

DIRECTIONS

FOR USING THE

REMINGTON TYPEWRITER.

Machines are packed and shipped, properly adjusted and ready for use. The rubber feet, which lessen the noise and prevent marring the table, are easily inserted in the bottom of the hollow posts. Any one can write on the typewriter by simply touching the keys, but to make the machine of the most commercial value, one should have a thorough knowledge of its construction and the uses of all its parts. That all may acquire such information, which with practice will enable them to become experts, the following full instructions are given:

PLACING THE PAPER.

1.—Lay the paper upon the paper shelf (F) with the edge close down between the cylinder and the feed roll (G), taking care that the right-hand edge of the paper does not project beyond the rubber covering of the cylinder. Turn the cylinder by hand from you, which will carry the paper to the proper position for printing. Roll the paper in until the edge is even with or a little beyond the carriage or cylinder scale. If it is not parallel with the scale, draw back the side that projects too far, until it is so. When the paper is thus squared with the carriage, roll it in until the proper place to begin printing is reached, which is easily determined when the use of the scale is understood.

THE KEYS.

2.—Every finger key represents two types, either of which can be printed by striking the same key. The keys for letters show but one character, though both small letter and its capital can be printed by it. But all the other type, being composed of two dissimilar characters each, have double keys or keys with both characters printed upon them. The front ones will be printed when the machine is in position for printing small letters, and those at the back when the machine is set for capitals.

THE CASE KEYS.

3.—When the key marked "UPPER CASE" is down, the capitals and all the characters at the back on the double keys will be printed, and when the key that is marked "LOWER CASE" is down, the small letters and all the characters that are at the front on the double keys will be printed. The "LOWER CASE" key need never be touched by the operator except when the cylinder shifter (149) is raised so the machine is writing all capitals; then, to make a character on the front of a key, press down the "LOWER CASE" key.

TO DO GOOD WORK.

4.—Strike the key with sufficient force and promptness to throw the type against the cylinder, strike but one key at a time and be sure to release that one before striking another. Strike squarely, with equal, even touch, and take your finger off the key, as nearly as possible, at the exact time that the type hits the paper. Of the two, let it be before rather than after the type strikes, for, pushing the key after a letter has been printed is liable to give the work a blurred appearance.

If very thin paper is used it is best to put in another sheet of thicker paper, the same size, as a backing sheet.

RETURNING THE CARRIAGE.

5.—To return the carriage to begin a new line, pull the carriage-lever (170) toward you but not hard enough to lift the front roll off the track, then give a gentle pressure to the right until brought to a full stop by the stop-collar (N). The pull forward revolves the cylinder and carries the paper through into position for the next line and the pressure to the right returns the carriage to the place of beginning.

The carriage may be pushed to the right without changing the line at any time if the carriage-lever be not pulled forward.

By pressing down the carriage release-key (140½), the carriage can at any time be moved either to the right or left without changing lines.

The carriage may be raised at any time to observe results. Always lift it by taking hold of the carriage-frame, not the carriage-lever, and when the next letter is struck it will fall in its proper place. If lifted by taking hold of the lever the line-spacing mechanism will be operated and the letter will fall upon the next line.

USING THE SCALES.

6.—The edge of the cylinder scale represents the bottom of the letters; that is, when filling blanks or using paper that has a heading, bring the line upon which the bottom of the letters should rest to the edge of the scale. (This may be accomplished by turning a little beyond the exact place and then drawing back to exact position, as directed when squaring the paper to the carriage). Then turn the cylinder two notches. This will carry the paper to such position that the bottom of a letter, when printed, will be upon the line that was brought to the edge of the scale. Machines vary slightly, but a little experience will demonstrate exactly where the paper should be set before turning the cylinder.

The position upon the line that any letter will occupy when printed is represented by the front scale (87) and pointer (94), at the front. The character will be printed over a point upon the carriage or cylinder scale corresponding to the point on the front scale at which the pointer rests.

THE RUBBER BANDS.

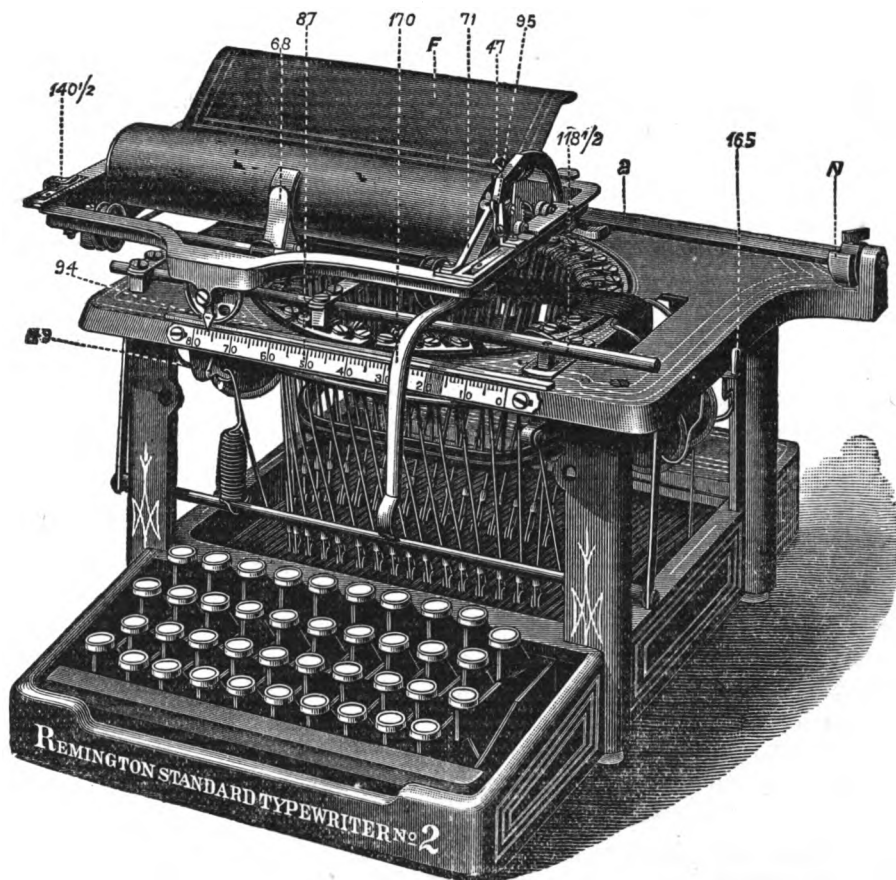
7.—Neither these bands nor the feed-roll give motion to the paper when the cylinder is turned, but motion is imparted by the cylinder itself. The bands and feed-roll simply press the paper against the cylinder, so that it cannot slip. Therefore, if at any time the paper does not feed through properly, see that the band pulleys (154) turn freely upon their shafts and the feed-roll in its bearings. (Put on a drop of oil with a broom-straw if necessary, but wipe off all the surplus). Anything that impedes the free action of these bands and rolls tends to hold the paper back, so that the cylinder will slip over its surface without carrying it through.

THE SHIFTING CYLINDER

8.—Is held forward or backward by the shifter (149). When forward it will print the small letters and the characters on the front side of the double keys; when backward it will print capitals and the characters on the back side of the double keys. To change the cylinder and set it in either position, you have only to LIFT UP and pull forward or push backward the shifter (149).

THE SPACE KEY.

9.—The long wood bar in front of the keys is the space bar, by which the space between words is made. The operator will, of course, strike it after every word, and also when it is desired to make other spaces than between words, such as the beginning of paragraphs, etc.



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| F—Paper Shelf. | 94—Pointer. |
| N—Stop-collar. | 95—Line-space Gauge. |
| 2—Carriage Way or Hinge-rod. | 118½—Cylinder-shift Rail. |
| 47—Line-space Pawl. | 140½—Carriage Release-key. |
| 68—Envelope-holder or Paper-guide. | 149—Cylinder-shifter. |
| 71—Cylinder-stop Spring. | 165—Ribbon-shift Handle. |
| 87—Front Scale. | 170—Carriage-lever. |

THE RIBBON MOVEMENT.

10.—When the carriage moves from right to left, the ribbon also moves, or is wound from one spool to the other by the same main-spring. When the ribbon is all wound on the spool at the right, lift the latch (81) and pull out the shaft (7), letting the latch drop into the inside groove. The spool at the left will then be turned, unwinding the ribbon from the right. When the shaft is pushed in, so that the latch falls into the groove nearest the end, the spool at the right is turned and the ribbon is unwound from the left.

A LATERAL MOTION (of the Ribbon)

11.—May be given as follows: By moving the handle (165) backward or forward, both ribbon spools will move laterally, so that the types will strike the ribbon in a new place, and by this handle, as often as the writing becomes faint, the ribbon may be moved so that its entire surface may be used.

THE RIGHT-HAND SPOOL SHAFT

12.—Can be detached to facilitate the changing of ribbons. It is held in place by a flat spring which bears lightly against it, in a shallow groove near the back end. By pulling the spring out of the groove (when the ribbon-shifting shaft (7) is to the extreme left), the spool shaft may be slid back enough to allow the spool to be taken out and another put in place, after which it can readily be returned to its place. In putting in a spool, both spool-heads must be placed between the two projecting loops of the guide-wires.

CHANGING RIBBONS.

13.—A short piece of ribbon is fastened to the axle of each spool; to one of these pieces pin the end of the new ribbon. Wind the ribbon upon the spool to which it has been fastened, by turning the crank upon the end of the shaft. Fasten the remaining end of the ribbon to the other spool in like manner, and it is ready for use.

NEW RIBBONS.

14.—Black record ribbons are not affected by the atmosphere, and the work done with them does not change in appearance.

Indellible copying ribbons also are not affected by the atmosphere, and the original print will not become illegible from exposure to light. Other copying ribbons, as now made, are but little affected and can be supplied in various colors.

It is impossible to make neat print with a ribbon that is too coarse or that is not properly inked. Use none that are coarser than the one furnished with the machine. The best ribbons can usually be purchased of local dealers in typewriters, whose interest it evidently is to furnish the best supplies possible.

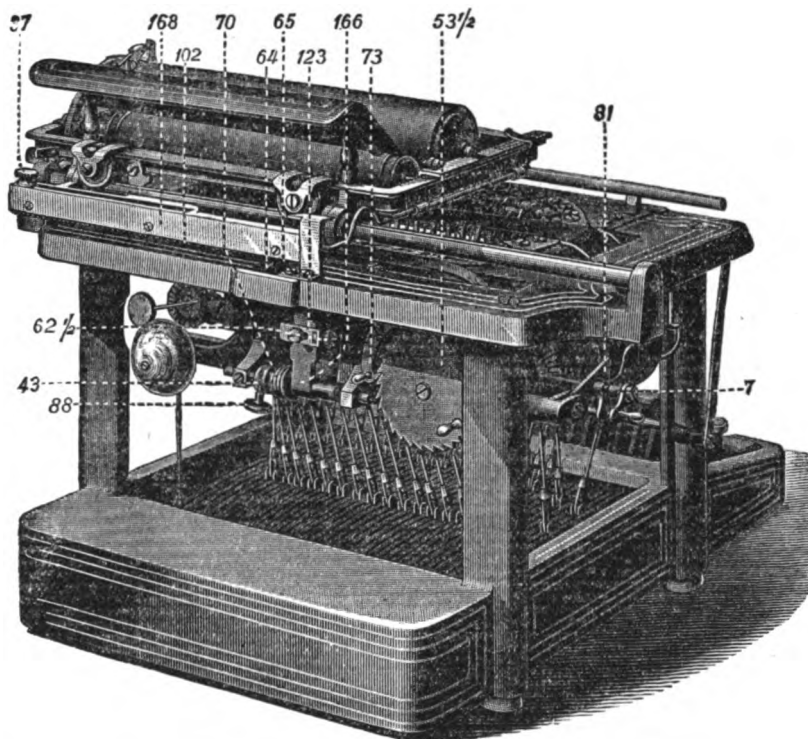
Keep all ribbons, not in actual use, done up in tin-foil.

THE CARRIAGE TENSION.

15.—A leather strap attaches the carriage to the main-spring wheel, and the tension of the main-spring determines the force which draws the carriage. It is desirable that the carriage should move promptly, but it is of the utmost importance that the carriage tension should be as light as possible, so that there shall not be too much wear upon the rack and dogs (102 and 65). A pull of one pound is sufficient to return the carriage against the action of the main-spring, and will do so if the top rods and rolls are kept clean by wiping off with an oily cloth, as directed by the inscription on the paper shelf. The carriage tension may be increased by turning the tension ratchet (53½), and diminished by moving up and down the handle of the tension pawl (73) which holds the ratchet against the pull of the main-spring.

TO CHANGE RUBBER BANDS.

16.—When it is necessary to put on a new band, it may be done as follows: Loosen the set-screws (55) which hold the band pulley shaft at each end, when the left-hand end can be pulled forward sufficiently to admit of the bands being slipped on. Do not bring it out of the slot any farther than necessary to slip the band on, and in replacing it be careful that the shaft is pushed back against the end of the slot—at both ends—and tighten the set-screws with care, as they should not be screwed up too hard. Slip the feed-roll out of its bearings and take it out of the way until the bands are properly adjusted in front, when they can be stretched enough to return it. Before tightening the set-screws, make sure that both ends are pushed back against the end of the slot, particularly the right-hand end; also, that the spring on the under side of the carriage-lever is over and not under the short stud upon which it should rest. Do not loosen the scale or band-shield, but take care to slip the bands into their places without deranging the adjustment of the scale, and no readjustment will be necessary. The paper-guide (68) may be removed if the bands do not readily stretch over it, and replaced afterward.



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| 7—Ribbon-shifting, or Long-gear Shaft. | 70—Key-tension Spring. |
| 37—Bell-ringer Thumb-screw. | 73—Carriage-tension Pawl. |
| 43—Tension-collar. | 81—Gear-shaft Latch. |
| 53½—Carriage-tension Ratchet. | 88—Key-tension Collar Thumb-screw. |
| 62½—Loose Dog Stop Adjusting-screw. | 102—Spacing-rack. |
| 64—Rigid Space Dog. | 123—Loose Dog Stop. |
| 65—Loose Space Dog. | 166—Spacing-rocker. |
| | 168—Spacing-rack Frame. |

THE FINGER KEY TENSION

17.—Is governed by the loosely coiled spring (70), one end of which is secured in the tension-collar (43), which is on the hub of the rocker, at the back of the machine. The tension is increased or diminished by turning the thumb-screw (88) to the right or left.

THE SPACING DOGS

18.—Are secured to the top of the upright arm of the rocker, at such a height that their sharpened edges will reach two-thirds of the way into the notches in the rack. The loose dog (65) is so adjusted as to spring forward opposite to the next notch of the rack every time that a key is depressed and the rocker brought forward to a point where the rigid dog (64) engages with the rack; and every time the key is released the rocker goes back, the loose dog is again engaged in the notch to which it was opposite; and is carried back again even with the other by the forward action of the carriage.

It will readily be seen that the loose dog must spring forward just far enough to go through the next notch of the rack without touching either side, and they are always adjusted to do so when new. But the loose dog stop (123) is cushioned with leather to prevent noise, and, if at any time the cushion becomes thinner and allows the dog to spring forward so far that it hits upon a tooth of the rack, it can easily be readjusted by means of the small thumb-screw ($62\frac{1}{2}$), the collar of which engages a mortise in the end of the loose dog stop (123) which will be carried to the right or to the left, according as the thumb-screw ($62\frac{1}{2}$) is turned toward or from you as you face the back of the machine. If the straight side of the dog hits against the straight side of the next tooth of the rack, turn the thumb-screw over toward you. If the beveled side hits, turn it over from you.

Always make the last turn of the adjusting-screw in the direction which closes the dogs. That is, first open the dogs too wide and then tighten the clamping-screw, so that the adjusting-screw will turn very hard in closing them; then gradually close to proper distance, taking care that the last movement be that of closing, not of opening, even in the slightest degree.

The screw which goes through a slot in the stop (123) and holds it against the rocker, also holds it against the threaded end of the thumb-screw ($62\frac{1}{2}$) and prevents it from jarring loose by the action of the machine. It may be slightly slackened if the thumb-screw turns too hard, or tightened if it has any tendency to jar loose.

CHANGING SPACE BETWEEN LINES.

19.—When the end of the space gauge (95) is raised to the top, it is adjusted for narrow space, and when lowered to the other stop, it is adjusted for double width.

REGULATING THE LENGTH OF LINES.

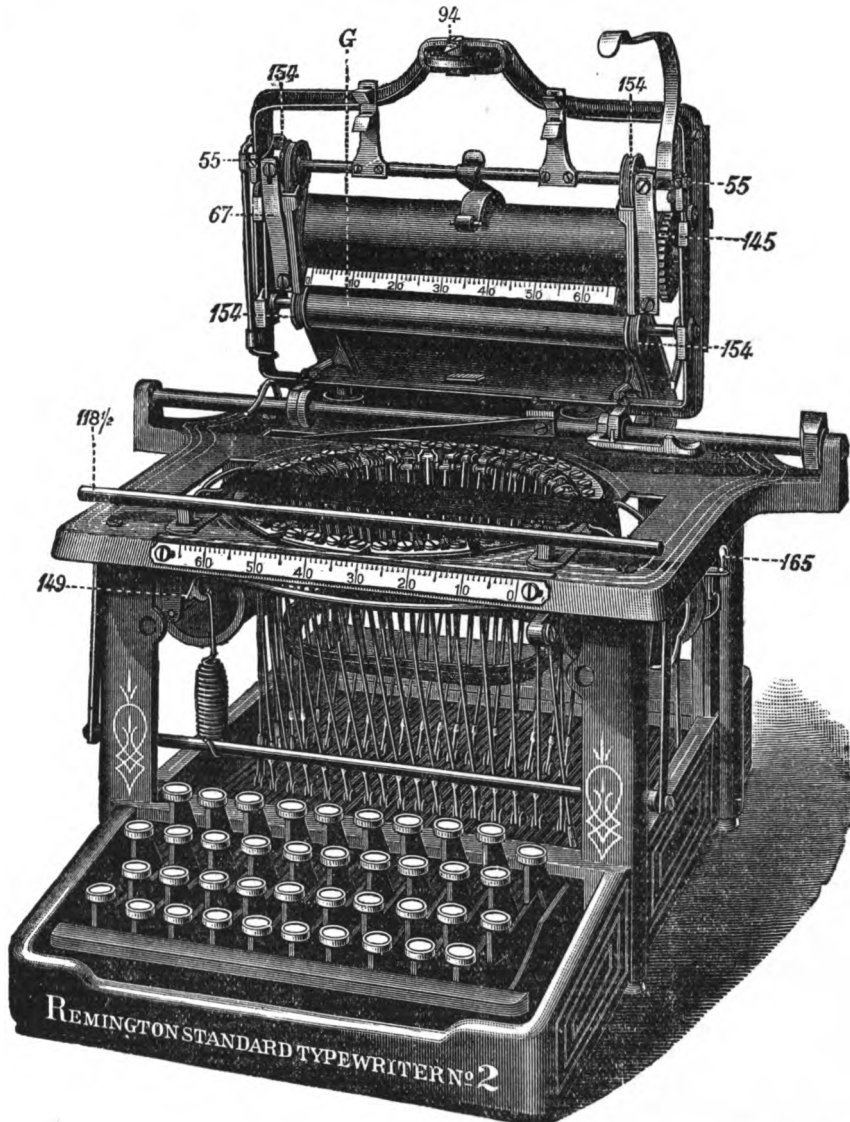
20.—If it is desired to begin the lines farther away from the left-hand edge of the paper, set the carriage by the front scale (87) where you wish the line to begin. Loosen the set-screw of the stop-collar (N), move it until the collar comes in contact with the carriage and fasten again—lightly at first—then press the release-key ($140\frac{1}{2}$), move the carriage out of the way and fasten firmly. We call particular attention to this, for if the collar is not fastened tightly the force of the carriage will move it out of position.

If a wider margin is wanted at the right of the sheet, set the carriage at the place where it is desired to have the line end, loosen the bell-ringer thumb-screw (37), slide the bell-ringer against the dogs (65) and fasten.

The bell-ringer, in whatever position it may be placed upon the rack frame (168), will ring the signal several spaces before the end of the line, giving time to finish or properly divide a word.

HOW TO STRIKE THE KEYS.

21.—A light, quick touch should be employed, similar to that used in piano playing. Do not pound the machine or write with a slow, dragging movement. If the machine is properly adjusted, a very light touch will produce the most perfect work. Punctuation marks should be struck lighter than letters, to avoid puncturing the paper and making too heavy impressions.



G—Feed-roll.
 55—Band Pulley Shaft Set-screw.
 67—Band-shield.
 94—Pointer.

118½—Cylinder-shift Rail.
 145—Cylinder Ratchet-head.
 149—Cylinder-shifter.
 154—Band Pulley.

165—Ribbon-shift Handle.

CLEANING AND OILING.

22.—Every morning you should thoroughly dust the typewriter with a feather duster, carefully removing dust wherever possible, not only from the top plate but also from the base of the machine. Lift the machine and brush away the dust that has accumulated underneath. This matter of dusting is an important point in the care of the typewriter, as the collection of dust particles in the bearings will not only cause the machine to work stiffly, but will undoubtedly wear it out much sooner than if the particles are prevented from accumulating.

Cleaning the Type.—After pushing back the ribbon, which may be done with the brush, so as not to soil the fingers, the best way to clean the type is to raise the type-bar by touching the key, and taking hold of it with one hand, hold it firmly, being careful not to bend the type-bar or displace it. Pick the accumulation of dust and ink from the type, if necessary, with an ordinary pin. After doing this, it is well to brush the type with the type-brush. If the type are brushed every day, it will not be necessary to use a pin.

Oiling.—In oiling, use nothing but the very best quality of oil. Never put on oil without afterward wiping off all the surplus that can be found outside the actual spot where the friction can be caused. The rods upon which the carriage runs and is guided should be cleaned every day by wiping with a cloth or piece of chamois skin slightly saturated with oil. The shift rail, especially, should be wiped off at any time the carriage seems to run sluggishly. The back and front wheels should be oiled about once a month. The back wheels can be oiled by removing the paper shelf and dropping a small quantity of oil on either side of the wheels. Should a more thorough cleaning and oiling of these wheels be necessary, remove the screw from the right-hand wheel first, and thoroughly clean and oil, being careful to replace the screw before removing the one from the left-hand wheel. In replacing these screws, be sure that they are screwed up tight, as any lateral motion will be apt to throw the work out of alignment. To oil the front wheel, it is not necessary to remove the screw, except in extreme cases. The best way is to simply tip the machine on its side, and drop a little oil between the bearings of the wheel. The wheel should run easily and should make several revolutions by simply touching it with the finger.

The Spacing Dogs.—First, oil slightly the bearings on which the spacing dog rocks; then touch the points of the dog with a drop of oil. Also put a little oil on the teeth of the spacing rack. This may be done by putting a few drops on the screw-driver, and running it lightly along on the teeth. A thorough brushing of these teeth with a clean, stiff brush before oiling is of great advantage. In oiling, always be careful to use as little oil as possible. Too much oil is as bad as none at all, as it simply makes a basis for an accumulation of dust. It is a good plan to now and then touch lightly with a straw dipped in oil each bearing of the journal. This, however, need not be done more than once in two or three months. No stenographer can conscientiously consider himself as being first-class in every respect, unless he is careful to keep the type clean, and his machine well cleaned and oiled. If the instrument is not well taken care of, it is absolutely impossible to produce good work.

FRACTIONS.

23.—Fractions may be represented by a hyphen; as, 1-2, 2-3, 5-6, or by the shilling mark; as, $\frac{1}{3}$, $\frac{3}{4}$, $\frac{7}{8}$, raising the first figure a little, as described in paragraph 24. The latter method is preferable.

TO RAISE A LETTER OR FIGURE

24.—A little above the line, push back the front carriage shift rail slightly and hold it firmly with the left hand while striking the key with the right. Or roll the cylinder forward as far as possible without lifting the cylinder-stop spring.

DIAGRAM OF KEY-BOARD OF THE NO. 2 REMINGTON TYPEWRITER (Actual Size).

25.—Instead of arranging the letters alphabetically on the typewriter key-board, they are so placed that the letters most used are located to facilitate speed. The following list is supposed to represent the comparative frequency with which the letters appear in ordinary work:

E, 1000	S, 495	I, 475	C, 260	D, 185	P, 130	G, 85	K, 20	Z, 6
T, 665	A, 490	H, 355	R, 260	M, 140	W, 130	B, 60	Q, 8	X, 5
N, 505	O, 480	L, 270	U, 185	F, 130	Y, 100	V, 60	J, 7	

As a rule, the keys on the right side of the dotted line should be struck with the first three fingers of the right hand, and those on the left by the same fingers of the left hand. It will occasionally be found more convenient to cross this imaginary line with the first finger. Keep the hands over the key-board in such position that the fingers will be as nearly as possible over the letters they are to strike.

Practice upon this key-board, when one does not have access to a machine, will help to fix the location of letters and characters.

The No. 3 and No. 5 add the following characters ° * + — @ φ § ! Other characters than these may be placed in any machine. Machines fitted with Great Primer type, chiefly used by professional men, have key-boards differing slightly from the No. 2.

