Form K1797
(1245)

This book should be carefully preserved for reference.

INSTRUCTIONS
FOR USING

SINGER SEWING MACHINE

No. 15

(CENTRAL BOBBIN)

FOR FAMILY USE

When requiring Needles, Oil, Parts or Repairs for your Machine

Look for the Red "S" There are Singer Shops in every City

THE SINGER MANUFACTURING CO.

Printed in Great Britain

WARNING

It is essential that your machine should be kept well oiled, in accordance with the instructions given on pages 13 and 14 of this book.

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

Singer Needles are stamped with the Company's Trade Mark "Simanco" and are sold in green packets which also bear the Singer Red Letter "S."

Needles in Containers marked "For Singer Machines" are not Singer made needles.

Should your machine require overhauling or repair, apply only to a Singer Shop or Singer Salesman, otherwise you will risk its being irretrievably damaged.

Every description of sewing machine repaired, or exchanged.

Form K1797

SINGER SERVICE

Now that you have purchased your new Singer Sewing Machine we do not want you to feel that your relations with us have come to an end.

The following instructions are worded so that they may be easily understood by everyone, and we would suggest that you study them carefully in order that you may obtain the fullest use and pleasure from your sewing machine. If, however, you require further assistance we would ask you to call at the local Singer Shop where advice will always be willingly given in the use of any Singer Machine and its Attachments.

We hope, too, that you will make the Singer Shop your headquarters for sewing supplies and service. Only there, or through Singer authorised representatives, can you secure genuine Singer oil, cotton, needles, etc.—all of which are so important in obtaining the best results from your sewing machine.

HAVE YOU SEEN THE SINGER MOTOR?

One screw attaches it to your machine

Cuts out all fatigue!
Both hands free to guide work!
Makes sewing a pleasure!
Better work done in half the time!

And then, after dark, there is the

SINGERLIGHT

which, by showing the stitching more clearly, prevents eyestrain and saves time and annoyance when threading the needle

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

Balance Wheel Stop Motion

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

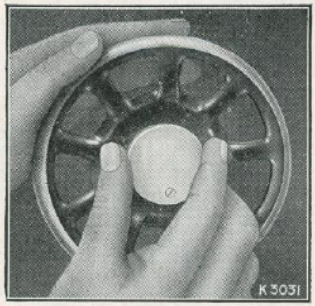


Fig. 1.

To Operate the Treadle Machine.

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

When familiar with the working movement, tighten the balance wheel by turning the stop motion screw from you, and place a piece of material under the presser foot (8, Fig. 3). Lower the latter by means of the lifter (4, Fig. 3) and again work the machine, without its being threaded, until you are accustomed to guiding the material.

To Operate the Hand Machine

Tighten the balance wheel (see Fig. 1) and place a piece of material under the presser foot (8, Fig. 3). Then lower the latter by means of the lifter (4, Fig. 3). Now **turn the handle over from you** to work the machine, without its being threaded, until you are accustomed to guiding the material with the left hand.

The advantages of a Treadle Machine, or better still, one electrically fitted, are: Higher speed, and, both hands being free, a greater variety of work. A Singer Motor may be applied to your machine at any time. *See page 2 of this book.*

To Ensure Perfect Action of the Machine

The balance wheel must always turn towards you.

Do not work the machine with the presser foot lowered or with the needle threaded, except when sewing.

The slide over the bobbin case must be kept closed.

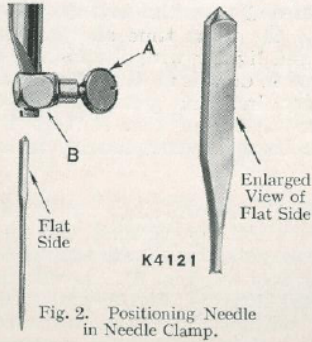


Fig. 2. Positioning Needle in Needle Clamp.

To Set the Needle

(See Fig. 2)

Raise the needle bar to its highest point and loosen the thumb screw (**A**).

Hold the needle with the left hand and, **with its flat side to the right,** insert it into the needle clamp (**B**) as far as it will go. Then retighten the thumb screw.

To Thread the Needle
(See Fig. 3)

Turn the balance wheel towards you until the lever (3) is at its highest. Place a reel of thread on the spool pin of the machine and pass the thread through the notch (2), downward between the tension discs (6) from the back, up over the thread guard (5) from behind, into the hook of the spring (12), up and through the hole in the end of the lever (3) from the back, down into the thread guard (11), into the guide (9), and **from left to right** through the eye of the needle. Draw about three inches of thread through the eye of the needle with which to commence sewing.

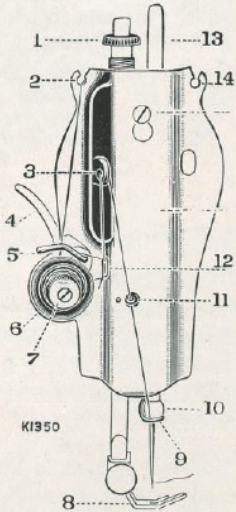


Fig. 3.

To obtain best results it is absolutely necessary that the needle should be of the size stated for the number of cotton, linen or silk, as shown on inside of back cover. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle, the machine will not function satisfactorily.

The Singer Needle Threader saves time, trouble and patience and is invaluable to those having defective sight.

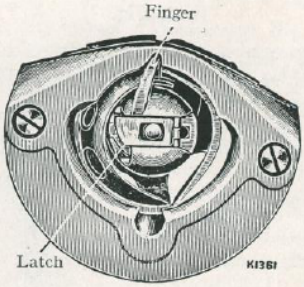


Fig. 4.

To Remove the Bobbin Case and Bobbin

Turn the balance wheel towards you until the take-up lever (3, Fig. 3) is at its highest point. Draw open the slide in the bed of the machine and, with the thumb and forefinger of the left hand, open the latch (see Fig. 4) and withdraw the bobbin case.

While the latch is held open, the bobbin is retained in its case. On releasing the latch and turning the case downward, the bobbin will drop out.

To Wind the Bobbin (See Fig. 5)

Loosen the balance wheel (see Fig. 1) and place a reel of thread on the spool pin. Pass the end of thread through the notch at top of face plate (14,

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

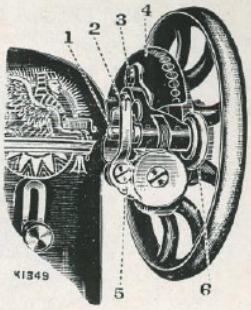


Fig. 5.

If the pressure of the rubber ring against the ledge of the balance wheel is insufficient for winding the bobbin, loosen the screw (3) and press winder lightly until the rubber ring is in contact with the ledge. Then tighten the screw. Afterwards push the latch to release the winder from contact with the balance wheel.

To Thread the Bobbin Case

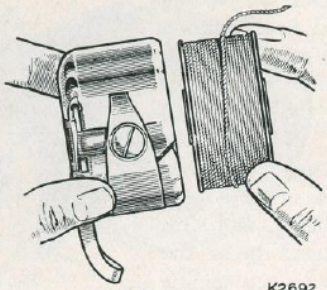


Fig. 6.

Hold the bobbin between the thumb and forefinger of the right hand, with the thread leading from left to right, as shown in Fig. 6 ; with the left hand hold the bobbin case and place the bobbin into it.

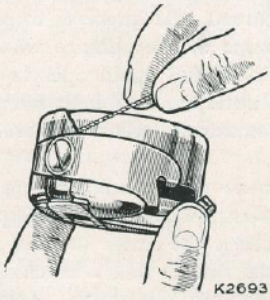


Fig. 7.

With the right hand draw the thread into the slot in the edge of the bobbin case, as shown in Fig. 7.

To Thread the Bobbin Case—continued

Then pull the thread to the right, under the tension spring, and into its delivery eye, as shown in Fig. 8.

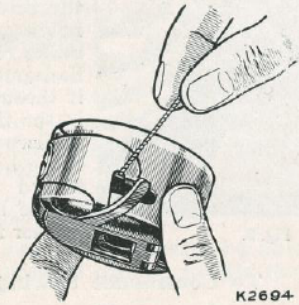


Fig. 8.

To Replace the Bobbin Case

After threading the bobbin case hold its latch between the thumb and forefinger of the left hand and, with its position finger opposite the notch at the top of the shuttle race (see Fig. 4), replace it on the centre stud of the shuttle. Then release the latch and press the bobbin case back until the latch catches the groove near the end of the stud. Allow the end of thread to hang free, and close the slide in the machine bed.

To Prepare for Sewing

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle. Turn the balance wheel over towards you for the needle to move down and up again to its highest. Pull the thread you are holding, and the under thread will be brought up with it through the hole in the throat plate, as shown in Fig. 9. Place both ends of thread under and to the back of the presser foot.

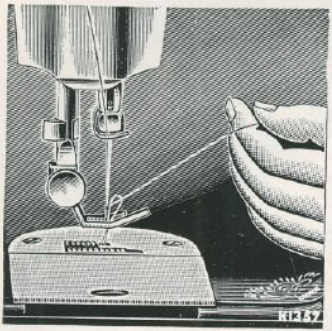


Fig. 9.

To Commence Sewing

Place the material to be sewn beneath the presser foot, lower the latter, and commence to sew by turning the balance wheel over towards you.

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

To Remove the Work

Raise the take-up lever (3, Fig. 3) to its highest and lift the presser foot (8, Fig. 3). Move the material back and to the left and sever the threads by passing them over the thread cutter above the presser foot. Leave a few inches of thread under and at the back of the presser foot.

To Regulate the Tensions (See Fig. 10)

Correct Stitch.

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

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

Needle Thread Tension too strong.

Needle Thread Tension too weak.

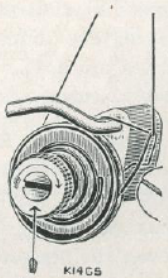
Fine fabrics require a light tension, while heavy materials want more tension to obtain a perfect stitch.

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

A correct stitch can usually be obtained by varying the tension on the needle thread (see Fig. 10).

Lower the presser foot and turn the thumb nut in the direction illustrated by the arrow to increase the tension or in the opposite direction to lessen it.

As all machines are correctly adjusted before leaving the factory, the under tension seldom requires to be altered, but if this becomes necessary tighten the screw in the spring on the outside of the bobbin case (see Fig. 6) to increase the tension, or loosen it slightly to lessen the tension.



Thumb Nut Fig. 10.

Always use thread with corresponding size of needle as per Table on page 3 of cover.

To Alter the Length of Stitch

Fig. 11.
Position for Long Stitch

The length of stitch is altered by loosening the thumb screw (see Fig. 11) and moving it downwards to lengthen, or upwards to shorten the stitch. Then tighten the screw.

To Change the Pressure on Material

For ordinary family sewing it is seldom necessary to change the pressure on the material. If sewing fine silk or flimsy material, lighten the pressure by giving the thumb screw (1, Fig. 3) two or three turns upwards. To increase the pressure, give the thumb screw a few turns downwards.

To Turn a Corner

Stop the machine when the needle is rising but still in the material. Raise the presser foot and turn the work, using the needle as a pivot. Then lower the presser foot.

To Sew Flannel or Bias Seams

Use a short stitch and as light a tension as possible, so that the stitching will be loose enough to stretch with the material.

To Oil the Machine and Stand

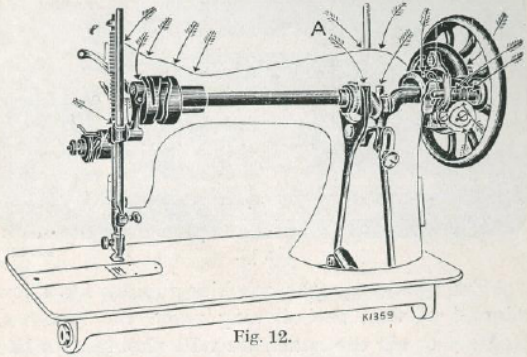


Fig. 12.

To ensure easy running the machine requires to be oiled so that all moving parts in contact are covered with a film of oil. **These should never be allowed to become dry.**

If used constantly, the machine should be oiled daily, while with moderate use, an occasional oiling is sufficient. A drop of oil applied at the points indicated by arrows in Figs. 12 and 13, is sufficient. To oil the needle bar mechanism, remove the face plate (16, Fig. 3) by loosening the screw (15, Fig. 3) and slipping the plate up over it. **It is most important that oil be applied to point "A" Fig. 12 and to point "B" Fig. 13 when the needle bar is at its lowest.** When oiling, insert the oil can spout well into the oil holes. A drop of oil should also be applied to the shuttle race.

To oil the stand, apply a drop of oil to the centres upon which the band wheel and treadle work, and to both ends of the pitman rod connecting the treadle with the band wheel.

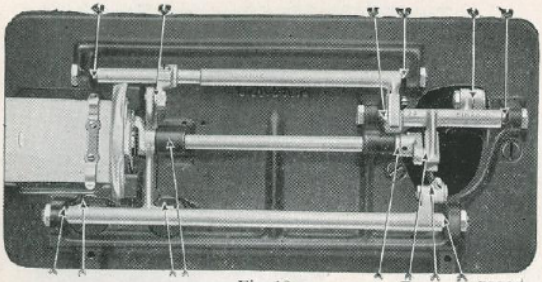


Fig. 13.

After oiling, run the machine rapidly for a few minutes so that the oil may reach the bearings. **Neglect to oil the machine will shorten its life and cause you trouble and annoyance.**

Always use Singer oil. Inferior oil clogs the bearings, prevents efficient working, and causes rapid wear of the mechanism.

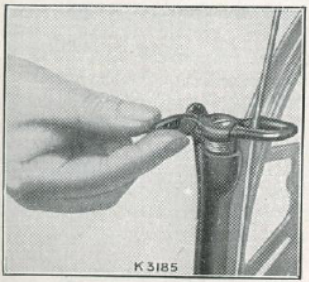


Fig. 14.

The Belt Shifter

This device simplifies throwing off and replacing the belt. To throw off the belt, move the belt shifter to the left (see Fig. 14), working the treadle at the same time. To replace the belt, work the treadle slowly with the band wheel turning towards you, when a revolution or two of the wheel will bring the belt back into its place.

HINTS

Machine working heavily. If the machine runs hard after being idle, oil with paraffin. Then run rapidly, wipe clean and oil with Singer oil.

The Belt should be only just tight enough not to slip. If too loose, shorten and rejoin.

Needles Breaking. See that the needle is not bent, the upper tension is not too tight, and the presser foot or attachments are securely fastened. Avoid pulling the material and do not sew heavy seams or thick goods with too fine a needle (see table on inside of back cover).

Thread Breaking. If the needle thread breaks, see that :

The machine is properly threaded.

The upper tension is not too tight.

The needle is not bent, blunt or set incorrectly.

The thread is not too coarse for the needle (see table on inside of back cover).

The thread take-up spring (12, Fig. 3) is not broken.

Should the under thread break, loosen the under tension (see page 11), and see that the bobbin case and under the tension spring are free from fluff.

Skipping of Stitches. See that the needle is correctly set (see page 4), is not blunt, bent, or too fine for the thread.

Stitches Looping. See that the spring (12, Fig. 3) is not broken, that the upper and under tensions are equal (see page 11), that both bobbin case and needle are properly threaded, that the thread is of good quality and of correct size for the needle (see table on inside of back cover).

Material Puckering. See that both tensions are equal.

INSTRUCTIONS

FOR USING

ATTACHMENTS

WHICH MAY BE APPLIED TO

SINGER MACHINE

No. 15

(CENTRAL BOBBIN)

NOTE.—Before applying any of these attachments raise the needle and remove the presser foot. After substituting the attachment turn the balance wheel slowly over towards you to make sure that the needle passes through the centre of the needle hole.

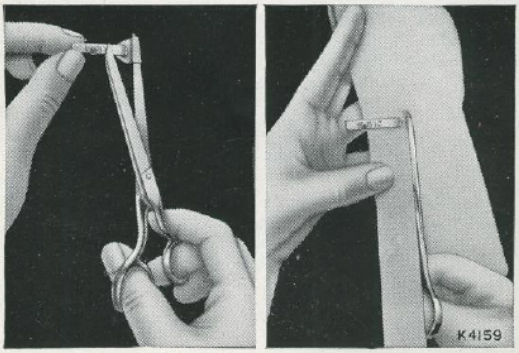
Darning by sewing machine is infinitely neater, stronger, and more quickly done than by hand.

A tiresome task becomes a pleasure!

Read how to do this in separate pamphlet, Form 1001 ad 33, which may be obtained free from any Singer Shop or Singer Salesman.

Bias Gauge

The Bias Gauge will be found very useful (especially in the case of soft materials) when cutting bias strips from $\frac{7}{16}$ inch to $1\frac{3}{8}$ inches in width. This may



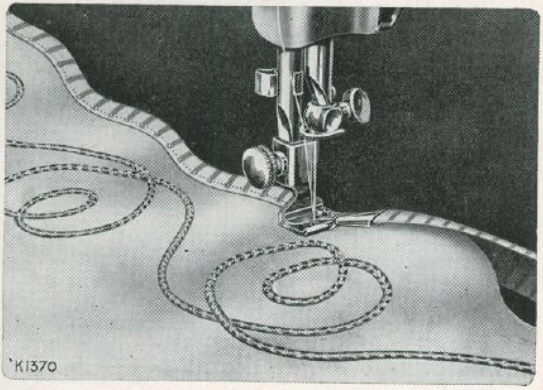
be done by placing the bias gauge upon the point of the scissors and setting the blued indicator to the width desired. The line **F** is the point at which to set the blued indicator for facings, the line **B** for binding, and the line **C** for cording or piping.

Insert the material in the gauge with the edge against the blued indicator, and hold as shown above.

Bias binding for use with the Binder Attachment should be cut $\frac{15}{16}$ inch wide, and to do this the indicator should be set midway between the lines **F** and **B.**

The Binder—Binding

Pass the binding through the scroll of the binder and draw it under the needle. Place the edge of the material to be bound between the scroll of the



binder and under the needle, lower the presser bar lifter and sew as usual.

Bias binding should be cut $\frac{15}{16}$ of an inch wide.

To Bind with Dress Braid.—Proceed as when using bias binding ; but as dress braid and binding purchased already folded are narrower than bias binding they should be inserted in the outer slot of the binder. The edges of dress braid are not turned under as in the case of bias binding.

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

The Adjustment and Operation of the Binder

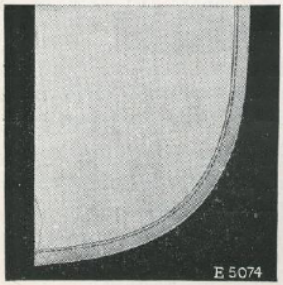
The edge to be bound should be held well within the centre slot of the scroll, and with a little practice this is quite easy. If the material is allowed to slip away from the scroll when near the needle, the edge will not be caught in the binding.

Various materials and conditions require different adjustments of the Binder to bring the stitching close to the edge. A wider adjustment of the Binder is necessary when binding curves than when binding a straight edge.

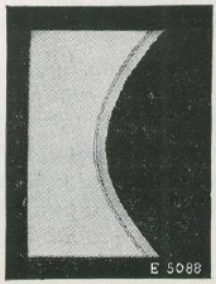
To adjust the Binder, loosen its small screw and move the scroll to the right for a narrower adjustment, or to the left for a wider adjustment, after which securely tighten the screw. To become perfectly familiar with the adjustment of the Binder, a little practice is necessary.

Binding Outside Curves

Practice is required to bind a curved edge properly. The edge to be bound must be allowed to pass freely through the scroll and should not



Sample of Outside Curve.



Sample of Inside Curve.

be crowded in or against it. Guiding should be from the back of the binder and to the left, allowing unfinished edges to swing naturally into the scroll of the binder.

Never pull the binding as it feeds through the Binder, as bias material is very easily stretched and would be too narrow when it reaches the needle. If this occurs the edges will not be turned.

When binding a curved edge, turn the material only as fast as the machine sews. It is not possible to hold the material in the entire length of the scroll when binding a small curve.

Do not push the material in too fast, as the edge will then become puckered, and do not stretch the material or the curve will not be the proper shape when finished. If the stitching does not catch the edge of the binding the scroll should be adjusted a little to the left.

Binding Inside Curves

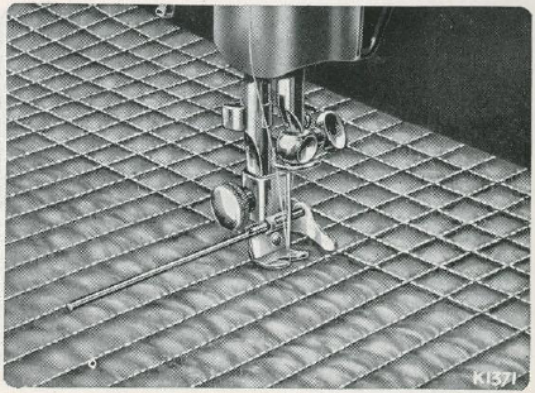
This curve is found on nearly all garments which are finished with a bound edge, but practice is necessary on various materials.

When binding an inside curve, straighten out the edge as it is being fed into the Binder. When doing this, take care not to stretch the edge of the material.

If the material is soft, like batiste or crepe de chine, add a row of machine stitching close to the edge of the curve before binding.

The Quilter

The quilter guide can be used at either the right or left of the needle, and the distance of the guide from the needle determines the width between the

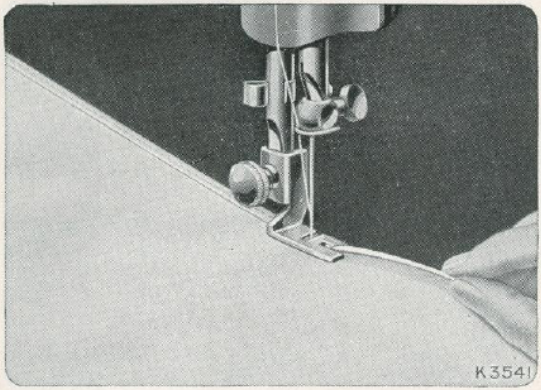


rows of stitching. Slide the wire into its holder on the foot, and set it to the width desired. Then lower the foot on to the material.

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

The Foot Hemmer—Hemming

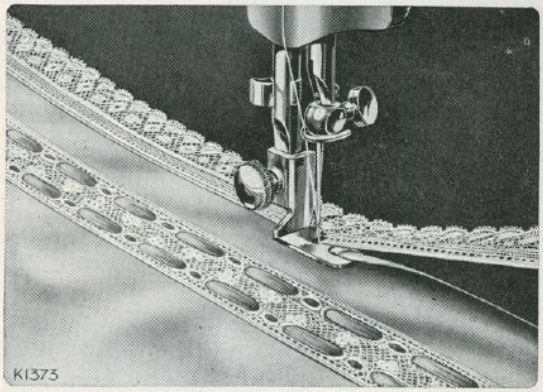
Clip off the right hand corner of the material for its edge to curl easily. Then, with the hemmer foot raised, place the material from left to right under



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

Hemming and Sewing on Lace in one Operation

Start the hem, as explained on page 22, and, when it is well started, raise the needle to its highest

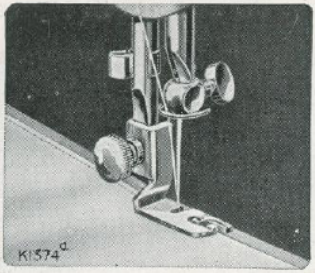


point. Raise the hemmer to relieve the pressure on the hem, and pass the end of the lace through the slot in the side of the attachment and over the hem, as shown.

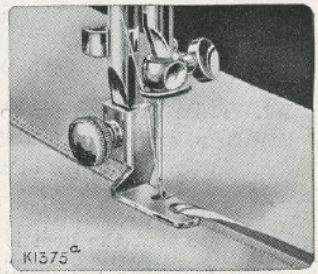
Take care that the hem is not displaced in the hemmer, and that the needle goes through both lace and hem. Then lower the presser bar, and guide the lace over the front of the hemmer, taking care to keep it well into the slot.

The Foot Hemmer—Felling

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

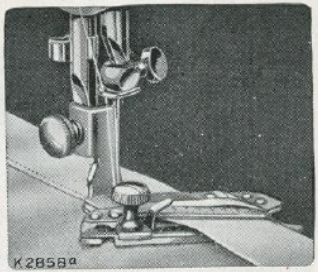


Raise the hemmer foot and open the work out flat, wrong side up, so that the edges will stand up straight. Then push the edges at the beginning of the seam into the mouth of the hemmer, as far as the needle, and lower the hemmer foot. While stitching, keep the material perfectly flat, using both hands,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

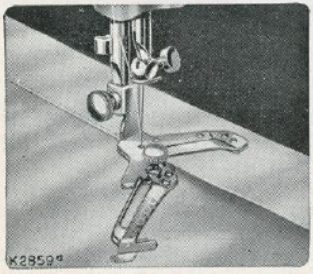


The Adjustable Hemmer

With its slide closed, see top illustration, the attachment will make hems up to one inch wide.



Loosen the screw at the front and move the slide until the pointer is against the desired width, then tighten the screw. Insert the edge of the material between the slide and the number gauge, and draw it backward and forward until the hem is formed, stopping with its end under the needle. Lower the presser bar and sew, taking care in guiding the work to keep the hemmer full. Felling can also be done by following the instructions on page 24.

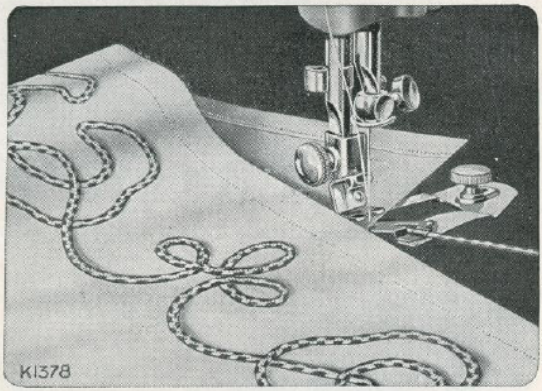


To make a hem more than one inch wide, loosen the screw, draw the slide to the right as far as it will go, and turn it towards you, as in the bottom illustration Fold and crease down a hem of the desired width, pass the fold under the extension at the right of the hemmer, then insert the edge of the material into the folder, and proceed to sew.

The Under Braider—Braiding

Fit the quilter foot, as shown.

To attach the under braider, insert the downwardly projecting hook of the attachment into the

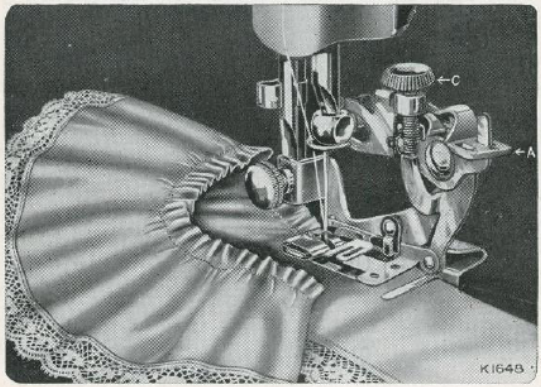


hole in the throat plate at the right of the feed dog. Then place the guide thumb screw in the slot of the attachment and into the hole in the bed plate of the machine. The under braider must be firmly secured by tightening the screw.

The pattern or design to be braided must be stamped or traced on the wrong side of the material. Pass the braid from the left between the blued guide and the lower plate until it enters the back and front braid guides, and then under the needle. Place the material, wrong side up, above the braid, lower the presser foot and proceed to sew, following the lines of the design.

The Ruffler—Ruffling

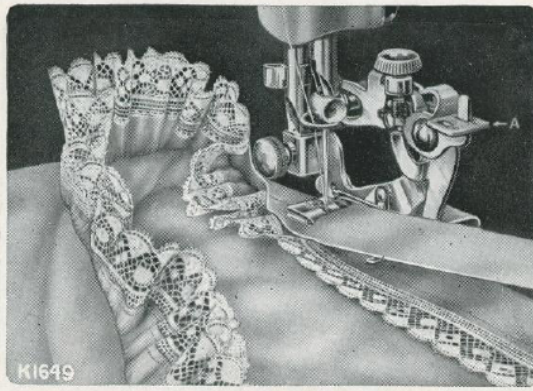
Attach the ruffler, taking care to connect the lever with the needle clamp, as shown.



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

The Ruffler—
Ruffling between Two Pieces of Material

Place the lower piece of material below the ruffler. Insert the piece to be ruffled in the ruffler.



as instructed on the preceding page, and pass the upper piece of material above the blued blades in the manner illustrated.

To Ruffle and Sew on at One Operation

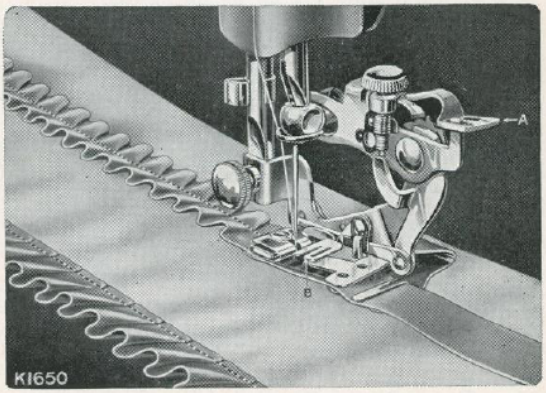
Place the material below the ruffler, and the piece to be ruffled between the blued blades. Then proceed as in ruffling.

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

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

Five-Stitch Ruffling or Pleating

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



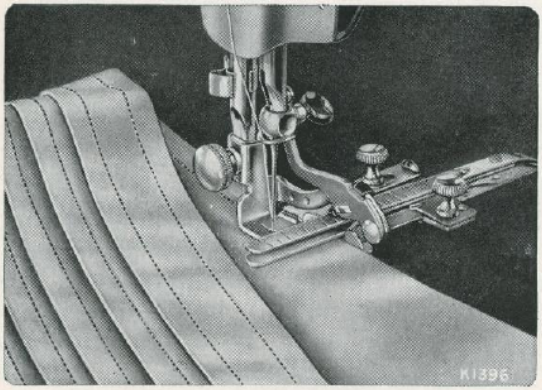
The ruffling blade will then move forward and back once at every fifth stitch. Finer or fuller pleats may be obtained by merely altering the length of stitch.

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

The Tuckmarker

Fit the tuckmarker, as shown in the illustration.

The attachment has two figured scales, that in



front (the space scale) in eighths and the central clip (the tuck scale) in sixteenths of an inch.

The tuck scale determines the width of the tuck. For instance, if this is required to be $\frac{1}{4}$ inch, loosen the back thumb screw and slide the guide until its straight edge is over the figure 2, then tighten the screw.

By loosening the front thumb screw, the space scale may be moved in either direction to give the desired width between the lines of stitching. For instance, if $\frac{1}{4}$ inch tucks are wanted with $\frac{1}{4}$ inch clear space between each, the space scale should show the figure 3 exactly in line with the needle hole ; or if no space is required, then the figure 2. When the required width is obtained tighten the thumb screw.

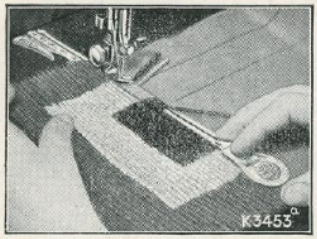
To operate the tuckmarker is exceedingly simple. Fold the material by hand and place it in the attachment by passing the folded edge over the upright marking point below the left hand end of the space scale, then between the tuck guide and below the foot. The lever on the top must also be down in position, as in the illustration, and the edge of the fold up against the small guide. Lower the presser bar lifter and sew as usual, being careful to keep the folded edge against the guide. When the first tuck is completed the material will be found creased for the second tuck. Fold the material at the crease and, with its plain side uppermost, proceed as before. When making the last tuck, raise the lever so that it does not press on the space scale. In this position no crease for a succeeding tuck is made in the material.

Use the table below to assist you in setting the Tucker.

	Tuck Guide	Space Scale
$\frac{1}{8}$″ tucks with no space	1	1
$\frac{1}{8}$″ " " $\frac{1}{8}$″ "	1	$1\frac{1}{2}$
$\frac{1}{4}$″ " " no "	2	2
$\frac{1}{4}$″ " " $\frac{1}{4}$″ "	2	3
$\frac{1}{2}$″ " " no "	4	4
$\frac{1}{2}$″ " " $\frac{1}{2}$″ "	4	6
1″ " " no "	8	8

Singercraft Guide

No special skill is needed in using this guide, and with very little practice, rugs, tea cosies, mats, babies' cot covers etc. may be made Whatever the article or the pattern or colour scheme to be used, the method of working is the same, the wool or other chosen material being wound round the guide and stitched to a suitable backing with the sewing machine. Various materials may be used for the purpose, such as rug wool, Angora, jumper wool, cotton, skein silk, etc., or even rag strips or old stockings cut into strips on the bias.



RELATIVE SIZES OF NEEDLES AND THREADS

(Class and Variety of Needles used 15x1)

Sizes of Needles	CLASS OF WORK TO SEW	Sizes of Cotton, Linen or Silk
9	Very thin Muslin, Cambric, Linen, etc.	100 to 150 Cotton. 30 Silk.
11	Very fine Calicoes, Linens, Shirtings, Fine Silk Goods, etc.	80 to 100 Cotton. 24 to 30 Silk.
14	Shirtings, Sheetings, Bleached Calicoes, Muslins, Silk and General Domestic Goods.	60 to 80 Cotton. 20 Silk.
16	All kinds of heavy Calicoes, Light Woollen Goods and Heavy Silk.	40 to 60 Cotton. 16 to 18 Silk.
18	Tickings, Woollen Goods, Trousers, Boys' Clothing, Corsets, Cloaks, Mantles, etc.	30 to 40 Cotton. 10 to 12 Silk.
19	Heavy Woollens, Tickings, Bags, Heavy Coats, Trousers, etc.	24 to 30 Cotton. 60 to 80 Linen.
21	Bags, Coarse Cloths, Heavy Goods of any texture.	40 to 60 Linen, or very coarse Cotton.

In sending orders, always specify the size required.

This Trade Mark is on the Arm of every Singer Sewing Machine.