just sufficient water should be used, however. This is an especial feature, and deserves attention. With proper care the most satisfactory results may be obtained. Press copies properly made with the copying-inks used on the Caligraph will last in letter books for many years, but care should be taken to make them plain and legible. The more pressure and time, the better copies. We prefer cotton cloths wrung out and spread over the pages for wetting the paper.

DUPLICATE COPIES.

12 For business correspondence, where one copy only is desired, an excellent way is not to use the ribbon at all, but, instead, use one sheet of full carbon paper, place it between a thick and thin sheet of white paper, and put these in the machine so that the thick paper is next to the platen, and the thin sheet next the type. In this way a beautiful letter may be written, and a perfect duplicate copy may be made, all with permanent ink, and with far less time and trouble than in taking a press copy, and by having a good letter file in which to preserve the duplicate copies, this method is exceedingly satisfactory. An excellent way is to adopt the rule of pasting the duplicate copy thus made to the letter to which it is a reply, and file them away together; thus the original letter and the answer to it are always together.

MANIFOLDING.

13 A number of copies may be taken at once by fastening the desired number of sheets of manifold paper together at one end, and placing a sheet of full carbonized paper between every two sheets of thin paper. Put all in the machine, and write in the usual way, except that the keys should be struck a little heavier than when making but one copy.

HARD PLATEN OR PRINTING CYLINDER.

14 When a machine is to be used especially for manifolding, and where many copies are desired, it should have a very hard printing cylinder. We do not put these in unless they are especially ordered, as they are not so good for ordinary usage, making more noise, and are not otherwise so satisfactory; but hard rollers or printing cylinders will always be furnished when desired. These hard rollers are desirable if over ten or twelve copies are to be taken at one time.
CLEANING THE TYPE.

15. Should any of the type not give a sharp and clean imprint, THEY MUST BE CLEANED. The best way to do this is to raise the type and remove the dirt with a sharp pointed knife or pin. While doing this, care should be taken to hold the type bar firmly, otherwise there is danger of springing it so as to effect the alignment. DO NOT WRITE WITH THE TYPE FILLED UP WITH DIRT.

OIL.

16. As a rule, oil no part of the machine except to clean it, but keep the guide-rail, (the rod on which the carriage runs,) and all other exposed parts of the machine perfectly clean. Occasionally moisten the teeth of the spacing racks with oil. It may be applied by saturating a small piece of flannel or woolen cloth with oil, pressing it against the under side of the teeth, and drawing it across the length of the rack.

KEEP THE GUIDE-RAIL CLEAN.

IMPORTANCE OF KEEPING THE MACHINE CLEAN.

17. Too great importance cannot be placed upon keeping the maching CLEAN. When not in use it should be kept CONSTANTLY COVERED with the cover or case provided for the purpose.

CHANGING RIBBONS.

18. A short piece of ribbon is firmly fastened to the axle of each spool. To one of these pieces, with a common pin, attach the end of a new ribbon; then, by turning the axle-crank of the ribbon spool, the ribbon will be rolled on to the spool; the remaining end being fastened in like manner to the other spool.

NEW RIBBONS.

19. Any one using a Caligraph should have a supply of not less than three or four good ribbons, in order that he may have a fresh one to use while another is being re-inked. Ribbons are supplied with inks of various colors to suit the taste. The black non-copyable ribbon is recommended for writing not intended to be copied in a letter press.

RE-INKING.

20. These ribbons for the Caligraph will last for many years, but it is neccessary to re-ink them once in from two to six months. This costs twenty-five cents, and if the agent of whom the machine was purchased is not prepared to do this, it can always be promptly and properly done by sending it to our office, or to S. T. Smith, 14 Park Place, New York. When properly done up or packed between small pieces of pasteboard, or in an envelope especially prepared for the purpose, the postage is from one to two cents on each ribbon. When sent by mail, ribbons MUST be so done up that they CANNOT soil or stain other mail matter.

CALIGRAPH SUPPLIES.

21. In order to obtain the most satisfactory results with the Caligraph, very much depends upon the quality of the materials used. We advise as earnestly as we can, that in all cases application be made to the agent of whom the machine was purchased for all supplies, such as paper, size and quality best adapted to the machine, carbon paper for manifolding, ribbons, etc., as he has an interest to furnish the very best, and at reasonable rates. In case the agent is not prepared to do this, we recommend parties to send direct to our general office.
OFFICE CASE.

23. The bottom of the office case should not be used; except to transport the machine, but should be removed before the machine is used. Always keep the cover over the machine when not in use. For $3.50 extra we can furnish a regular Traveling Case, which is preferred by those traveling. This traveling case is very strong and durable; is provided with a lock and is altogether satisfactory.

RELEASE KEY.

23. The carriage is always free to move from left to right, and by means of a convenient RELEASE KEY, it can be instantly released, so that it can be placed in any desired position without touching the space or other keys.

At the upper left hand corner of the machine, a nickel plated button or key will be observed, on the end of a rod. Pressing with the left hand, and at the same time moving the carriage slightly to the right with the other, will release the carriage.

24. THE No. 2 and No. 3, MACHINES

are especially adapted to making duplicate copies, or manifolding, as they are provided with long and heavy type-bars, and are made very heavy and strong, and are, when provided with hard platen, the best manifolding or duplicating writing machines ever made.

ALIGNMENT.

25. All of the type in the No. 1 and in the No. 3 Caligraph, and all of the lower case letters in the No. 2, are aligned to the "n." The upper case or capital letters in the No. 2 machine are aligned to the capital "N." When some of the type seem to be out of alignment, if the operator will strike such letters as seem to be too high or too low with the "n" each side of them, thus; man, nbn, nen; and carefully observe the result, it will be seen which letters are out of alignment, and how much, and whether they strike too high or too low.

To correct this, first; with the tool provided for that purpose, take up any lost motion there may be in the type-bar pivot, by turning the adjusting screw in the hanger. If this does not entirely correct the difficulty, strike the letter as before, with the "n" each side of it, and if the letter is too high, press it gently from you, again trying it as before, and observe the result, and thus keep on until it is perfectly in alignment. If the letter is too low, the operator should press it toward him, as above described, until it is perfectly in alignment. No tools, at all are required to put a machine in perfect alignment after it has once been aligned, except the tool for turning the adjusting screws. A little practice, as above, will enable any intelligent operator to keep the Caligraph in perfect alignment for many years. This construction or arrangement of the type-bars and hangers, is one of its greatest advantages.

TO REGULATE THE MARGIN.

26. On the top plate near the right-hand front corner, will be observed a nickel-plated stop. On the front carriage rod between the traveling wheel and the carriage lever, will be observed another nickel-plated stop; this latter is adjustable, and can be set so as to stop the carriage at any desired point, so as to make any desired margin at the left-hand side of the page.

The bell trip, also on the carriage rod, can be adjusted so as to ring the bell at any desired position, and thus, the margin at the right side of the page can be regulated.
SLUGGISH FINGER KEYS.

27 There are four reasons why it is possible for the finger keys to work sluggishly. First, they may require a drop of oil on the stem of the key where it passes through the guide; or second, the adjusting screw in the hanger may be screwed too tight, and require turning back a trifle; or third, the rear reed bar wires may in some manner become so bent that the key lever has insufficient room to work freely; or fourth, the connecting rod which links the type-bar with the key lever may become bent and require straightening, so that the type-bar will fall freely when the space key is held down.

PRINTING DOUBLE.

28 It sometimes happens, that some one or more letters will print double, i.e., they print and then they seem to re-bound and print again in a slightly different place. This is usually owing to lost motion in the type-bar journal, and can be corrected by turning the adjusting screw to take up this lost motion.

DOUBLING UP.

29 It sometimes may happen that when a letter is struck, the carriage will not move, and the result is that two letters strike in the same place. This may be caused by the following: First, the adjusting screw at the end of the main rack, which helps form the cushion, may require slightly turning to allow the dog to pass through the racks; or, second, the dog that works in the racks may require adjusting; or, third, there may be some extra friction in the ribbon movement; or, fourth, some of the finger keys may not work freely; or, fifth, the guide-rail may require cleaning; or, sixth, there may be insufficient finger key tension. A little observation will locate the difficulty, and then the remedy can be applied.

30 Keep the Caligraph clean, use both hands and at least three fingers of each hand. Observe the foregoing directions, and you will be able to use the machine a life time. Every part of each Caligraph is thoroughly inspected before assembling, and the machines when finished are again inspected and adjusted.

Please, therefore, if possible, use the machine without attempting to adjust or change it.

Rules for Learning to Write.

While almost any one can learn to write on the Caligraph without special instructions, still, the following rules will be found of very great advantage, and beginners will advance more rapidly and become better operators by observing them.

1 Place the hands in the same position as for the piano, the right hand controlling the right half, and the left hand the left half of the key-board. Let the fingers fall upon the keys nearest to them, using the first, second and third fingers of each hand.
2 When some of the letters of a word are on one side of the key-board and some on the other, both hands should always be used, each hand taking the letters that properly belong to it; but, when the letters are all on the same side, then only the hand on that side should be used, except in cases when the off hand may be used to advantage, as, for example, in the word you. In writing this word, the left hand may be conveniently used in striking the letter Y, though this letter is on the right side of the key-board. This practice will be of advantage in many other words, as may be seen in the exercises below.

3 Learn to strike the space key with the third finger. By a little practice this will become entirely mechanical.

4 Strike the keys a sharp, quick blow, keeping the fingers well bent, raising the fingers from one key before striking another—the blow being like that used in the staccato movement in playing the piano. Always raise the finger from one key before striking another. *Never strike two keys at the same time.*

5 Write very slowly to commence with, and aim at accuracy rather than speed. The speed will come with practice.

6 In this circular there are given a few words and sentences for finger practice. The figures denote the number of the finger, counting from the thumb, 1st, 2d, and 3d. The abbreviations denote the different hands—R. H., right hand; L. H. left hand. By following these rules the operator can pick out other words for further practice.

7 Beginners will find a great advantage in writing from dictation, as soon as some familiarity with the key-board is acquired. This practice is strongly recommended.

By carefully observing the following examples, the beginner will quickly learn the best way of using the fingers. By being systematic and devoting a half hour or an hour each day to practice, the learner will become reasonably proficient in from two to six weeks, and an expert in from two to four months. After this, writing with the pen will be found tedious labor.

**PRACTICAL EXERCISES.**

<table>
<thead>
<tr>
<th>WAS</th>
<th>Strike W 2 L. H.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;  A 3 L. H.  Left hand.</td>
</tr>
<tr>
<td></td>
<td>&quot;  S 1 L. H.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNION</th>
<th>Strike U 1 R. H.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;  N 1 R. H.</td>
</tr>
<tr>
<td></td>
<td>&quot;  I 1 R. H.  Right hand.</td>
</tr>
<tr>
<td></td>
<td>&quot;  O 2 R. H.</td>
</tr>
<tr>
<td></td>
<td>&quot;  N 1 R. H.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THIS.</th>
<th>Strike T 2 L. H.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;  H 2 R. H.  Right and Left</td>
</tr>
<tr>
<td></td>
<td>&quot;  I 1 R. H.  Hands.</td>
</tr>
<tr>
<td></td>
<td>&quot;  S 1 L. H.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOUSE.</th>
<th>Strike H 1 R. H.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;  O 2 R. H.</td>
</tr>
<tr>
<td></td>
<td>&quot;  U 1 R. H.  Right and Left</td>
</tr>
<tr>
<td></td>
<td>&quot;  S 2 L. H.  Hands.</td>
</tr>
<tr>
<td></td>
<td>&quot;  E 2 L. H.</td>
</tr>
</tbody>
</table>
WERE. Strike W 3 L. H.
" E 1 L. H.
" R 2 L. H. Left Hand.
" E 1 L. H.

MUCH. Strike M 2 R. H.
" U 1 R. H. Right Hand.
" C 2 R. H.
" H 1 R. H.

MACHINE. Strike M 1 R. H.
" A 2 L. H.
" C 3 R. H. Right and Left Hands.
" H 1 R. H.
" I 2 R. H.
" N 1 R. H.
" E 2 L. H.

SUPERSEDE. Strike S 2 L. H.
" U 1 R. H.
" P 2 R. H.
" E 2 L. H.
" R 1 L. H. Right and Left Hands.
" S 2 L. H.
" E 1 L. H.
" D 2 L. H.
" E 1 L. H.

SENTENCES.
121 211 211 1121 1 1 12 131 1 3211 22
YOU CAN SEE THAT IT IS FAR EASIER
L R L R L L L L E L L R L L L L L L
12 3111 21 21 211 1 221 221 21 21 22
TO WRITE IN THIS WAY THAN WITH THE PEN
L L R L L R R L R L L R L L R L L R L L R
211 211 2212 3211 122 12 221
TIME AND TIDE WAIT FOR NO MAN
L L R L L R L L R L L R R R R L R
21 21 21 21 21 21 231 21 122 211 1 31 22
PERSEVERANCE CONQUERS ALL THINGS
R L L L L L L L E R R L L L R L R L L

For any further information address

AMERICAN WRITING MACHINE CO.,
213 West 31st Street,
NEW YORK.