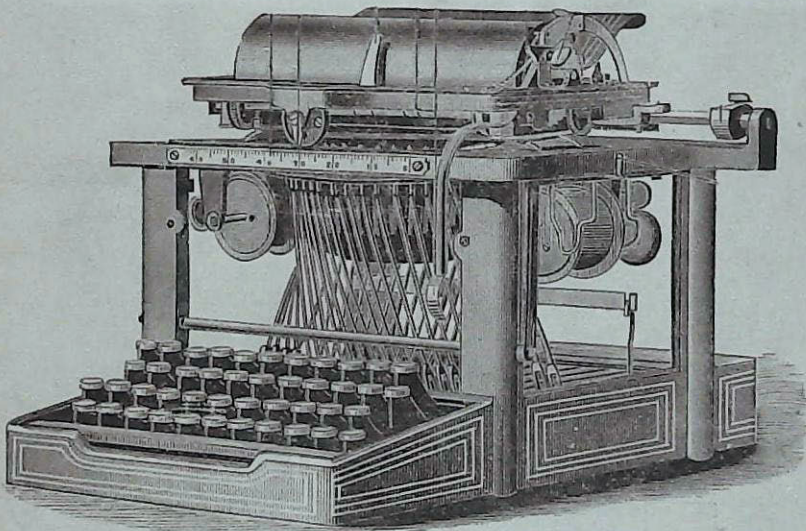


826-05

#262
2-23-81
jm

DIRECTIONS FOR USING
 THE
PERFECTED
TYPE-WRITER



Perfecting Type Writer, No. 4.

E. REMINGTON & SONS,

Manufacturers and Sole Agents.

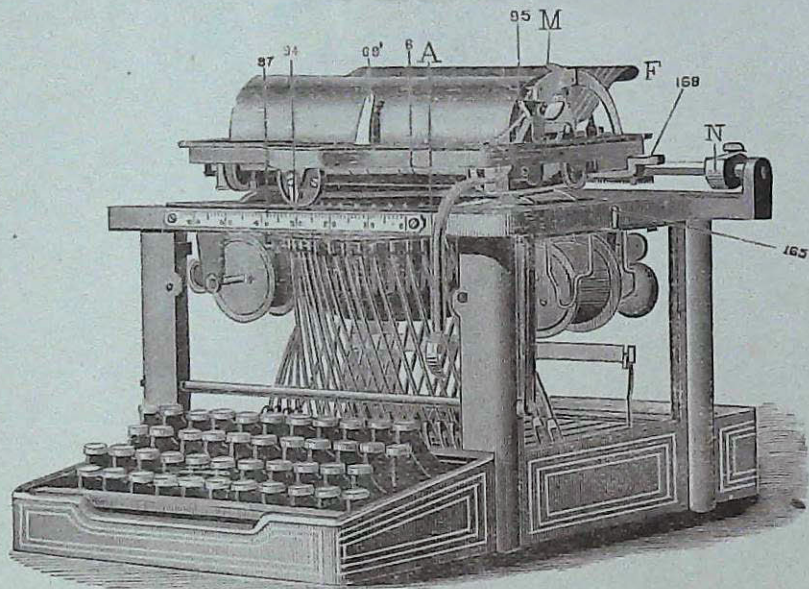
PRINCIPAL OFFICE, Nos. 281 and 283 BROADWAY, NEW YORK.

Branch Office
 ... bottom of the letter;
 ... nks or using paper that has a heading, bring
 ... he bottom of the letters will rest to the edge



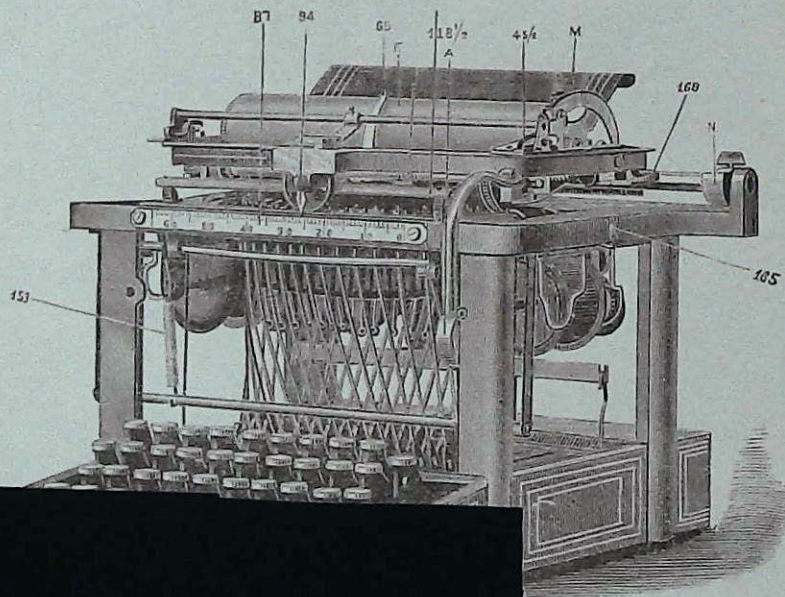
FACTORY, ILL

PLATE No. 1.

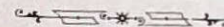


Type Writer No. 2.

PLATE No. 2.



TYPE-WRITER DIRECTIONS.



MACHINES are packed and shipped, properly adjusted, and ready for use. They have rubber feet, which are conveniently put in position by inserting their larger ends in the four holes in the bottom board, bored for their reception, when the base of the machine can easily be placed upon them.

PLACING THE PAPER.

Lay the paper upon the paper shelf (F,) with the edge close down between the cylinder and the feed-roll, 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 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 arrived at, which is easily determined when the use of the scale is understood.

USING THE SCALES.

The edge of the scale represents the bottom of the letter; that is, when filling blanks or using paper that has a heading, bring the line upon which the bottom of the letters will rest to the edge

of the scale. (This may be accomplished by turning it a little beyond the exact place and then drawing it back to exact position, as directed when squaring the paper to the carriage.) Then turn the cylinder two notches on No. 2 machines, and one notch on other machines. 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.

The position upon the line that any character will occupy when printed, is represented by the front scale (87) and pointer (94), at the front (plate 2). At whatever point the pointer rests upon the front scale, the character will be printed over a corresponding point upon the carriage scale.

NARROW PAPER AND ENVELOPES.

To use narrow paper or an envelope, place it upon the paper shelf like other paper, but be careful that it is far enough to the left to be well engaged under the rubber band, for in this case, one band has to do all the work. Then bring the envelope holder (69) firmly against the right hand margin of the paper or envelope, so as to hold it smoothly against the cylinder. Pressing the holder hard near the place where it is clamped upon the rod, will prevent its springing away from the paper. In directing an envelope, it is better to open out the flap, and turn the cylinder, for line spacing, with the thumb and fingers, holding the envelope firmly to the cylinder with the thumb.

The envelope holder (69) is a nickel-plated steel spring, clamped upon the front band pulley shaft, with a small friction roll resting against the large cylinder.

REPRINTING.

If it is desired to turn the paper back to reprint a word or a letter, or for any purpose, press the line-space pawl (M) forward until the end is disengaged from the ratchet wheel. Take hold of the cylinder with the thumb and fingers, as in adjusting the paper, and turn toward you until the desired position is reached.

When the cylinder has been turned by hand, be sure that the cylinder stop-spring is well seated in the notch of the ratchet wheel,

so that the cylinder cannot jar from its position when you begin to print. Due attention to the above will enable the operator to reprint, without trouble and with very little delay, any letter, word, or line, upon the page.

RETURNING THE CARRIAGE.

To return the carriage to begin a new line, pull the carriage lever (A) toward you, until the back end of it has lifted the rack (102) of the dog (64, plate 3), but not hard enough to lift the front carriage roll off the track. When still holding the lever forward, a gentle pressure to the right will return the carriage until the trip comes in contact with the adjustable stop-collar (N), which will release the rack and allow it to engage with the dog again ready for printing. This revolves the cylinder, carrying the paper through into position for the next line.

To return the carriage without changing the line, take hold of the thumb piece (168) projecting from under the back right hand corner of the carriage, press it down sufficiently to lift the rack off the dogs, and it may be moved to any position desired.

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

REGULATING THE MARGINS.

If a wider margin is wanted upon the left of the sheet, loosen the set-screw of the stop-collar (N), move it to the proper place, *and fasten again firmly*. We call particular attention to this, for if the collar is not fastened tightly, the force of the carriage coming against it, causes it to slide against the ear of the top-plate and prevent the carriage-way rod from turning freely. This will cause the carriage to move sluggishly, or not at all, and should be carefully attended to.

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, plate 3,) slide the bell-ringer against the dogs, and fasten.

The bell-ringer, in whatever position it may be placed upon the rack-frame, will ring the signal in time for four or five more letters to be printed before reaching the end of the line, so that a word may be finished or properly divided by the hyphen.

CHANGING SPACE BETWEEN LINES.

When the end of the space gauge (95, plate 1) is raised to the stop, it is adjusted for narrow space; and when lowered to the other stop, it is adjusted for double width.

THE RUBBER BANDS.

Neither these bands nor the feed-roller give motion to the paper when the cylinder is turned, but motion is imparted by the cylinder itself; and the bands and feed-roller simply press the paper against the cylinder, so that it cannot slip. Therefore, if at any time the paper does not feed through without slipping, see that the band pulleys turn freely upon the shaft, and the feed-roll in its bearings; for any thing 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.

PUTTING ON RUBBER BANDS.

When it is necessary to put on a new band, it may be done as follows: It will be noticed that in the No. 4 machine, the front band-pulley-shaft rests in a slot in the carriage-frame at the left, and is held in place at the end by the rubber band; consequently this end of it may be pulled forward so as to clear the carriage-frame sufficiently to admit of the bands being slipped on without loosening the other end, or bending the shaft. Slip the feed-roll out of its bearings, and take it out of the way until the bands are properly adjusted in front and the shaft returned to its place,

when they can be stretched enough to return it. Do not loosen the scale or band-shield, but take care to slip the bands into their place without deranging the adjustment of the scale, when no re-adjustment will be necessary, and it will be found all right when the shaft is in position. The paper-guide (69) may be removed if the bands do not readily stretch over it, and replaced afterward.

In No. 2 machines it will be necessary to loosen the set-screws which hold the band-pulley-shaft at each end, when the left hand end can be pulled forward sufficiently. Do not bring it out of the slot any further 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.

THE CARRIAGE TENSION.

It will be observed that a leather strap attaches the carriage to the main-spring wheel. Now while it is desirable that the carriage should move promptly, 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 dog (102 and 64). A pull of one pound should be sufficient to return the carriage, against all necessary friction and the action of the main-spring. [See "Cleaning and Oiling."] The Carriage Tension may be increased by turning the "tension ratchet" (the toothed wheel at the back of the machine), and diminished by moving up and down the handle of the "tension pawl," which holds the ratchet against the pull of the main spring.

THE FINGER-KEY TENSION

May be increased by loosening the thumb-screw of the "tension collar," the collar upon the hub of the rocker, at the back of the machine, and in which rests one end of the rocker spring, and turning it upward. To decrease it, turn it downward. Never loosen the thumb-screw more than half a turn, and after turning the collar to the desired position, fasten again firmly, and there can be no possibility of its jarring loose. If the coiled rocker-

spring is ever taken out, it can be replaced by turning the tension collar downward, with the thumb-screw loosened half a turn, until it is stopped by the screw coming to the end of the cut in the rocker-hub; placing the point of the longest arm of the spring in its seat with the top of the coil in its guide, and then with the screw-driver or the thumb, springing the other end into its seat in the collar. Be careful that the spring is properly seated and that the coil end has a little side play in its guide. The tension should never be tightened so much that more than six ounces is required to depress the key, and if a machine is kept in good order [see "Cleaning and Oiling,"] from four to five ounces will be sufficient.

THE RIBBON MOVEMENT.

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 to the spool at the right, lift the latch (81, plate 3), and pull out the shaft (7, plate 3), 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.

When the latch is in the center groove, no motion is imparted to the spools.

It will be observed that the types strike the ribbon on a narrow line corresponding with the width of the types.

A LATERAL MOTION

May be given to the ribbon as follows: By moving the handle (165, plates 1 and 2), backward or forward, both ribbon spools will move latterly, so that the types will strike the ribbon in a new place, and by moving this handle as often as the writing becomes too faint, the entire surface of the ribbon may be used.

CHANGING RIBBONS.

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 (7, plate 3). Fasten the remaining end of the ribbon to the other spool in like manner, and it is ready for use.

TO REMOVE RIBBON.

Wind the ribbon all upon one spool, unpin the end, disconnect the shaft (7) by dropping the latch into the middle groove, then cut a piece about three inches square, from an old pasteboard box or any old piece of heavy cardboard, and the ribbon can be wound upon it without getting your fingers inked; and it will be in convenient form for replacing upon the machine, if desired. By wrapping it up in a piece of tin-foil, the ribbon will retain its ink intact, and will not soil other articles by contact; for though the ribbon may not dry up in the atmosphere, the ink will be absorbed by coming in contact with cloth or paper. It is well, therefore, in keeping ribbons, or sending them by mail to be re-inked, to have them well-covered with tin-foil.

RE-INKING RIBBONS.

When the ink is exhausted from the ribbons, the ribbons may be re-inked by sending it to any of our agents, or to a ribbon maker. Re-inking costs thirty-five cents. The price of a new ribbon is one dollar.

THE RIBBON REEL

Is used to facilitate taking off and putting on ribbons. When using it, the carriage should be tipped back, the ribbon-shift handle (165, plates 1 and 2), pushed as far toward the back of the machine as it will go, then apply the reel over the front end of the opening in the top plate on the left side where the ribbon-guide comes through, as follows:

Loosen the thumb-screw at the bottom of the reel standard sufficiently, and holding the standard perpendicular, reel uppermost, and with the crank to the right, drop the foot of the standard through the opening far enough to engage under the top plate. Swing it one-quarter round, bringing the crank to the

front and the reel square with the machine, draw it forward against the front end of the opening so that the clamp will hold, and fasten.

Do not set the screw down very tight, as it will hold firmly without, and setting it too hard may mar the machine.

The pasteboards upon which the ribbons are to be wound, or from which they are to be unwound, may then be clamped in the reel and turned on or off by the crank.

Always wind the ribbon on and from the left hand spool.

NEW RIBBONS.

Any one using the type-writer should procure another new ribbon, of the kind that he uses most, before the one that is upon the machine is completely exhausted, so that he may have one to use while the other is being re-inked. In this way two ribbons will serve a long time.

Non-copying ribbons, either black or blue, are not affected by the atmosphere, and will not often need re-inking; and some people like the appearance of the work done with them better than that done with copying ribbons.

Copying ribbons, as now made, are but very slightly affected by the atmosphere, especially those that are termed "Black Copying Ribbon" and "Purple Copying Ribbon." The black is a very dark purple, or purple black, which gives a purple copy, but the original grows blacker with age. The purple is a bright purple, and gives a neat appearance to the page upon which it is used.

Red and green ribbons can be procured for fancy printing, if desired.

Use no ribbons that are of coarser fabric than the one furnished with the machine. It is impossible to make neat print with a ribbon that is too coarse. The best ribbons can usually be purchased of our agents, to whose interest it evidently is, to furnish the best supplies possible.

PRESS COPIES.

Printing done with the copying ribbons can be copied in the ordinary way; but a little more water should be used, and when

time will permit, the book should be allowed to remain in the press a minute or two.

THE GELATINE COPYING PROCESS.

Several distinct copies may be made, upon thick paper by this process.

TO MAKE AND USE THE TABLET.

Gelatine, one ounce; glycerine, six and one-quarter fluid ounces, Cooper's Gelatine and pure concentrated glycerine answer very well. Soak the gelatine over night in cold water, and in the morning pour off the water and add the swelled gelatine to the glycerine, heated to about 200 degrees, Fahrenheit, over a salt water bath. Continue the heating for several hours to expel as much of the water as possible, then pour the clear solution into a shallow pan or on a piece of cardboard placed on a level table, and having its edge turned up about a quarter of an inch all around, to retain the mixture, and let it remain for six hours or more, protected from dust.

USING.

With a soft sponge and cold water wash the face of the tablet before using. Place the page to be copied, ink side down, on the tablet, press down lightly until all parts to be copied touch, and let it remain one minute. Remove carefully; it is best to turn up one corner of the paper for this purpose, press a clean sheet upon the tablet in the same manner, and when it is removed it will retain a distinct copy.

After using, clean the tablet by rubbing hard with a soft sponge and cold water, and dry with a cloth or blotting paper. If the tablet gets damaged, it may be made good by heating it until a level surface is obtained.

ANOTHER GOOD WAY.

Where one copy only is desired, an excellent way is not to use the ribbon at all; but instead, take one sheet of full carbon

paper, place it between a thick and thin sheet of white paper, and put it in the machine so that the thick paper is next to the cylinder, and the thin sheet is 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 very little trouble; and with a good letter file in which to preserve duplicate copies, this method is quite satisfactory. An excellent way is to adopt a rule of pasting the duplicate copy thus made to the letter to which it is a reply, and file them both together; thus the original letter and the answer to it are always together.

MANIFOLDING.

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 carbon 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 put one copy. When the machine is used in this way, the ribbon movement should be thrown out of gear by placing the lach 81 in the middle groove in shaft 7, and the ribbon carried forward so far that the types will not hit it. [See "A Lateral Motion," page 5.]

TOUCHING THE KEYS.

Strike the Key with sufficient force and promptness to throw the type against the cylinder, being careful to touch but one key at a time, and to release that one before striking another.

TO MAKE NICE WORK.

Be careful to strike the keys squarely and with an even touch, and take particular pains not to continue pushing the key after the type has reached the paper; for, in that case, the letter printed will not be well defined and clear. But practice removing the fingers if possible before the type strikes, and hit with a quick sharp blow. This will give clear, sharp outlines to the letters.

SPACE KEY.

The long bar in front of the keys is the space-key by which the

space between the words is made. The operator will of course strike it after every word, and also whenever it is desired to make other spaces than between words, such as at the beginning of paragraphs, etc.

STYLE OF WORK.

Type-writing work can be made to present a very neat appearance by due attention given to paragraphing, punctuation, etc. Each new paragraph should be spaced at least five notches from O on the scale; and the space-key should be struck three times after every sentence.

Words can be emphasized by using the underscore [the key at the upper right hand corner of the key-board, on No. 4 machines, is the underscore, and is to be struck before any letter under which you wish to print], or by spacing between the letters of a word, remembering to give double space before and after such word, or by holding the space-key and striking each letter two or three times; each stroke will make the letter darker and heavier. On the No. 2 machine the underscore is on the key with the figure 6.

Fine headings can be made by striking the hyphen a given number of times, then the O several times, and again the hyphen, thus: ————OOO——— Other fancy headings may be made by exercising a little taste.

Captions for legal work may be made by using the hyphen

_____	}	for the upper and lower lines ending with
_____		a mark made by holding the space-key down and striking the parenthesis; then,

still holding the space-key down, turn the cylinder one notch, strike the parenthesis again: repeat this until the two lines made by the hyphen are connected.

In No. 1 and No. 4 machines, which have no dollar mark, it may be made by holding the space-key down, and striking the S and parenthesis.

In the same kind of machines, the exclamation point may be made by holding the space key-down, and striking the straight apostrophe and the period; the mark, or sign of division, by holding the space-key down and striking the colon and hyphen.

WHEN VERY NICE PRINTING IS WANTED.

Especially if thin paper is used, lay the paper to be printed upon a sheet of the same size, of moderately thick and quite hard paper—like ordinary well calendered letter paper—and put them both into the machine, with their edges even, and the thick sheet next to the cylinder. This will make a good backing for the paper to be printed, so that it will be but slightly embossed by the type, and make the work look much better. It will also preserve the cylinder so that it will not become indented by the action of the type.

NO. 2 TYPE-WRITER.

The principal difference between this and the other machine is, that the No. 2 is supplied with both capitals and small letters, that work may be done resembling, in style of type, ordinary book printing, and is somewhat easier to read than the printing of those machines which only use capitals.

THE TYPES OF No. 2 MACHINE

Are double, or there are two types upon each type-bar, and either of them is brought into use when desired, as follows: Several keys upon the key-board show two characters, the upper of which may be made when the "upper case" key is held down, and the lower one when the said key is released. All the keys upon the key-board which show but a single letter, have two types of the same character upon the type-bar which it lifts—a capital and small letter; they being placed so that when the bar is raised, the capital will be at the back and the small letter at the front. Upon the bars which are lifted by the keys having two characters, the types are so placed that they will occupy the same relative position as upon the key.

THE SHIFTING CYLINDER

Is held forward in its forward position by the spring (151, plate 2,) so that it will print small letters, or the characters that are upon

the front side of the double keys. When it is desired to strike a capital, or any character at the back of the double keys, depress the key containing the words, "upper case," and hold it down until you have struck the capital or character which you wish to print.

CLEANING.

Too great importance cannot be placed upon keeping the type-writer perfectly clean and free from dust.

If left exposed to the dust from sweeping, it will settle upon the carriage-way rod, and when the carriage is moved, the back carriage-rolls crush it, and it will adhere both to the rod and rolls, more particularly the rolls, until the motion of the carriage is impeded or stopped.

No machine will work well with an accumulation of dust upon these wheels.

Other parts of the machine will be injured by the accumulation of dust, put in no other place will it be so quickly fatal to good work, as upon the rods and rolls above mentioned.

It must be kept scrupulously clean, or it will not work well.

CLEAN THE TYPE.

When the types begin to fill up with ink and dust, it is very easily found out by the want of well-defined letters, and clearness in the print. The best way to clean them is, to raise the type-bar and, taking hold of it with one hand, hold it firmly, taking care not to bend the type-bar nor displace it, pick the accumulation of dust and ink from the type with an ordinary brass pin. After doing this, it is well to brush the types with the type-brush, using a little benzine.

The best precaution is, to brush the dust off your machine, clean the rod and rolls above referred to, and the types, or see that they are so, every day, if used daily; and every time that you sit down to the instrument, if only used at long intervals.

OILING.

Never use any but the very best oil (such as the best that is used for sewing machines and watches), upon the writer. [Por-

poise oil seems to meet the requirements of the type-writer better than any other we have tried.]

Never put oil upon any part of the type-writer without wiping off afterward all that shows upon the outside of the place to which it is applied; as the oil that is in sight cannot do any good towards lubricating the machine, but only catches dust and forms a gum that will prevent the machine from running lightly.

Never oil the rod on which the carriage runs.

WHEN TO OIL.

If the dog (64) gets dry and grinds upon the rack (102, plate 3), put a little oil on the teeth of the rack in this way: Return the carriage to the extreme right, when the rack can be lifted and oiled by moistening the end of the finger with oil and drawing it across the bottom of the teeth, lengthwise, and from left to right.

If a type-bar sticks when brought up against the paper, so that it does not return to its place at the bottom of the type-basket freely, touch the bearing where it is pivoted, with a broom splint—or something equally small—with the least possible drop of oil, and work the bar up and down until it is free.

The pivots upon which the rocker moves, should be oiled occasionally, but if the rocker is ever taken out, for cleaning or any other purposes, be sure to loosen but one of the pivots, which will insure its being returned to the proper place. And in putting it back, be careful that it does not bind and that it is not loose.

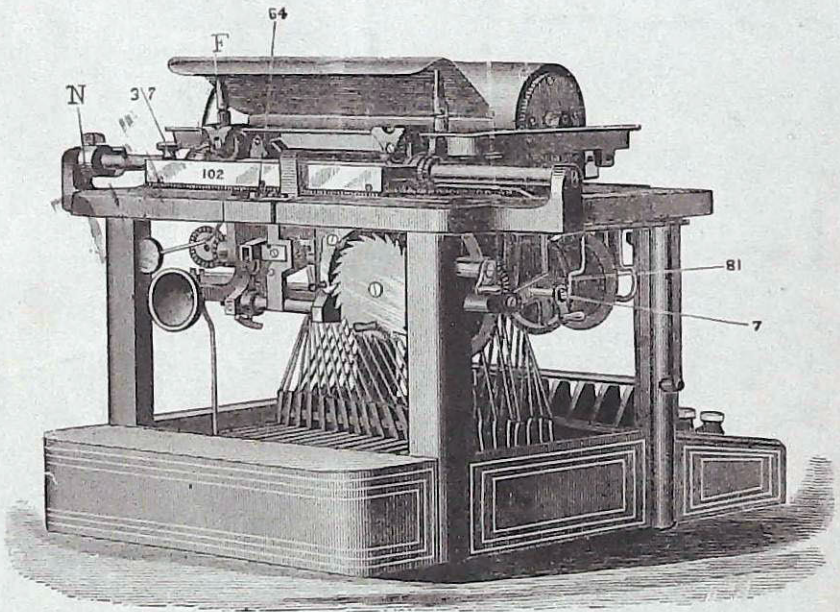
Remembering the precautions under the head "Oiling," any of the rolls or shafts may be oiled in their bearings if they become too dry and stick. However, cleaning and keeping clean, is the great preventive of trouble in using the type-writer.



These Instructions are written for our latest machine. If any one should need a Book of Directions for a machine manufactured before 1881, we could probably furnish it upon application.



PLATE No. 3.



Type Writer No. 4, (Back View.)