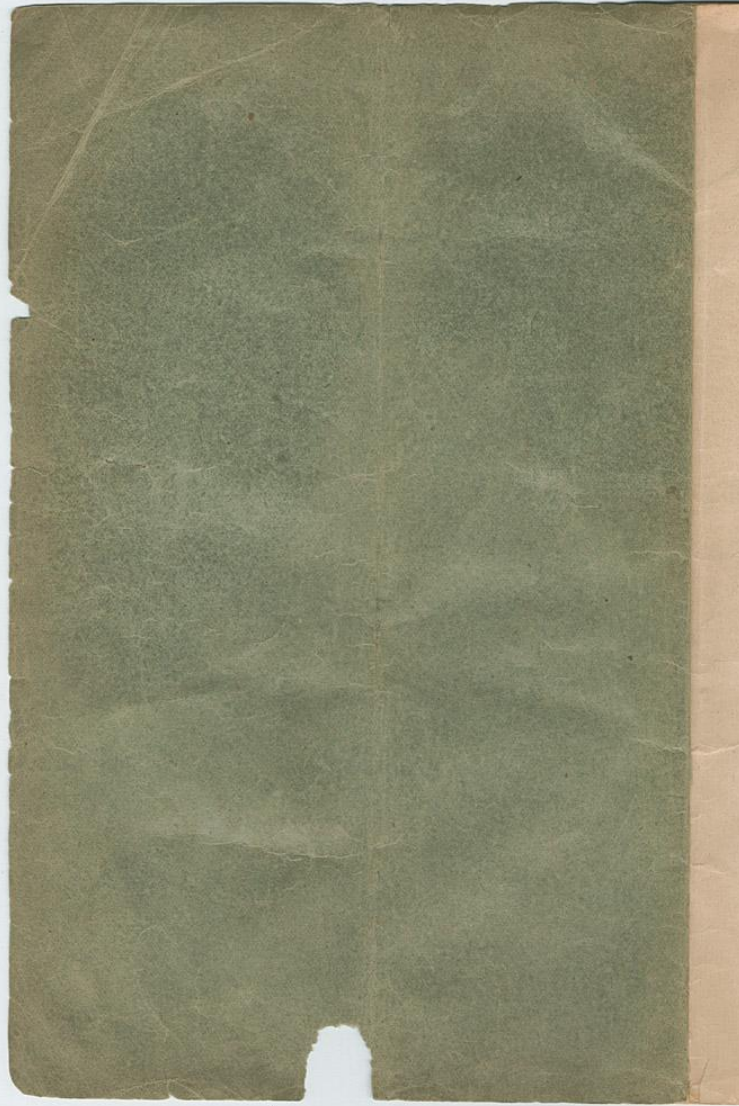


Form 7460
Sept. 16, 1887
Revised

Instructions
FOR USING THE
Singer Sewing Machine
No. 27
(Vibrating Shuttle No. 2.)



The Singer Manufacturing Co.

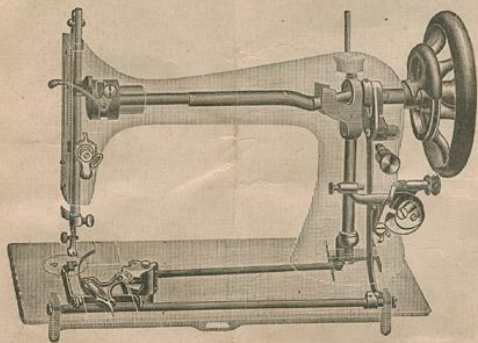


INSTRUCTIONS

FOR USING THE

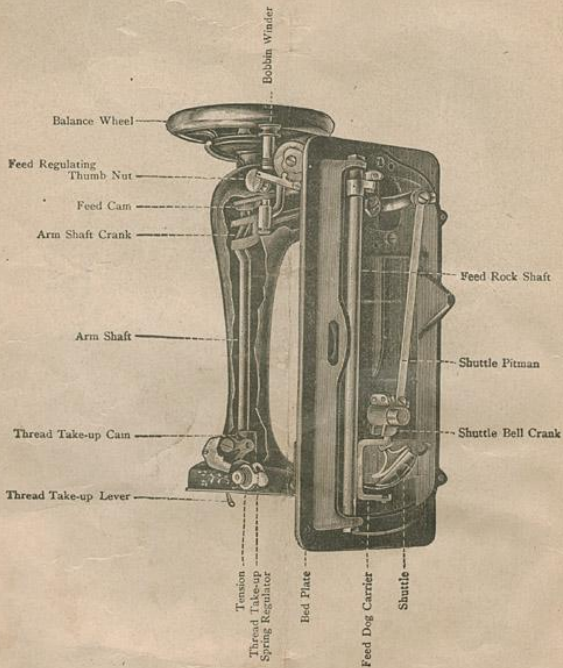
Singer Sewing Machine

No. 27.



(Vibrating Shuttle No. 2)

Fig. 1.



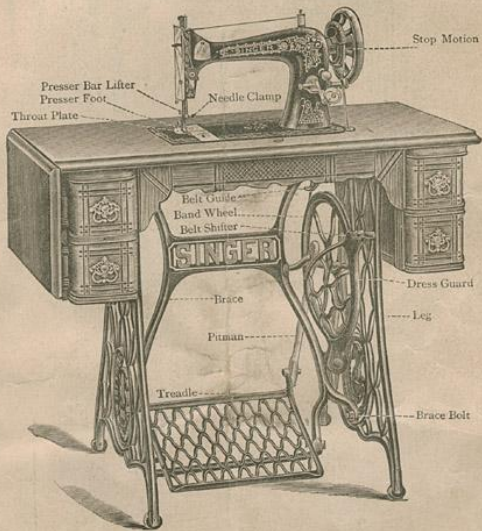
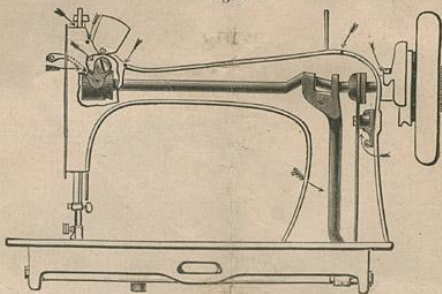
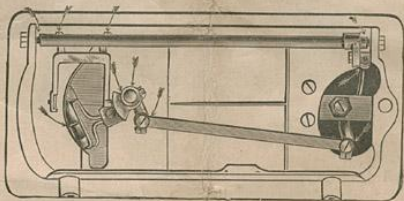


Fig. 3.



Oiling Places Shown by Arrows.

Fig 4.



Oiling Places Shown by Arrows.

INSTRUCTIONS
FOR USING THE
Singer Sewing Machine
No. 27.

To Oil the Machine.

The places where the machine should be oiled are indicated by the arrows in Figs. 3 and 4.

Oil the loose balance-wheel through the oil hole in the end of the stop-motion flange, the needle-bar cam through the oil hole at the back and near the top of the head, the thread take-up lever hinge screw and cam roller through the opening in the side of the head towards the operator, and the top bearing of the arm rock shaft through the oil hole in the top of the arm.

Then remove the plate from the back of the arm and oil the feed-cam, the forked connection roller and stud, the crank of the arm shaft and the lower bearing of the arm rock shaft.

Moisten a small piece of muslin with oil and rub it over the face of the shuttle-race, and also put a few drops of oil in the shuttle-race oil hole under the front slide, at least once a day when in constant use. The bobbin-winder spindle, the spindle-bearing, the worm and the cam which operates the thread guide must be oiled; also the point of the bobbin at the left centre.

To reach the parts to be oiled under the bed of the machine, turn it back, as in Fig. 4. To enable the operator to do this, the belt must first be thrown off the band-wheel, which is done (the machine being in motion) by turning the belt shifter handle (shown in Fig. 2) to the left. After oiling, turn the machine up again, and operate the treadle as in sewing, which will automatically replace the belt on the band-wheel.

The points requiring oil in the stand are the bearings at each end of the band-wheel crank, treadle and treadle pitman. After oiling, run the machine rapidly for a few moments (with the presser-foot up) to work the oil into the bearings. Then carefully wipe off the surplus oil. All places where one part of the machine rubs against another, producing friction, require oiling, and if, after oiling, the machine runs hard, it is certain that some place has been overlooked.

If the machine runs hard after standing for some time, use a little kerosene or benzine on the wearing points, run rapidly, wipe clean and then oil with the best sperm oil, which should always be used. The machine should be oiled once a day if in constant use, and after standing for some time should be always cleaned and oiled before using.

To make sure of getting good oil buy it at any of the company's offices, or from its authorized agents. The genuine oil is put up in bottles which have THE SINGER MANUFACTURING COMPANY'S "trade-mark" blown in their panel and bears the company's label.

The Stop Motion.

The object of the stop motion is to enable the operator to wind a bobbin by running the balance-wheel without running the machine, which not only saves labor, but permits the re-winding of a bobbin when a seam is partially sewed, without removing the goods from the machine or interfering with the upper or needle thread.

To operate the stop motion turn the friction-screw outside of the balance-wheel over towards you to release the balance-wheel, and in the opposite direction to clamp it.

To Operate the Treadle and Machine.

Release the balance-wheel as explained (see "stop motion"), place your feet upon the treadle with the instep directly over its centre, turn the balance-wheel over towards you with the right hand and continue with the feet (giving an alternate pressure with the heel and toe) the motion thus commenced until a regular motion is obtained. Next clamp the balance-wheel to the machine (see "stop motion") see that the presser-foot does not rest on the feeding surface, and operate the treadle as before.

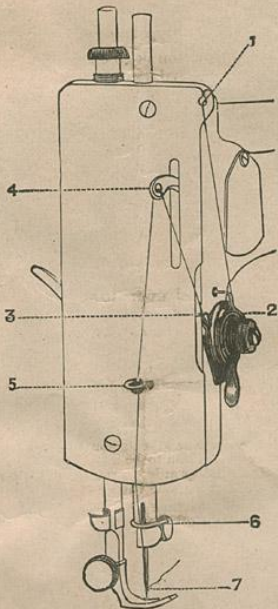
Finally, place some goods in the machine, loosen the presser-foot upon them and again operate the treadle.

- | | | |
|------------|---|---|
| CAUTION 1. | { | Do not attempt to sew until you are sufficiently familiar with the treadle motion to be able to start the machine without turning it backwards, to run it with a regular and steady motion, and to guide the goods. |
| CAUTION 2. | { | Never run the machine with the presser-foot resting on the feed and no cloth between. |
| CAUTION 3. | { | Practice upon strips of cloth, and do not attempt practical sewing until you can guide the material and produce a regular motion of the machine. |
| CAUTION 4. | { | Do not try to help the machine by pulling the fabric, lest you bend the needle; the machine feeds without any assistance. |
| CAUTION 5. | { | Never run the machine with both shuttle and needle threaded, except while you are sewing. |
| CAUTION 6. | { | Do not allow lint or dust to accumulate in the shuttle or under the shuttle tension-spring, as any foreign substance inside of the shuttle [particularly in the inner end] will prevent the proper action of the bobbin; and under the tension-spring, will render the shuttle-tension inoperative. |

To Set the Needle.

Hold the needle in the left hand with the flat side of the shank towards the arm of the machine; raise the needle bar to its highest point, put the needle up in the clamp as far as it will go, and tighten the thumb-screw.

Fig. 5.

**To Thread the Needle.**

[See Fig. 5.]

Pass the thread from the spool through the eyelet 1 at the top of the front of the face-plate, downward between the tension discs 2 from right to left through the eyelet 3 of the thread take-up spring, up and through the eyelet hole 4 in the end of the take-up, from the front; into the thread guard 5 on the front of the face-plate, then under the thread guide 6 on the lower end of the needle bar, and from left to right through the eye 7 of the needle.

To Wind the Bobbin.

First detach the balance-wheel, and swing the bobbin-winder at the right of the operator (see cut on title page) forward until it comes against the belt with pressure sufficient to drive it; then place the bobbin in the bobbin-winder and the spool of thread on the spool pin of the machine.

Draw the thread into the eyelet in the face-plate as in sewing, thence into the eyelets in the thread-guide (first at the lower end and then at the top), secure the free end of the thread by placing it between the head of the bobbin and the cup at the end of the bobbin-winder-spindle, and operate the treadle the same as in sewing.

Fig. 6.



To Thread the Shuttle.

Take the shuttle between the thumb and fingers of the left hand, with its point towards you, put the bobbin in the shuttle with the thread drawing from it from the top side towards the right, as shown in Fig. 6. When the bobbin is in its place, put a slight pressure on the end of it with the forefinger of the left hand, and draw the free end of the thread into the slot in the shuttle body in the direction of the point of the shuttle as far as it will go, as shown in Fig. 7; then draw towards the butt again, as shown in Fig. 8, until the bobbin commences to revolve.

FIG. 7.

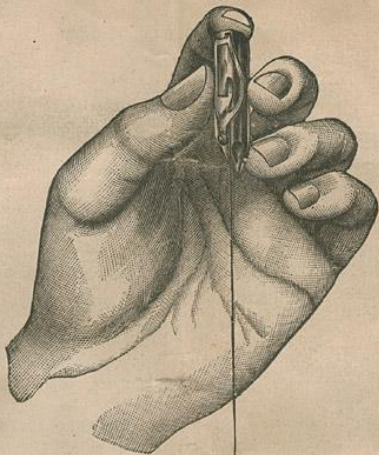
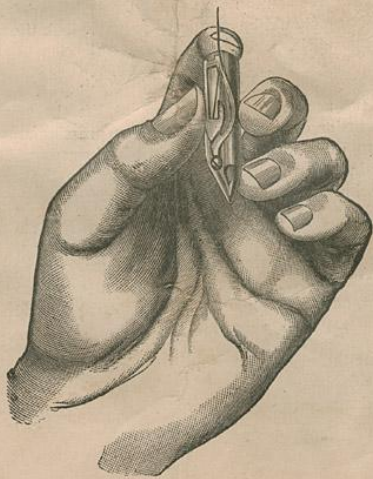


FIG. 8.



To Prepare for Sewing.

Open the front slide of the machine, turn the balance-wheel till the shuttle carrier comes under the opening, place the shuttle in its carrier with the point towards you, with the left hand take hold of the needle thread (leaving it slack between the hand and the needle) turn the balance-wheel towards you until the needle moves down and up again to its highest point, thus catching the shuttle thread; draw up the free end of the needle thread and the shuttle thread will appear; then draw the shuttle thread up through the hole in the throat-plate, lay both threads back across the feed points, close the slide, place the material beneath the needle, lower the presser foot upon it, and commence to sew, turning the wheel towards you.

Be sure that every part is clean before you commence to sew.

To Regulate the Tensions.

The tension of the needle thread is regulated by turning the thumb screw at the side of the face plate nearest the operator, over to the right to increase, and to the left to diminish the tension. The tension of the shuttle thread is regulated by the small screw near the point of the shuttle on its top side. Using the small screwdriver, turn to the right to increase, or to the left to diminish the tension. (See caution 6 on page 6).

The tension should be regulated so as to lock the stitch in the centre of the fabric.

To Remove the Work.

Raise the needle to its highest point, lift the presser-foot, release the tension on the upper thread by pressing the lever below the tension discs, and draw the work backwards and to the left about two inches; then cut the threads close to the goods, leaving the two inches of thread with which to commence sewing.

To Alter the Length of Stitch.

On the side of the arm, near the trade-mark (see Fig. 1), is the feed regulating thumb-screw. To lengthen the stitch turn it over to the right, and in the opposite direction to shorten it.

To Change the Pressure on Material.

Turn the thumb-screw through which the presser-bar passes at the top of the head of the machine, to the right to increase and to the left to decrease the pressure. For ordinary family sewing this pressure rarely needs to be changed.

General Remarks.

The leather belt, which gives motion to the machine, should always be tight enough not to slip and no tighter; not so tight as to prevent the easy motion of the machine. If the belt is too long, uncouple it and cut off squarely from one end to the desired length.

Be sure that the slide over the shuttle race is kept closed. This is important.

If the machine does not work well, it will be found to be because some of the foregoing directions have not been followed.

Twist, Linen and Cotton Thread, Needles and Oil.

Do not use poor thread or needles. Any good thread will work well, but you must not expect to make a smooth, even stitch, with poor, rough thread; nor can you expect a machine to work well with a cheap grade of needles, made in imitation of ours. As our interest is to maintain the reputation of the machine, it is evident that we will always supply the best. Persons living at a distance from an agency can send by mail, enclosing us the money, and we will fill orders promptly, either by mail or express.

Relative Sizes of Needles and Thread.

Sizes of Needle.	Class of Work to Sew.	Size of Cotton, Linen or Silk.
O	Very thin Muslin, Cambrics, Linen, etc.	100 to 150 Cotton, 000 & 00 Silk Twist
B	Very fine Calicoes, Linens Shirtings, fine Silk Goods, etc.	80 to 100 Cotton, 0 Silk Twist.
1/2	Shirtings, Sheetings, Bleached Calicoes, Muslins, Silk, and general domestic goods, and all classes of general work.	60 to 80 Cotton, A & B Silk Twist.
1	All kinds of heavy Calicoes, light Woolen Goods, heavy Silk, Seaming, Stitching, etc.	40 to 60 Cotton, C Silk Twist.
2	Tickings, Woolen Goods, Trousers, Boys' Clothing, Corsets, Cloaks, Mittels, etc.	30 to 40 Cotton, D Silk twist,
3	Heavy Woolens, Tickings, Bags, Heavy Coats, Trousers, etc. Heavy Clothing generally.	24 to 30 Cotton. E Silk Twist. 60 to 80 Linen.
4	Bags, Coarse Cloths, Heavy Goods of any texture.	40 to 60 Linen or very Coarse Cotton

In sending orders, always specify the "Size" required.

Fig. 9.



Drop Cabinet (Closed).

To open the cabinet turn over the leaf which covers the machine, release the platform upon which the machine is fastened by pressing the button at the right of the operator near the bottom of the centre doors, first taking hold of the arm of the machine with the left hand to steady it as it rises, and when entirely up push back the centre doors which then become a firm support for the platform. See page 13.

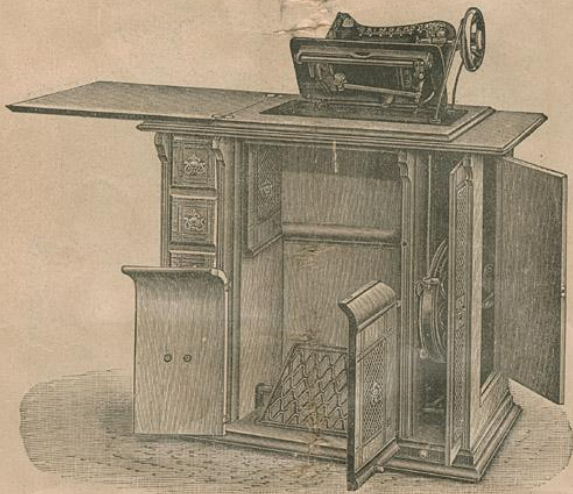
Fig. 10.

**Drop Cabinet (Open).**

To close the cabinet, bring the small doors to the front, as shown on page 12. A slight pressure upon the machine will then force it down beneath the top of the cabinet, and, after the platform is latched, the leaf is folded over the aperture, completely enclosing the machine.

The cabinet, when closed, forms a handsome piece of furniture.

Fig. 11.



Drop Cabinet (Open for Oiling).

To prepare the cabinet for the oiling of the machine and of the driving mechanism, open the front and side doors of the right end of the cabinet; then oil as instructed on: page 5, "To Oil the Machine."

Fig. 12.



The New Singer Stand Brace (with Belt Thrown Off).—Patented

This invention simplifies and makes easy the often-irritating task of throwing off and replacing the belt. To throw off the belt, press the small lever at the top of the dress guard to the left with the fore-finger, keeping up the motion of the treadle meanwhile. To put on the belt, allow the lever to spring back in its place, and operate the treadle as in sewing (with the wheel turning toward you), when a single revolution of the wheel will bring the belt back in place.

Fig. 12 shows our Stand Brace, carrying the entire driving mechanism.

Both the band-wheel and treadle work upon adjustable centres, which admit of accurate adjustment with a minimum amount of friction.

This distinctive feature renders ours the lightest running of any sewing machine stand yet constructed, and is a matter of great importance to the health and comfort of the operator.

Fig. 13.



The New Singer Belt Shifter.—Patented

Fig. 14.

THE NEW SINGER
PITMAN.

Fig. 14 shows our new adjustable pitman. The block which forms one-half of the journal is adjusted to the crank or pin by means of the screw, shown at the top of the cut.

When taking up lost motion, be careful not to make the journal so close as to prevent the free motion of the machine.

THIS MACHINE IS SUPPLIED WITH THE FOLLOWING
APPLIANCES AND ACCESSORIES:

- 1 Cloth Washer for Spool Rest.
- 1 Instruction Book for Attachments.
- 1 " " " Machine.
- 1 Oiler, filled.
- 1 Presser Foot.
- 1 Set of Attachments.

...WHERE THE...

Singer Sewing Machine

IS MADE.



ELIZABETH PORT, N.J.



SOUTH BEND, IND.



GLASGOW, SCOTLAND

Other Factories at Vienna, Austria and Montreal, Canada.