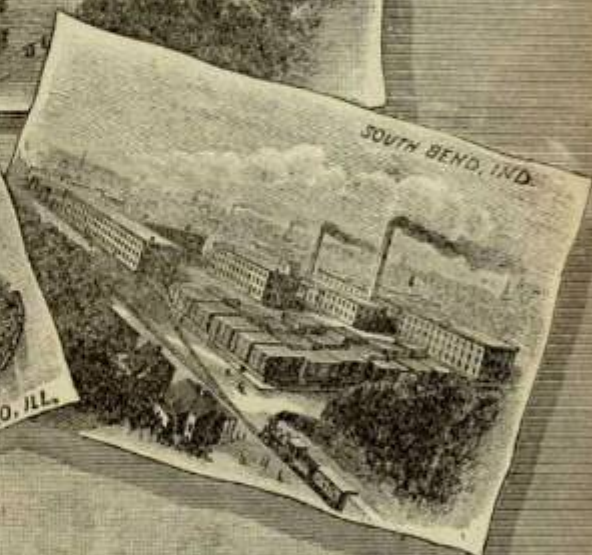
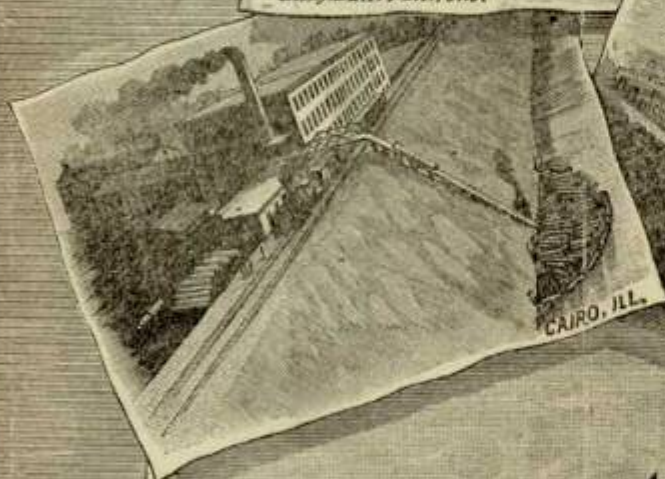
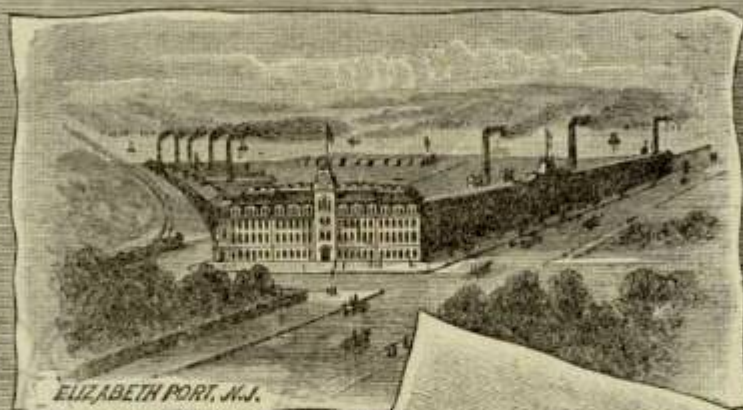


WHERE THE  
**SINGER SEWING MACHINE**  
IS MADE



OTHER FACTORIES AT VIENNA, AUSTRIA;  
AND MONTREAL, CANADA.

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DIRECTIONS  
FOR USING THE  
IMPROVED FAMILY  
SINGER SEWING MACHINE.

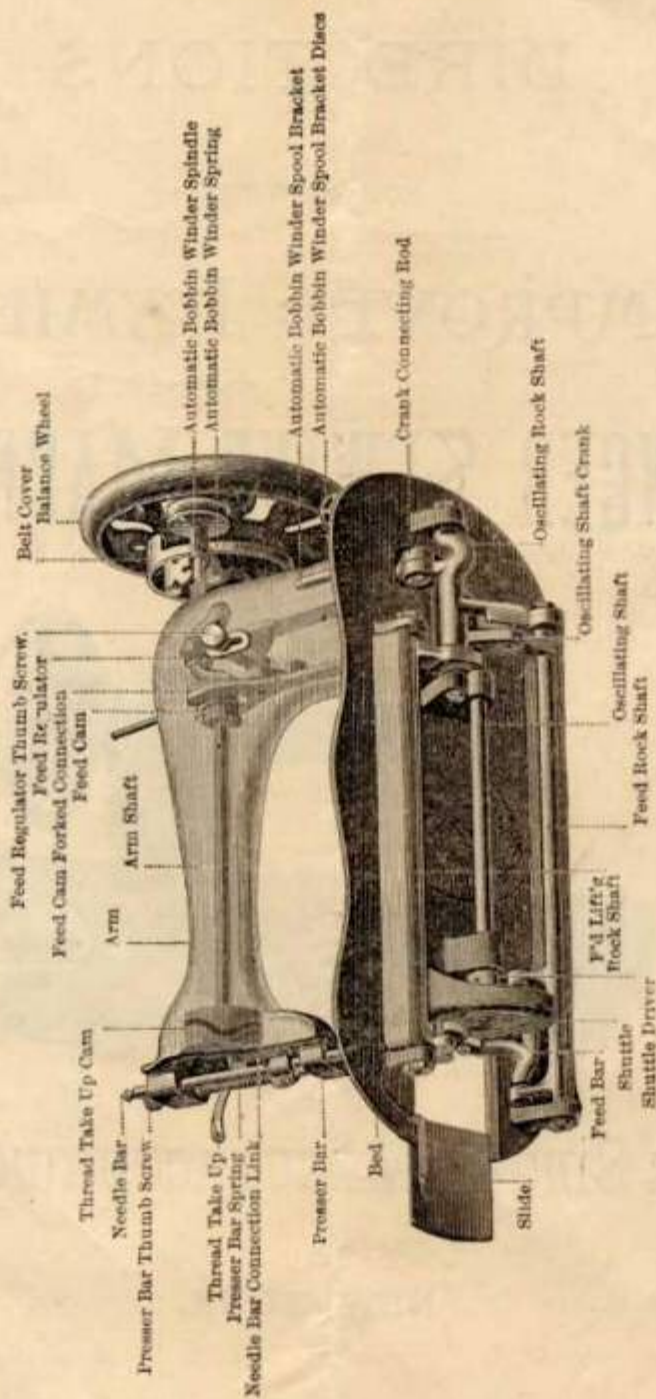


THE SINGER MANUFACTURING CO.,

NEW YORK.

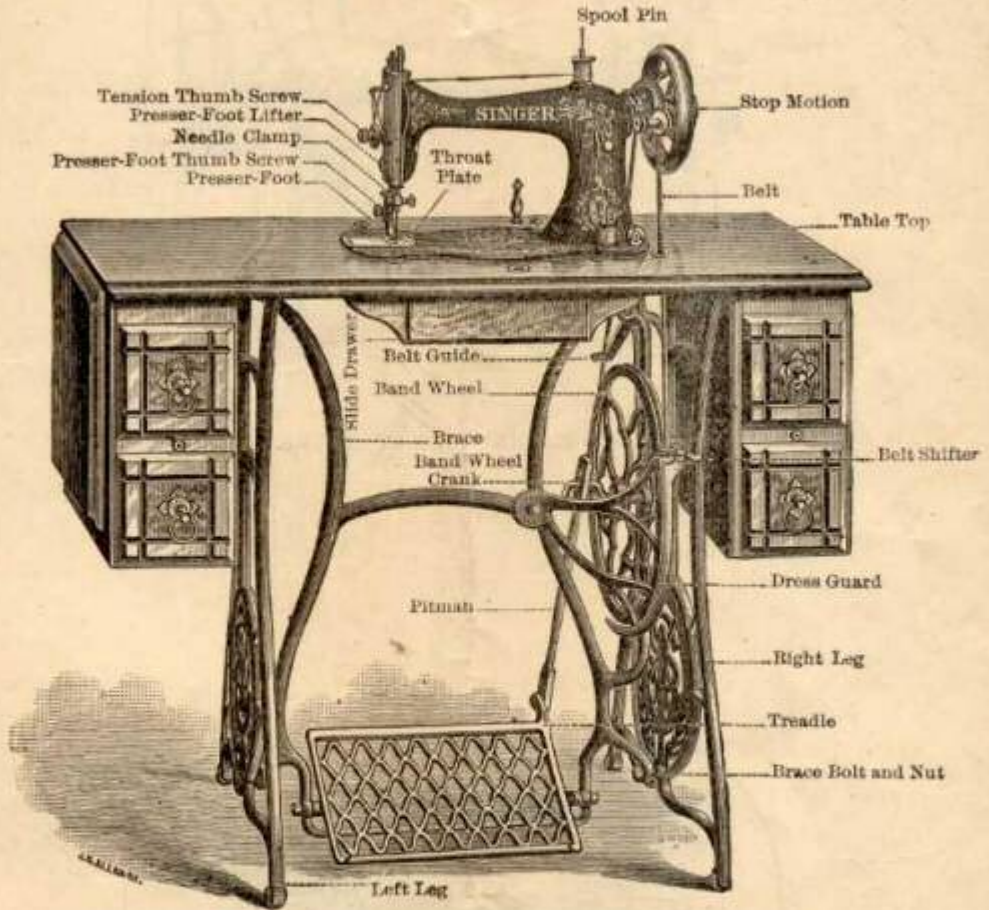
1891.

Fig. 1.



PHANTOM HEAD OF IMPROVED FAMILY MACHINE.

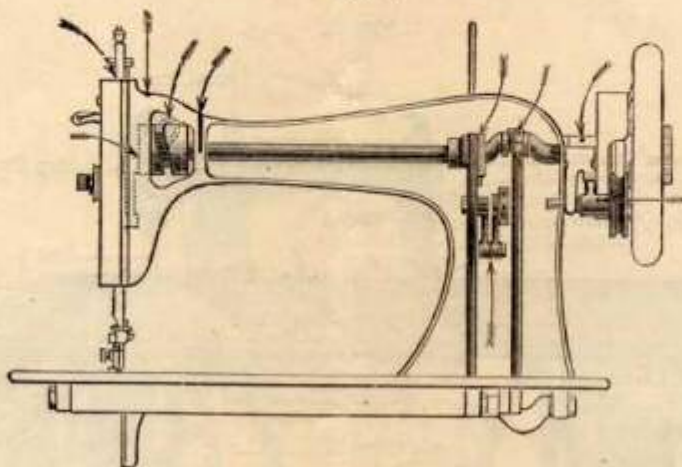
FIG. 2.



IMPROVED FAMILY MACHINE, WITH STAND.

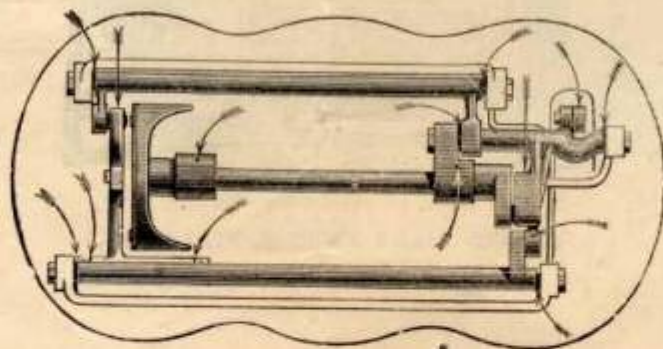


FIG. 3.



OILING PLACES SHOWN BY ARROWS.

FIG. 4.

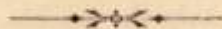


OILING PLACES SHOWN BY ARROWS.

## DIRECTIONS

FOR USING THE

# Singer Improved Family Machine.



### To Oil the Machine.

Be sure that every part is clean before you commence to sew. *If the machine runs hard at any time, IT IS CERTAIN that some place has not been oiled.* Oil holes will be found for all bearings which cannot be reached without them. Each place requiring oil is indicated by an arrow head in the cuts on the opposite page. The shuttle should be oiled sparingly, but often, if the machine is in constant use; always be careful to use no more oil than is needed, a single drop being sufficient at any point. If the machine runs hard after standing idle for some time, use a little kerosene oil or benzine on the wearing points, run rapidly, *wipe clean*, and then *oil with the BEST sperm oil*, which should always be used. To make sure of getting good oil, buy it at any of the Company's offices or from its authorized representatives. The genuine oil is put up in bottles which have The Singer Manufacturing Company's "trade-mark" blown in their panel, and bear 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 center, 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.

### To Set the Needle.

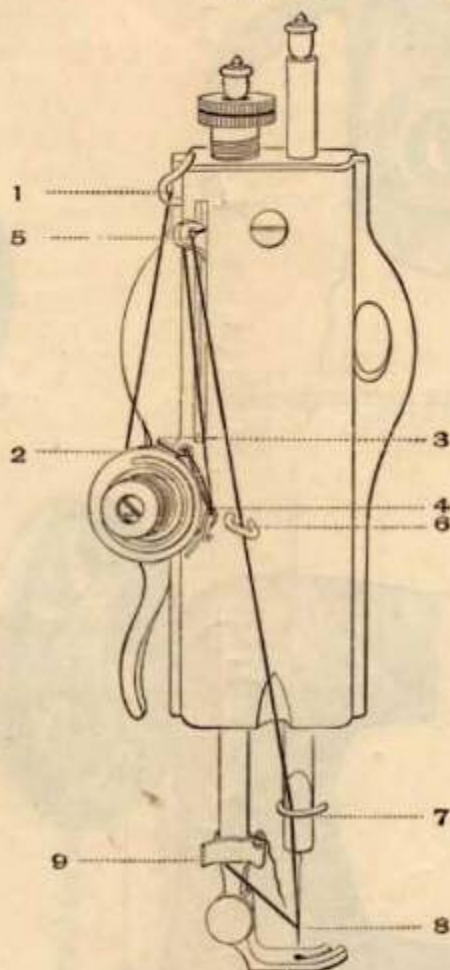
Hold the needle in the left hand with the flat side of the shank towards the arm of the machine; raise the needle-bar to its highest point, put the needle up in the clamp as far as it will go, and tighten the thumb-screw.

### Relative Sizes of Needles and Thread.

ROUND POINT NEEDLES FOR CLOTH.	WEDGE AND TWIST POINTS FOR LEATHER WORK.
O..... { 100, 150 Cotton. { 000 Silk.	O..... 000, O Silk.
B..... { 80, 100 Cotton. { 00, O Silk.	B..... A, B Silk.
½..... { 60, 80 Cotton. { A Silk.	½..... C, D Silk.
1..... { 40, 60 Cotton. { B, C Silk.	1..... { 40 to 60 Cotton. { D, E Silk.
2..... { 24, 40 Cotton. { D, E Silk.	2..... { 40, 60 Linen. { EE Silk.
3..... { 20, 24 Cotton. { 60, 80 Linen.	3..... 35, 40 Linen.
4..... { 40, 60 Linen, or { very coarse Cotton.	4..... 24, 35 Linen.
5..... 24, 40 Linen.	



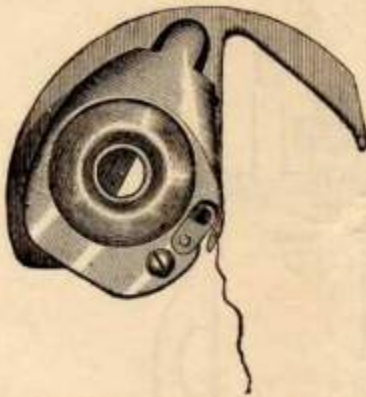
FIG. 5.



### To Thread the Needle.

Place the spool of thread on the spool pin, and draw the thread from the spool through the eyelet 1, on the side of the arm, downward between the tension discs 2 from the back toward you, up behind and over the staple 3, through the hook of the take up spring 4, up and through the eyelet in the end of the take-up lever 5 from the back toward you, down through the eyelet 6 in the face plate, under the hook 7 on the needle bar, and from left to right through the eye 8 of the needle. Enough thread should be drawn through the needle to leave an end two inches long when the take up is at its highest point, which should be caught up behind the thread cutter 9.

FIG. 6.



THE SHUTTLE CONTAINING BOBBIN.

FIG. 7.



THE BOBBIN.

FIG. 8.



THE BOBBIN WINDER (WITH LATCH DOWN).

*Patented.*

### The Bobbin Winder.

**To prepare for winding**, release the balance-wheel (see "Stop Motion") press the bobbin on the spindle of the bobbin-winder until it reaches the shoulder, then press the arm of the latch down between the



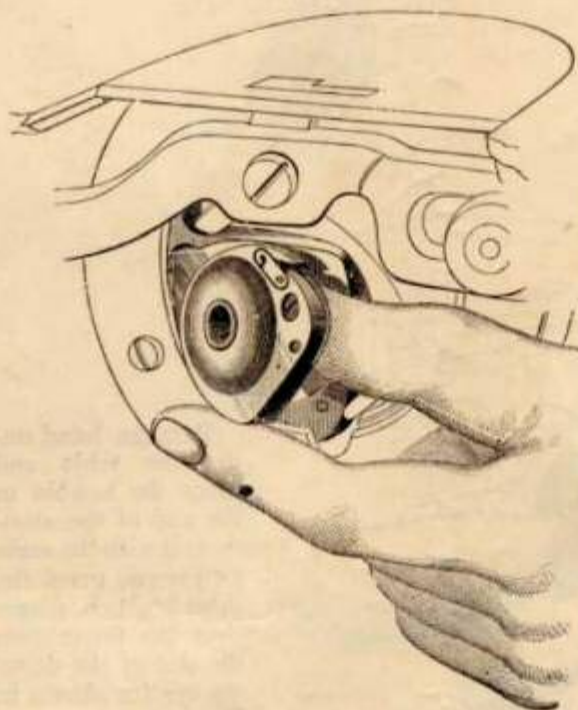
flanges of the bobbin until it catches, to bring the pulley in contact with the driving-belt.

**To wind the bobbin**, place the spool of thread on the spool-pin at the base of the arm, draw to the right between the retainer discs, pass the end about an inch through the slot in the outer end of the bobbin from the inside (this must be done before the bobbin is placed on the spindle) and "Operate the Treadle" the same as in sewing until the bobbin is filled, when it will stop automatically.

The free end of the thread must be held with the hand until a few coils are wound, and should then be broken off.

### To Remove the Bobbin.

FIG. 9.



Open the slide on the bed of the machine, and bring the shuttle into position by turning the balance-wheel toward you until the needle-bar reaches its lowest point; then with your left hand under the table, remove the bobbin, by placing your thumb against the cap, on outside of the shuttle (as shown in Fig. 9) and press it outward as far as it will go; the cap will then remain open and allow the bobbin to drop out into your hand.

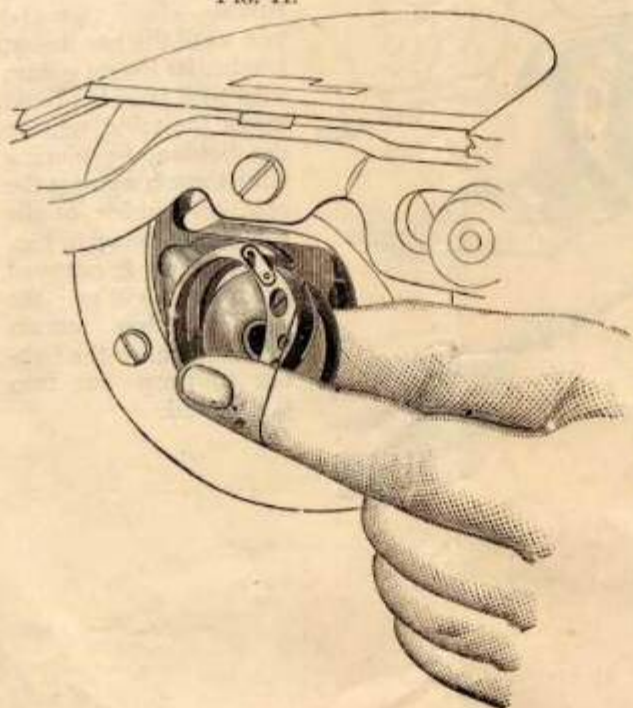
**To Replace the Bobbin and Thread the Shuttle.**

FIG. 10.

Take the bobbin between the thumb and forefinger of the left hand with thread drawn tightly across the finger (as shown in Fig. 10).



FIG. 11.



Pass the hand under the table and place the bobbin in the cap of the shuttle and with the same movement press the thread which passes over the finger into the slot of the delivery eye (as shown in Fig. 11).



FIG. 12.

Press the cap with the forefinger against the thumb, meanwhile supporting the bobbin in its place with the thumb, (as shown in Fig. 12).

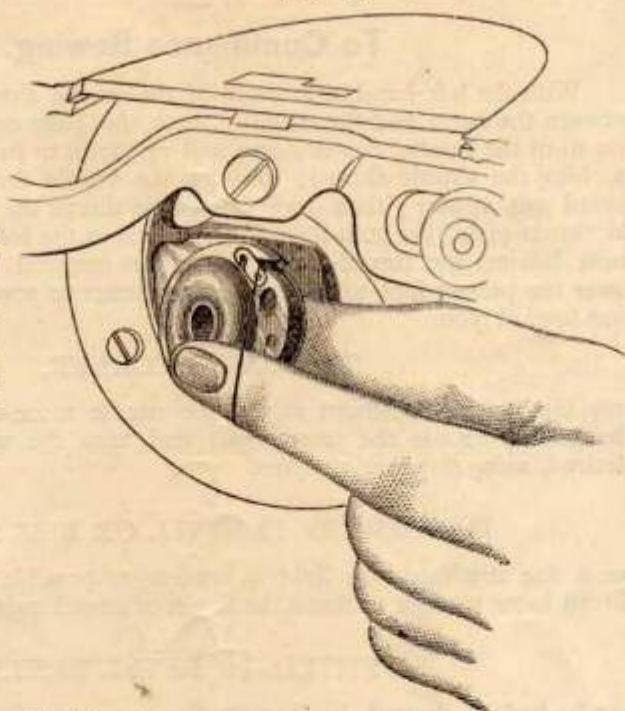
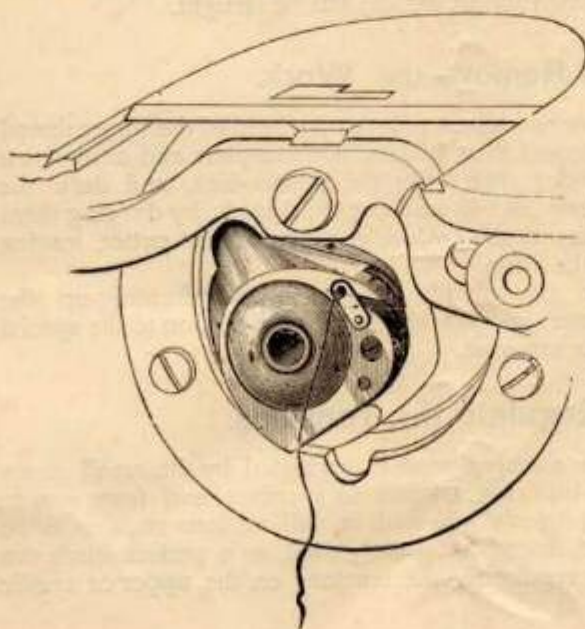


FIG. 13.



Withdraw the thumb gently, allowing the shuttle to close; then draw the thread behind the delivery-eye-guard or hook, (as shown in Fig. 13), leaving an end two inches long, with which to commence ewing.

### To Commence Sewing.

With the left hand, take hold of the needle thread (leaving it slack between the hand and the needle), turn the balance-wheel over toward you until the needle moves down and up again to its highest point, thus catching the shuttle thread; draw up 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, and catch them behind the thread-cutter, place the material beneath the needle, lower the presser-foot upon it, and commence to sew, turning the wheel over toward you.

#### TO TURN A CORNER,

stop the machine without raising the needle more than half way out of the goods. Raise the presser-foot and turn the work in the manner desired, *using the needle as a pivot.*

#### FOR SEWING FLANNEL OR BIAS SEAMS,


use a fine stitch and as light a tension as possible so as to leave the thread loose enough to stand the strain of stretching the goods.

#### A STITCH TO RAVEL EASILY

can be had, if desired, by leaving the upper tension so light that the under thread will not draw into the goods, but lie straight.

### To Remove the Work.

Let the take up rest at its highest point; take hold of the upper thread between the take up lever and the eyelet on the face-plate and draw down about two inches of slack; then raise the presser-foot, and draw the fabric to the left, about two inches, and cut the threads by drawing them behind and then down across the knife-edge of the thread-cutter, leaving the ends caught behind the same.

 This ingenious but simple device saves "hunting-up the scissors" every few minutes, and is a highly-valued addition to the special attachments of the Singer machine.

### To Regulate the Tensions.

The tension on the shuttle-thread is regulated by the small screw near the delivery eye—turn toward you to increase, and from you to diminish; when once properly adjusted, it will seldom require to be changed for any kind of thread commonly used, as a perfect stitch can usually be obtained by regulating the tensions on the upper or needle



thread. To regulate the upper tension, turn the small thumb-screw in front of the tension discs, over toward you to increase the tension, and from you to diminish it. A loose tension is best for sewing cotton or linen fabrics, to prevent fullness after the goods have been washed.

If there are loops or a straight thread on the *under* side of the fabric, as in Fig. 14,

FIG. 14.



it shows that the upper or needle tension is too loose.

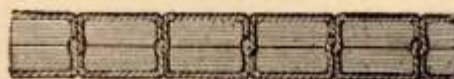
If loops or a straight thread appear on the *upper* side of the goods, as in Fig. 15,

FIG. 15.



it shows that the upper tension is too tight, and it should be diminished sufficiently to bring the lock in the centre of the fabric, as in Fig. 16.

FIG. 16.



### To Alter the Length of Stitch.

On the right side of the operator, and at the front of the arm, there is a thumb-screw working in a slot. Loosen this, and move it downwards to lengthen, or upwards to shorten the stitch. When you get the length of stitch you require, tighten the thumb-screw.

### To Change the Pressure on Material.

Turn the large thumb-screw on the top of the head of the machine, to the right to increase, and to the left to diminish the foot-bar pressure. When properly set, this need never be changed for any ordinary work.

### The Belt.

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 and cut to the desired length.

### Twist, Linen and Cotton Thread and Needles.

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 by mail or express.



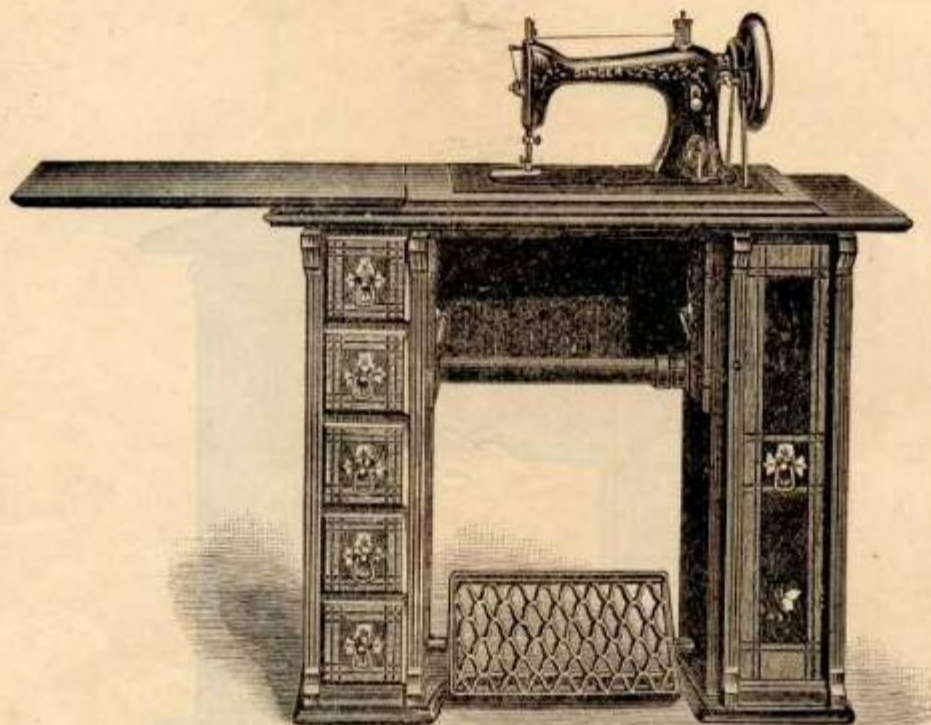
FIG. 17.



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 16.

FIG. 18.



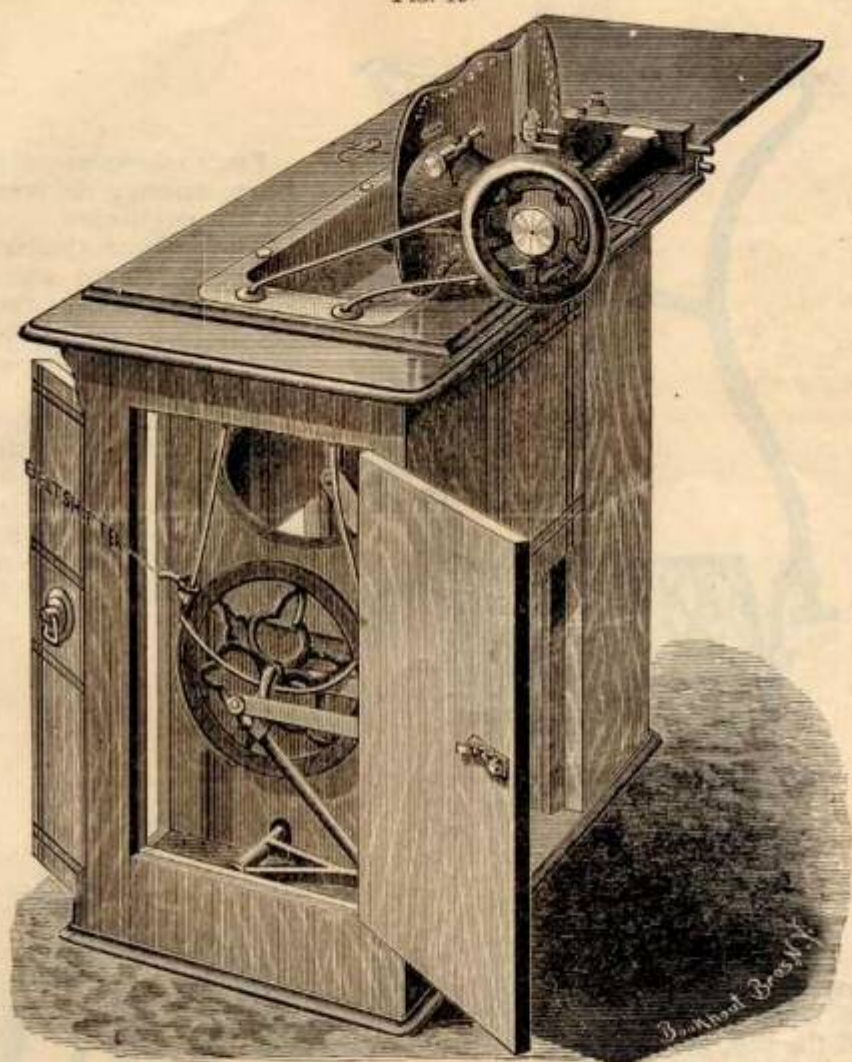
DROP CABINET (OPEN).

To close the cabinet, bring the small doors to the front, as shown on page 15. 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.



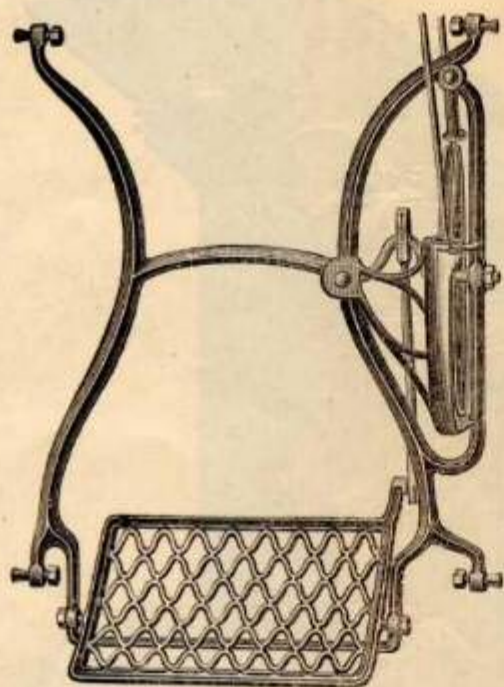
FIG. 19.



SINGER DROP CABINET (READY FOR OILING).

FIG. 19 represents the Drop Cabinet with the machine turned back and the driving mechanism exposed, ready for oiling. In order to turn the machine back, pull open the door at the right of the operator, and (with the machine in motion) turn the belt-shifter handle to the left, to throw the belt off the band-wheel. To reach the oiling points in the driving mechanism, open the door at the end of the cabinet. After oiling, turn the machine up again, and operate the treadle as in sewing, which will automatically replace the belt on the band-wheel.

Fig. 20.



THE NEW SINGER STAND BRACE (WITH BELT THROWN OFF).—*Patented.*

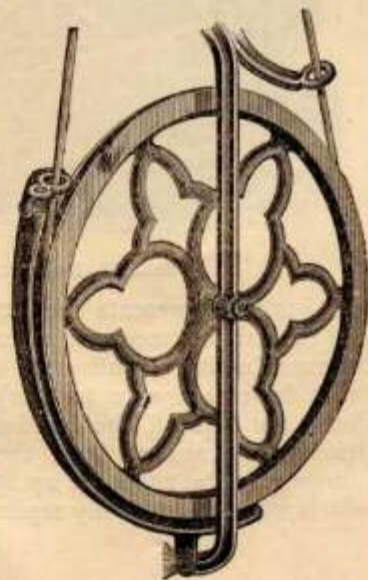
This invention simplifies and makes easy the often-irritating task of throwing off and replacing the belt. To throw off the belt, press the small lever at the top of the dress guard to the left with the forefinger, keeping up the motion of the treadle meanwhile. To put on the belt, allow the lever to 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. 20 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. 21.



THE NEW SINGER BELT SHIFTER.  
*Patented.*





**"FAVORITE SINGERS"**

FIG. 22.

THE NEW SINGER  
PITMAN.

FIG. 22 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 band wheel.

We send with each machine a full set of Attachments in a neat case, and an Attachment Instruction Book.

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*The Singer Manufacturing Co. use and recommend exclusively the*  
**"Willimantic 6 Cord Spool Cotton."**