

DIRECTIONS FOR USING
THE
REMINGTON STANDARD
TYPEWRITER

VISIBLE
Models 10 and 11

REMINGTON TYPEWRITER COMPANY

(Incorporated)

374 Broadway, New York, U. S. A.

50

Directions for Using

The

Remington Standard
Typewriter

VISIBLE
Models 10 and 11



Remington Typewriter Company
(Incorporated)
New York and Everywhere

Instructions for Unpacking.

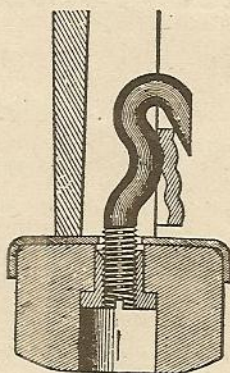
SECTION I. First—To open the packing box: turn the box upside down, remove the screws around the edge and take the machine out of the box by lifting up the lid. Turn the lid upside down, thus bringing the machine right side up.

Second—Remove the metal cover. (If the machine is provided with one.)

Third—Remove the four nuts and two metal strips from top of wooden packing strips.

Fourth—Four Reinforced Rubber Feet will be found in the box of tools fastened inside of every machine case.

Remove the wooden feet in the machine, and insert each rubber foot so that the hook fits over the foot-strap of the machine, as shown in the illustration. Screw it tight to the machine base, pulling downward on the foot, so that the hook will act as a "key."



Rubber Foot

Ordinarily, the foot can be tightened by hand, although a slot is provided in the nut for a screw-driver. The foot should be screwed down until the end of the nut presses against the cup.

Fifth—Untie all the tapes carefully, being sure to remove them all.

Sixth—In an envelope attached to the inside of the packing case will be found the ribbon for the machine. Insert this ribbon on the right

hand ribbon spool shaft, after attaching the end to the left hand ribbon spool tape, as per instructions for attaching ribbons contained in Section 26 of this book, page 15.

Do not meddle with the screws or tensions. The machines are sent out from the factory properly adjusted.

THE KEYBOARD.

The Type Keys.

SECTION 2. Every type key represents two characters, either of which can be printed by striking the same key. The keys with only one letter upon them print both the capital and small letter represented. All the type carrying dissimilar characters have both characters indicated upon the keys. The "lower case," or front characters on the keys, will be printed when the machine is set to write small letters, and the "upper case," or rear ones, when the machine is set for capitals.

The Space Key.

SECTION 3. The spaces between words are made by depressing the long bar which extends across the front of the keyboard, known as the space key (13830, Fig. 1). The depression of this bar at any portion of its length moves the carriage to the left just the width of one letter. The operator should, of course, strike it once after every word, and also when it is desired to make spaces other than those between words, such as between sentences, etc.

The Shifting Cylinder.

SECTION 4. Every type in the machine prints two characters. The cylinder (31611, Fig. 1) determines by its position which of the two shall strike the paper. When the cylinder occupies the lower position, the small letters and the lower characters upon the "double" keys will be printed. When the cylinder is moved upward as far as it will go, the machine will only print capital letters and the upper characters on the "double" keys.

The Shift Keys.

SECTION 5. The purpose of the shift keys, either one of which can be operated as may be most convenient, is to change the position of the

cylinder so as to print a character contained in the "upper case." (Following the custom of printers, the capitals and upper characters on "double" keys are frequently called the "upper case," while the small letters and lower characters on "double" keys are known as the "lower case.") By depressing either shift key, the cylinder is instantly shifted to the upper case position, but is returned to its former place immediately upon removing the finger from the key. From this it will be seen that when the cylinder is in the normal position for writing the lower case characters the use of the shift key enables the operator to insert any capital or other character from the upper case at will, and instantly return to the lower case simply by releasing the shift key. The shift key must always be depressed while "upper case" characters are being written.

The Shift Lock.

SECTION 6. The Shift Lock (17520, Fig. 1), situated directly behind the left shift key, is depressed instead of the shift key if the upper case is to be used for writing several words or sentences in sequence, for underscoring, etc. The cylinder is again returned to the lower case simply by pressing and then releasing the left shift key.

The Back Spacer Key.

SECTION 7. The Back Spacer Key (13811, Fig. 1) is located in the upper right hand corner of the keyboard. Each stroke on this key moves the carriage backward one letter space. This feature is very convenient where it is desired to return a few spaces to a former writing point.

THE CARRIAGE.

Placing the Paper.

SECTION 8. Drop the edge of the paper well down on the rubber feed rolls back of the cylinder (31611, Fig. 1), with the left edge of the sheet just touching the paper side guide (33921, Fig. 1) and so that it is immediately caught between the cylinder and the feed rolls. Turn the cylinder from you by either one of the thumb wheels (31671 or 31681, Fig. 1) until the lower edge of the paper has passed an inch or an inch and a half beyond the line gauge (26931, Fig. 1), bringing it beneath the paper guides (33891 and 33901, Fig. 1).

When using the Model 10, if the edge of the paper is not parallel with the line gauge, slacken the pressure of the feed rolls upon the paper by

pressing back the feed roll release key (33740, Fig. 1) with the thumb of the left hand, and with the first finger of the same hand, press down on the feed roll release lever lock, just behind the release key, which will hold the key in position while adjusting the paper. Then draw back the side of the sheet that projects too far, until it is quite parallel

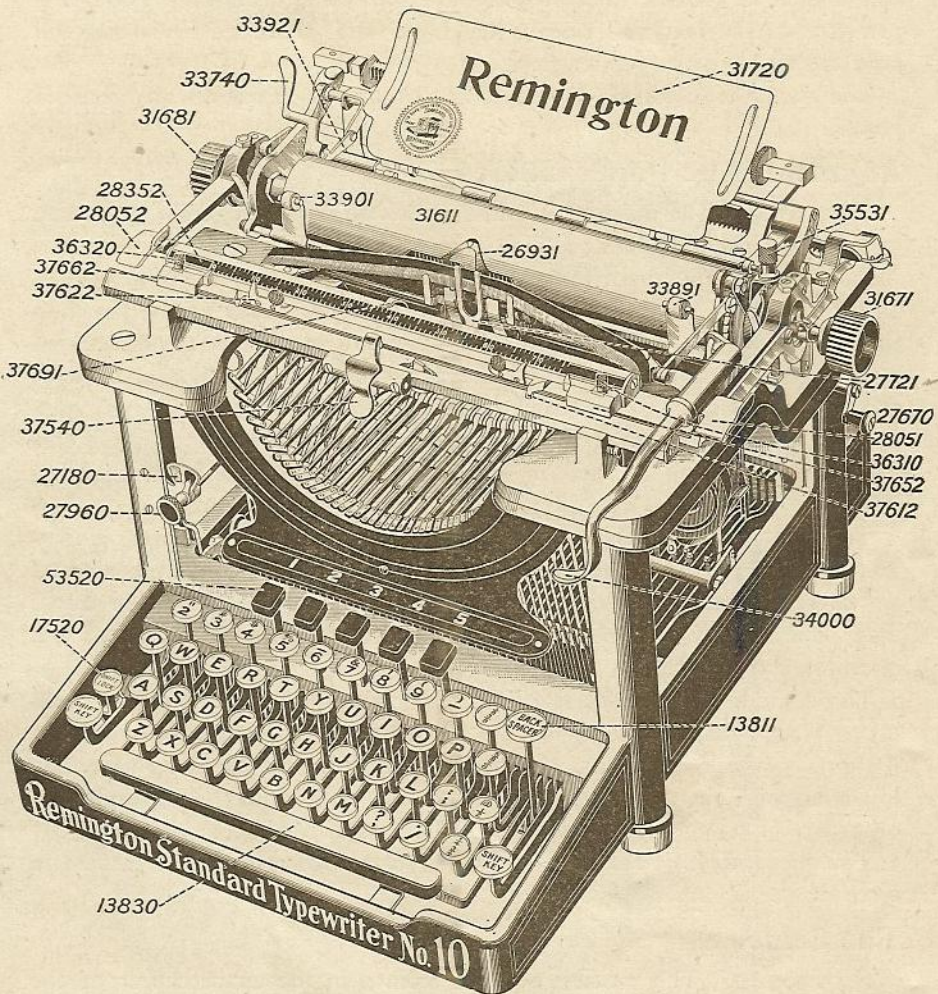


FIGURE I

with the line gauge (26931, Fig. 1). Release the feed roll release key, simply by pressing it.

On the Model 11, which is equipped with needle-point end guides (See Section 32), simply hold or lock back the feed roll release key (33740, Fig. 1) while inserting the paper. This brings the needle points in contact with the cylinder in a row just below the back feed rolls, and the paper comes to a stop square with the cylinder. When the pressure on the feed roll release key is relaxed, the back feed rolls will hold the sheet in the proper position.

The paper side guide (33921, Fig. 1) moves easily to any desired position.

Adjusting the Paper Guides.

SECTION 9. The machine is fitted with two paper fingers (33891 and 33901, Fig. 1) and a central line gauge (26931, Fig. 1), which render instantaneous adjustment for any width of paper or any size of envelopes an easy matter. A perfectly smooth and uniform fitting of the paper to the surface of the cylinder, which is essential to good work, is secured by the guide rolls at the top of the paper fingers, which adjust themselves automatically to any thickness of paper through the paper fingers and the tension spring (67380, Fig. 2), but the pressure upon the paper can at any time be increased or diminished by turning the little adjusting screws (74370, Fig. 2) to the right or left as may be required.

To slide the paper fingers easily to any desired position, press downward on the release arms (there are two of these, one on each side of the carriage frame, and each controls the paper finger on that side only). The paper finger will remain in the position where the hand of the operator leaves it.

To do the best work, the left hand and right hand paper fingers should be so placed that the edges of the sheet of paper come well under the little rolls which they bear. These rolls carry the paper along after the lower edge of the sheet has passed the feed rolls under the cylinder, in other words, when writing close to the bottom of the sheet.

The adjustment of the marginal stops for narrow paper is explained in Section 17.

The Scale.

SECTION 10. The writing point is always in the exact center of the cut-out on the line gauge (26931, Fig. 1) and corresponds to the position

of the pointer (37691, Fig. 1) on the carriage scale (28352, Fig. 1). The triangular opening at the top of the line gauge is three spaces over the writing point. The pointer on the carriage scale informs the operator of the position of the writing point in relation to the other points on the scale.

The Feed Roll Release Lever.

SECTION 11. The pressure of the feed rolls upon the paper is instantly removed by pressing and holding back the feed roll release key (33740, Fig. 1), which will permit the adjusting of the thinnest or most delicate paper without danger of tearing. This key is conveniently placed, so that a slight movement of the fingers of the left hand will suffice to give the needed pressure.

The feed roll release lever is provided with a feed roll release lever lock which is located just back of the release lever, on the carriage frame. When pressed downward, while the feed roll release lever is held back, this locks the feed roll release lever and holds the feed rolls away from the cylinder, thereby allowing the operator the use of both hands in adjusting forms, in handling an exceptional number of sheets, etc. A slight pressure on the feed roll release lever releases the lock and throws the feed rolls against the paper.

For the use of the feed roll release lever and feed roll release lever lock in connection with the end guides of the Model 11, see Sections 8 and 32.

To Begin a New Line.

SECTION 12. To return the carriage to begin a new line, pull the line space lever (34000, Fig. 1) with a gentle pressure to the right until brought to a full stop by the margin stop (37622, Fig. 1). This movement simultaneously revolves the cylinder carrying the paper to the proper position for the next line, and returns the carriage to the beginning of the writing line.

The Carriage Release.

SECTION 13. The position of the writing line does not change unless the line space lever is pulled to the right of the thumb wheels (31671 or 31681, Fig. 1) are turned. The carriage can be moved freely toward

the right at any time, but it cannot be pushed toward the left without first depressing one or the other of the two carriage release levers (28051, and 28052, Fig. 1) which are placed for convenience on each side of the carriage. With either of these keys depressed, the carriage moves freely in both directions.

Changing Space Between Lines.

SECTION 14. The machine is constructed for three different widths of line spacing. These are regulated by the line space gauge (35531, Fig. 2). When the little knurled thumb piece of this gauge is lifted up and pulled forward as far as it will go, the machine is adjusted for the widest spacing, equal to three notches of the ratchet (30370, Fig. 2) on the cylinder. When it is set in the central groove, the spacing equals two notches of the ratchet, and when it is set in the groove farthest from the operator, it is adjusted to the narrowest spacing, or one notch.

In case it is desired to write upon lines of irregular width, or to make an insertion between regular lines of spacing already written upon, or to write upon ruled paper where the spacing differs from that regulated by the notches on the ratchet, set the cylinder to the desired writing line as described in the following sections (15 and 16).

Variable Line Space Mechanism.

SECTION 15. To write upon ruled paper, to fill out blanks or insert dates in a printed letter heading, bring the line on which it is desired to print exactly to the edge of the line gauge (26931, Fig. 1). This may be accomplished by pressing in on the right thumb wheel (31671, Fig. 2), thus throwing out of action the spacing ratchet (30370, Fig. 2), and while the thumb wheel is held in, turning the cylinder to the exact position. When the hand is removed from the thumb wheel, it will spring out, thus throwing the ratchet into action again.

Variable Line Space Lock.

SECTION 16. If it is desired to use the variable line spacing mechanism for writing several lines in sequence, press in the right cylinder thumb wheel (31671, Fig. 2) as far as it will go and then lock it in place by pulling over the little lever (30521, Fig. 2) with the thumb, so that it catches over the flange on the hub of the thumb wheel. This holds the cylinder ratchet entirely out of action. When the catch is released, the

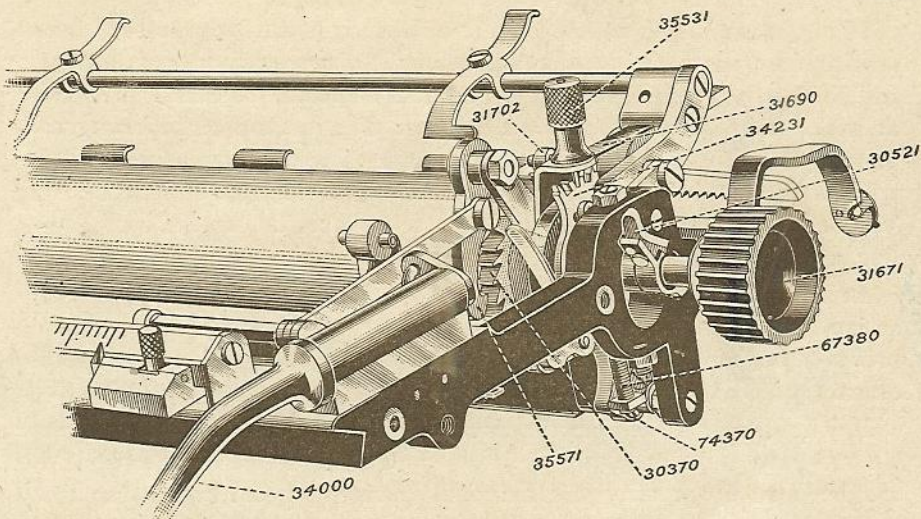


FIGURE 2.

thumb wheel springs back and the line spacing ratchet is once more operative.

In the operation of the variable line spacing mechanism, the line space lever is not used; the paper being turned to the desired writing point by means of the thumb wheels alone.

Regulating the Margins and Changing the Lines.

SECTION 17. Margins are regulated by the marginal stops (37662, 37622, 37612, 37652, Fig. 1), which slide on the marginal stop bar. The latter is graduated to correspond with the markings on the scale, and all the stops are movable, so that they can be set to begin and end the lines of writing at any point.

When the machine is set for full length lines, the writing always commences at the point shown by "O" on the scale. If it is desired to begin the lines further away from the left side of the sheet, so as to leave a margin down that edge of the page, it can readily be done by moving the left marginal stop (37622, Fig. 1) to the right. To do this, press with the finger on the knurled knob, and move it to the right until the little indicator is exactly upon the mark on the graduated scale (28352, Fig. 1) at which it is desired to begin the writing. For convenience, margins are usually set to commence at 5, 10, 15, etc.

If it is desired to shorten the line on the right as, for instance, when writing on a narrow sheet of paper, it is only necessary to set the right marginal stop (37612, Fig. 1) so that its indicator points to the place at which it is desired to stop the writing. The method of adjusting the paper guides for any considerable amount of writing on paper of less width than the full capacity of the machine is described in Section 9. The bell will invariably give warning a few spaces before the end of the line, as fixed by the right marginal stop, is reached.

At this point the further operation of the keys is impeded by the action of the letter spacing lock, which gives the operator warning and prevents further writing on the sheet, unless the marginal release mechanism (referred to below) is used.

If it is desired to extend the line of writing beyond the limits set by the marginal stops on either the right or left hand side of the paper, it can be done by pressing the marginal release (37540, Fig. 1) so that the carriage can be moved in either direction past both of the marginal stops mentioned to the full length of the line indicated by the position of the final marginal stops (37652 and 37662, Fig. 1.) This permits the insertion of a few additional characters to complete a word or syllable at the end of the line, or the writing of marginal notes or headings in the left hand margin of the sheet.

Both of the final stops (37652, 37662, Fig. 1) can be moved to any desired point on the bar by pressing back the final stop release levers (36310 and 36320, Fig. 1) and moving them along the bar.

Rewriting.

SECTION 18. To rewrite upon the line of writing (that is before the paper has been shifted by the operation of the line space lever), operate the back spacer until the space in which the character is to be rewritten shows in the center of the cut-out on the line gauge (26931, Fig. 1), another way is to line space three times and back space until the space where the character is to be written appears in the triangular opening in the top of the line gauge. When it is necessary to return the carriage more than a few spaces, pull it back.

If the correction is to be made on a sheet which has been removed from the cylinder, replace it again as at first and turn the paper forward

until the printing appears above the line gauge. Then adjust one of the printed lines, preferably one near to the line on which the correction is to be made, to the edge of the line gauge in the manner described in Section II, so as to make sure that the character to be rewritten will fall exactly upon the line of writing. When adjusting the paper for the position of the line, care should be taken to see that the center of the letters upon the line upon which the adjustment is made corresponds with the graduated marks on the edge of the line gauge. The best way of testing this is by noting the position of letters having a straight central stem, such as "i," "m," or "l." This is especially important where only one character is to be corrected. Careful attention to these points will enable the operator to correct the misprinting of even a single character so that the insertion cannot be distinguished from the original writing.

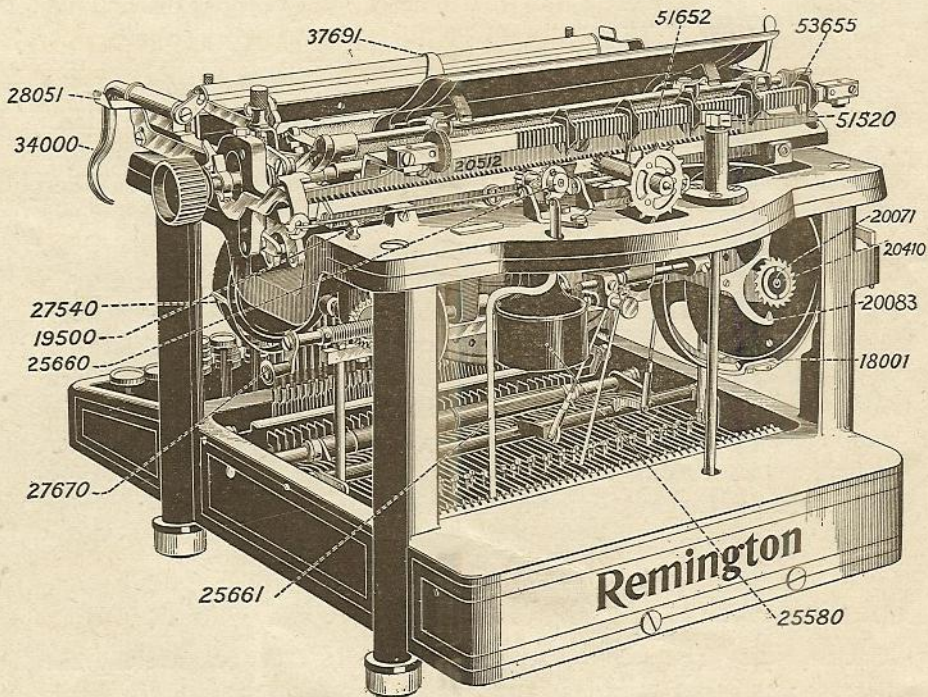


FIGURE 3

Regulating the Carriage Tension.

SECTION 19. The carriage moves to the left by the force of a coiled spring contained in the mainspring wheel (18000, Fig. 3). A flexible metal strap (19500, Fig. 3) connects this spring with the carriage. It is desirable that the carriage move promptly, but it is also important that the tension should not be too strong, or it will cause unnecessary wear upon the escapement wheel (21731, Fig. 4) and the dogs (20193 and 20194, Fig. 4). The carriage tension may be increased by turning the tension ratchet wheel (20410, Fig. 3), toward the right and diminished by moving up and down the lever (20083, Fig. 3). It is seldom necessary to change this tension.

Removing and Replacing the Cylinder.

SECTION 20. Occasionally it may be desirable to remove or replace the cylinder with another one fitted for special work, such as a very hard one for heavy manifolding.

Press the shift lock (17520, Fig. 1), thus locking the carriage as for "upper case" writing, loosen the two set screws in the right cylinder thumb wheel (31671, Fig. 1) and remove the thumb wheel. Then loosen the cylinder set screws in the left cylinder head. This permits the left cylinder thumb wheel (31681, Fig. 1) to be removed. When the left cylinder thumb wheel is removed, a "space collar" drops down which allows the cylinder to be pushed to the left; then, by lifting up the left end first, remove the cylinder by a firm pull to the left.

To replace it, first insert the shaft at the right end of the cylinder. Be sure that the ratchet wheel on the end of the cylinder is beneath the roll of the cylinder stop spring (31702, Fig. 2). Place the space collar in position between the left cylinder head and the cylinder frame, at the same time inserting the left cylinder thumb wheel (31681, Fig. 1). Then tighten the set screws in the left cylinder head. Replace the right cylinder thumb wheel (31671, Fig. 1) and tighten the screws.

THE ESCAPEMENT.

The Letter Spacing.

SECTION 21. The step-by-step motion of the carriage, whereby the letter spacing is performed, is accomplished by the action of the letter spacing dogs (20193 and 20194, Fig. 4) upon the escapement wheel

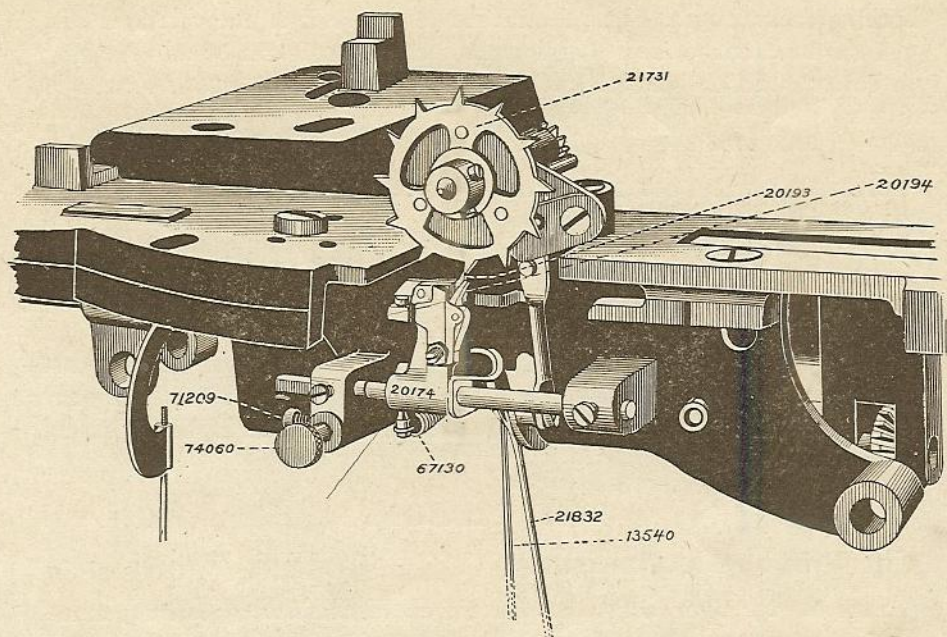


FIGURE 4

(21731, Fig. 4). The dogs, mounted upon the upright arm of the rocker (20174, Fig. 4) at the back of the machine engage slightly the teeth of the escapement wheel just above, and prevent them from revolving, save as motion is communicated to them by the operation of the machine.

The dogs are so adjusted that when a key is struck, they are released from a tooth in the escapement wheel (21731, Fig. 4), and are brought into contact with the next tooth in the escapement wheel. As soon as the key is released, the rocker goes back to its first position. With this style of escapement, the carriage moves with the downward stroke of the keys. The key should be struck with a light, staccato stroke, and the fingers not allowed to dwell on the keys when the type is printing.

The Carriage Release Keys.

SECTION 22. The motion of the carriage is communicated through the escapement wheels by means of a little pinion wheel upon the other end of the same shaft. This pinion wheel engages the teeth of a letter-

spacing rack (20512, Fig. 3) attached to the rear of the carriage. To release the carriage from the pinion wheel so that it can be moved along in either direction, depress either carriage release key (28051 or 28052, Fig. 1).

Tension of Letter Spacing Rocker.

SECTION 23. The amount of tension on the letter spacing rocker (20174, Fig. 4) is regulated by the coiled spring (67130, Fig. 4), which is secured to the letter spacing rocker and the spring adjusting bridge. To increase the tension, loosen the set screw (71209, Fig. 4), which holds the adjusting screw for dog tension spring (74060, Fig. 4), and turn the adjusting screw to the right until the desired tension is secured; then tighten the set screw again. To diminish the tension, turn the adjusting screw to the left.

THE RIBBON.

The Ribbon Mechanism.

SECTION 24. The action of the ribbon mechanism is entirely automatic. Once the ribbon is put on the machine, no further attention need be given it until it is worn out. It moves from the right to left or vice versa, with the action of the carriage, and when it has all been wound on one spool, the action changes and the ribbon begins re-winding on the empty spool. Our model (Fig. 5) gives a very good idea of the ribbon mechanism.

The Two Color Ribbon Device.

SECTION 25. All Models 10 and 11 are regularly equipped for using two color ribbons. With the ribbon mechanism as regularly adjusted, the ribbon writes the color on the upper part of the ribbon. To write on the lower part, turn the knob of the ribbon position indicator (27960, Fig. 1), located on the left front post, to the left so that the pointer is over the red spot on the indicator stand (27180, Fig. 1).

In cases where a one-color ribbon is used, the knob on the ribbon position indicator is also useful as a means of utilizing the entire surface of the ribbon. Every time this knob is moved, a new transverse surface of the ribbon is presented to the type. The same result may be attained by removing ribbon from the oscillator and inverting it before reinsertion.

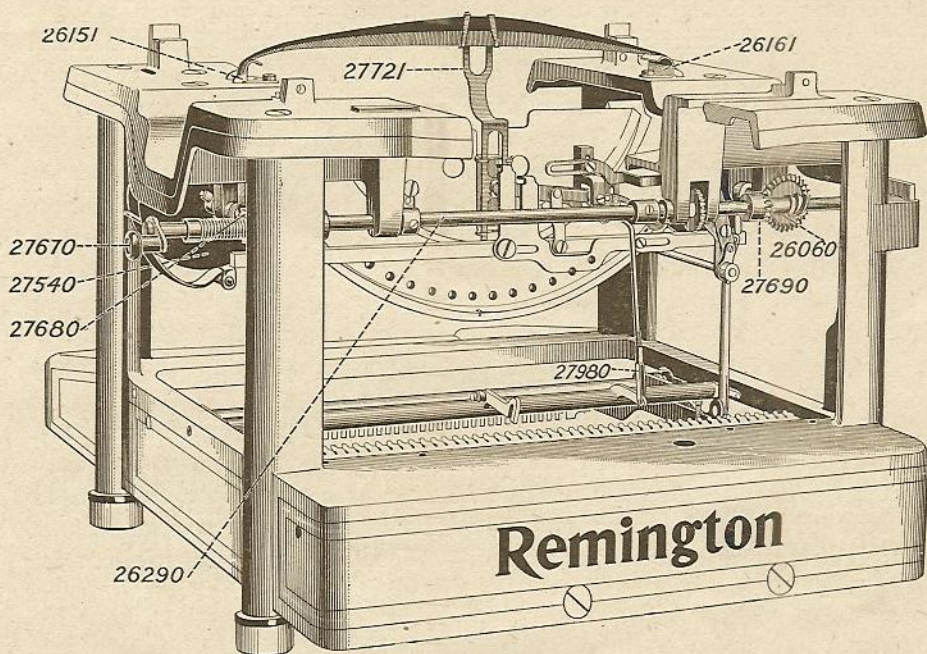


FIGURE 5

Changing Ribbons.

SECTION 26. We desire to caution all users of the visible model Remingtons against inserting on our machines the spools on which other makes of ribbons are wound. When they are not perfectly made and perfectly interchangeable, the reversing mechanism is thrown out of commission. If using other makes of ribbons, we recommend that the ribbon be wound from the spool on which it is furnished onto the spool that is now a part of the machine, to avoid likelihood of difficulties resulting from the introduction of non-Remington-made parts into the machine.

With Remington-made ribbons, proceed as follows:

Wind all the old ribbon on the right ribbon spool. Detach ribbon from the left hand ribbon tape, being careful to keep the end of the tape

above the top plate. Press on the snap catch which protrudes from the ribbon spool shaft and take off the ribbon spool containing the old ribbon. The old spool may be thrown away. To the ribbon spool shaft is attached a weight, which is the "control" of the automatic ribbon reverse. Turn the ribbon spool crank (27670, Fig. 5), until the weight rests on top of the ribbon spool shaft. There is a cut-out on one side of every Remington spool into which this weight will fit. Hold the ribbon with the cut-out side next to the ribbon spool shaft, and *before the new spool is placed upon the ribbon spool shaft*, pass the free end of the new ribbon up through the slot above the right hand spool and across the type basket, and attach to the tape on the left spool, care being taken to fasten the clip on the tape so that the clip will be above the ribbon. Insert the new ribbon spool in place of the old one, taking care that the spool is properly inserted so that the ribbon will not be twisted.

Hold the ribbon between the thumb and the first finger of each hand, place it back of and below the ribbon carrier (27721, Fig. 5) and draw it up into the loops. Do not attempt to *thread* the ribbon *through* the loops of the ribbon carrier. The ribbon is now in position in the ribbon carrier. Turning the crank (27670, Fig. 5) will straighten the ribbon.

THE COLUMN SELECTOR OF THE MODEL 10.

Operation of the Column Selector.

SECTION 27. Every Model 10 Remington is equipped with a Five Key Column Selector, the purpose of which is to bring the carriage instantly to a given writing point by one stroke on a key, thus obviating the necessity for any hand adjustments. This column selector has a wide variety of uses. It is a great time saver in the writing of the date, address, and "yours truly" on letters, for the indentation of each paragraph, and the name and address on the envelope. The correct starting point of each line is reached instantly by one stroke on a key. The column selector may also be used for form or tabular work, although wherever figures are written in columns, the ten key decimal tabulator of the No. 11 is to be preferred.

The column selector is operated by means of five keys (53520, Fig. 1), the depression of any one of which operates the star wheel (51520, Fig. 3), which in turn engages the stops (53655, Fig. 3) on the rack (51652, Fig. 3). It is the setting of the stops on this rack in connection with the operation of the keys, which determines where each line of writing shall begin.

We will assume as our illustration that it is desired to adjust the column selector for plain letter writing.

The line for the name and the line for the salutation begin, of course, at zero on the scale.

The first line of the address and the first line of each paragraph begin at 10 on the scale.

The second line of the address begins at 20 on the scale.

The "yours truly" line begins at 30 on the scale.

The line for the typewritten signature begins at 35 on the scale.

The date line begins at 45 on the scale.

The above arrangement of column selector stops can also be used in addressing envelopes. For large envelopes the stops at 30, 35 and 45 can be used, and for small envelopes those at 20 and 30.

To set up the machine for doing this work, simply set the five stops (53655, Fig. 3) on the rack (51652, Fig. 3) at the points "10," "20," "30," "35" and "45," as shown by the rack scale.

When the stops on the rack are thus set, and the carriage is at the beginning of the line, the striking of the column selector key "1" (53520, Fig. 1) will cause the carriage to move instantly to "10" on the scale; or the striking of the column selector key "2," when the carriage is at the beginning of the line, will cause the carriage to *jump* the first stopping point or "10" and come instantly to the second stopping point or "20," and so on with the keys "3," "4" or "5." The striking of key "3" would cause the jumping of the first two columns, the striking of key "4" would cause the jumping of the first three columns, and the striking of key "5" would cause the jumping of all the columns but the last. This capacity for the *jumping* of columns is an absolutely new feature of a writing machine. It permits the operator to reach instantly any one of the five starting points by a single touch on a column selector key.

It should be noted that each one of the column selector keys moves the carriage the number of columns indicated by the key. For example, column selector key "3" always moves the carriage three columns, no

matter where the carriage is located when the key is struck. If the jump is made from the beginning of the line, the striking of column selector key "3" would bring the carriage to the third column on the scale, or to "30," according to the above example. If, however, the carriage is, say, at the 2d or "20" key when key "3" is depressed, it would move three additional columns, going instantly to column "5." If, therefore, the carriage should be at, say, column "3," and the operator should wish to go to column "4," it would be incorrect to press the "4" key. The key which should be depressed is key "1," thus bringing the carriage one column further. A little practice with the column selector will soon give remarkable facility in its use, and no time whatever will be lost in bringing the carriage to position for writing lines of any different length.

The above example, of course, describes only one setting. These settings can be varied in any manner whatever according to the nature of the work to be done. When the work requires less than five different starting points for different lines, only the number of stops need be set on the rack corresponding to the number of columns or starting points. If, for example, the work calls for only three stops on the rack, then, of course, selector keys "4" and "5" would be out of service, though they would interfere in no way with the work of the machine.

NOTE.—When a column selector key is locked on any one of the stops (53655, Fig. 3), as, for example, when no writing has been done at the column in question, the pressure of the key of next higher denomination is necessary to advance the carriage to the next stop, etc.

The Reversible Rack.

SECTION 28. The Reversible Rack (51652, Fig. 3) is designed for use in connection with the column selector of the Model 10 Remington. It has four sides and may be turned at will by simply revolving the rack on its axis. The reversible rack is a very useful feature where a number of forms of different character are used alternately on the same machine, since it relieves the operator of any necessity for resetting the stops when changing from one form to another. With this device, the stops (53655, Fig. 3) for two, three or four different forms can be kept permanently in place, and the change from any one to any of the others can be made instantly by simply turning the rack.

In order to facilitate the setting of the stops on the rack for different forms of work, stops are furnished of a number of different shapes, intended to operate on one, two, three, or if necessary on all four sides of the rack. This variety always permits the exact arrangement of stops

desired on each side of the rack. In all there are nine of these stops and in order that the purpose of each one may be clearly understood, pictures of all of them (actual size) are shown on the next page, the sides of the rack on which each stop operates being stated in each case.

In the description accompanying the illustrations the top of the rack refers to that side of the rack which bears the scale. The front of the rack refers to that side of the rack on which the tabular mechanism operates; in other words, to the side which is furthest from the operator when the scale side is uppermost.

Every stop goes on the rack either from the top or the bottom.

The stops should always be set with the smooth side to the left.

Each stop has a small spring on the reverse side to hold it securely in the rack. Should the stop appear to be either too tight or too loose, the spring may be easily bent in or out.

The practical use of the reversible rack may best be illustrated by a practical example. In the following example it is assumed that the machine is equipped with Carriage A, with 76 character spaces (pica spacing, 10 to the inch). The same machine is to be used for writing on four different tabular forms which require stops to be set at the following points on the scale:

Form 1. (Front)	14	18		37		46		70
Form 2. (Top)			22	29		46	50	
Form 3. (Back)	14	18	25		38	46		70
Form 4. (Bottom)	10	18		29		39	46	58

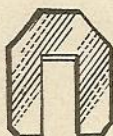
Front, top, back and bottom, in this example, as in the case of the previous illustration, refer to the position of the rack when the scale side is uppermost. When the rack is set to operate on Form 1 (front) the scale (top) is uppermost and the figure "1" appears on the right side of the rack facing the operator.

When the rack is set to operate on Form 2 (top) the figure "2" appears on the right side of the rack facing the operator.

When the rack is set to operate on Form 3 (back) and Form 4 (bottom), the figures "3" and "4," respectively, appear on the side of the rack facing the operator.

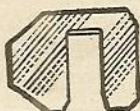
Any side of the rack may of course be brought to "front" by simply turning the rack. When setting the stops on the rack, however, operators will always find it more convenient to have the scale side of the rack uppermost with the rack scale in plain sight.

1



One Side
Top or Bottom

2



One Side
Front or Back

3



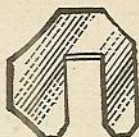
Two Sides
Top and Bottom

4



Two Sides
Front and Back

5



Two Sides
Top and Front
or Bottom and Back

6



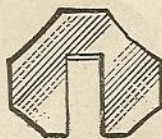
Two Sides
Top and Back
or Bottom and Front

7



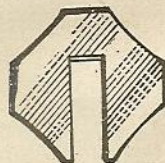
Three Sides
Top, Bottom and Front
Top, Bottom and Back

8



Three Sides
Top, Front and Back
or Bottom, Front and Back

9



Four Sides

In the foregoing illustration the majority of the stopping points, namely, 10, 22, 25, 37, 38, 39, 50, and 58 occur only on a single form, and in these cases only the single or one-side stops 1 and 2 are required, 1 for top or bottom and 2 for front or back. Forms 1 and 3 have common stops at both 14 and 70. At both of these points stop 4, for front and back, must be placed. Forms 2 and 4 have a common stop at 29. At this point stop 3, for top and bottom, must be placed. Forms 1, 3 and 4

have a common stop at 18. At this point stop 8 must be inserted (from the bottom) for front, bottom and back. Forms 1, 2, 3 and 4 all have a common stop at 46. At this point stop 9, for all four sides, must be placed.

When the stops are thus set the machine is adjusted to write on all four of the different forms, and the stops will never require any further attention from the operator so long as no other forms are used. In changing from one form to another all that is necessary is to turn the rack—the work of an instant.

The example we have chosen is far more complicated than any which are usually encountered in actual service, the two one-side stops, 1 and 2 with the occasional use of a two-side stop, generally sufficing for all purposes.

The application of the principle which is illustrated in the example will enable the operator readily to set the stops for writing on any forms or combinations of different forms which the nature of the work requires.

The Carriage Governor.

SECTION 29. The Carriage Governor (25580, Fig. 3) tempers the action of the carriage release mechanism which operates in connection with the column selector keys, so that no injurious shock or jar to the carriage results. When a column selector key is depressed, the lever is drawn down, throwing the pinion wheel into contact with the rack which causes the wheel to revolve, and, by its connecting mechanism on the other end of the shaft (25660, Fig. 3), to turn the shaft leading to the governor in which the shock is absorbed, thus preventing any undue strain on the carriage.

The carriage governor performs the same office in connection with the decimal tabulator of the Model 11.

THE KEY-SET DECIMAL TABULATOR OF THE MODEL 11.

Operation of the Decimal Tabulator.

SECTION 30. In place of the five key column selector with which the Model 10 Remington is furnished, and which is described in the preceding sections, all Model 11 Remingtons are equipped with a complete key-set decimal tabulator which is built into the machine and forms an integral part of its mechanism. The decimal tabulator differs from the column

selector in that it does more than merely bring the carriage to a single writing point in each column. It will bring the carriage instantly to the *exact writing point* in each column where the writing is to begin, whether this be the units column, tens column, hundreds column or any other. The ten tabulator keys (53510—53520, Fig. 6), which are located immediately back of the character keys on the keyboard, afford no less than 10 different starting points for every column.

The decimal tabulator is composed of two general parts; the tabulator rack (52783, Fig. 6) on which stops (53650, Fig. 6) for each column of figures to be written are placed, and the actuating mechanism, composed of a series of ten finger keys (53510—53520, Fig. 6) and their connecting levers and plungers (51500, 53960, 52010, Fig. 6). The device is valuable for every form of tabular or figure work, and its operation is simplicity itself.

The scale used in connection with the tabulator is placed directly back of the tabulator keys and is for the purpose of indicating to the operator the numerical value of each key.

The most common use of the tabulator in the United States is for the writing of columns of dollars and cents in connection with simple columnar headings on the same form, and for this work either the so-called standard scale (No. 1) or the common scale (No. 2) (see page 27) is generally used. To set the tabulator for writing columns of dollars and cents, place the paper in the machine, squaring the sheet by means of the end guides (see Section 32) and placing it flush with the side guide (33921, Fig. 1), and, releasing the carriage by means of either of the levers (28051, 28052, Fig. 1) provided for the purpose, move it along until the place for writing the decimal point (separating dollars and cents) falls exactly in the center of the cut-out in the middle of the line gauge (26931, Fig. 1) three line-spaces underneath the triangular opening at the top of the line gauge. Then strike the key (53610, Fig. 6) marked "Tab. Stop Set" which by means of its connecting wire (53640, Fig. 6) and shaft (53630, Fig. 6) and arm (53620, Fig. 6) forces one of the stops (53650, Fig. 6) into the proper position on the rack (52783, Fig. 6). If more than one column of figures is to be tabulated, the same procedure for each column should be followed, using one stop for each column. The machine is now set for the work in hand, and the stops on the rack need never be changed so long as the same form is used.

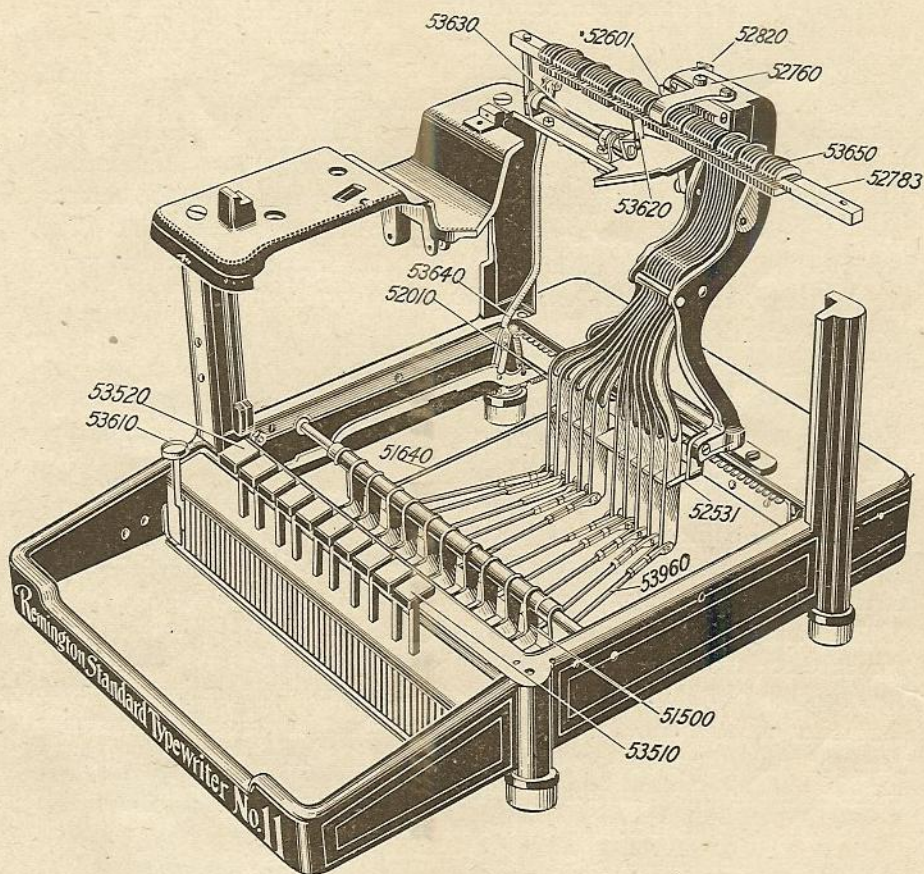


FIGURE 6

When it is desired to provide for writing another form with a different columnar arrangement, all stops (53650, Fig. 6) should be restored to the forward position on the rack.

To change stops from the backward to forward position, release carriage by either of the levers (28051 or 28052, Fig. 1) and bring to extreme right or left. Now press finger piece (52820, Fig. 6) which will drive out the cam (52601, Fig. 6), continue to hold in finger piece and draw carriage to right or left, as required, for entire length of line. All is now ready to set up for a new form.

After the stops have been set for writing, the operator will note that the second tabulator key from the left of the machine is indicated on the scale as "1" or the "units" key. By depressing this key the connecting mechanism is thrown into action and the pinion wheel disengages the rack (20512, Fig. 3) from the pinion wheel on the escapement wheel shaft, permitting the carriage to escape until it is stopped by the tabulator stop (53650, Fig. 6) coming in contact with the upper end of the plunger lever (52010, Fig. 6) at one point to the left of the decimal point. The same applies to every tabulator key, each one having indicated above it on the tabulator scale the exact point in the column to which it will move the carriage.

For example:

The depressing of the 2d or "units" key will bring the carriage instantly to the correct writing point in the column for writing any amount from 1 to 9, inclusive.

The depressing of the 3d or "tens" key will bring the carriage instantly to the point for writing any sum from 10 to 99, inclusive.

The depressing of the 4th or "hundreds" key will bring the carriage to the point for writing any amount from 100 to 999 inclusive.

The same principle holds throughout, in the case of the No. 1 or standard scale, see page 27. *In the following examples we will assume that the No. 1 or standard scale is used.* (The operator must understand that after each amount is tabulated, a line must be spaced, the carriage returned and the item or description for the next amount must be written before the tabulator key for the next amount is pressed).

We will assume that the first amount to be written in the column is 5.52. After writing the description, if any, press the 2d or "units" key, and write,

5.52

To begin in the tens of dollars column, press the "tens" or 3d key, and write,

29.45

To begin in the hundreds of dollars column, press the "hundreds" or 4th key, and write,

767.94

To begin in the thousands column, press the "thousands" or 5th key, and write,

9763.52

To begin in the tens of thousands column, press the "tens of thousands" or 6th key, and write,

86573.42

To begin in the hundreds of thousands column, press the "hundreds of thousands" or 7th key, and write,

142345.68

To begin in the millions column, press the "millions" or 8th key, and write,

4356758.92

To begin in the tens of millions column, press the "tens of millions" or 9th key, and write,

67954678.36

To begin in the hundreds of millions column, press the "hundreds of millions" or 10th key, and write,

561437845.29

To write cents, press the decimal or first key, and write,

.16

The amounts thus written would stand tabulated as follows:

5.52
29.45
767.94
9763.52
86573.42
142345.68
4356758.92
67954678.36
561437845.29
.16

In order that the explanation may be perfectly clear, the above illustration has been given as an ascending scale, though of course the amounts in the above column can be written in any order.

The first seven amounts in the above column, if written on the comma scale (No. 2, Page 27) would appear thus:

5.52
29.45
767.94
9,763.52
86,573.42
142,345.68
4,356,758.92

In this case the process is the same except that the fifth and the ninth tabulator keys each represents a comma, which diminishes the capacity

of the scale from hundreds of millions to units of millions. The principle, however, remains unchanged, namely, that each space in each amount counting from the right, is always reached with the same tabulator key, counting from the left. The decimal point, or first character, is reached with the first tabulator key, the next character to the left of the decimal is reached with the second tabulator key, and so on through the scale. Some users, by remembering this plain rule, find it easy to dispense with tabulator scales entirely, simply numbering the tabulator keys, beginning at the left, from "one" to "ten."

For other information concerning tabulator scales, see Section 31.

When writing more than one column on a line, the same principle is followed, one pressure of the tabulator key always bringing the carriage to the exact writing point in the first column beyond the point where the carriage happens to stand. If it is desired to skip one or more columns and insert the figures in a column further to the right, the tabulator button must be pressed once for each column which it is desired to pass, as in the following example, which is written with three stops set on the tabulator rack at 30, 45 and 65 respectively:

4th, 4th and 4th key	198.63	263.45	768.46
2d, 7th and 10th keys	2.45	12,926.63	3,456,987.25
2d, skip and 3d key	2.63		29.78
Skip, 3d and 4th key		19.64	768.42
Skip, skip and 1st key			.09

It will be noted that all of the above amounts are tabulated in their correct positions under each other, no matter how they may vary. The examples given demonstrate the whole principle in the operation of the tabulator.

Tabulator Scales.

SECTION 31. On page 27 we show a number of tabulator scales, including the scales in more common use. It will be observed that each of the scales has ten divisions and that these divisions correspond to the ten tabulator keys. *This stop on the rack is always set at the point on the scale where the last or left hand character appearing on the scale is to be written.* For example, in the case of the standard scale (No. 1) or the comma scale (No. 2), all the characters before the decimal will fall at writing points to the left of where the stop is set. On the other hand, the two columns for cents will fall to the right of the point on the scale

TABULAR SCALES.

Standard Scale

.	'	10	100	000	0000	00000	000000
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Comma Scale

.	1	10	100	1,000	10,000	100,000	1,000,000
---	---	----	-----	-------	--------	---------	-----------

Unit Scale

1	10	100	1,000	10,000	100,000	1,000,000	10,000,000
---	----	-----	-------	--------	---------	-----------	------------

Tenths Scale.

TENTHS	.	1	10	100	1,000	10,000	100,000	1,000,000	10,000,000	MILLIONS
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Sterling Scale.

1d	10d	.	1s	10s	.	£1	£10	£100	£1000
----	-----	---	----	-----	---	----	-----	------	-------

Combination Unit and Sterling Scale.

1	10	100	,	1000	10,000	100,000	,	1,000,000	10,000,000
1d.	10 d.	.	1s.	10s.	.	£1	£10	£100	£1000

NOTE—These scales can be tested experimentally by cutting them out along the lines. They will then fit the scale holder of the tabulator.

at which the stop is set. For this reason, the two columns of cents do not appear in either the standard or the comma scales.

The truth is that the point in the column where the stop is set is simply a matter of convenience. If a user so wishes the two columns for cents could be included on the scale, in which case the third tabulator key from the left instead of the first key would stand for the decimal point, and the entire scale would be moved two spaces to the right. Likewise, it would be equally feasible to shift the entire scale to the left as many points as the operator desires. The scale shown on page 27, however, will be found to answer for all ordinary purposes. There would never be any occasion to shift the scale to the right, and the only occasion which would ever arise which would necessitate the shifting of the scale to the left would be when very high amounts are written. Take, for example, the No. 5, or sterling scale. If the amounts to be written on this scale run above the thousands of pounds, it would be better to shift the first period from the third key on the left to the first, thus allowing the two columns for pence to be written on the other side of the stop as the two columns for cents are written in the case of the standard scale No. 1.

With this explanation, the arrangement of the scale for any conceivable purpose is a very easy matter. In addition, the operator will, as a result of a little practice, devise other ways of setting the scales for individual pieces of work which will result in a continual saving of time and labor in connection with the typewriter work of the office. The ease with which the tabulator adapts itself to every form of tabular work and its great labor-saving features make it almost indispensable where billing, statistical or any considerable amount of other tabular work is done.

THE END GUIDES OF THE MODEL 11.

SECTION 32. The end guides or needle bar stops of the Model 11 Remington are located underneath the cylinder and out of sight of the operator. They are designed, in connection with the left hand paper edge stop or side guide (33921, Fig. 1), to insure absolute accuracy of the paper feed. The method for the adjusting of the side guide has been described in Section 8, under "Placing the Paper." The end guides require no adjustment.

To insert the paper, press back the feed roll release key (33740, Fig. 1) with the left hand, and, holding paper firmly in the right hand, drop it down upon the needle bar stops, just touching the paper edge stop (33921, Fig. 1). This gives to each sheet of paper a common and absolutely accurate starting point.

The end stops, like the decimal tabulator, are principally useful in connection with the billing machine. The importance of an absolutely accurate paper feed, one which does not vary by a hair line, is very great in the case of certain kinds of billing, notably retail daily entry or monthly statement work where many entries must be made at different dates on the same bill.

The end guides are also useful if corrections are to be made after the paper has been removed from the cylinder. If the side and end guides are used when the paper is first inserted, their use when the sheet is reinserted will bring the paper to the exact point where the correction is to be made, without the necessity of any adjustment by hand.

Care should be taken when using the feed roll release lever (33740, Fig. 1) on the Model 11 for adjusting a typewritten sheet to the line of writing for inserting a correction, etc. If the feed roll release lever is pushed back to the extreme limit, or locked back, the needle points are in contact with the cylinder, and will hold the paper more or less firmly in position, rendering adjustment difficult. A slight pressure on the feed roll release lever, however, will be sufficient to disengage the feed rolls, permitting the adjustment of the paper, and will not bring the needle point end guides fully against the cylinder.

GENERAL MATTER.

New Ribbons.

SECTION 33. Neat and attractive looking work cannot be done with ribbons that are poorly inked, or are made from too coarse a fabric. Use none that are coarser than the one furnished with the machine, which is of the "Remtico Paragon Brand." The quality of this brand is guaranteed by the manufacturers of the machine, and it can always be relied upon to give satisfaction. These ribbons are for sale everywhere by the local representatives of the Remington Typewriter.

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

Indelible copying ribbons, also, are not affected in any way by the atmosphere, and the original print will never become illegible from exposure to light. As now manufactured, the various other colors of copying ribbons are but little affected, and, unless continuously exposed to the action of the light for a long period, can be considered as permanent for all practical purposes.

All ribbons not in actual use upon the machine should be kept in tin boxes similar to the ones in which all Paragon ribbons are packed.

Always order "copying" ribbons when you want a ribbon which will make a press copy, and "record" ribbons when you use the carbon copy system.

Making Stencils for Duplicating.

SECTION 34. When the machine is to be used for making stencils for any of the duplicating devices now on the market, the work should be done without the ribbon. To do this slip the ribbon downwards out of the vibrator and let it hang loosely across the type basket. If much work of this character is to be done, any Remington representative will furnish, upon request, a small hook for holding the ribbon permanently out of the way. This can be screwed upon the segment plate just beneath the printing point. When the ribbon is removed from the vibrator drop it down over this hook, where it will run to and fro as the machine is operated without interfering with anything. When ready to resume regular writing, simply remove the ribbon from the hook and replace it in the vibrator.

Care of the Machine.

SECTION 35. Keep the type clean. No machine will do good work when the type are clogged up with an accumulation of ribbon dust or ink. Clean the type frequently, using for the purpose the type brush which is included in the box of accessories which are supplied with each machine.

Keep all of the working parts of the machine clean and free from dust. The best results can only be obtained when the machine is kept clean—and the working life of any machine can be greatly prolonged by careful attention to this point.

In addition to dusting the machine carefully every morning, keep it covered when not in use. If the machine stands on a table, use a Remington rubber cover to keep it safe from the dust of sweeping, etc.

Oiling, When and How.

SECTION 36. Never use any but the very best oil (such as that used for clocks and watches) upon the typewriter. Porpoise oil seems to meet the requirements better than any other.

Never put on oil without afterward wiping off all the surplus that can be found outside the actual spot where friction can be caused, as it cannot do any good toward lubricating, but only catches the dust, and forms a gum that will prevent the machine from running lightly.

The pinion wheel shaft should be oiled occasionally by putting a drop of oil in the oil hole which will be found in the top of the pinion wheel stand.

Oil, when needed, can be supplied best by dipping the end of the Remington touch oiler into the oil, and then touching the spot to be oiled with it.

If at any time the point of the dog and the teeth of the escapement wheels get dry and begin to wear, apply a little oil to the teeth of the escapement wheels. Two or three drops will be sufficient for all the teeth.

At intervals of about two months the type bar bearings should be oiled very slightly, using Remington touch oiler for the purpose.

The bearings of the spool shafts and the long ribbon movement shaft also need occasional oiling.

Remembering these instructions, any of the wearing surfaces of the machine may be oiled, if necessary. BE VERY CAREFUL NOT TO PUT ON TOO MUCH OIL. WIPE OFF ALL THE SURPLUS. NEVER USE ANY BUT THE VERY BEST.

