INSTRUCTIONS
FOR USING
SINGER SEWING MACHINE
NO. 115
LOCK STITCH, FOR FAMILY USE

When requiring
Needles, Oil
Parts or
Repairs for
Your Machine

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SINGER SEWING MACHINE

No. 115

ROTARY HOOK, FOR FAMILY USE

PARTS OF THE MACHINE STAND

1. Belt Guide
2. Band Wheel
3. Band Wheel Crank
4. Pitman
5. Treadle
6. Belt Shifter
7. Leg
8. Dress Guard
INSTRUCTIONS FOR OPERATING
THE MACHINE

Raise the presser foot (2, Fig. 3) by means of the presser bar lifter (3, Fig. 3) to prevent injury to the foot (2, Fig. 3) and feed (1, Fig. 3).

Fig. 3. Front View of the Machine

It is necessary to understand the stop motion (5, Fig. 3) by which the balance wheel (4, Fig. 3) can be released when required, thus enabling the operator to become proficient in the use of the treadle, and permitting the winding of bobbins without running the stitching mechanism. It also allows the operator to wind bobbins without removing partially sewn work and without unthreading the machine.
To release the balance wheel (4, Fig. 3, page 3) turn the stop motion screw (5, Fig. 3, page 3) over toward you. It will be necessary to hold the balance wheel while loosening the stop motion screw.

After releasing the balance wheel place your feet upon the treadle and with the right hand turn the balance wheel over toward you. This will start the band wheel, treadle and pitman, the sewing mechanism having been disconnected.

Continue the motion thus begun by an alternate pressure of heel and toe, until a regular and easy movement is acquired, and the balance wheel kept in continuous rotation by use of the feet alone.

When you are thoroughly familiar with the treadle movement, and can restart the machine without turning the balance wheel in the wrong direction, tighten the stop motion screw to connect the balance wheel with the stitching mechanism.

Place a piece of cloth under the presser foot, let the foot down upon it, and operate the machine in this way without being threaded, until you have become accustomed to guiding the material.

To Ensure Perfect Action of the Machine

The balance wheel must always turn over toward the operator.

Do not run the machine with the presser foot resting on the feed without cloth under the presser foot.

Do not run the machine when both bobbin case and needle are threaded unless there is material under the presser foot.
Do not try to help the machine by pulling the fabric lest you bend the needle. The machine feeds the work without assistance.

The slide over the bobbin case should be kept closed when the machine is in operation.

**To Take Out the Bobbin**

Draw to the left the slide in the bed of the machine. Reach down with the thumb and forefinger of the left hand, open the bobbin case latch (2, Fig. 4) and lift out the bobbin case. While the latch remains open the bobbin is retained in the bobbin case. Release the latch, turn the open end of the bobbin case downward and the bobbin will drop out.

**FIG. 4. TAKING OUT THE BOBBIN CASE**
To Wind the Bobbin

Release the balance wheel (4, Fig. 3, page 3) by turning the stop motion screw (5, Fig. 3, page 3) over toward you.

**Fig. 5  MACHINE THREADED FOR WINDING THE BOBBIN**

Place the bobbin on the bobbin winder spindle (8, Fig. 6, page 7) and push it up closely against the shoulder, having the small pin in the spindle enter the slot in the side of the bobbin. Put the spool of thread on the spool pin (1, Fig. 5). Pass the end of the thread into the thread guide (2, Fig. 5) at the left and near the top of the arm, then up into the lower eyelet (3, Fig. 6, page 7) of the bobbin winder thread guide, into the notch (4, Fig. 6, page 7) and pass the thread through the slot in the left side of the bobbin from the inside. Press
the bobbin winder pulley (5, Fig. 6) down on the balance wheel hub, and the latch (7, Fig. 6) will drop down and hold it. Then operate the treadle the same as for sewing.

The end of the thread must be held by the hand until a few coils are wound and should then be broken off. When sufficient thread has been wound upon the bobbin it is automatically released from the stop latch (7, Fig. 6).

If the pressure of the rubber ring (5, Fig. 6) against the hub of the balance wheel is insufficient for winding the bobbin, loosen the adjusting screw (6, Fig. 6) and press the bobbin winder lightly until the rubber ring is in contact with the hub of the balance wheel; then tighten the screw.
To Thread the Bobbin Case

Hold the bobbin between the thumb and forefinger of the right hand, the thread drawing on top from the left toward the right (see Fig. 7).

Fig. 7

With the left hand hold the bobbin case as shown in Fig. 7, the slot in the edge being near the top, and place the bobbin into it.

Fig. 8

Then pull the thread into the slot in the edge of the bobbin case (see Fig. 8), draw the thread under the tension spring and into the delivery eye which is on the latch side of the bobbin case (see Fig. 9).
To Replace the Bobbin Case

After threading, take the bobbin case by the latch, holding it between the thumb and forefinger.

Fig. 10. Bobbin Case Threaded and Replaced

of the left hand. Place the bobbin case on the centre stud (1, Fig. 4, page 5) of the bobbin case holder, release the latch and press the bobbin case back until the latch catches the groove near the end of the stud. Allow the thread to hang free and close the slide in the bed of the machine.
To Set the Needle

Turn the balance wheel over toward you until the needle bar (9, Fig. 5, page 6) moves up to its highest point, loosen the thumb screw (10, Fig. 5, page 6) in the needle clamp (11, Fig. 5, page 6) and put the needle up into the clamp as far as it will go, with its flat side toward the right, then tighten the thumb screw.

To Thread the Needle

See Opposite Page

Turn the balance wheel over toward you until the thread take-up lever (5, Fig. 11) is raised to its highest point. Place the spool of thread on the spool pin at the top of the machine, lead the thread toward the left through the thread guide (1, Fig. 11) at the back and at the top of the face plate, down, under and from back to front between the tension discs (2, Fig. 11), up back of the tension thread guard (3, Fig. 11), down into the loop of the take-up spring (4, Fig. 11), up and from back to front through the hole in the end of the thread take-up lever (5, Fig. 11), down into the eyelet (6, Fig. 11) in front of the face plate, into the lower wire guide (7, Fig. 11), then from left to right through the eye of the needle (8, Fig. 11).

Draw about two inches of thread through the eye of the needle with which to commence sewing.
FIG. 11. THREADING THE NEEDLE
To Prepare for Sewing

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle.

![Diagram of sewing machine showing thread path]

**Fig. 12. Drawing Up the Bobbin Thread**

Turn the balance wheel over toward you until the needle moves down and up again to its highest point, thus catching the bobbin thread; draw up the needle thread and the bobbin thread will come up with it through the hole in the throat plate (see Fig. 12). Lay both threads back under the presser foot.

To Commence Sewing

Place the material beneath the needle, lower the presser foot and commence to sew, turning the balance wheel over toward you.
To Remove the Work

Let the thread take-up lever rest at its highest point, raise the presser foot and draw the fabric back and to the left, pass the threads over the thread cutter (1, Fig. 12, page 12) and pull down lightly to sever them. Leave the ends of the threads under the presser foot.

Tensions

For ordinary stitching the needle and bobbin threads should be locked in the centre of the thickness of the material, thus:

\[\text{Fig. 13. Perfect Stitch}\]

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:

\[\text{Fig. 14. Tight Needle Thread Tension}\]

If the tension on the bobbin thread is too tight or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

\[\text{Fig. 15. Loose Needle Thread Tension}\]
To Regulate the Tensions

The tension on the needle thread should only be regulated when the presser foot is down. Having lowered the presser foot, turn the small thumb nut (12, Fig. 5, page 6) at the front of the tension discs over toward you to increase the tension. To decrease the tension, turn the thumb nut over from you.

The tension on the bobbin thread is regulated by the screw (1, Fig. 7, page 8) in the bobbin case tension spring. To increase the tension, turn the screw over to the right. To decrease the tension, turn the screw over to the left.

When the tension on the bobbin thread has been once properly adjusted it is seldom necessary to change it, as a correct stitch can usually be obtained by varying the tension on the needle thread.

To Regulate the Length of Stitch

The length of stitch is regulated by the large thumb screw (14, Fig. 6, page 7) in a slot on the front of the arm near the bobbin winder.

To lengthen the stitch loosen this screw and move it downward. To shorten the stitch, move the screw upward. When the desired length of stitch is obtained, tighten the thumb screw.

To Turn a Corner

Stop the machine with the needle at its lowest point. Raise the presser foot and turn the work as desired, using the needle as a pivot.
To Regulate the Pressure on the Material

For ordinary family sewing it is seldom necessary to change the pressure on the material. If sewing fine silk or flimsy material, lighten the pressure by giving the thumb screw (13, Fig. 5, page 6) on the top of the machine two or three turns to the left. To increase the pressure turn it over to the right. The pressure should be only heavy enough to prevent the material from rising with the needle and to enable the feed to move the work along evenly; a heavier pressure will make the machine run hard.

To Sew Flannel or Bias Seams

Use a short stitch and as light a tension as possible on the needle thread so as to leave the thread loose enough in the seam to allow the goods to stretch if necessary.

A Stitch to Ravel Easily

can be made if desired, by having the tension on the needle thread so light that the bobbin thread will not draw into the goods but lie straight, as shown in Fig. 15, page 13.
To Oil the Machine

To ensure easy running the machine and stand requires oiling and if used continuously it should be oiled each day. With moderate use an occasional oiling is sufficient. Oil should be applied at each of the places shown by arrows in Figs. 10, 16 and 17. One drop of oil at each point is sufficient. Oil holes are provided in the machine for bearings which cannot be directly reached.

Draw to the left the slide in the bed of the machine and apply a few drops of oil to the hook race (1, Fig. 10, page 9). The slide should then be closed.

Loosen the screw (1, Fig. 16) near the upper end of the face plate, raise the plate and slip it off over the head of the screw; put one drop of oil into each of the oil holes and joints.
On the back of the arm is a round plate or cover, fastened by a thumb screw; loosen the screw, turn the plate upward and fasten by tightening the screw; turn the balance wheel slowly and oil the moving parts inside, then turn the cover down and fasten it as before.

To reach the parts underneath the bed the belt must be thrown off the band wheel on the machine stand. For this purpose a belt shifter (6, Fig. 1, page 1) is placed at the front of the band wheel. By pressing the belt shifter lever to the left and working the treadle meanwhile, the belt is released and the head can then be turned back on its hinges. The places to be oiled are indicated in Fig. 17, by arrows pointing to the oil holes and bearings.

To oil the stand, put a drop of oil on the centres on which the band wheel and treadle work, and both ends of the pitman rod which connects the treadle with the band wheel.
HINTS

The Belt. See that the belt is not too tight; it should always be tight enough not to slip. If too loose remove the hook at one end, shorten the belt and rejoin.

Machine Working Heavily. If the machine runs hard after standing idle for some time use a little kerosene in the oiling places, run the machine rapidly, then wipe clean and oil.

To Avoid Breaking Needles. See that the presser foot or attachments are securely fastened by the thumb screw. Do not sew heavy seams or very thick goods with too fine a needle. A large needle and thread to correspond should be used on heavy work (see table at back of book).

See that the needle is not bent and avoid pulling the material when stitching.

Breaking of Needle Thread. If the needle thread breaks it may be caused by:

- Improper threading.
- Tension being too tight.
- The thread being too coarse for size of needle.
- The needle being bent, having a blunt point, or being set incorrectly.

Breaking of Bobbin Thread. If the bobbin thread breaks it may be caused by:

- Improper threading of bobbin case.
- Tension being too tight.

Skipping of Stitches. The needle may not be accurately set into the needle bar or the needle may be blunt or bent. The needle may be too small for the thread in use.
ATTACHMENTS WITH THE MACHINE
No. 36489

Quilter 35932

Ruffler 36517

Bias Gauge 25525

Tucker 36583

Guide 25527B

Binder 36594

Under Braider 35940

Shirring Plate 35938

Bobbins (5) 55623

Large Screwdriver 25537

Adjustable Hemmer 35931

Small Screwdriver 25538

Stiletto 25539

Thumb Screw 287B

Needles

Needle Case 28880

FIG. 18
INSTRUCTIONS FOR USING THE ATTACHMENTS

FOOT HEMMER—Hemming

Raise the needle to its highest point. Remove the presser foot and attach the foot hemmer in its place (see Fig. 19). Clip off the right hand corner of the cloth, so that it will take the roll easily, turn up the edge about a quarter of an inch, insert it in the mouth of the hemmer and draw or push it along with the stiletto until under the needle. Then let down the presser bar and after taking two or three stitches, draw gently on the ends of the threads to help the work along till the feed catches it. In order to produce a smooth even hem the mouth of the hemmer must be kept just full.

Fig. 19 shows also what is known as a bag seam or fell, made by passing two pieces of fabric through the hemmer together and hemming them down.
FOOT HEMMER—Hemming and Sewing on Lace

Start the hem as previously explained, and when it is well started raise the needle to its highest point.

Fig. 20

Raise the hemmer to relieve its pressure on the hem, pass the end of the lace through the slot in the side of the hemmer, under the back of the hemmer and over the hem, as shown in Fig. 20.

Take care that the hem is not displaced in the hemmer and that the needle goes down through the lace and hem together. Then let down the presser bar and guide the lace over the front of the hemmer, keeping it well into the slot.

FOOT HEMMER—Felling

The two pieces of cloth to be felled should be laid together, wrong side up, the edge of the under piece being a little farther to the right than the
upper piece. Stitch them together using the hemmer as a presser foot, the front end of the hemmer form-

![Fig. 21](image)

ing a guide for the edges of both pieces, the upper piece being guided by the inside and the under piece by the outside of the projecting front of the foot hemmer (see Fig. 21). Then open the work out flat, wrong side up, the edges standing up straight, and

![Fig. 22](image)
taking the edges near the beginning of the first seam in the right hand, and the ends of the threads in the left hand, draw the edges into the hemmer which will turn them as in hemming. Guide the first row of stitching by the inside of the projecting front of the foot hemmer to ensure a perfect fell (see Fig. 22, page 22).

**ADJUSTABLE HEMMER—Hemming**

Remove the presser foot and attach the adjustable hemmer in its place as shown in Fig. 23. This hemmer will turn hems from \( \frac{3}{8} \) inch to 1 in. wide. The adjustment is made by loosening the thumb screw on the hemmer and moving the slide to the right or left until the hem turned is of the desired width. Enter the edge of the cloth into the hemmer under the scale and draw it back and forth until the hem is formed, stopping with the end under the needle. Lower the presser and commence to sew, being careful to so guide cloth as to keep hemmer full. Felling can also be done with the adjustable hemmer by following instructions on pages 21 and 22.
ADJUSTABLE HEMMER—Wide Hemming

To make a hem more than one inch wide take out the thumb screw in the hemmer and remove the slide and pointer; fold and crease down a hem of the desired width; pass the fold under the extension at the right of the hemmer, and the edge into the folder as shown in Fig. 24 and proceed to stitch the hem.

BINDER—Binding

Remove the presser foot and attach the binder in its place. Pass the binding through the scroll of the binder and draw it back under the needle. Place the edge of the goods to be bound between the scrolls of the binder and draw it under the needle. Lower the presser bar and sew as usual. To make French folds proceed as directed for binding except that the fold is stitched on to the face of the material
instead of on the edge (see Fig. 25). After loosening the binder set screw and adjusting the binder the line of stitching can be brought nearer the centre, this being more effective when making French folds.

**BIAS GAUGE**

The bias gauge may be used by placing it on the point of a pair of scissors, as below, and different
widths of material may be cut by adjusting the slide "S" (Fig. 26, page 25). Bias binding for binder No. 36594 should be cut fifteen-sixteenths of an inch wide, and to do this the slide "S" should be placed half way between the lines marked "T" and "B" and the edge of the goods should be passed through the bias gauge and against the slide while cutting.

**BINDER—To Bind with Dress Braid**

The braid being stitched on the edge it should fit the binder without turning in the edges, as is the case with bias binding.

**RUFFLER—Ruffling**

Remove the presser foot and attach the ruffler in its place, connecting the arm with the needle clamp, as shown in Fig. 27.

![Fig. 27](image)

The ruffler can be adjusted to make a gather or plait either at every stitch or once in every five stitches as the operator may choose.
To make a ruffle with a gather or plait at every stitch see that the adjusting lever (A, Fig. 27, page 26) of the ruffling attachment is at its lowest point. Place the material to be ruffled between the lower or separator blade and the ruffling blade, draw the material slightly back of the needle, lower the presser bar and proceed to sew.

To make a finer gather shorten the stroke of the ruffling blade by turning the regulating thumb screw (B, Fig. 27, page 26) over to the left, also shorten the stitch. To make a fuller gather or plait lengthen the stroke of the arm by turning the regulating thumb screw (B, Fig. 27, page 26) over to the right, also lengthen the stitch. By varying these adjustments many pleasing varieties of work can be accomplished.

**RUFLER—Ruffling Between Bands**

Place the lower piece of material below the separator blade, the piece of material to be ruffled
under the ruffling blade and over the separator blade and the upper piece of material over the ruffling blade, as shown in Fig. 28, page 27.

**TO RUFFLE AND SEW ON**

Place the band below the separator blade, the piece to be ruffled between the separator blade and the ruffling blade, and proceed. Oil the wearing parts of the ruffler before using. The ruffler should never be operated without cloth between the blades.

**RUFLER—Five Stitch Ruffling or Plaiting**

To make a five stitch ruffle or plait, raise the adjusting lever (A, Fig. 29) to its highest point. The ruffling blade will then move forward and back once every fifth stitch.
RUDDLER WITH SHIRRING PLATE—Shirring

To attach the shirring plate (see Fig. 18, page 19) draw to the left the slide that covers the bobbin case, insert the downwardly projecting hooks on the shirring plate under the edge of the throat plate, push as far as possible to the right and press the pin into the hole at the right of the throat plate, then close the slide covering the bobbin case.

The lower or separator blade of the ruffer is fastened by a pin. Turn back the separator blade as shown in Fig. 30 and attach the ruffer to the presser bar as instructed on page 26.

Place the cloth between the ruffling blade and the shirring plate, lower the ruffer on the goods and operate as in ruffling.
QUILTER

Remove the presser foot and attach the quilter foot in its place. The quilter guide can be used on either the right or left side of the needle and the distance of the guide from the needle determines the width of space between the rows of stitching. Slide the wire of the guide into the holder prepared for it on the foot and set it to the width desired.

Let the quilter guide follow the edge of the goods, a straight crease, or a chalk line, as the case may be, for the first row of stitching. All succeeding rows are made straight and at a uniform distance by keeping the last row steadily under the guide.

TUCKER

Remove the presser foot and attach the tucker in its place. The width of the tuck is determined by the scale of figures nearest the needle, which
shows in eighths and sixteenths of an inch the distance of the edge of the fold from the line of stitching.

Fig. 32

The crease or mark for the second and following tucks is determined by the scale nearest the operator and this is set by the line in front of the needle hole in the presser foot. For blind tucks without spaces set both scales at the same figure; to make spaces between the tucks move the front scale farther to the left until the desired space is obtained.

Having adjusted the scales for tuck and space as desired, fold the material and crease by hand; pass the folded edge between the spring and spur near you, then between the two blades of the second scale, and back under the presser foot; draw to the right against the guide, lower the presser bar; see that the lever for the needle clamp to strike is in its backward position so as to form a crease for the next tuck, then proceed with the first tuck.
For the second tuck fold carefully at the crease made by the spur and place the edge of the first tuck underneath and against the spur at the left. The spur will serve as a guide and will also make a distinct crease for the next tuck. Always place the last tuck against the spur to ensure perfect work.

When making the last tuck the lever upon which the needle clamp strikes while tucking should be raised to its highest point; while the lever is in this position no crease for a succeeding tuck is made upon the goods.

**UNDER BRAIDER**

Remove the presser foot and attach the quilting foot in its place. Attach the under braider (see Fig. 18, page 19) as directed for the shirring plate (see page 29). The design to be braided must be stamped or traced on the wrong side of the goods. Pass the end of the braid back through the guides in the under braider and under the needle as shown above. Lower the quilting foot and proceed to sew.
## RELATIVE SIZES OF NEEDLES AND THREAD
(Class and Variety of Needles Used, 15 x 1)

<table>
<thead>
<tr>
<th>SIZES OF NEEDLES</th>
<th>CLASSES OF WORK</th>
<th>SIZES OF COTTON, SILK OR LINEN THREAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Very thin Muslins, Cambries, Linens, etc.</td>
<td>199 to 150 Cotton 00 &amp; 000 Silk Twist</td>
</tr>
<tr>
<td>11</td>
<td>Very fine Calicoes, Linens, Shirtings, fine Silk Goods, etc.</td>
<td>80 to 100 Cotton O Silk Twist</td>
</tr>
<tr>
<td>14</td>
<td>Shirtings, Sheetings, Calicoes, Muslins, Silk and general domestic goods and all classes of general work.</td>
<td>60 to 80 Cotton A &amp; B Silk Twist</td>
</tr>
<tr>
<td>16</td>
<td>All kinds of heavy Calicoes, light Woolen Goods, heavy Silk, Seaming, Stitching, etc.</td>
<td>40 to 60 Cotton C Silk Twist</td>
</tr>
<tr>
<td>13</td>
<td>Ticking, Woolen Goods, Trousers, Boys' Clothing, Corsets, Cloaks, Mantles, etc.</td>
<td>30 to 40 Cotton D Silk Twist</td>
</tr>
<tr>
<td>19</td>
<td>Heavy Woolens, Ticking, Bags, Heavy Coats, Trousers, etc. Heavy Clothing generally.</td>
<td>24 to 30 Cotton E Silk Twist</td>
</tr>
<tr>
<td>21</td>
<td>Bags, Coarse Cloths and Heavy Goods</td>
<td>40 to 60 Linen or very Coarse Cotton</td>
</tr>
</tbody>
</table>

When sending orders for needles always specify the size required.

You will obtain the best stitching results from your sewing machine if it is fitted with a Singer Needle.
This Trade Mark Embossed in Brass
is on the Arm of Every
Singer Sewing Machine