INSTRUCTIONS
FOR USING
SINGER
SEWING MACHINES
No. 66
OSCILLATING HOOK FOR FAMILY USE

When requiring
needles, oil,
parts or repairs
for your machine

Look for the
red "S"
there are singer
shops in every city

THE SINGER MANUFACTURING CO.
1929

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IMPORTANT

To obtain the best results from your sewing machine, it is necessary to use the best quality of oil and good needles.

Singer Oil, which is specially prepared for sewing machines, is supplied in tins which have the well-known Singer Red “S” printed thereon.

Singer Needles are sold in green packets which also bear the Singer Red Letter “S.”

To avoid trouble, be sure to purchase your Oil and Needles from a Singer Shop or Singer Salesman.

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WARNING
It is essential that the machine should be kept well oiled, in accordance with the instructions given on page 13 of this book.

THE SINGER MANUFACTURING CO.

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Have You Seen the Singer Way to Sew By Electricity?

F it A SINGER ELECTRIC MOTOR to your machine—one screw attaches it—and the machine will do the work while you guide the material.

After dark the ELECTRIC SINGER LIGHT throws its light just where it is needed, enabling you to see the stitching more clearly. Prevents eye-strain and fatigue; saves time and annoyance when threading the needle.

Any Singer Shop or Singer Salesman will tell you all about them.

Balance Wheel Stop Motion.

This device allows the balance wheel to run free, so that bobbins may be wound, and correct treadling acquired without operating the mechanism. To loosen the wheel, hold it with the left hand, and with the right hand turn the stop motion screw over towards you, as shewn in Fig. 1.

To Operate the Treadle Machine.

Loosen the balance wheel, place both feet upon the treadle, and turn the balance wheel towards you, at the same time allowing the feet to move freely and lightly with the motion of the treadle. Continue to do this until a regular and easy movement is acquired and you are able to work the treadle so that you can re-start the machine without the balance wheel turning in the wrong direction.

When familiar with the working movement, tighten the balance wheel by turning the stop motion screw from you, and place a piece of calico or cloth under the presser foot (2, Fig. 2). Lower the presser foot upon the material by means of the presser bar lifter (1, Fig. 2) and again work the machine, without it being threaded, until you have become accustomed to guiding the material.
To Operate the Hand Machine.

Tighten the balance wheel, and after placing a piece of material under the presser foot (2, Fig. 2), turn the handle from you with an easy and regular motion. Continue to do this until you are able to guide the material correctly with the left hand.

The advantages of a treadle machine, compared with a hand machine, are greater speed and, both hands being free, a greater variety of work can be accomplished.

To Ensure Perfect Action of the Machine.

The balance wheel must always turn towards you.
The presser foot must be raised, except when sewing.
Do not work the machine with the bobbin case (1, Fig. 6) and the needle threaded, except when sewing.
The slide (5, Fig. 6) must be kept closed.

To Thread the Needle
(See Fig. 3).

Pass thread from reel through the wire guide (12), down under and from right to left between the tension discs (14), over the small spring (5) at left of the discs, under the slack thread regulator *(6), up and from right to left through the hole (11) in take-up lever, down into the eyelet (7), into the wire guide (9); then from left to right through the eye of the needle, leaving an end of thread three or four inches long when the thread take-up lever (11) is at its highest point.

*NOTE—For darning and embroidery work, pass the thread through the hole in the slack thread regulator (6), instead of under it.

For threading the needle, use the Singer Needle Threader. It saves time, trouble and patience.

To Set the Needle
(See Fig. 3).

Raise the needle bar (15) to its highest point and loosen the thumb screw (16); hold the needle with the left hand and, with its flat side towards the balance wheel, insert it into the needle clamp (17) as far as it will go; then retighten the thumb screw.
To Take out the Bobbin.

Draw the slide (5, Fig. 6) to the left and press the forefinger of the right hand upon the bobbin ejector, as shown in Fig. 4; this will raise the bobbin so that it can be easily taken out.

To Wind the Bobbin
(See Fig. 5).

Loosen the balance wheel, and place a reel of thread on the spool pin. Pass the end of the thread through the wire guide (12, Fig. 3), then into the lower eyelet (5) of the thread guide from below, and into the notch (2) at its top. Now thread the bobbin by passing the thread through the hole in its left disc from the inside, and with the left hand press it on to the bobbin winder spindle (1) and hold. Then, with the right hand, turn the small pulley (6) until the hole in the right disc of the bobbin is engaged by the pin in the spindle shoulder. Press the pulley against the ledge of the balance wheel until the latch retains the winder in position; hold the free end of the thread and proceed to wind by turning the balance wheel towards you; then, after a few turns, break off the end of thread and again operate the treadle, as in sewing, until the bobbin is filled. The winder stops automatically when the bobbin is full.

If through any cause the pressure of the rubbering against the ledge of the balance wheel is insufficient for winding the bobbin, loosen the screw (3) and press the winder lightly until the rubber ring is in contact with the ledge of the balance wheel; then retighten the screw.

To Replace the Bobbin in the Bobbin Case
(See Fig. 6).

Take the bobbin between the thumb and forefinger of the right hand, with the end of the thread drawing from the top to the left, and in this position replace it in the bobbin case, as shewn in Fig. 6. With the left hand draw the thread into the slot (3), then back between the spring and side of bobbin case until it reaches the notch (4); then across the bobbin towards the needle. Thereafter close the slide (5).
To Clean the Stitch-Forming Mechanism.

If the stitch-forming mechanism should become clogged with lint and interfere with the perfect operation of the machine, remove the bobbin case, as described in the following instructions, and dislodge the lint accumulated in the machine.

To Remove the Bobbin Case
(See Fig. 7).

Raise the needle to its highest point and remove the slide (5, Fig. 6) by raising its front edge.

Insert the nail of the left forefinger under the latch “B” and raise the latter on to the edge at “A.” Hold the bobbin case between the thumb and forefinger of the left hand, at the edge nearest the latch “B,” as shown in Fig. 7, and lift it out towards you.

Under no circumstances must the screw in latch B be loosened, as this would put the stitch-forming mechanism out of adjustment.

To Replace the Bobbin Case.

Raise the needle to its highest point, with the latch (B, Fig. 8) in the position illustrated. Hold the bobbin case between the forefinger and thumb of the left hand, by the edge furthest from the forked part (as shewn in Fig. 8), and insert the latter beneath the throat plate so that the fork straddles the position stud; then with a slight twisting motion of the fork to the left and to the back, lightly press down the bobbin case until the edge of the sewing hook engages in its groove.

Having correctly inserted the bobbin case, move the latch (B, Fig. 8) into the notch to hold the bobbin case in position, and then replace the slide from the right, as shewn in Fig. 9, being careful to see that the two ends of the flat spring (A, Fig. 9) enter the grooves on the underside of the slide.
To Prepare for Sewing.

With the left hand hold the end of the needle thread, leaving it quite slack from the hand to the needle; turn the balance wheel towards you until the needle moves down and up again to its highest point, thus catching the under thread; then pull the end of the needle thread you are holding and, the under thread will be brought up with it through the needle hole in the throat plate, as shewn in Fig. 10. Place both ends of thread, and material to be sewn, under the presser foot and needle, lower the presser bar lifter and commence to sew by turning the balance wheel towards you.

NOTE.—Do not try to help the feeding of the work by pulling the material, as this may deflect the needle and cause it to break. The machine feeds without any assistance.

To Remove the Work.

Raise the take-up lever (11, Fig. 3) to its highest point, by turning the balance wheel towards you, and lift the presser foot; then move the material back and to the left, and sever the threads by passing them over the thread cutter above the presser foot. Leave the ends of the threads a few inches long under the presser foot.

To Regulate the Tensions.

Correct Stitch

For ordinary stitching, the tension on the upper and under threads should be equal, and just sufficiently strong to lock both threads in the centre of the work, as shewn in the above illustration.

If either tension is stronger than the other, imperfect stitching will be the result, thus:

| Needle thread tension too strong | Needle thread tension too weak |

A correct stitch can usually be obtained by varying the tension on the needle thread (see Fig. 11).—To increase the tension, turn the thumb nut in the direction illustrated by the arrow, or to lessen the tension, turn the nut in the opposite direction. All machines are correctly adjusted before leaving the factory, and it is therefore seldom necessary to alter the under tension. Should it become necessary to do so, however, tighten the tension spring screw (2, Fig. 6) on the left hand side of the bobbin case to increase the tension, or loosen the screw slightly to lessen the tension.

Care should be taken to use thread and needles suitable for the material being sewn (see Table on inside of back cover).
To Alter the Length of Stitch.

Turn the thumb screw inwards (see Fig. 12) to lengthen the stitch, or turn outwards to shorten it.

To Change the Pressure on 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 (1, Fig. 3) two or three turns upwards. If it be found necessary to increase the pressure, give the thumb screw a few turns downwards.

To turn a Corner.

Stop the machine when the needle is at its lowest point, raise the presser foot and turn the work, as desired, using the needle as a pivot. Then lower the presser foot.

To Sew Flannel or Bias Seams.

Use a short stitch and as slight a tension as possible, so as to leave the thread loose enough to withstand the strain of stretching the goods.

To Oil the Machine and Stand.

All moving parts in contact must be covered with a film of oil and not allowed to become dry. Oil should always be applied at the points indicated by arrows in Figs. 13 and 14, a drop of oil being sufficient at any place. To oil the needle bar mechanism, remove the face plate (3, Fig. 3) by taking out the thumb screw (8, Fig. 3); then loosen the small screw (2, Fig. 3) and slip the plate up and over the latter. It is most important that oil should be applied at the point marked "A" (Fig. 13) when the take-up lever (11, Fig. 3) is at its lowest point. When oiling, insert the oil can spout well into the oil holes. Apply a drop of oil to the small piece of felt lubricating the oscillating hook and to the rollers at the right of the hook shaft.

After oiling, run the machine rapidly for a few minutes so that the oil may penetrate into the bearings. If in constant use, the machine should be oiled two or three times a week. Neglect to do this will shorten the life of your machine and cause you trouble and annoyance.
To oil the stand, apply a drop of oil to the centres upon which the band wheel and treadle work, and to both ends of the pitman rod which connects the treadle with the band wheel.

Always use the best oil, as sold only at Singer Shops. Inferior oil clogs the bearings, prevents efficient working, and causes rapid wear of the mechanism.

The Belt Shifter.

This device simplifies throwing off and replacing the belt. To throw off the belt, move the belt shifter to the left (see Fig. 15), working the treadle at the same time. To replace the belt, work the treadle slowly with the band wheel turning towards you: a revolution or two of the wheel will bring the belt back into its place.

Machine Working Heavily.—If, after standing for some time, the machine works heavily, use a little paraffin or benzine in place of oil. Then run the machine rapidly to clean the bearings, thereafter oiling with Singer superior machine oil. The use of inferior oil is usually the cause of the machine working heavily. See that the leather belt is not too tight; it should be just tight enough not to slip. If too long, shorten and rejoin.

Skip Stitches.—A bent or blunt-pointed needle is often the cause of this. See that the needle is accurately set (see page 5). Remove the throat plate, and, after seeing that the feed (3, Fig. 2) is clean and working freely, replace the throat plate.

Thread Breaking.—If the needle thread breaks, this is probably due to one of the following causes:—

The machine being improperly threaded.
The tensions being too tight.
The needle being bent or having a blunt point.
The thread being too coarse for the size of the needle (see Table on inside of back cover).
The thread take-up spring (5, Fig. 3) being broken.

If the under thread breaks, adjust the under tension (see page 11); also see that the inside of the bobbin case and under the tension spring are quite free from fluff.
**INSTRUCTIONS**

**ATTACHMENTS**

**WHICH MAY BE APPLIED TO**

**Singer Machine No. 66**

**Needles Breaking.**—See that the needle is not bent, that the top tension is not too tight, and avoid pulling the material when stitching. Any of these errors will cause the needle to strike on the throat plate and break. **Use Singer Needles, sold only at Singer Shops and by the Company's authorised representatives. Other makes of needles are often of inferior quality, they become blunt, break easily, and prevent the efficient working of the machine.**

_Inferior Needles and Thread are often the causes of breaking. The eye in Singer Needles is specially finished to prevent cutting of Thread, while the best Thread resists strain and is free from knots. Singer Shops sell the best machine Sewing Thread._

**Material Puckering.**—This is generally due to irregular tensions. See page 11 for the regulation of tensions.

**Stitches Looping.**—This is regulated by the tensions (see page 11). See that both the bobbin case and the needle are properly threaded, that the thread used is of good quality and the correct size for the needle (see table on inside of back cover). See that the thread take-up spring (5, Fig. 3) is not broken.

Advice is given free at all Singer Shops as to the proper adjustment of machines.

Free instruction is always willingly given in the use of any Singer machine and its attachments at any Singer Shop, no matter where the machine may have been purchased.

*Every description of Sewing Machine repaired, or exchanged.*
The Binder—Binding.

Raise the needle and fit the binder, as shewn.

Pass the binding through the scroll of the binder and draw it under the needle. Place the edge of the material to be bound between the scroll of the binder and under the needle, lower the presser-bar lifter and sew as usual.

Bias binding should be cut $\frac{3}{8}$ of an inch wide.

To Bind with Dress Braid.—Proceed as when using bias binding; the only difference is, dress braid being narrower, the edges are not turned under, as is the case with bias binding.

To make French folds.—Proceed as directed for binding, but pass the cloth beneath the binder-foot, so that the fold is stitched on to the face of the material instead of on the edge.

The Quilter.

Raise the needle and fit the quilter, as shewn.

The quilter guide can be used at either the right or left of the needle, and the distance of the guide from the needle determines the width between the rows of stitching. Slide the wire into the holder prepared for it on the foot, and set it to the width desired; then lower the foot on to the material.

To Quilt.—For the first row of stitching, let the quilter guide follow the edge of the material, a straight crease, or a line, as preferred. The succeeding rows are made straight, and at a uniform distance, by keeping the previous row steadily under the guide, as shewn.
The Foot Hemmer—Hemming.

Raise the needle and fit the foot hemmer, as shewn. Clip off the right hand corner of the material so that its edge will curl easily. Then, with the hemmer foot raised, place the material from left to right, under the foot and, with its edge slightly raised, insert the corner into the mouth of the hemmer, easing it along until it fills the curl and reaches the needle. Lower the foot and make the first few stitches slowly. Guide the material with the thumb and forefinger of the right hand, so that the edge lies flat over the top of the hemmer, and proceed to sew, taking care to keep the hemmer curl just full. Should the edge begin to run out, move the hand to the right; should too much material run in, move to the left.

Hemming and Sewing on Lace in One Operation.

Start the hem, as explained on page 20, and, when it is well started, raise the needle to its highest point. Raise the hemmer to relieve the pressure on the hem, and pass the end of the lace through the slot in the side of the attachment and over the hem, as shewn.

Take care that the hem is not displaced in the hemmer, and that the needle goes through both lace and hem. Then let down the presser bar, and guide the lace over the front of the hemmer, taking care to keep it well into the slot.
The Foot Hemmer—Felling.

The two pieces of cloth should be laid wrong side out, one over the other, with the edge of the under piece a little further to the right than the upper piece, as shewn in the illustration. Stitch the two pieces together, using the front projecting part of the hemmer as a guide for keeping the seam straight. The seam should be made close, but not too near the edge of the upper piece, or the cloth will give way at the seam when a strain is put upon it.

The Foot Hemmer—Felling—continued.

Raise the hemmer foot and open the work out flat, wrong side up, so that the edges will stand up straight. Then push the edges at the beginning of the seam into the mouth of the hemmer, as far as the needle, and lower the hemmer foot. While stitching, keep the material perfectly flat, using both hands, and see that the seam is in line with the mouth of the hemmer. For the second seam, the stitch should be lengthened slightly.
The Adjustable Hemmer.

Raise the needle and fit the adjustable hemmer, as shewn. This attachment will make hems from $\frac{3}{16}$ inch to 1 inch wide.

Loosen the thumb screw at the front of the hemmer and move the slide to the right or left until the small pointer is against the desired width; then tighten the screw. Insert the edge of the cloth between the slide and the number gauge, at their end, and draw it backward and forward until the hem is formed, stopping with the end of the cloth under the needle. Lower the presser bar lifter and commence to sew, taking care to so guide the cloth as to keep the hemmer full. Felling can also be done with this hemmer by following the instructions on pages 22 and 23.

The Adjustable Hemmer—Wide Hemming.

To make a hem more than one inch wide, take out the thumb screw 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, insert the edge into the folder, as shewn, and proceed to stitch.
The Under Braider—Braiding.

Raise the needle and fit the quilter foot, as shewn. To attach the under braider, draw the slide (5, Fig. 6) to the left, and insert the downward projecting hooks of the attachment under the edge of the throat plate. Push the attachment as far as possible to the right, and press the small stud into the hole at the right of the throat plate; then close the slide.

The pattern or design to be braided must be stamped or traced on the wrong side of the material. Pass the end of the braid through the blued guide of the under braider, and then under the needle. Place the material, wrong side up, above the braid, lower the presser foot and proceed to sew, following the lines of the design.

The Ruffler—Ruffling.

Raise the needle and attach the ruffler, taking care to connect the lever with the needle clamp, as shewn.

To make a gather at every stitch, insert the small post into slot 1 of lever (A). Pass the edge of the material under the prong at the front of the ruffler and between the two blued blades until it is slightly past the needle, lower the presser bar lifter and proceed to sew. To make a finer gather, shorten the stitch, and shorten the stroke of the ruffling blade by raising the thumb screw (C). To make a fuller gather, lower the thumb screw and lengthen the stitch. By varying these adjustments, many pleasing varieties of work can be accomplished with the ruffler.
The Ruffer—
Ruffling between Two Pieces of Material.

Place the lower piece of material below the ruffer. Insert the piece to be ruffled in the ruffer, as instructed on the preceding page, and pass the upper piece of material above the blued blades in the manner illustrated.

To Ruffle and Sew on at One Operation.

Place the material below the ruffer, and the piece to be ruffled between the blued blades; then proceed as in ruffling.

Apply a little oil to the wearing parts of the ruffer before using.

CAUTION.—The ruffer should never, under any circumstances, be operated without cloth between the blued blades.

Five-Stitch Ruffling or Pleating.

To make a five-stitch ruffle or pleat, insert the small post into slot 5 of lever (A), as shewn.

The ruffling blade will then move forward and back once at every fifth stitch. Finer or fuller pleats may be obtained by merely altering the length of stitch.

To make Pleated Trimming.—Insert a narrow tape or ribbon through one or both of the slots in the small guide (B) and beneath the presser foot and needle, so that it lies centrally over the material to be pleated.
The Ruffler with Shirring Plate—Shirring.

Attach the shirring plate, as instructed for the ruder braider, so that the needle will descend in the slot in the front end of the plate.

Remove the lower blued blade of the ruffler by loosening the small screw at the side of the latter. Then attach the ruffler to the presser bar, as already instructed.

To Shirr.—Place the material between the blued blade and the shirring plate, lower the presser bar lifter and proceed, as in ruffling.

The Tuckmarker.

Raise the needle to its highest point, remove the presser foot from the machine and fit the tuckmarker, as shewn in the illustration.

It will be noticed that the tuckmarker has two figured scales, the double flat spring in front being marked in eighths of an inch and the small clip in the centre in sixteenths of an inch.

The scale on the small clip in the centre of the attachment determines the width of the tuck to be made. For instance, if the width of tuck required is ¼ inch, loosen the thumb screw at the back of the tuckmarker and slide the small guide either to the right or left until its straight edge is over the figure 2, then tighten the thumb screw.
By loosening the thumb screw nearest you, the double flat spring in front may be moved either to the right or left to give the desired width between the lines of stitching. For instance, if \( \frac{1}{4} \) inch tucks are to be made, and it be desired to leave \( \frac{1}{4} \) inch clear space between each tuck, the flat spring should be moved until the figure 3 is exactly in line with the needle hole; or if no space is required between the tucks, then the figure 2 should be in line with the needle hole. When the required width is obtained, tighten the thumb screw.

To operate the tuckmarker is exceedingly simple. Fold the material by hand and place it in the attachment by passing the folded edge over the upright marking point (which will be found at the left hand end of the flat bar below the double flat spring, already referred to); then between the small clip at the centre and below the foot, taking care that the end of the material is over the feed. The small lever on the top of the tuckmarker must also be down in position, as shown in the illustration, and the edge of the fold right against the small guide. Now lower the presser bar lifter and sew as usual, being careful to keep the folded edge against the guide. When the first tuck is completed, it will be seen that the material is creased ready for the second tuck. Fold the material at the crease, and, with its plain side uppermost, proceed as before. When making the last tuck, raise the marking lever so that it does not press on the double flat spring; while it is in this position no crease for a succeeding tuck can be made on the material.