

Form 19767
Rev. (1154)

INSTRUCTIONS
FOR USING
SINGER
ELECTRIC SEWING MACHINE
(P. H. Built-on Motor)
1200-1
REVERSIBLE FEED
LOCK STITCH, FOR DRESSMAKERS

WHEN REQUIRING
NEEDLES, OIL,
PARTS OR
REPAIRS FOR
YOUR MACHINE



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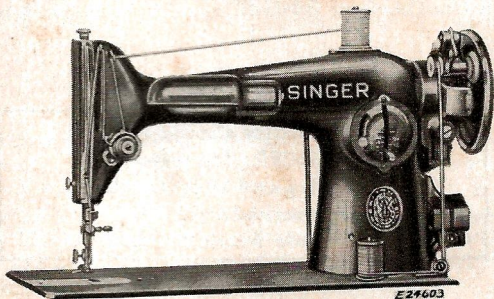
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19767

INSTRUCTIONS
FOR USING
SINGER*
ELECTRIC SEWING MACHINE
(P. H. Built-on Motor)
1200-1



REVERSIBLE FEED
HORIZONTAL ROTARY HOOK
FOR DRESSMAKERS

THE SINGER MANUFACTURING COMPANY

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DESCRIPTION

Machine 1200-1 is especially suited for dressmakers and home industrial use. It has a horizontal rotary sewing hook on a vertical axis and makes the lock stitch.

It has a reverse feeding mechanism by means of which the machine stitches as readily in a reverse direction as it does in a forward direction.

It is used on Set No. 134 and Stand 46913, and is fitted with a knee lifter for raising and lowering the presser foot.

The machine is driven by an electric motor built on the back of its arm, and controlled by a treadle.

The machine is also equipped with an electric light.

Before starting to darn or embroider, make the simple adjustment on the machine, as instructed on page 34.

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THE KNEE LIFTER

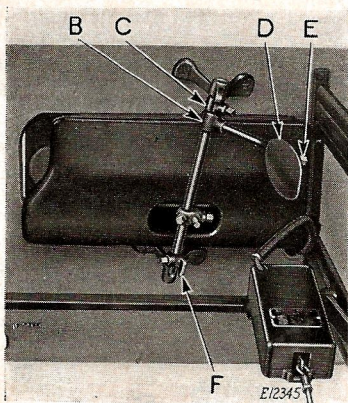


FIG. 1. UNDERSIDE OF TABLE, SHOWING
DRIP PAN AND KNEE LIFTER

The stop **C**, **Fig. 1** should be set so that the knee lifter cannot raise the presser bar any higher than it is raised by the hand lifter **C**, **Fig. 3**, in order to prevent strain on the tension release mechanism. The rear stop **F**, **Fig. 1** should permit a little loose motion of the knee lever after the presser foot has been lowered to the throat plate.

The knee plate **D**, **Fig. 1** may be moved up or down to suit the operator after loosening the set screw **E**. It may be swung to the right or left after loosening the set screw in the hub **B**.

ELECTRICAL INFORMATION

Motor

The SINGER electric motor, located at the back of the machine, is regularly furnished for operation on a direct current of 110-120 volts or on alternating current of 110-120 volts, 25 to 75 cycles. Special motors can be furnished for direct or alternating current for any voltage between 50 and 250, and for 32 volts direct current.

To Connect Machine to Electric Service Line

Before connecting the machine to the electric service line, be sure that the voltage and the number of cycles stamped on the motor nameplate are within the range marked on the electric meter installed by the electric power company.

Push the terminal plug at one end of the electric cord as far as it will go on the three-pin terminal block at the right of the machine, as shown in **Fig. 5**. Attach the plug at the other end of the cord to the nearest electric outlet and the machine is ready for operation.

CAUTION

When you have finished your sewing, always disconnect the plug from the electric outlet.

ELECTRIC LIGHT

To turn the light "on" or "off", a switch is conveniently located at the three-pin terminal block, as shown at **D, Fig. 5.**

To Remove and Replace the Bulb

Do not attempt to unscrew the bulb. It is of the bayonet and socket type and does not unscrew.

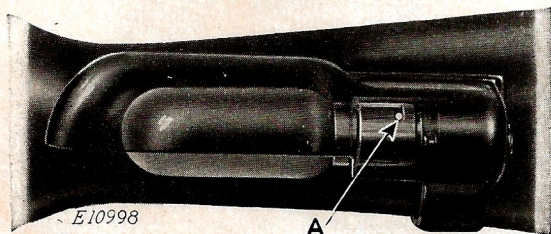


FIG. 2

To Remove the Bulb. Press the bulb into the light socket and at the same time turn the bulb over toward the machine as far as it will go, then withdraw the bulb.

To Insert a New Bulb. Press the bulb into the light socket and turn it over from the machine until the bulb pin **A, Fig. 2** enters the notch in the socket, as shown in **Fig. 2.**

TO OPERATE THE MACHINE

Raise the presser foot **B**, Fig. 3 by means of the presser bar lifter **C** to prevent injury to the foot **B** and feed **A**.

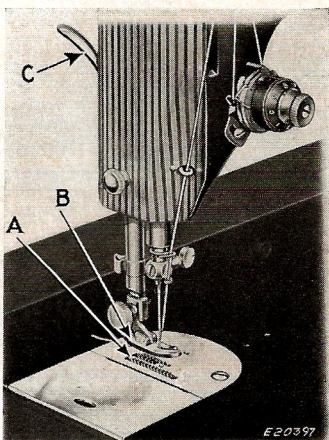


FIG. 3. FRONT VIEW OF THE MACHINE

Place a piece of cloth under the presser foot and let the foot down upon it.

Turn on the electric current and depress the treadle. As the pressure on the treadle is increased, the speed of the machine is increased, the speed being controlled entirely by the amount of pressure on the treadle. Operate the machine in this way, without being threaded, until you have become accustomed to guiding the material and operating the treadle.

TO REMOVE THE BOBBIN

Draw to the left the slide in the bed of the machine and lift out the bobbin with the thumb and forefinger of the left hand, as shown in **Fig. 4**.

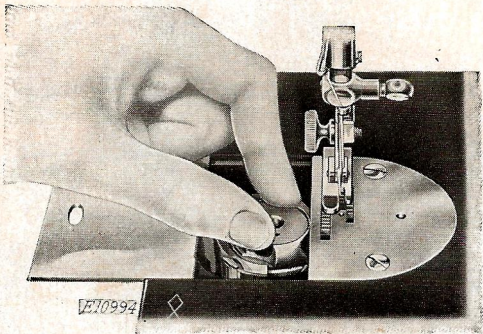


FIG. 4. REMOVING THE BOBBIN

TO WIND THE BOBBIN

It is necessary to understand the stop motion **C**, **Fig. 5** by which the hand wheel **B**, **Fig. 5** can be released when required, thus permitting the winding of bobbins without running the stitching mechanism.

Release the hand wheel by turning the stop motion screw **C** over toward you. It is necessary to hold the hand wheel while loosening the stop motion screw.

Place the bobbin on the bobbin winder spindle and push it up closely against the shoulder, having

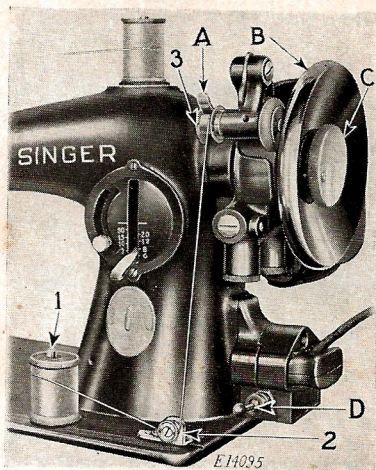


FIG. 5. WINDING THE BOBBIN

the small pin in the shoulder enter the hole in the side of the bobbin. Put the spool of thread on the spool pin 1. Draw the thread under and between the tension discs 2 on the bed of the machine, then pass the thread up and through the hole 3 in the left side of the bobbin, from the inside. Press down on the bobbin and the bobbin winder latch A, Fig. 5 will drop down and hold the bobbin winder pulley against the hub of the hand wheel. Then operate the machine the same as for sewing.

The end of the thread must be held by hand until a few coils are wound and should then be broken off. When sufficient thread has been wound upon the bobbin, the bobbin winder is automatically released from the hand wheel.

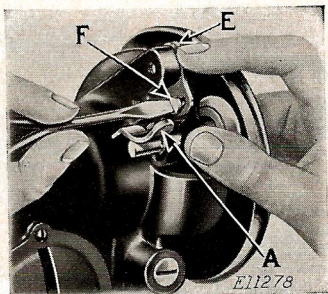


FIG. 6. ADJUSTMENT OF BOBBIN WINDER

If the pressure of the bobbin winder pulley against the hub of the hand wheel is insufficient for winding the bobbin, press down the bobbin winder until the latch **A** drops down and holds it, then loosen the adjusting screw **F**. With the forefinger, push back the upper end of the slotted plate **E** as far as it will go, as shown in **Fig. 6**, and at the same time press the bobbin winder pulley against the hub of the hand wheel, then tighten the adjusting screw **F**.

If the thread does not wind evenly on the bobbin, loosen the screw which holds the tension bracket **2**, **Fig. 5** in position on the bed of the machine and slide the tension bracket to the right or left, as may be required, then tighten the screw.

Bobbins can be also wound while the machine is sewing.

TO REPLACE THE BOBBIN CASE

Hold the bobbin between the thumb and fore-finger of the left hand, the thread drawing on the bottom from right to left, as shown in Fig. 7.

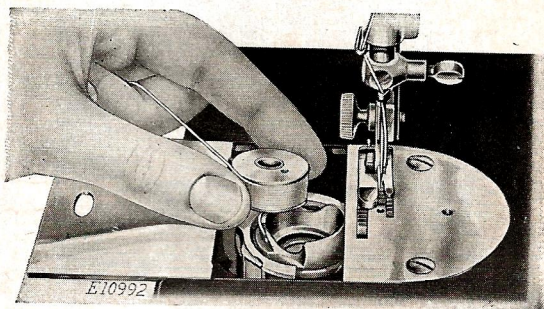


FIG. 7. REPLACING THE BOBBIN

Place the bobbin into the bobbin case and draw the thread into the slot 1, Fig. 8 in the bobbin case, as shown in Fig. 8.

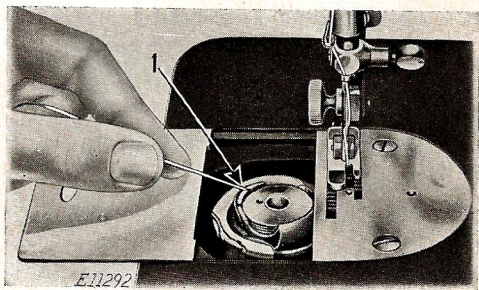


FIG. 8. THREADING THE BOBBIN CASE

Draw the thread toward you between the bobbin case and the tension spring until it passes the notch 2, Fig. 9 in the bobbin case, as shown in

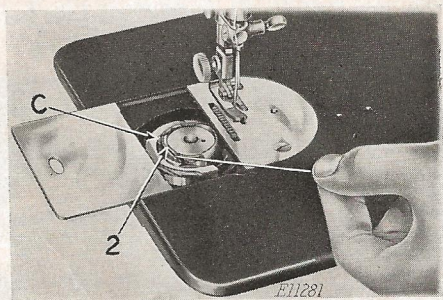


FIG. 9. BOBBIN CASE THREADED

Fig. 9. Then close the slide and at the same time draw the thread into the long notch in the right edge of the slide, as shown at 3, Fig. 10.

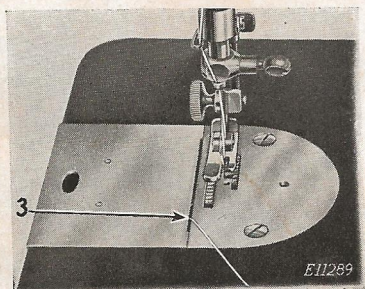


FIG. 10. UNDER THREADING COMPLETED

TO SET THE NEEDLE

Select a needle to suit the size of thread being used. See chart on inside rear cover of this book.

Turn the hand wheel over toward you until the needle bar is at its highest position, and loosen the thumb screw **A**, **Fig. 11** in the needle clamp.

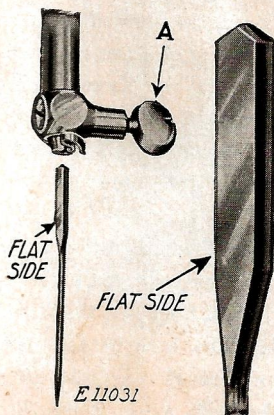


FIG. 11. POSITIONING OF NEEDLE
IN NEEDLE CLAMP

Have the flat side of the shank of the needle toward the left as shown above and put the needle up into the clamp as far as it will go. Then tighten the thumb screw.

UPPER THREADING

(SEE FIG. 12)

Turn the hand wheel over toward you until the thread take-up lever **5** is raised to its highest position. Place the spool of thread on the spool pin at the top of the machine and pass the thread to the left through the thread guide **1**, down, under and from right to left between the tension discs **2**, the thread guard **X** guiding the thread between the discs. (See insert in **Fig. 12**). With the right hand, hold the spool to prevent it from turning, and, with the left hand, draw the thread up into the take-up spring **4** until the thread enters the retaining fork **3**, then pass the thread from right to left through the hole in the thread take-up lever **5**, down through the guide **6** on the face plate, into the wire guide **7** on the needle bar bushing, into the guide **8** on the needle clamp and **from right to left** through the eye **9** of the needle.

Draw about two inches of thread through the eye of the needle with which to start sewing.

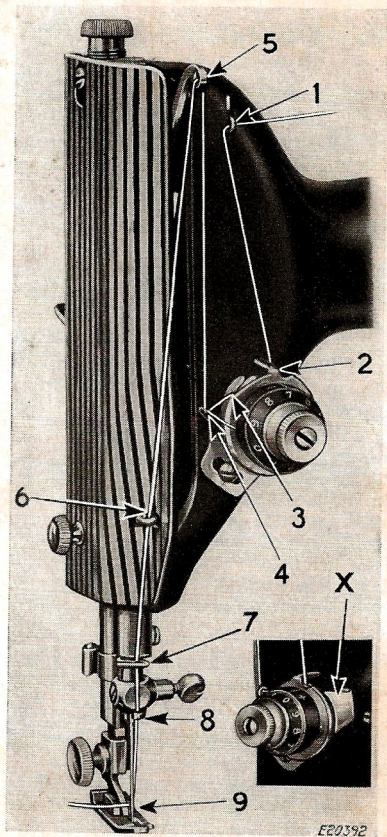


FIG. 12. UPPER THREADING

TO PREPARE FOR SEWING

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

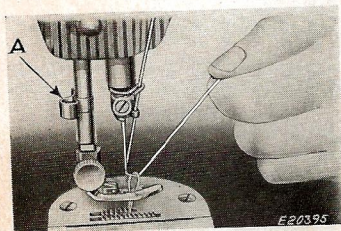


FIG. 13. DRAWING UP BOBBIN THREAD

Turn the hand wheel over toward you until the needle moves down and up again to its highest position, 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, as shown in Fig. 13. Lay both threads back under the presser foot diagonally across the feed, as shown in Fig. 14, to the right or left, depending upon which side of the needle the material is to be located, so that when the presser foot is lowered, the threads will be firmly held between the feed and the presser foot.

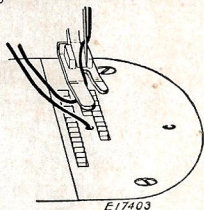


FIG. 14. THREADS IN POSITION TO START SEWING

TO START SEWING

Place the material beneath the presser foot, lower the presser foot and start to sew.

When sewing thick material, it may be necessary to turn the hand wheel over toward you by hand to start the machine. This should also be done if the machine stops when sewing across thick seams.

TO REMOVE THE WORK

Stop the machine with the thread take-up lever **5, Fig. 12** at its highest position, raise the presser foot and draw the fabric back and to the left, pass the threads over the thread cutter **A, Fig. 13** and pull down lightly to sever them. Leave the ends of the threads under the presser foot.

TO TURN A CORNER

Stop the machine when the needle is at its lowest position. Raise the presser foot and turn the work as desired, using the needle as a pivot, then lower the presser foot.

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 turning the thumb screw **C, Fig. 28** on the top of the machine to the left so that it screws up. To increase the pressure, turn this thumb screw to the right so that it screws down. 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. The heavier the material, the heavier the pressure, the lighter the material, the lighter the pressure.

TO REGULATE THE DIRECTION OF FEED

To feed the goods **from you**, push down the stitch regulator lever **B**, Fig. 15 as far as it will go.

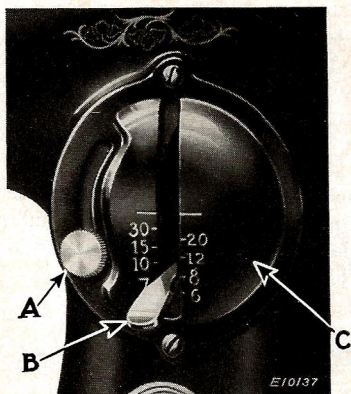


FIG. 15. SHOWING LEVER FOR REVERSING DIRECTION OF FEED AND REGULATING LENGTH OF STITCH

To feed the goods **toward you**, raise the stitch regulator lever **B** as high as it will go.

The direction of feed can be reversed at any point of a seam without removing the work from the machine.

Back tacking is therefore readily accomplished and the fastening of the ends of seams is made easy.

TO REGULATE THE LENGTH OF STITCH

The machine can be adjusted to make from 6 to 30 stitches to the inch as indicated by the numerals on the stitch indicator plate **C**, **Fig. 15**.

The number of stitches to the inch that the machine is set to make is indicated by the number which is in line with the upper side of the stitch regulating lever **B**, **Fig. 15**.

To change the length of stitch, loosen the thumb screw **A**, **Fig. 15** and move it to the bottom of the slot. Then move the stitch regulating lever **B** until its upper side is in line with the number of the desired length of stitch. Now move the thumb screw **A** until the stitch regulating plate touches the lever **B**, then tighten the thumb screw **A**.

The machine will make the same number of stitches to the inch in reverse direction when the lever **B** is moved to its highest position.

Should forward stitching, only, be necessary, move the screw **A** down to the bottom of the curved slot and firmly tighten it. The length of the forward stitch can then be changed by moving the lever **B** downward for a long stitch or upward for a short stitch. In this case the lever should not be raised higher than the top line in the scale.

BASTING

The longest stitch, No. 6 on the stitch indicator, is found satisfactory for basting and is easily removed by clipping every sixth stitch and withdrawing the long continuous thread.

Machine basting is firmer and more even than that done by hand in addition to being much quicker.

TO SEW FLANNEL OR BIAS SEAMS

Use a shorter stitch when sewing bias or curved seams to increase the elasticity of the seam and prevent seam failure under strain. No change in tensions is required.

TENSIONS

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



FIG. 16. 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 side of the material, thus:



FIG. 17. 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:



FIG. 18. LOOSE NEEDLE THREAD TENSION

Caution—It is important for the tension thumb nut **B**, Fig. 19 to have a firm fit on tension stud **O**, Fig. 20, page 22 to keep the numbered dial **D** in the position set for the required tension. To remedy a loose fit of the nut, remove parts **B**, **D**, **E**, **F** and **G**, Fig. 20, and slightly spread the stud, then reassemble the parts as instructed on pages 22 to 25 inclusive.

TO REGULATE THE NEEDLE THREAD TENSION

The tension on the needle thread can be regulated only when the presser foot is down.

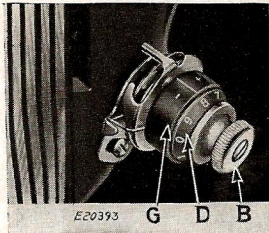


FIG. 19. NEEDLE THREAD TENSION

The numbered dial **D**, Fig. 19 is marked with numbers ranging from 0 to 9 which indicate different degrees of tension that can be produced. The numbers do not denote a particular size of thread. By noting the number which is opposite the center line between the plus and minus signs, on the in-

indicator **G** when set for a satisfactory tension on the work being stitched, the work can be readily reverted to when a change is made in the tension or size of thread.

To increase the tension, turn the thumb nut **B** over to the right until the desired number on the numbered dial **D** is opposite the center line, the higher numbers denoting increased tension.

To decrease the tension, turn the thumb nut **B** over to the left, the lower numbers indicating less tension.

The tension indicator **G** is marked with the signs $+$ and $-$, which also indicate the direction in which to turn the thumb nut **B** for more or less tension.

TO REGULATE THE BOBBIN THREAD TENSION

The tension on the bobbin thread is regulated by the screw **C**, Fig. 9 in the bobbin case tension spring. To increase the tension, turn the screw **C** over toward you. To decrease the tension, turn this screw over from you.

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 DISASSEMBLE THE NEEDLE THREAD TENSION

Turn the thumb nut **B**, Fig. 20 to the left until it stops at "0" on the numbered dial **D**, then

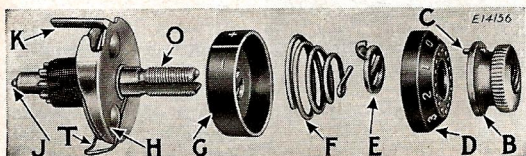


FIG. 20

press in the dial to disengage the pin **C** in the thumb nut from the dial and remove the thumb nut and dial, stop washer **E**, tension spring **F**, indicator **G** and tension disc assembly **H**, which includes the thread take-up spring, thread guard plate and two discs.

Note. It is not necessary to remove the stud **O**, Fig. 20 from the machine arm in order to disassemble the thread tension. It is shown removed, in Fig. 20, only for the purpose of illustration.

TO REASSEMBLE THE NEEDLE THREAD TENSION

First make sure that the tension releasing pin **J**, only the end of which is shown in Fig. 20, is in place in the stud **O**.

Place the two tension discs **L**, Fig. 21 with the flat thread-bearing sides of the discs together in position on the thread guard **M**. Then pass the

eyelet **N** of the thread take-up spring under the thread guard, having the coils of the spring above the tension discs as shown in **Fig. 21**.

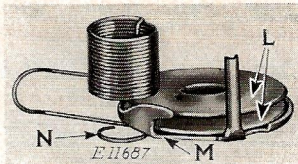


FIG. 21

Guide the tension disc assembly onto the stud so that the extension **K**, **Fig. 20** of the thread guard enters the hole in the machine arm, and the tail (inside the coil) of the thread take-up spring enters one of the grooves in the stud. Next replace the indicator with the large open side facing the

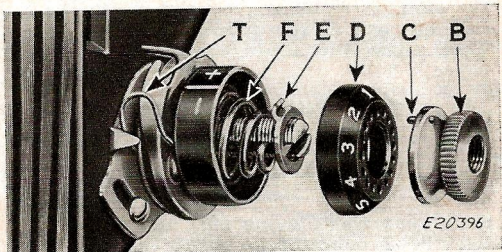


FIG. 22

end of the stud so that the plus and minus marks will be at the top (with the minus sign at the left) and hold the parts, thus assembled, against the shoulder of the stud. Then insert the tension spring **F**, **Fig. 20** in the indicator with the first (half) coil of the spring straddling the lower half of the stud. Guide the stop washer **E** onto the stud so that the extension will be above the tension stud.

If the spring and stop washer are in correct position, the extension **S** will clear the first (half) coil of the tension spring as shown in **Fig. 23**.



FIG. 23

Next place the numbered dial **D** on the stud so that the numeral 2 is opposite the stop washer extension, then push the dial to compress the spring so that the thumb nut can be turned onto the stud, carefully guiding the pin in the thumb nut into one of the holes of the numbered dial. Then proceed to adjust the tension as instructed below.

TO ADJUST THE NEEDLE THREAD TENSION

Lower the presser bar and turn the numbered dial **D** to bring the numeral "1" opposite the center line between the plus and minus signs on the tension indicator **G**. Press the numbered dial inward as far as it will go, and turn the thumb nut **B** until the pin **C** engages one of the holes in the numbered dial. Turn the thumb nut, together with the numbered dial, to the left. This should cause the numeral "0" to stop opposite the center line if the tension is properly assembled. Now insert the pin **C** of the thumb nut **B** in different holes of the numbered dial until one is found which gives a **slight perceptible tension** on No. 50 mercerized thread when the thumb nut is turned to

the extreme left and the numeral "0" is opposite the center line. This tension gradually increases with the turn of the thumb nut to the right, providing a full range of tensions from light to heavy with one revolution of the thumb nut.

TO ADJUST THE TENSION ON THE THREAD TAKE-UP SPRING

The tension on the thread take-up spring **T**, **Fig. 22** should be just sufficient to take up the slack of the needle thread until the eye of the needle reaches the goods in its descent.

If the tension on the thread take-up spring requires adjustment, remove the tension disc assembly, disengage the end of the spring from the groove in the tension stud, revolve the spring and place its end in the groove which produces the correct tension.

TO ADJUST THE BOBBIN THREAD TENSION

First adjust the needle thread tension, as instructed on **page 24** and above. Then, using No. 50 mercerized thread in both the needle and the bobbin, and using two thicknesses of thin material under the presser foot, turn the numbered dial, by means of the thumb nut, to bring the numeral "4" opposite the center line. A few stitches should now be made in the material and then examined to see if the stitch is properly locked in the center of the material; if not, proceed to regulate the tension on the bobbin thread as instructed on **page 21**.

A wide range of materials and threads can now be accommodated without further adjustment of the bobbin thread tension.

Any change in tension, required to obtain a proper stitch to suit different materials being sewn, can be made by a slight adjustment of the tension on the needle thread only.

HINTS

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

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 **page 12**).

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.

Bent thread take-up spring.

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 or too large for the thread in use.

Free Instruction for using the machine is gladly given at any SINGER Shop.

TO OIL THE MACHINE

To insure easy running, the machine requires oiling and if used continuously it should be oiled

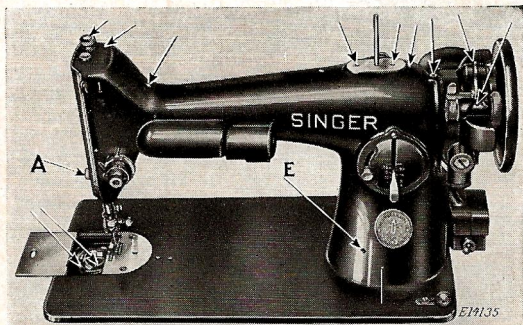


FIG. 24. FRONT VIEW SHOWING OILING POINTS

each day. With moderate use, an occasional oiling is sufficient. Oil should be applied at each of the places shown by unlettered arrows in **Figs. 24 to 29**. One drop of oil at each point is sufficient. Oil holes are provided in the machine for bearings which cannot be directly reached.

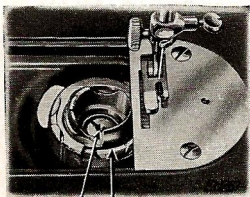


FIG. 25.

VIEW OF SEWING HOOK
SHOWING OILING POINTS

Draw to the left the slide in the bed of the machine. See that the thread take-up lever **5**, **Fig. 12** is at its highest position, then apply oil to the sewing hook race in the bobbin case and oil hole as indicated by the arrows in **Fig. 25**, then close the slide.

At the back of the machine is a round cover plate, fastened by a thumb screw. Loosen the thumb screw

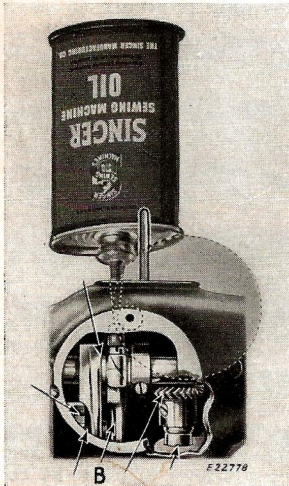


FIG. 26. OILING POINTS AT THE BACK OF THE MACHINE

and turn the cover plate upward and fasten by tightening the screw. Turn the hand wheel over toward you until connecting rod **B**, Fig. 26 is at its highest position. Then apply a few drops of oil through the hole in top of the machine, to the wick which is retained in the cap of the connecting rod as shown in Fig. 26. Also oil the other moving parts inside, then turn cover plate down and fasten as before.

Remove the thumb screw **A**, Fig. 24 near lower end of face plate and loosen screw **D**, Fig. 28 near upper end of face plate, then raise the face plate and slip it off over the head of screw **D**. Apply one drop of oil at each of the places indicated by unlettered arrows in Fig. 28, then replace the face plate and fasten it as before.

To reach the parts underneath the machine bed, turn the machine back on its hinges and apply oil to the oil holes and bearings indicated by the unlettered arrows in Fig. 29.

The gears concealed by gear cover **E2**, **Fig. 29** are oiled through oil hole **E**, **Fig. 24**.

The gears concealed by gear cover **D**, **Fig. 27** and **29** are oiled through the space just above this cover, as indicated by arrow **D2** in **Fig. 27**. After oiling the gears at **D2**, rotate the hand wheel toward you to distribute the oil on these gears.

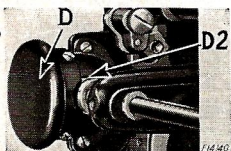
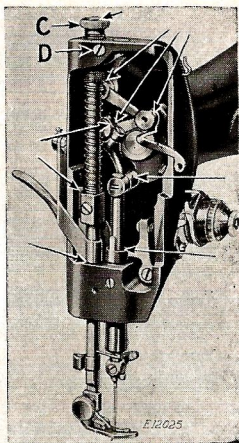


FIG. 27



**FIG. 28. END VIEW
SHOWING OILING POINTS**

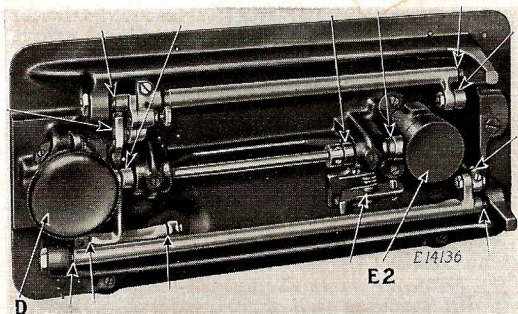


FIG. 29. OILING POINTS IN BASE OF MACHINE

TO LUBRICATE THE MOTOR

USE ONLY **SINGER** MOTOR LUBRICANT FOR LUBRICATING THE MOTOR. A tube of this lubricant is sent with the machine.

The **SINGER** MOTOR LUBRICANT is a specially prepared non-flowing compound which is not affected by varying temperatures. It is the only lubricant which will positively lubricate the motor. Other lubricants, including oil or ordinary grease must not be used for lubricating the motor, as they are harmful for this purpose.

When the machine is shipped from the factory, the two motor grease cups **A**, **Fig. 30** are filled with sufficient **SINGER** MOTOR LUBRICANT for approximately six months' use, under ordinary circumstances.

At least once a year thereafter, turn the machine back on its hinges and remove the two thumb screws from the two grease cups **A** and clean out the interior of the cups. Then insert the tip of the motor lubricant tube into the grease cups as shown in **Fig. 30** and, while holding the tube firmly against the bottom of the grease cups, squeeze about a quarter of a tube of the lubricant into each cup, then replace and tighten the thumb screws.

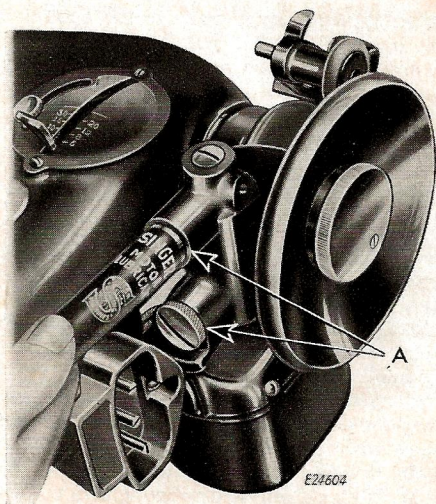


FIG. 30. LUBRICATING THE MOTOR

TO CLEAN THE STITCH FORMING MECHANISM

After considerable use, the stitch forming mechanism in the bed of the machine may become clogged with lint and, as this may interfere with the perfect operation of the machine, it should be removed.

It is rarely necessary to remove the bobbin case to clean out accumulated lint, but when required, the bobbin case may be removed and replaced as instructed below.

TO REMOVE THE BOBBIN CASE

(SEE FIG. 31)

The bobbin case may be easily removed from the machine without taking off the throat plate, although for the purpose of illustration the throat plate and feed dog are shown broken away in **Fig. 31**.

Remove the bobbin from the bobbin case. Turn the hand wheel over toward you until the end of the hook ring **E** is toward the front of the machine, as shown in **Fig. 31**. Insert the blade of the small tension screwdriver No. 120378, which is furnished with the machine, into the slot **C** between the ring and the edge of the spring, as shown in **Fig. 31**. With a downward pressure, turn the screwdriver one-half turn to the right so that the screwdriver will drop into the slot and unlock the spring. With the right hand, hold the hand wheel to prevent its turning, and, with the left, place the screwdriver against the edge of the slot in the ring and push it around in a direction opposite to the hook rotation until the circular cutout **B** is opposite the spring **D**. The ring and bobbin case may then be lifted out.

TO REPLACE THE BOBBIN CASE

(SEE FIG. 31)

When replacing the parts, first place the bobbin case into position with the finger **A** in the opening

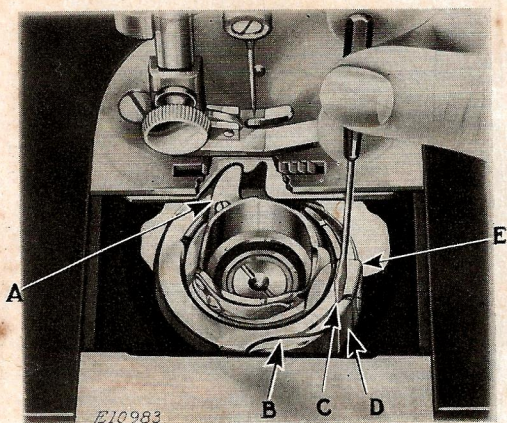


FIG. 31. BOBBIN CASE IN POSITION
(THROAT PLATE BROKEN AWAY TO SHOW
CORRECT POSITION OF FINGER A)

in the position plate under the feed dog as shown in **Fig. 31**. Turn the bobbin case back and forth slightly to make sure that it is properly seated, then place the hook ring **E** in position with the cutout **B** opposite the spring **D**. Press the ring into place and turn it in the direction of hook rotation until the spring locks it in position. Then replace the bobbin.

DARNING OR EMBROIDERING

When darning with fine thread, the use of SINGER* Darning and Embroidery Attachment 160620 is recommended. This attachment can be purchased at any SINGER Shop or from any SINGER salesman.

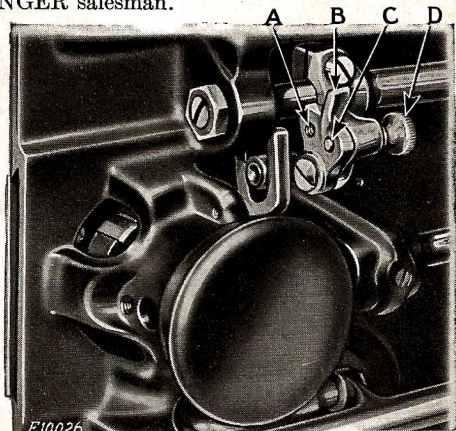


FIG. 32. ADJUSTMENT FOR DARNING OR EMBROIDERING

Turn the machine back on its hinges. Unscrew the thumb screw **D**, **Fig. 32**, which is located in the lower hole **C** in the feed lifting crank **B**. Move the feed lifting crank **B** down so that the thumb screw **D** will enter the proper hole **A**. Having inserted the screw in this hole, tighten it firmly. The feed is thus rendered inoperative and will not interfere with the free movement of the work. Bring the machine forward into place.

Move the stitch regulator lever **B**, **Fig. 15** to its neutral position at the center of the slot.

Remove the presser foot and let down the presser bar lifter to restore the tension on the needle thread which is released when the lifter is raised.

Draw up the bobbin thread as instructed on **page 16**.

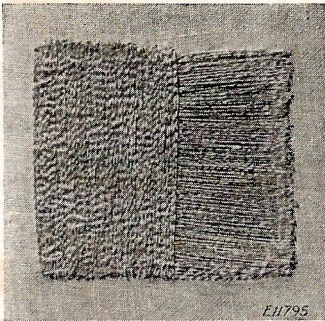


FIG. 33. DARNING IN PROCESS

When darning flat work, it is advisable to use embroidery hoops to hold the work.

Place the work in the machine, having the unworn part near the hole under the needle. Start the darning by making a line of stitches across the hole a little longer than the width of the hole. Continue making parallel lines of stitches across the hole, moving the work backward and forward and at the same time gradually moving the work sidewise until the hole is covered with lines of stitches running across the hole. Then start as before and move the work lengthwise of the hole until the stitches across the holes are completely covered and the darn is finished.

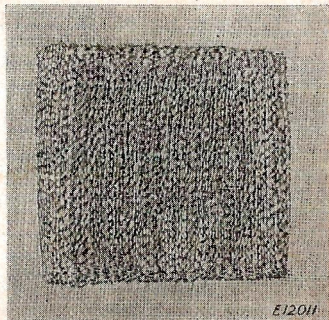


FIG. 34. DARNING FINISHED

When you have finished the darning or embroidery, raise the presser bar lifter and replace the presser foot. Turn the machine back on its hinges and replace and firmly tighten the thumb screw **D** in the lower hole **C** in the feed lifting crank **B** as shown in **Fig. 32**. Bring the machine forward into place and it is ready for regular stitching.

Stockings and socks, underwear, etc., can be more conveniently darned on the machine with the **SINGER*** Darner which can be purchased at any **SINGER** Shop or from any **SINGER** salesman.

ADVANTAGES OF MACHINE 1200-1 FOR DARNING OR EMBROIDERING

In practically all earlier types of sewing machines if the stitching is reversed, as in darning or embroidery, a knot is formed on the under thread at each stitch, resulting in a poor appearance of the under side of the embroidery or darn. The 1200-1 machine and other late designs of **SINGER** machines are free from this defect.

INSTRUCTIONS FOR USING THE ATTACHMENTS

THE FOOT HEMMER

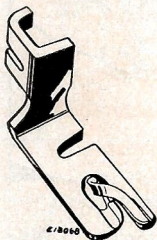


FIG. 35
FOOT HEMMER

The foot hemmer may be used for hemming the edge of the material, making hemmed and felled seams and for hemming and sewing on lace in one operation.

To Attach the Foot Hemmer

Raise the needle to its highest point, remove the presser foot and attach the foot hemmer to the presser bar in place of the presser foot.

Pull up the bobbin thread as instructed on **page 16**.

To Start the Hem at the Edge

- (1) Fold edge of material twice, about $\frac{1}{8}$ inch each time, for a distance of about two inches. Crease folds.
- (2) Lay about three inches of needle and bobbin threads back under hemmer. Place creased edge of material under hemmer with end of hem directly under needle. Lower hemmer and tack end of hem with two machine stitches.

- (3) Raise hemmer. Pull threads and hem slightly from you with left hand, then while holding threads, draw material toward you with right hand into scroll of hemmer until tacked end is caught in hemmer, as shown in **Fig. 36**.

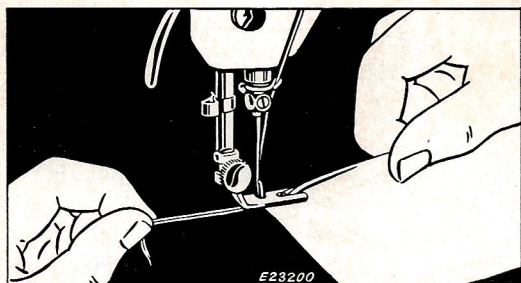


FIG. 36. STARTING HEM AT VERY END OF MATERIAL

- (4) Lower hemmer and start to sew, slightly pulling threads back while sewing. **Keep mouth of hemmer full to produce a smooth, even hem, as shown in Fig. 37.**

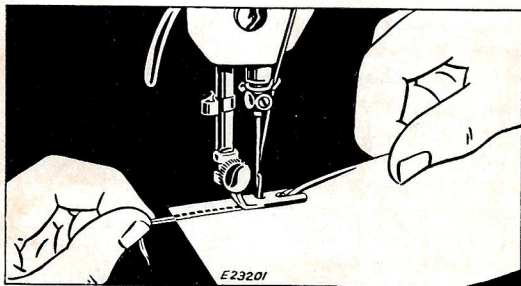


FIG. 37. HEMMING EDGE OF MATERIAL AND PULLING BACK THREADS WHILE SEWING

To Make a Hemmed Seam with the Foot Hemmer

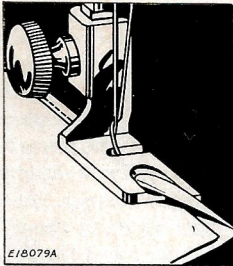


FIG. 38
MAKING A HEMMED SEAM
(FIRST OPERATION)

(1) When making this seam, the garment must first be fitted and the edge of the material trimmed, allowing for about $\frac{1}{8}$ inch seam. Insert the two edges of the material, right sides together, in the hemmer in the same manner as a single hem as shown in Fig. 38. If the material is bulky, place the edge of the upper piece of material about $\frac{1}{8}$ inch to the left of the edge of the under piece.

(2) The free edge of the hemmed seam may be stitched flat to the garment, if desired. To do this, open the work out flat, wrong side up, then insert the hem in the scroll of the hemmer, holding the edge of the hem in position while it is being stitched. If the seam is stitched flat to the garment, one row of stitching is visible on the right side.

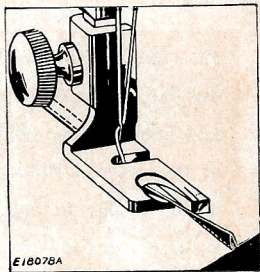


FIG. 39
MAKING A HEMMED SEAM
(SECOND OPERATION)

To Make a Felled Seam with the Foot Hemmer

(1) Place the right sides of the material together, having the edge of the upper piece about $\frac{1}{8}$ inch to the left of the edge of the under piece. Stitch the two pieces together, using the hemmer as a presser foot. Guide both pieces by the projecting toe of the hemmer, as shown in Fig. 40.

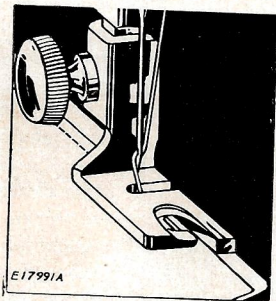


FIG. 40. MAKING A FELLED SEAM
(FIRST OPERATION)

(2) Open the work out flat, wrong side up, and hem the free edge of the seam, stitching it flat to the garment as shown in Fig. 41.

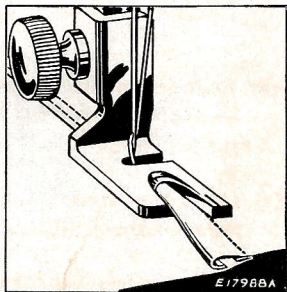


FIG. 41. MAKING A FELLED SEAM
(SECOND OPERATION)

To Hem and Sew on Lace in One Operation

- (1) Start the hem in the regular way.
- (2) Hold the hem in position with the needle.

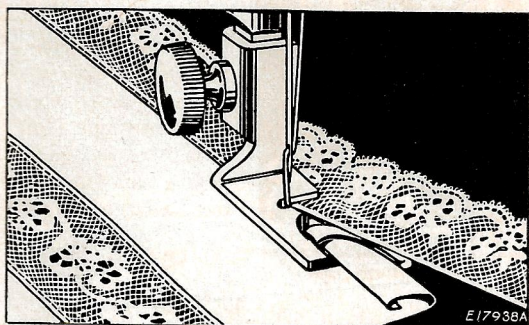


FIG. 42. HEMMING AND SEWING ON LACE

- (3) Raise the presser bar and insert the edge of the lace in the slot of the hemmer and back under the hemmer.
- (4) Lower the presser bar and start sewing, catching the edge of the lace with the needle.
- (5) Guide the hem with the right hand and the lace with the left, being careful not to stretch the lace as it enters the hemmer.

ADJUSTABLE HEMMER

To Make Hems from 3/16 to 15/16 Inch Wide

- (1) Attach the adjustable hemmer to the presser bar in place of the presser foot.
- (2) Pull up the bobbin thread, as instructed on page 16.

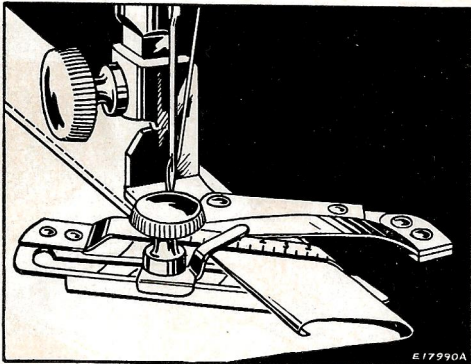


FIG. 43. SHOWING HOW ADJUSTABLE HEMMER IS USED FOR MAKING HEMS UP TO 15/16 INCH WIDE

- (3) Loosen the thumb screw on the hemmer and move the scale until the pointer registers with the number of the desired width of hem, No. 1 indicating the narrowest hem and No. 8, the widest, then tighten the thumb screw.
- (4) Place the cloth in the hemmer and draw it back and forth until the hem is formed, as shown in Fig. 43.
- (5) Draw the end of the hem back under the needle, lower the presser bar and start to sew.
- (6) Guide sufficient cloth into the hemmer to turn the hem properly.

To Make Hems Wider than 15/16 Inch

- (1) Loosen the thumb screw on the hemmer, move the scale to the right as far as it will go, then swing it toward you, as shown in **Fig. 44**, and tighten the thumb screw.
- (2) Fold and crease the desired width of hem.

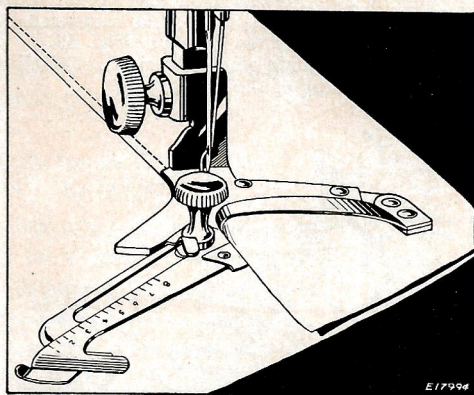


FIG. 44. SHOWING HOW ADJUSTABLE HEMMER IS USED FOR MAKING HEMS WIDER THAN 15/16 INCH

- (3) Place the fold under the extension at the right of the hemmer and the edge into the folder, as shown in **Fig. 44**.
- (4) Draw the end of the hem back under the needle, lower the presser bar and start to sew.
- (5) Guide the cloth to keep the hem flat.

MULTI-SLOTTED BINDER

This multi-slotted binder will apply **unfolded bias binding** $\frac{15}{16}$ inch in width and commercial **folded binding** in sizes **1, 2, 3, 4** and **5** to the seams or to the edges of garments. These sizes of folded binding are $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ inch in width, respectively, and are fed through slots of corresponding sizes in the binder scroll. See **Fig. 45**. Binding may be purchased in a variety of materials and colors.

For convenience in determining the correct width of **unfolded binding** ($\frac{15}{16}$ inch), this measurement is marked on the binder, as shown in **Fig. 45**.

The two upright guide pins shown in **Fig. 45** eliminate manual guiding of the binding.

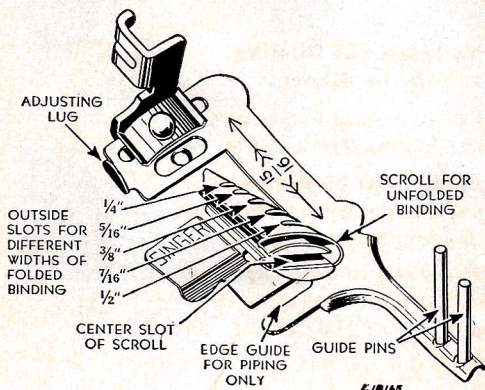


FIG. 45. MULTI-SLOTTED BINDER 160359

The wide range of bindings that can be applied with this binder makes it useful for a large variety of work. It will be found particularly advantageous for making children's wear, lingerie, summer dresses, and other dainty articles which call for the narrower bindings.

As two different widths of binding of contrasting color can be fed through the binder at the same time, attractive binding and piping effects can be produced in one operation.

To Attach the Binder

Raise the needle to its highest position, then attach the binder to the presser bar in place of the presser foot.

See that the needle enters the center of the needle hole.

To Insert the Binding In the Binder

Cut all binding to a long point to the left, as shown in **Fig. 46**.

Folded bias binding must be inserted in the slot or slots of corresponding sizes. See **Fig. 49**.

Unfolded or raw edge bias binding must be inserted in the open end of the scroll. See **Fig. 47**.

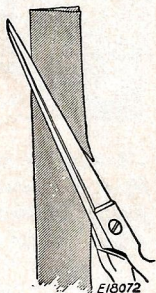


FIG. 46

After inserting the pointed end of the binding in the binder, push it through until the full width of the binding is under the needle.

Guide the binding by means of the two upright pins, as shown in **Figs. 47 to 51**.

To Insert the Garment in the Binder

Place the edge to be bound as far to the right as it will go in the center slot of the scroll **C2**, as shown in **Fig. 47**, and draw it back under the binder foot.

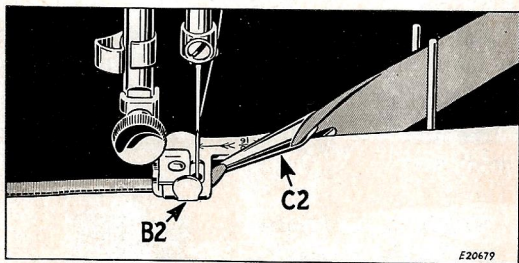


FIG. 47. BINDING WITH UNFOLDED BINDING

Lower the binder by means of the presser foot lifter, and start to sew. Keep the material well within the center slot of the scroll so that the edge will be caught in the binding.

To Adjust the Binder

To bring the inner edge of the binding closer to the stitching, move the scroll **C2**, **Fig. 47** to the right by means of the lug **B2**, **Fig. 47**. This is the usual adjustment when binding straight edges.

When binding curves, move the scroll to the left to bring the inner edge of the binding farther from the stitching and allow for the sweep of the curve.

Piped Edge

To produce a **piped edge** on garments, move the **lug B2, Fig. 48** to the left to bring the stitching about midway of the folded binding.

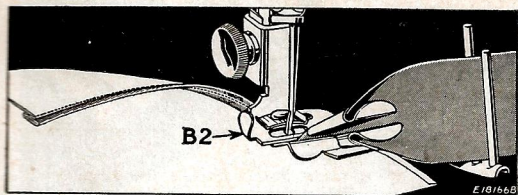


FIG. 48

POSITION OF GARMENT AND BINDING WHEN PIPING EDGES

Crease the raw edges of the garment toward the wrong side about $\frac{1}{8}$ inch, and insert the folded edge, raw edges uppermost, into the edge guide on the binder, and **beneath** the binding.

When stitched, both sides of the garment will be finished, and the right side will show the piped edge.

Piping and Binding in One Operation

A garment can be piped and bound in one operation, as shown in **Fig. 49**.

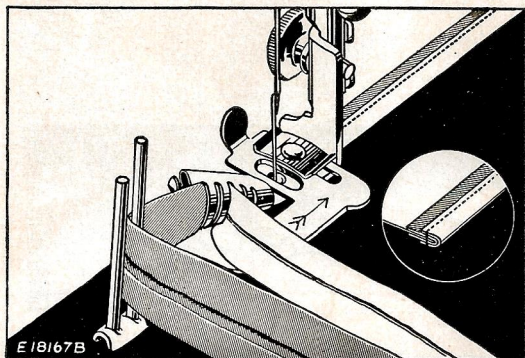


FIG. 49. PIPING AND BINDING IN ONE OPERATION

IMPORTANT: When piping and binding at the same time, as shown above, insert the **narrow width** of binding **first** in its slot, then insert the **wider width** in its slot. **Two consecutive widths should not be used at the same time.** That is, if No. 1 is used, the wider binding should not be smaller than No. 3. If No. 2 is used, the wider binding should not be less than No. 4. **Never use Nos. 1 and 2, or 2 and 3, etc., together.**

Use the upright guide pins to guide the wider of the two widths of binding, as shown in **Fig. 49**.

To Bind Outside Curves

Allow the edge to be bound to pass freely through the scroll without crowding against the scroll wall. The material must be guided from the back of the binder and to the left, permitting unfinished edges to swing naturally into the scroll of the binder.

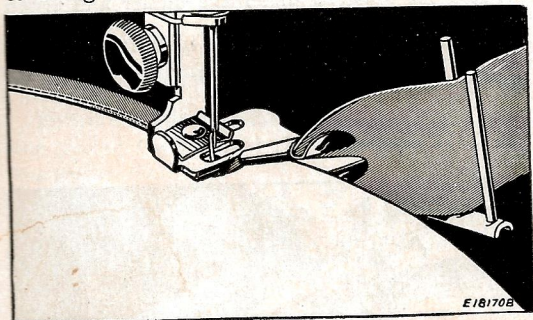


FIG. 50. BINDING AN OUTSIDE CURVE

Never pull the binding while it is being fed through the binder, as this may stretch the binding, making it too narrow to stitch or to turn in the edges. When binding curves, turn the material only as fast as the machine sews.

Do not push the material in too fast as this will pucker the edge.

Do not stretch the material as this will distort the edge so that the curve will not have the proper shape when finished.

If the stitching does not catch the edge of the binding, adjust the scroll slightly to the left.

To Bind Inside Curves

When binding an inside curve, straighten out the edge of the material while feeding it into the binder, being careful not to stretch the material.

Soft materials like batiste or crepe de chine require a row of stitching added close to the edge of the curve before binding.

To Apply French Folds To Curves

Place the material under the binder and stitch the binding onto the face of the material, as shown in Fig. 51.

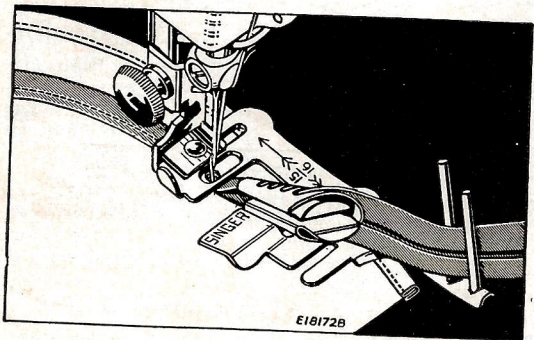


FIG. 51. APPLYING A FRENCH FOLD

For guidance in applying the rows of French folds, mark the material with a line of basting stitches or with chalk or pencil.

THE EDGE-STITCHER

This attachment should be used when the stitching must be kept accurately on the extreme edge of the material. It is also useful for sewing together laces, insertions and embroideries, sewing in position hemmed or folded edges, piping or sewing flat braid to a garment.

To Adjust the Edge-Stitcher

Fasten this attachment to the presser bar in place of the presser foot.

See that the needle enters the center of the needle hole.

The distance from the line of stitching to the edge of the material in the slots is regulated by moving the lug **D2**, **Fig. 52** to the right or left.

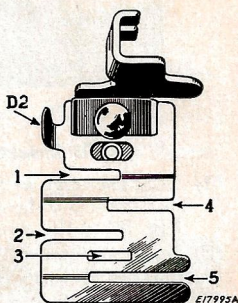


FIG. 52
THE EDGE-STITCHER

To Sew Lace Together

- (1) Insert one of the laces in slot 1 of the edge-stitcher and the other in slot 4, **Fig. 52**.
- (2) Adjust the lug **D2** until the edges to be joined are caught by the stitching.
- (3) Slightly overlap the edges of the lace while stitching to keep them against the ends of the slots.
- (4) Loosen both thread tensions to avoid puckering of fine lace.

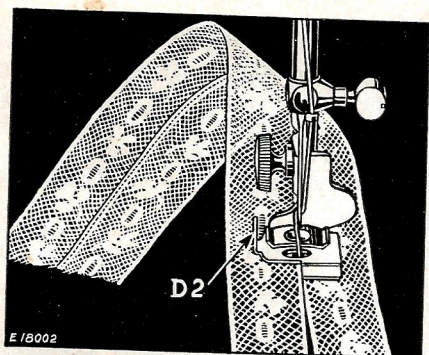


FIG. 53. SEWING LACE TOGETHER

To Insert Lace or Ribbon

- (1) Fold the edge of the material to which the lace or ribbon is to be sewn and insert it in the slot 1, Fig. 52 of the edge-stitcher.
- (2) Insert the lace or ribbon in the slot 4 of the edge-stitcher and proceed to sew.
- (3) Cut away the surplus folded material close to the stitching.

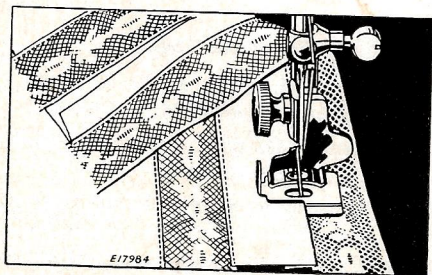


FIG. 54. SETTING IN LACE INSERTION

To Pipe with the Edge-Stitcher

(1) Cut the piping bias and twice the width of the slot **3** so that it can be folded once.

(2) Insert the piping with its folded edge to the left in slot **3** and the edge to be piped in slot **4**, Fig. 52.

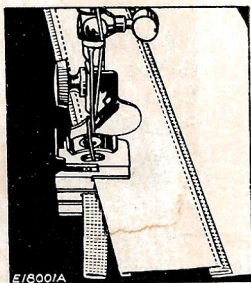


FIG. 55

PIPING WITH EDGE-STITCHER

To Apply Folded Bias Tape or Military Braid

(1) Place the garment under the edge-stitcher and the tape in slot **1** or **4**, Fig. 52.

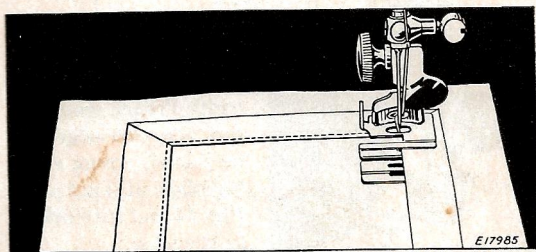


FIG. 56. APPLYING BIAS FOLDED TAPE

- (2) To make square corners, sew to the turning point, remove the tape from the attachment, form the corner by hand, replace the tape and continue stitching. See Fig. 56.
- (3) To space two or more parallel rows, mark the material with a guide line, using a crease, chalk or basting thread.

To Stitch a Wide Hem

- (1) A wide hem may be stitched evenly on sheets, pillow slips, etc., with the edge-stitcher after the hem has been measured and the edge turned.
- (2) Insert the edge in slot 5, Fig. 52, and adjust the lug D2 to stitch as close to the edge as desired.

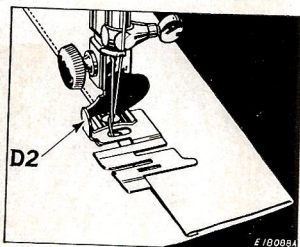


FIG. 57
MAKING A WIDE HEM

To Make a French Seam

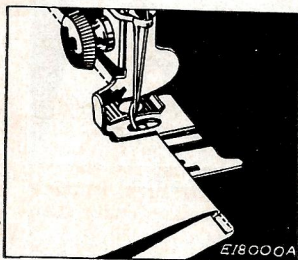


FIG. 58
MAKING A FRENCH SEAM
(SECOND OPERATION)

- (1) To make a uniform width French seam, insert the two edges to be joined, wrong sides together, in slot 1 or 2, Fig. 52 and stitch close to the edge.
- (2) Fold both right sides together and insert the back of the seam in the slot 1 and stitch, allowing just enough margin to conceal the raw edges.

To Tuck with the Edge-Stitcher

The maximum width of tuck that can be made with the edge-stitcher is $\frac{1}{8}$ inch.

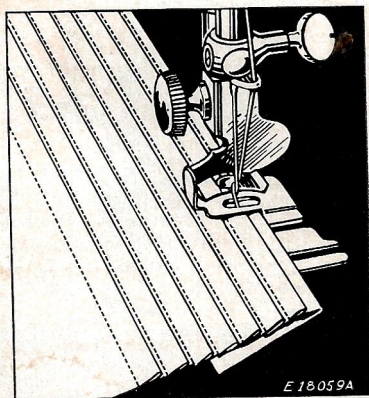


FIG. 59. TUCKING WITH THE EDGE-STITCHER

- (1) Fold and crease the material for the desired width of tuck.
- (2) For succeeding tucks, fold the material the desired distance from the previous tuck, running the fold lengthwise over a straight edge, then crease the folds.
- (3) Insert the creased folds in the slot **1**, Fig. 52 and adjust the edge-stitcher to the right or left for the desired width of tuck. Use a light tension, short stitch and fine thread and needle.

GATHERING FOOT

To Shirr with the Gathering Foot

- (1) Fasten the gathering foot to the presser bar in place of the presser foot.

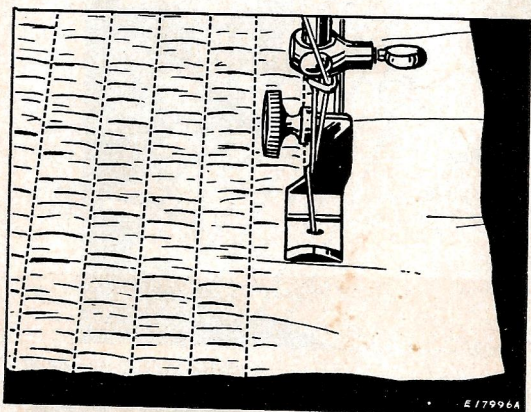


FIG. 60. SHIRRING WITH THE GATHERING FOOT

- (2) Place the material under the gathering foot and stitch in the usual way.
- (3) The fullness of the shirring or amount of gathering is regulated by the length of stitch. A longer stitch increases the fullness of the gathers.

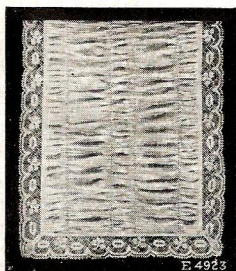


FIG. 61. SHIRRING

A very pleasing effect may be gained by using thread or embroidery silk of contrasting color on the bobbin. **Fig. 62** shows a white organdy collar and cuff set with red and green smocking made with the gathering foot, using fine crochet cotton or tatting thread on the top and white cotton on the bobbin.

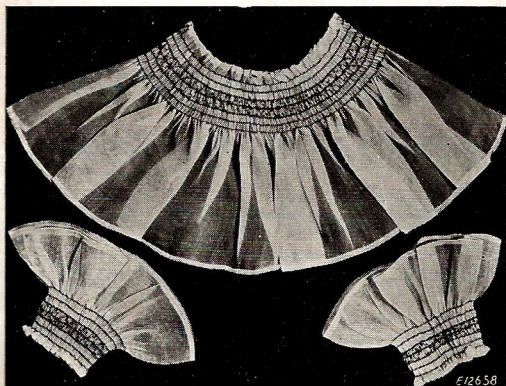


FIG. 62. SMOCKING

THE RUFFLER

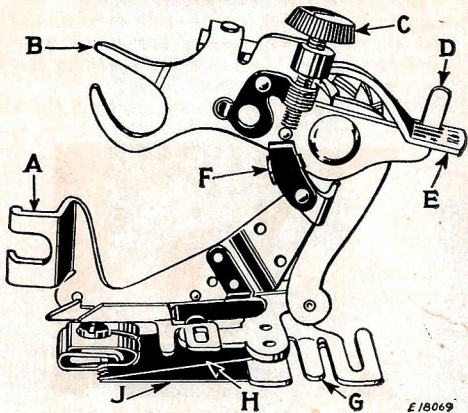


FIG. 63. PRINCIPAL PARTS OF THE RUFFLER

- A—Foot**—attaches ruffler to the presser bar.
- B—Fork Arm**—straddles the needle clamp.
- C—Adjusting Screw**—regulates fullness of gathers.
- D—Projection**—engages the slots in adjusting lever.
- E—Adjusting Lever**—sets ruffler for gathering or for making a pleat once at every 6 stitches or once every 12 stitches as desired; also for disengaging ruffler, when either pleating or gathering is not desired.
- F—Adjusting Finger**—regulates width or size of pleats.
- G—Separator Guide**—contains slots into which edge of material is placed to keep the heading of ruffle even; also for separating the material to be ruffled from the material to which the ruffle is to be attached.
- H—Ruffling Blade**—pushes the material in pleats up to the needle.
- J—Separator Blade**—prevents ruffling blade teeth from contacting feed or material to which ruffle or pleating is applied.

To Attach The Ruffler

- (1) Raise the needle to its highest point.
- (2) Loosen the presser foot thumb screw and attach the ruffler to the presser bar in place of the presser foot, at the same time placing the fork arm **B** astride the needle clamp.
- (3) See that the needle enters the center of the needle hole in the ruffler.

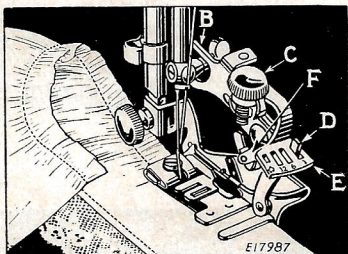


FIG. 64. GATHERING WITH THE RUFFLER

To Adjust The Ruffler For Gathering

- (1) Swing the adjusting finger **F** away from the needle.
- (2) Raise the adjusting lever **E** and move it until the projection **D** can be entered in the slot marked "1."

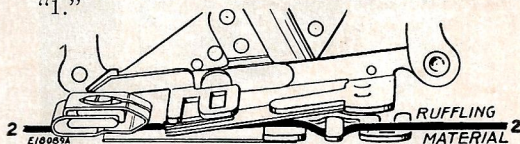


FIG. 65. CORRECT POSITION FOR MATERIAL TO BE RUFFLED

- (3) Insert the material to be ruffled between the two blue blades **Line 2, Fig. 65.**
- (4) Draw the material slightly back of the needle, lower the presser bar and start to sew.
- (5) For fine gathering, turn the adjusting screw **C** upward and shorten the stitch.
- (6) For full gathering, turn the adjusting screw **C** downward and lengthen the stitch.

To Make a Ruffle and Sew it to a Garment in One Operation

- (1) Insert the material to be ruffled between the two blue blades **Line 2, Fig. 66.**

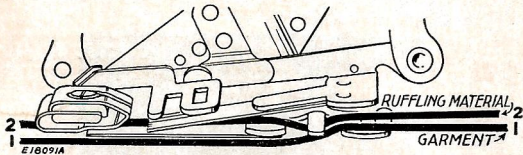


FIG. 66. CORRECT POSITIONS FOR THE MATERIALS

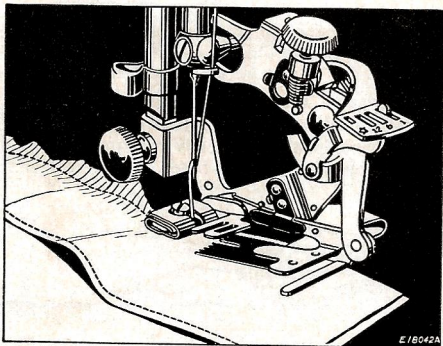


FIG. 67

MAKING A RUFFLE AND ATTACHING IT IN ONE OPERATION

- (2) Place the material to which the ruffle is to be attached under the separator blade **Line, 1, Fig. 66.**
- (3) Proceed the same as for plain gathering.

To Make a Ruffle and Attach it with a Facing in One Operation

- (1) Insert the material to be ruffled between the two blue blades **Line 2, Fig. 68.**

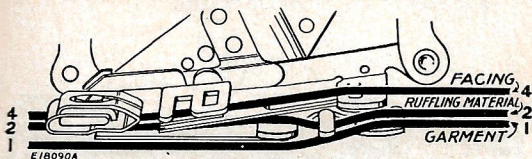


FIG. 68. CORRECT POSITIONS FOR THE MATERIALS

- (2) Place the material to which the ruffle is to be attached under the separator blade **Line 1, Fig. 68.**
 (3) Place the facing material over the upper blue blade **Line 4, Fig. 68.**

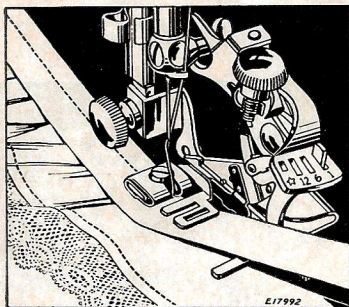


FIG. 69. MAKING A RUFFLE AND ATTACHING IT WITH A FACING IN ONE OPERATION

- (4) If the facing is to be on the **right side** of the garment, place the wrong sides of the garment and ruffle together.
 (5) If the facing is to be on the **wrong side**, place the right sides of the garment and ruffle together.

To Pipe a Ruffle

- (1) Insert the material to be ruffled between the two blue blades **Line 3, Fig. 70**. This material must not exceed $1\frac{1}{4}$ inches in width.

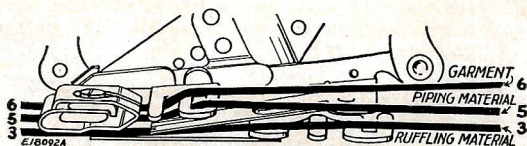


FIG. 70. CORRECT POSITIONS FOR THE MATERIALS

- (2) The piping material is usually cut on the bias and it should be about $\frac{1}{4}$ inch wide when folded in the center. Place the piping material in the ruffler, following **Line 5, Fig. 70** with the folded edge of the piping to the right.

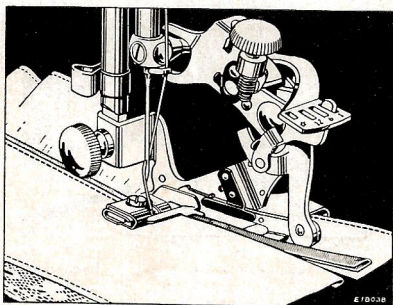


FIG. 71. PIPING A RUFFLE

- (3) Fold the edge of the material to which the piping and ruffling are to be attached and insert it in the ruffler, following **Line 6, Fig. 70**.

To Adjust the Ruffler for Pleating

- (1) Raise the adjusting lever **E** and move it until the projection **D** can be entered in the slot marked "6". The ruffler will then pleat once every six stitches. To pleat once every 12 stitches, have the projection **D** enter the slot "12" in the adjusting lever **E**.

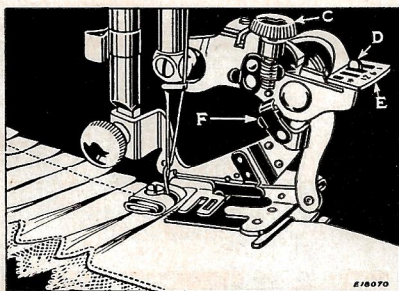


FIG. 72. PLEATING WITH THE RUFFLER

- (2) Insert the material to be pleated between the two blue blades **Line 2, Fig. 73**.

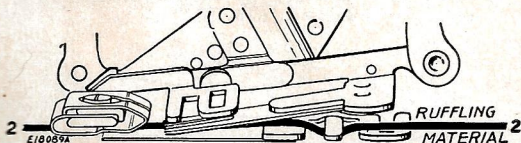


FIG. 73. CORRECT POSITION FOR THE MATERIAL

- (3) To increase the width of pleat, move the adjusting finger **F** back toward the needle and turn the adjusting screw **C** downward. To make a smaller pleat, turn the adjusting screw **C** upward. The distance between pleats is regulated by the length of stitch.

To Adjust the Ruffler for Group Pleating

- (1) To make the space between the groups of pleats, raise the adjusting lever **E** and move it until the projection **D** can be entered in the small slot indicated by the star on the adjusting lever **E**. The ruffler will then stop pleating and plain stitching will be made.

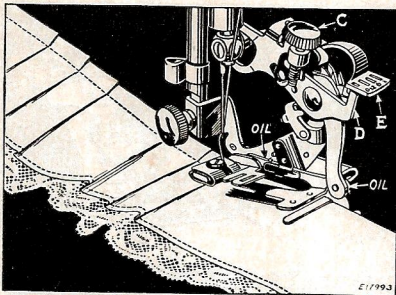


FIG. 74. GROUP PLEATING WITH THE RUFFLER

- (2) When the desired space is made, set the projection **D** in either of the slots "6" or "12"
- (3) Insert the material to be pleated between the two blue blades **Line 2, Fig. 75.**

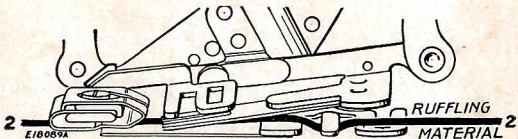


FIG. 75. CORRECT POSITION FOR THE MATERIAL

To Oil the Ruffler

Occasionally apply a drop of oil to the working parts of the ruffler at each of the places indicated in **Fig. 74.**

NEEDLES AND THREADS

For perfect stitching, the **thread** should be selected according to the fabric to be stitched and the **needle** must be the correct size for the thread which must pass freely through the eye of the needle.

CHART SHOWING THE RELATIONSHIP OF TYPES OF FABRICS, THREAD AND NEEDLE SIZES AND MACHINE STITCHES TO THE INCH

TYPES OF FABRICS	THREAD SIZES	NEEDLE SIZES	MACHINE STITCHES PER INCH	
			INSIDE SEAMS	TOP STITCHING
Filmy materials comparable to Net, Marquisette, Organodie, Ninon.	100 Cotton OO and OOO Silk	9	20	30
Sheer materials comparable to Lawn, Dimity, Voile, Batiste, Chiffon, Rayon Sheer, Rayon Crepe.	80 to 100 Cotton O Silk	11	16	20
Lightweight materials comparable to Gingham, Chambray, Sheer Wool Crepe, Taffeta.	60 to 80 Cotton A and B Silk	14	12	18
Medium lightweight materials comparable to Poplin, Figue, Percalle, Cretonne, Chants, Faille, Bengaline, Wool Flannel, Wool Crepe, Wool Jersey.	50 to 70 Cotton B Silk	14	12	16
Medium heavy materials comparable to Crash, Gabardine, Rep, Corduroy, Velveteen.	40 to 50 Cotton C Silk	16	10	12
Heavy materials comparable to Sailcloth, Denim, Ticking.	30 to 40 Cotton 24 to 30 Cotton D Silk	18 19 18 or 19	8	10
Very heavy materials comparable to overcoating.	40 to 60 Linen 20 to 24 Cotton E Silk	21	6	8
Plastic materials.	Mercerized Cotton	11	10	12

When ordering needles, always specify "Class and Variety 15x1" and state the size and quantity required.



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