

Form 7876
Reissue
September 23, 1912

INSTRUCTIONS

FOR USING

SINGER SEWING MACHINE



No. 66-1

AND

ATTACHMENTS

FOR FAMILY USE

THE SINGER MANUFACTURING CO.

THE IMPORTANCE OF GOOD OIL FOR SEWING MACHINES

THERE IS NOTHING connected with a sewing machine which better illustrates the proverb that "the best is the cheapest," than the small but important item of OIL.

BAD OIL does not last as long as good oil and is really more expensive.

BAD OIL makes a machine run hard.

BAD OIL leaves a SEDIMENT and the oily portion is soon exhausted.

BAD OIL clogs the oil holes so that it does not reach the bearings and thus prevents the efficient working of the machine, besides causing rapid wear of the parts.

KNOWING, from many years' experience, the great importance of GOOD OIL, we put up an extra quality machine oil, in bottles, specially prepared for sewing machines.

SEE THAT THE WORDS "THE SINGER MANUFACTURING COMPANY"
ARE MOULDED IN RELIEF UPON THE BOTTLE

7876

INSTRUCTIONS FOR USING SINGER SEWING MACHINE



No. 66-1
FOR FAMILY USE

THE SINGER MANUFACTURING CO.

MACHINE NO. 66-1

DESCRIPTION

This machine is intended for family sewing and is capable of doing all classes of work, from the lightest to the heaviest ordinarily required in the family; it is provided with a full line of convenient attachments for ruffling, tucking, hemming, quilting, binding, etc.

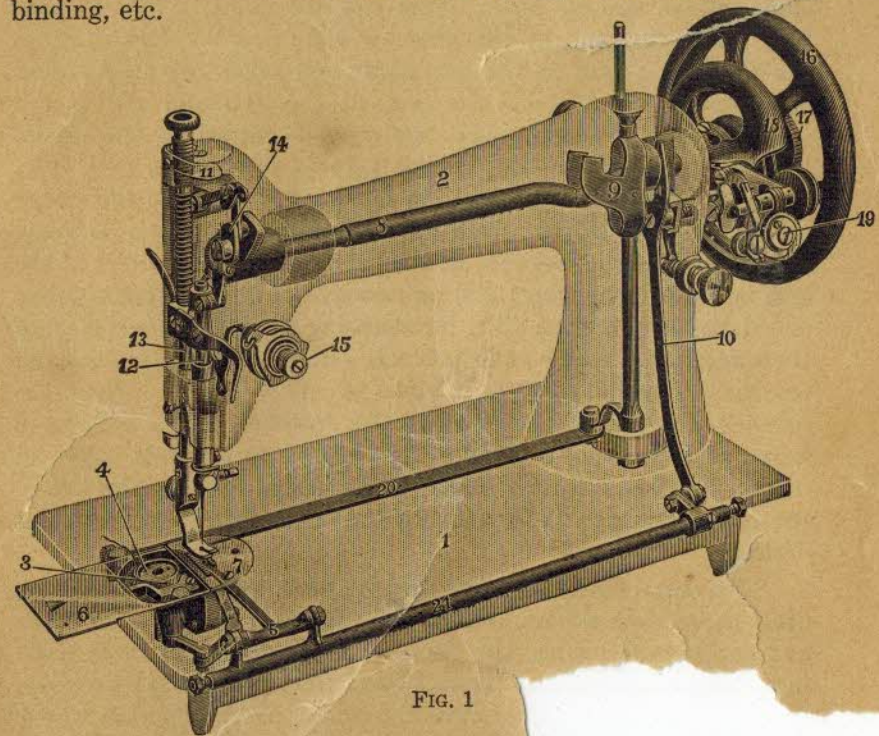


FIG. 1

TRANSPARENT ILLUSTRATION

The frame of the machine consists of arm (2); under the bed plate are the oscillating frame which carries the needle thread and passes it around the

bobbin (4) containing the under thread and the parts (5) that move the feeding or cloth moving points.

Upon the upper side of the bed plate, at the left hand, is a slide (6), which can be drawn to the left, as shown, to open the space occupied by the oscillating hook, bobbin case, bobbin, etc.; and the throat plate (7), fastened by two screws, having a hole through which the needle descends and rises and openings for the feeding or cloth moving points.

The upper part of the frame consists of the arm, rigidly connected at its base to the bed plate and hanging over it toward the left. Inside and lying lengthwise the arm is a rod called the arm shaft (8), an upright, rocking piece operated by the arm shaft, which reaches down below the bed plate, called the arm rock shaft (9), and at the extreme right hand a forked piece operated by a cam on the arm shaft and called the feed forked connection (10). Outside the arm, at the left-hand end, is the face plate (11), which covers the space occupied by the needle bar (12), presser bar (13), thread take-up mechanism (14), etc.; upon the outside of the arm, in front, at the left, is the upper thread tension (15) by which the thread and stitch can be made tighter or looser as desired; at the extreme right-hand end of the arm is the balance wheel (16) and outside of that the large screw, called the stop motion (17), for releasing the balance wheel from the arm shaft so that it can run freely without moving the stitching mechanism while winding bobbins of under thread. Near the balance wheel is the belt cover (18), fastened to the arm by a screw and the bobbin winder (19) hinged to the belt cover in front. The large thumb screw, below and a little to the left of the bobbin winder, is for making the stitch longer or shorter as desired.

The stand consists of two upright sides, a brace, band wheel, dress guard, belt shifter, treadle and pitman. The brace connects and supports the sides, the band wheel hangs on its crank shaft in a groove on the right and the belt runs in its groove, and over the pulley on the balance wheel. The treadle is pivoted on pivot screws in the lower part of the brace, and is connected to the band wheel crank, so that when it is rocked by the feet, motion is communicated to the band wheel and by the belt to the balance wheel.

THE BELT

The leather belt which passes over the balance wheel pulley and under the band wheel, should be just tight enough to run the machine without slipping; if it becomes too loose, take it off and cut away one of the holes; make another hole about one-quarter inch from the cut end, put on the belt, leaving it out of the band wheel groove, insert the belt hook and replace the belt on the band wheel.

TO THROW OFF AND REPLACE THE BELT

The belt shifter is at the upper end of the dress guard on the stand; if the small lever is pressed over to the left while the machine is running, the belt will be thrown off the band wheel and the machine can then be turned back on its hinges. To replace the belt, allow the lever to spring back to its place and run the machine as in sewing, with the band wheel turning over toward you.

TO OIL THE MACHINE

Take out the thumb screw near the lower end of the face plate, raise the plate and slip it off over the head of the screw near the upper end of the plate; within the space thus uncovered the upper end of the needle bar and its connecting link, the presser bar and the mechanism that operates the thread take-up can be seen; put one drop of oil into each of the oil holes and joints, also upon the needle bar and presser bar where they enter the holes into which they are fitted.

There are six holes for oil in the upper surface of the arm, one at the left in the highest part, one near it in the smallest part, three near the spool pin and one at the right hand near the belt cover.

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 the screw; turn the balance wheel slowly and oil the moving parts inside wherever one part touches another; then turn the cover down and fasten it as before.

Throw the leather belt off the band wheel in the stand and turn the machine back on its hinges; the feed rock shaft (21, Fig. 1) lies parallel with the front edge; oil both ends of it where

the pivot screws enter, also the joint on the short crank at its right-hand end; oil the joints at the ends of the long, flat piece called the oscillating hook pitman (20, Fig. 1) which connects the lower end of the arm rock shaft with the mechanism that drives the oscillating hook and other parts at the left under the bed plate, which must be oiled at each joint and oil hole. A very little oil must be occasionally put upon the inside of the oscillating hook and upon the inclined surfaces and rollers at the right of the hook shaft.

The stand must be oiled at each end of the treadle, where the pivot screws enter, at each end of the pitman and of the band wheel shaft.

If the machine has been standing a long time without use, kerosene or benzine should be used to dissolve and clean out the old oil; then run the machine rapidly a few moments, or until it runs freely, wipe clean and then oil as above directed with the fresh sewing machine oil put up by The Singer Manufacturing Company.

TO OPERATE THE TREADLE

Release the balance wheel by turning the stop motion on the outside of the wheel over toward you as far as it will go; the balance wheel will then turn freely without moving the sewing mechanism; place the feet squarely on the treadle and turn the balance wheel over toward you; this will start the band wheel, pitman and treadle; continue the motion thus begun by the pressure of the feet, first on one, then on the other side of the treadle; practice this motion until the balance wheel can be kept in continuous rotation by the use of the feet alone. Then turn the stop motion over from you as far as possible, raise the presser foot by the lifter on the back of the arm and run the machine without trying to sew, until you can without any difficulty keep up a regular motion.

THE STITCH

The lock stitch made by Machine No. 66-1 consists of two threads, one taken from the spool upon the arm and led through the tension, take-up and guides to the eye of the needle, the other from the bobbin that lies in the case under the slide in the bed

plate; in stitching, the two threads are locked together at each descent of the needle and the threads drawn tight by the take-up and tensions.

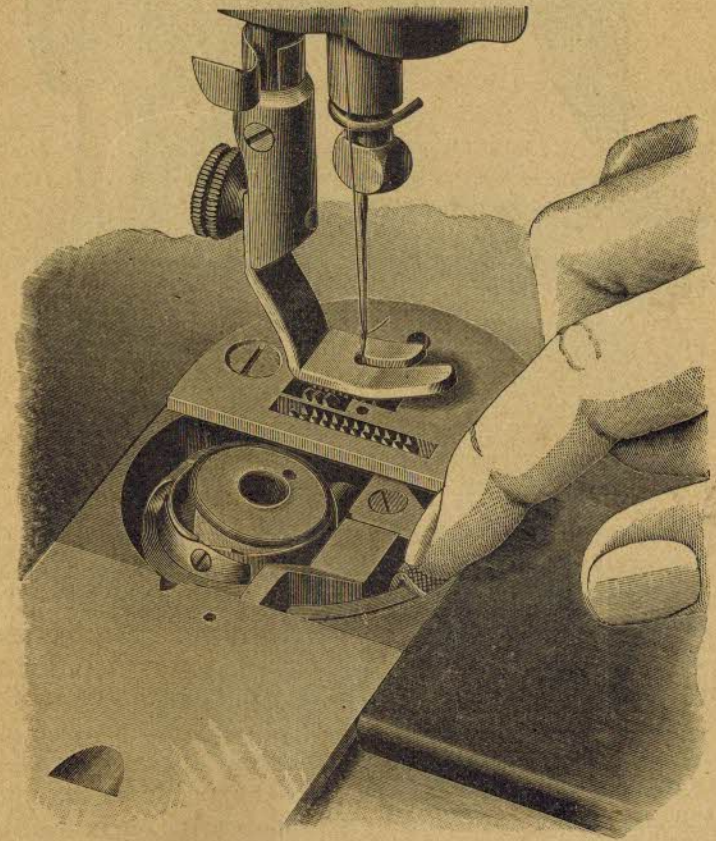


FIG. 2

TO TAKE OUT THE BOBBIN

Draw out the slide in the bed plate and press the forefinger of the right hand upon the bobbin ejector, a small roughened piece at the side of the opening nearest you (see Fig. 2); this will raise the bobbin so that it can be easily taken out.

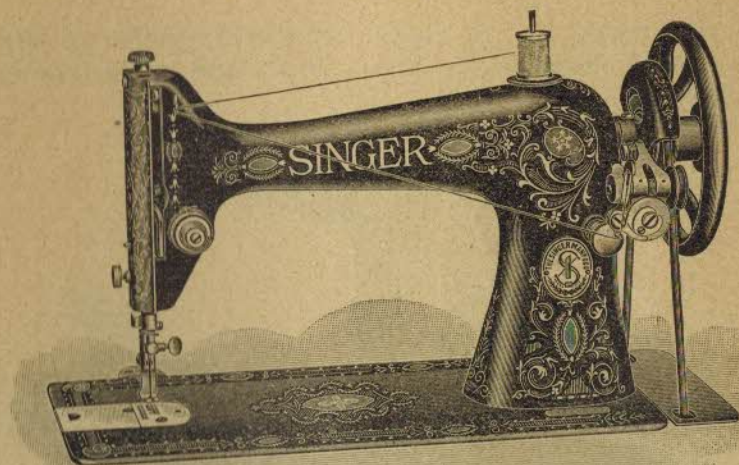


FIG. 3

TO WIND AND REPLACE THE BOBBIN

SEE FIG. 3

The thread to be wound on the bobbin may be taken from the same spool as that used for the upper thread, or another spool may be used; in the latter case take off the spool in use and put the other on the spool pin. Release the balance wheel by turning the stop motion over toward you; lead the thread into the wire guide (see 1, Fig. 4), then into the thread guide in the lower end of the guide finger of the bobbin winder, then into the upper guide in the same finger; pass the end of the thread into the hole in the left hand side of the bobbin and place the bobbin on the spindle so that the hole in its other side will slip over the pin in the flange on the spindle; then press downward upon the bobbin winder, until the hook catches and holds it in position and the flat portion of the latch lies between the flanges of the bobbin. Now take hold of the end of thread projecting from the hole in the bobbin and proceed to wind, turning the balance wheel over toward you; after a few turns the end of thread held in the hand should be broken off; when the bobbin is filled the bobbin winder stops automatically and the bobbin can be taken off and replaced in the bobbin case. It is important that it should be placed so that the left hand side, as it lies in the case, will turn toward you. Now draw the

thread toward you, then to the left and backward into the groove, and between the side of the bobbin case and the tension spring; this will complete the threading of the bobbin case.

TO SET THE NEEDLE

Turn the balance wheel until the needle bar is at its highest point; loosen the needle clamp screw near the lower end of the bar, insert the shank of the needle with the flat side toward the screw, push it up as far as it will go and tighten the screw; the needle will require no further adjustment.

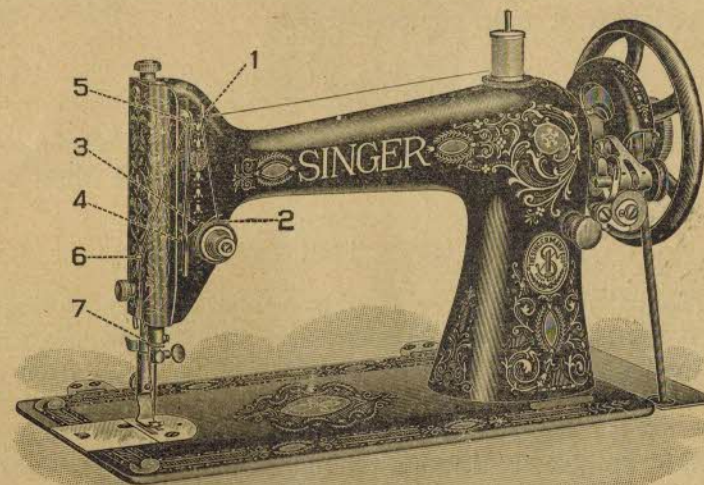


FIG. 4

TO THREAD THE NEEDLE

Place the spool of thread upon the spool pin on the arm; lead the thread into the wire guide (see 1, Fig. 4) down, under and from right to left between the tension discs (2), into the small wire spring (3) at the left of the discs, under the slack thread regulator (4) at the left, up and from right to left through the hole (5) in the end of the take-up, down into the eyelet (6) in front of the face plate, into the wire guide (7) on the sleeve in which the needle bar moves, then from left to right through the eye of the

needle. Enough thread must be drawn through the needle to leave an end at least two inches long when the thread take-up is at its highest point, with which to commence sewing.

TO PREPARE FOR SEWING

Before commencing to sew, take hold of the end of the needle thread, leaving it slack from the hand to the needle and turn the balance wheel toward you until the needle moves down and up again to its highest point; the needle thread has then been carried around the under thread, which can be drawn up through the hole in the throat plate by the needle thread, and both should then be laid back under the presser foot.

TO COMMENCE SEWING

Place the material under the needle, let the presser foot down upon it and start the machine, turning the balance wheel over toward you.

TO REGULATE THE TENSIONS

The under tension is regulated by a small screw and spring on the left-hand side of the bobbin case (see Fig. 2); turn this screw over toward you to make the thread draw off harder, or from you to make it draw easier; after this tension has been once properly adjusted it is rarely necessary to change it, as a correct stitch can usually be obtained by varying the tightness of the upper thread; the upper tension discs are separated and inoperative when the presser foot is raised, therefore it is necessary to have the foot down when regulating this tension; it is regulated by the thumb screw, spring and discs, on the arm directly in front (see 2, Fig. 4); turn the thumb screw over to the right to make the upper thread tighter, or to the left to make it looser.



FIG. 5

For ordinary stitching the upper and under threads should be locked in the center of the thickness of the material, as shown in Fig. 5.



FIG. 6

If the upper thread is held too tightly by its tension, or if the under thread is too loose, the thread will lie straight along the upper surface of the material, as shown in Fig. 6.



FIG. 7

If the under tension is too tight or the upper too loose, the thread will lie straight along the under side of the material, as shown in Fig. 7.

TO TURN A CORNER

Stop the machine while the needle is rising, but before it is out of the material raise the presser foot and turn the corner, using the needle as a pivot.

TO REMOVE THE WORK

Let the thread take-up rest at its highest point; raise the presser foot and draw the fabric back and to the left two inches or more; cut the threads close to the goods, leaving the ends under the presser foot.

FOR SEWING FLANNEL OR BIAS SEAMS

Use a short stitch and light tensions, so that there will be sufficient thread in the seam to allow the goods to stretch if necessary.

TO ALTER THE LENGTH OF STITCH

Upon the side of the arm near the bobbin winder is a large thumb screw; turn it over to the right to make the stitch longer, or to the left to make it shorter.

TO CHANGE THE PRESSURE OF THE PRESSER FOOT ON THE MATERIAL

Turn the large thumb screw in the highest part of the arm, directly over the presser foot, to the right to make the pressure heavier, or to the left to make it lighter; the pressure should be

only heavy enough to prevent the material rising with the needle and to ensure that the feed moves the work along evenly; a heavier pressure would make the machine run harder and be of no benefit.

NEEDLES

Needles for Machine No. 66-1 are of Class and Variety 15 x 1 and are made in sizes suitable for the different sizes of thread commonly used.

When ordering needles give the *quantity* and *size* required, also the *class* and *variety* numbers, separated by x; an order for a dozen No. $\frac{1}{2}$ Needles should read:

"One Doz. No. $\frac{1}{2}$ Needles, 15 x 1."

RELATIVE SIZES OF NEEDLES AND THREAD

SIZES OF NEEDLES	CLASS OF WORK TO SEW	SIZES OF COTTON, LINEN OR SILK
0	Very thin Muslin, Cambrics, Linens, etc.	100 to 150 Cotton 000 & 00 Silk Twist
B	Very fine Calicoes, Linens, Shirtings, fine Silk Goods, etc.	80 to 100 Cotton O Silk Twist
$\frac{1}{2}$	Shirtings, Sheetings, Bleached Calicoes, Muslins, Silk and general domestic goods and all classes of general work	60 to 80 Cotton A and 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, Mantles, 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

To make a smooth, even stitch with your machine, it is necessary to use good, firmly twisted and smoothly finished thread, that passes freely through the eye of the needle. No other needles will give as good results and satisfaction as those recommended above.

Supplies of parts or needles for the machine can be purchased at any Singer shop, or ordered by mail; money, or a post office order covering their value, including postage should be enclosed with the order, which will then receive immediate attention, and be promptly filled and forwarded by mail or express.

INSTRUCTIONS

FOR USING

ATTACHMENTS

WITH

SINGER SEWING MACHINE

NO. 66-1

ATTACHMENTS NO. 35920

FOR

MACHINE NO. 66-1

NO.		RETAIL	U. S. POSTAGE
35920	Set complete	\$5 00	\$ —
25525	Bias Gauge	10	01
35956	Binder	50	02
32522	Bobbin (five)	each 05	01
25527B	Cloth Guide	10	02
287B	Cloth Guide Thumb Screw	10	01
35957	Hemmer (Adjustable)	1 00	02
	Needles, 15 x 1 (two pkgs. of three) .. each	05	01
28880	Needle Case	05	01
35958	Quilter	30	02
35959	Ruffler	85	04
35960	Ruffler Shirring Plate	15	02
35961	Ruffler No. 35959 with No. 35960	1 00	05
25537	Screw Driver (Machine)	10	03
25538	Screw Driver (Bobbin Case)	05	02
25539	Stiletto	05	02
35962	Tucker	1 00	05
35963	Under Braider	20	02

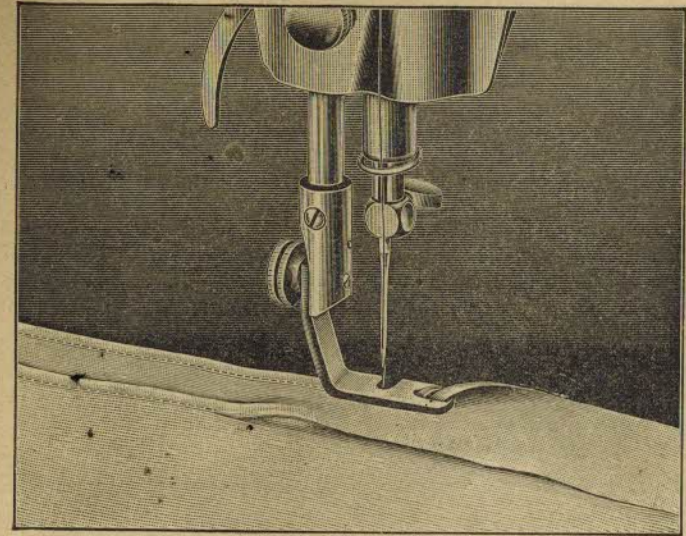


FIG. 8

THE FOOT HEMMER—HEMMING

Raise the needle to the highest point. Substitute the foot hemmer for the presser foot. See Fig. 8.

Clip off the right hand corner of the cloth, so that it will take the roll more naturally, 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. Hold the edge of the goods between the thumb and forefinger of the right hand while it is being hemmed, keeping the mouth of the hemmer just full. Should the edge of the goods begin to run out of the hemmer, move the hand to the right; should too much cloth run in, carry to the left.

Fig. 8 shows also what is known as a bag seam or fell, made by passing both edges of two pieces of fabric through the hemmer together and hemming them down.

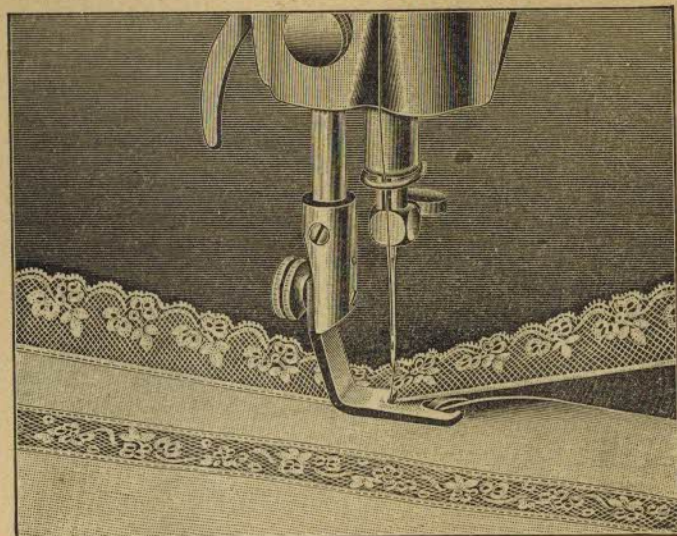


FIG. 9

HEMMING AND SEWING ON LACE IN ONE OPERATION

Start the hem as previously explained, and when it is well started raise the needle to its highest point. 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. 9.

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.

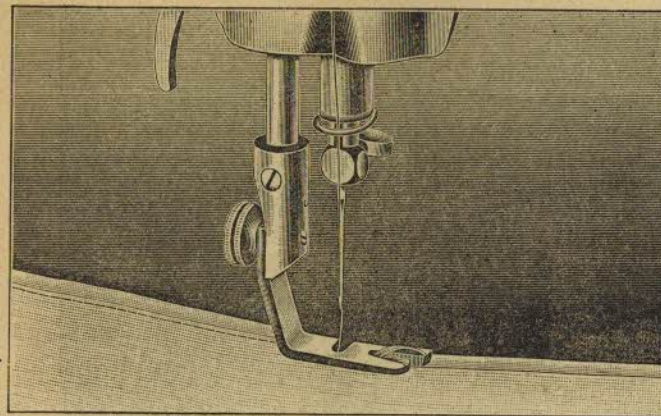


FIG. 10

THE FOOT HEMMER—FELLING

The two pieces of cloth to be felled should be laid together, wrong side out, 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 forming 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. 10. Then open the work out flat, wrong side up, the edges standing up straight, and taking the edges near the beginning of the first seam in the right hand, and the ends of the thread in the left hand, draw the edges into the hemmer without disarranging the work. Slightly lengthen the stitch and sew the second seam. See Fig. 11.

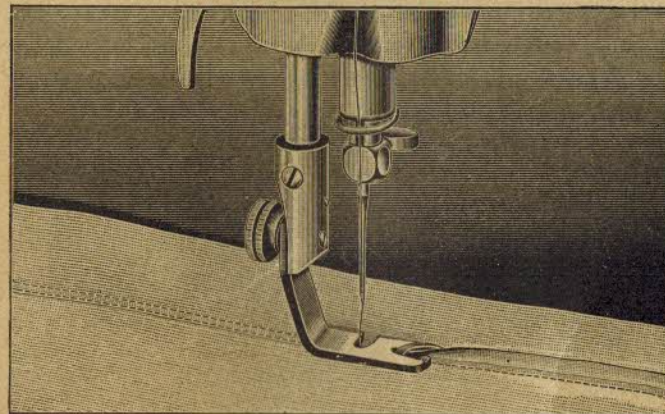


FIG. 11

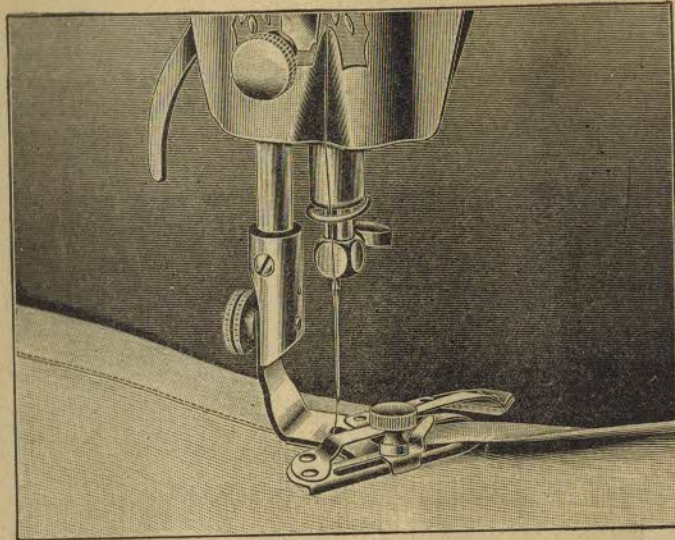


FIG. 12

THE ADJUSTABLE HEMMER (NO. 35957) HEMMING

Substitute the adjustable hemmer for the presser foot as shown in Fig. 12; this hemmer will turn hems from $\frac{3}{16}$ inch to 1 inch 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 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 the cloth as to keep the hemmer full. Felling can also be done with the adjustable hemmer by following instructions on page 19.

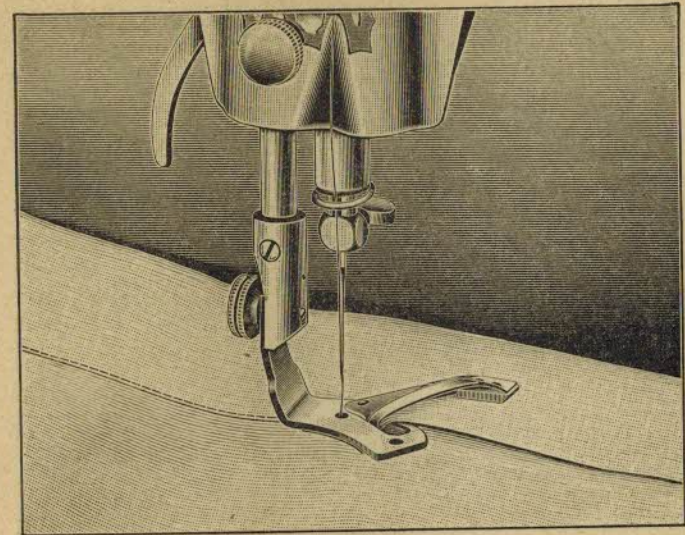


FIG. 13

THE ADJUSTABLE HEMMER (NO. 35957) 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, and the edge into the folder as shown in Fig. 13 and proceed to stitch the hem.

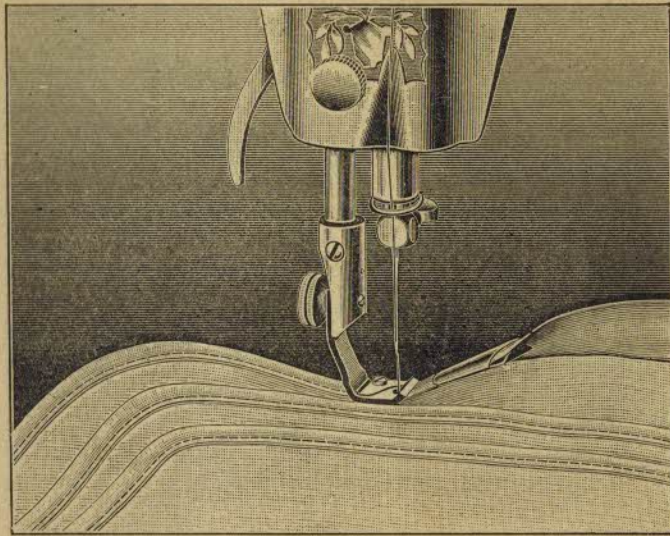


FIG. 14

THE BINDER (NO. 35956) BINDING

Substitute the binder for the presser foot. 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.

Bias binding should be cut fifteen-sixteenths of an inch wide. This may be done by placing the bias gauge upon the point of the scissors, setting the slide half way between the lines marked F and B and passing the edge of the goods through the gauge and against the slide while cutting.

TO BIND WITH DRESS BRAID

Proceed the same as when using the bias binding, as explained above; the only difference is, the dress braid being narrower, the edges will not be turned under, as is the case with bias binding.

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. 14.

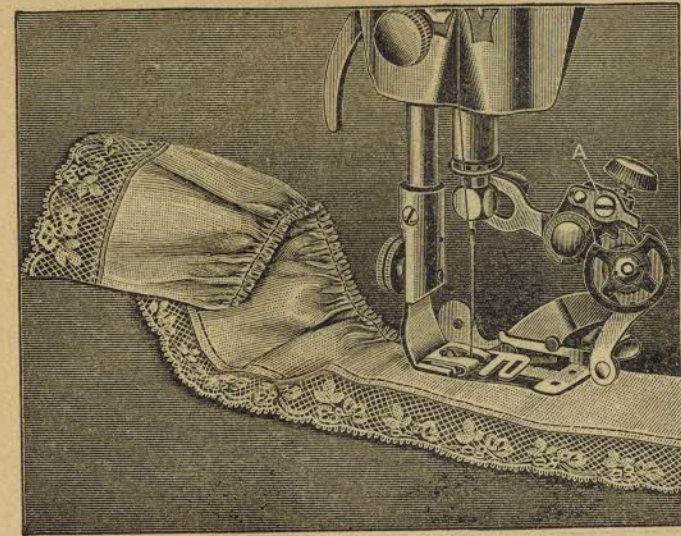


FIG. 15

THE RUFFLER (NO. 35959) RUFFLING

Remove the presser foot and attach the ruffler in its place, connecting the lever with the needle clamp, as shown in Fig. 15.

To make a stitch in each ruffle the screw (A) must be turned over as far as possible to the left. See Fig. 15.

Place the goods to be ruffled between the lower or separator plate and the ruffling blade, push forward until under the needle, lower the presser bar and proceed.

The stroke of the ruffling blade is governed by the regulating thumb screw on the lever. To make a finer gather, shorten the stitch and the stroke of the ruffling blade. A full gather requires a longer stroke of the ruffler blade.

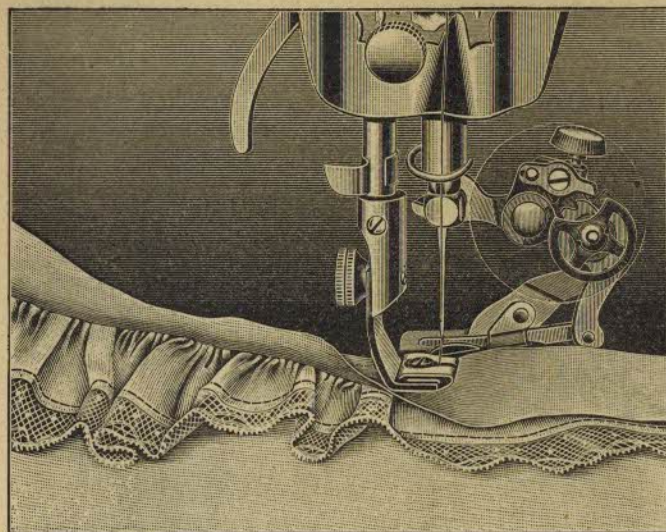


FIG. 16

THE RUFFLER (NO. 35959) RUFFLING BETWEEN BANDS

Place the lower piece below the separator plate, the piece to be ruffled under the ruffling blade and over the separator plate and the upper piece over the ruffling blade, as shown in Fig. 16.

TO RUFFLE AND SEW ON

Place the band below the separator plate, the piece to be ruffled between the separator plate and the ruffling blade, and proceed as in ruffling.

Oil the wearing parts of the ruffler before using.

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

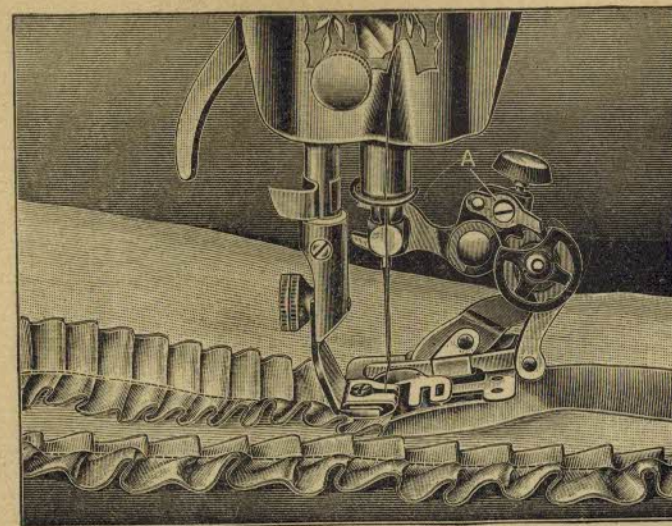


FIG. 17

FIVE STITCH PLAITING

To make the five stitch ruffle turn the screw (A) as far as possible over to the right, as shown in Fig. 17; the ruffling blade will then move forward and back only once every fifth stitch.

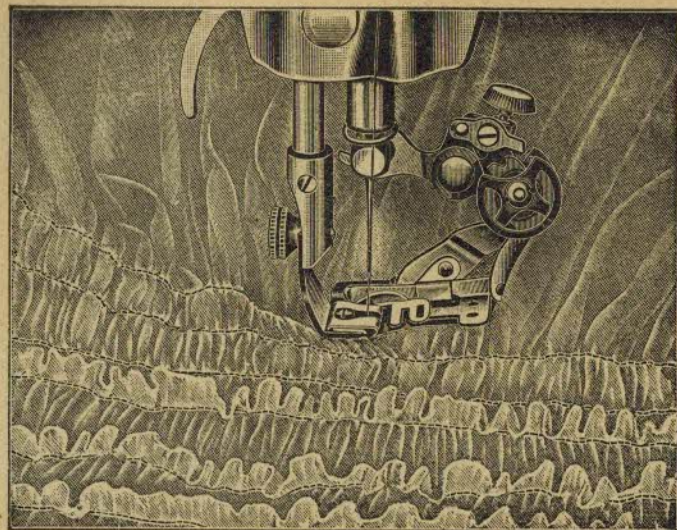


FIG. 18

THE RUFFLER WITH SHIRRING PLATE (NO. 35961) SHIRRING

To attach the shirring plate draw the slide that covers the shuttle to the left, insert the downwardly projecting hooks on the shirring plate (No. 35960) 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; close the shuttle covering slide.

The lower or separator plate of the ruffler is fastened by a screw; loosen the screw, take off the separator plate and attach the ruffler to the presser bar as already instructed

TO SHIRR

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

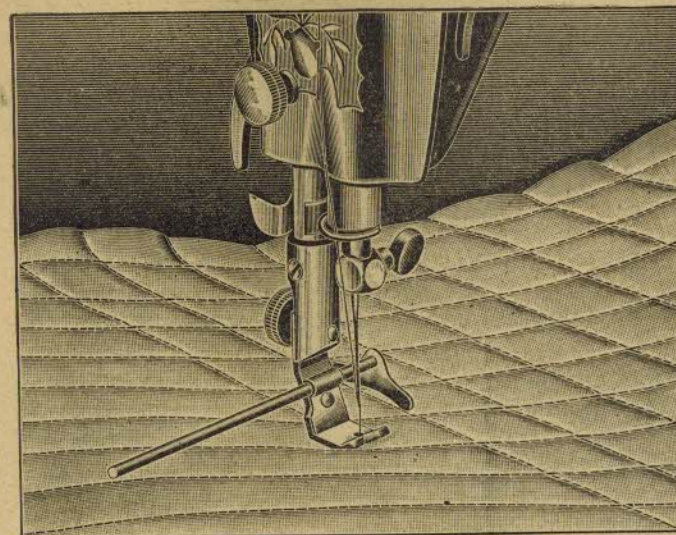


FIG. 19

THE QUILTER (NO. 35958)

Substitute the quilter foot for the presser foot and let it down upon the work; 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.

TO QUILT

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.

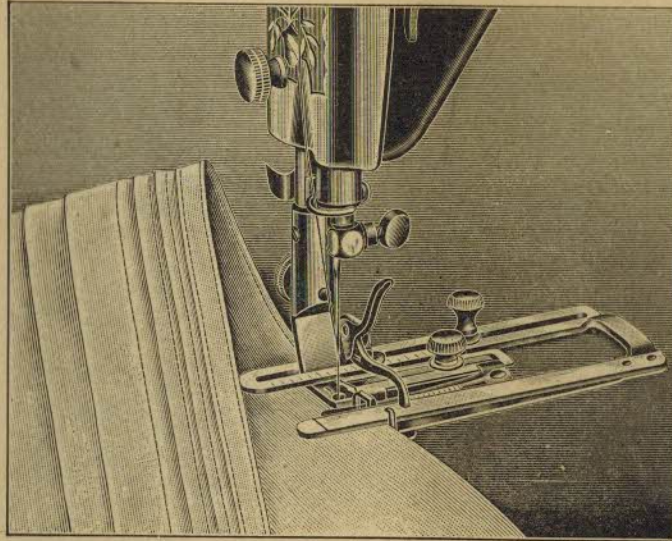


FIG. 20

THE TUCKER (NO. 35962)

Fasten the tucker to the presser bar in place of the presser foot. The width of the tuck is determined by scale of figures nearest the operator, which shows in eighths of an inch the distance of the edge of the fold from the line of stitches.

The position of the mark for the next tuck is determined by the scale farthest from the operator; for blind tucks without spaces set the same figure on this scale as is used on the other scale opposite the line back of the needle hole in the presser foot; to make spaces between the tucks move the back scale farther to the left until the desired space is obtained. When making the last tuck the lever upon which the needle clamp strikes while tucking should be turned up and back; while it is in this position no mark for a succeeding tuck is made upon the goods.

TO OPERATE THE TUCKER. Crease down the first fold by hand; pass the folded edge between the spring and marker nearest you and back under the scale and presser foot; draw to the right against the guide; lower the presser foot; see that the lever for the needle clamp to strike is in its forward position, then proceed with the first tuck. For subsequent tucks fold down on the crease made by the tucker and proceed as before.

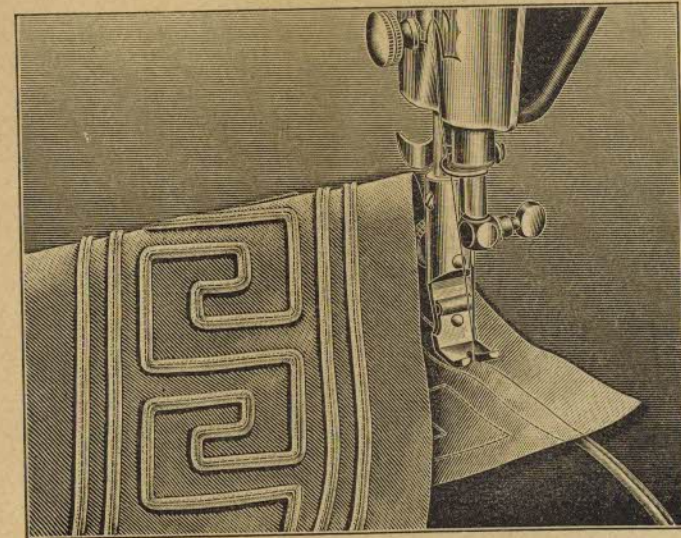


FIG. 21

THE UNDER BRAIDER (NO. 35963) BRAIDING

Substitute the quilter foot for the regular presser foot. Attach the under braider as directed for the shirring plate, see page 26. The pattern or 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.

PRICE LIST
OF
ACCESSORIES, BELTS, NEEDLES, OIL AND PARTS
FOR MACHINE NO. 66-1

NO.	DESCRIPTION	PRICE EACH	U. S. POSTAGE EACH
25134	Belt with Hook for Cabinet Table Set.....	\$ 20	\$ 03
25187	Belt with Hook for Cover Set.....	20	02
32589	Feed Cover Plate to use with 35506.....	10	02
32600	Feed Dog	35	02
28789	Hemmer (foot)	35	02
28233	Key.....	05	02
2054	Needle Clamp.....	25	01
	Needles, 15 x 1, package of three.....	05	01
	Oil, 3 oz. bottle.....	10	
35676	Oiler with Cap and Spout	05	04
32601	Presser Foot.....	25	02
35506	Presser Foot for Embroidery Work.....	50	01
1158B	Presser Foot Thumb Screw.....	10	01
32522	Oscillating Hook Bobbin.....	05	01
8238	Tension Spring.....	05	02
26076	Thread Cutter	05	01
32575	Thread Take-up Spring	03	02
32602	Throat Plate.....	30	02

INSTRUCTIONS FOR ORDERING

Be careful to give correct number or name of article desired. When orders amount to less than \$1.00, return postage must be included with remittance, or order will not be filled. Goods will not be sent C. O. D. Money must accompany order in every instance.

