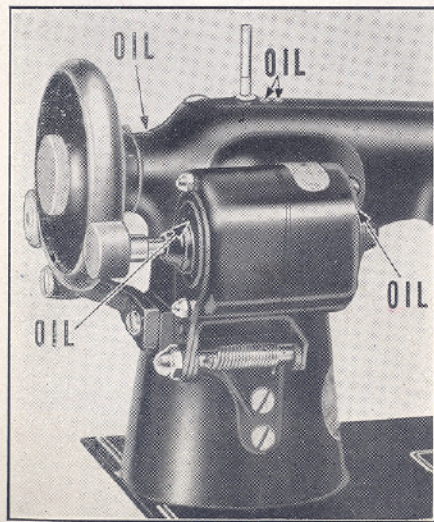
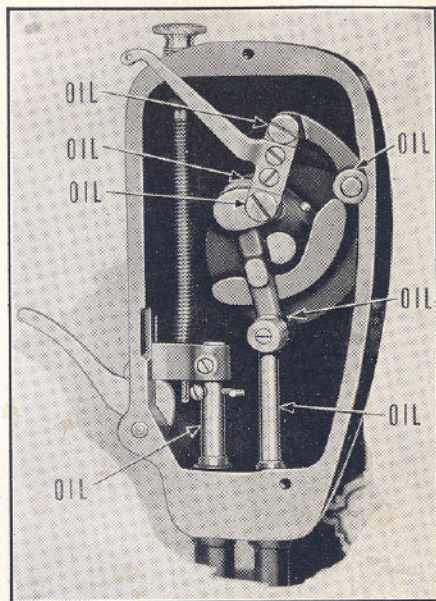


TO OIL PARTS UNDER FACE PLATE (illustration shown on right), remove plate which is held in place by the two face plate screws, one at the top and the other at the bottom of the face plate. Oil parts regularly, but not too freely, as the oil will run down the bar on to your material if you do. Remember, one drop of oil at each point is enough.

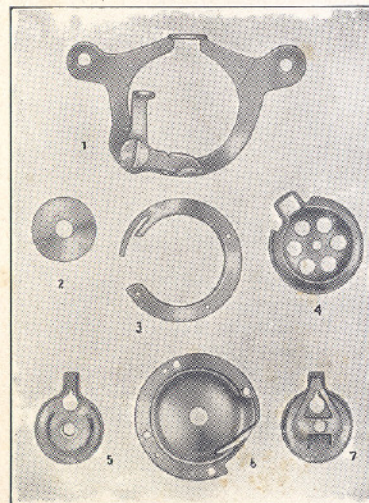
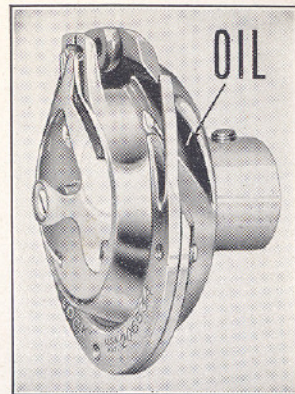


OIL MOTOR ONE DROP ONLY at each point, (as shown on illustration), about every sixth time you oil the rest of the machine. Too much oil in the motor will cause the motor to heat as the excess oil is consumed.

TO OIL THE FLOATING GIB HOOK MECHANISM. Tip the head back on its hinges. Turn hand wheel till V shaped slot on the hook appears. This Hook Mechanism should be oiled regularly at least once after every five hours of sewing or if machine has been idle any great length of time.

TO REMOVE GUMMED OIL, or to clean the machine if it has stood idle for some time, remove needle and bobbin case. Use a little kerosene at all oiling places (except in motor), run the machine rapidly for a few minutes, wipe clean, then put a drop of the best oil at each point indicated.

TO PREVENT STAINING — after oiling, wipe off superfluous oil and stitch a yard or so of waste material before sewing on good material.



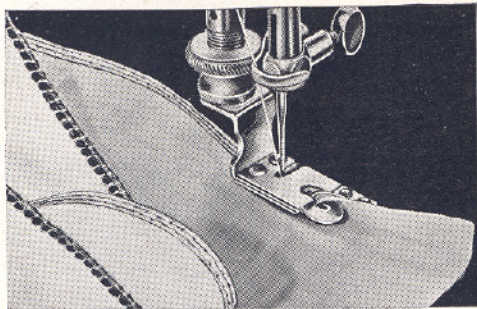
IMPORTANT PARTS OF THE HOOK AND BOBBIN CASE MECHANISM

1. Bobbin case stop shield AAE483BA with bobbin case latch.
2. Bobbin A1225.
3. Gib AAE488.
4. Bobbin case base AAE331A
5. Bobbin case, with face upward.
6. Hook AAE332.
7. Bobbin case complete. AAE330BA. Face downward, showing tension spring and tension spring screw.

INSTRUCTIONS FOR OPERATION OF ATTACHMENTS

Several Hemmers are furnished with your Machine. They will turn, finish and stitch hems from $\frac{1}{8}$ to $\frac{3}{8}$ of an inch in width.

NARROW HEMMER — A443-A



At left is the Narrow Hemmer, (sometimes called the Hemmer Foot, or Feller). To operate: Remove Presser Foot, attach Hemmer in its place on Presser Bar.

Before entering material, turn over for a few inches, $\frac{1}{8}$ inch of material along the edge, then insert between scrolls in Hemmer, folded edge on top, draw back until end is under needle; lower Presser Bar and begin to sew, guiding material so that neither too much feeds into scroll—

causing wide and uneven hems—nor too little, not allowing for a second turning, thus leaving a raw edge.

To trim a hem with contrasting colors at the same time hem is being turned and stitched, mercerized floss is used on the bobbin.

Wind bobbin with floss as illustrated on page 3.

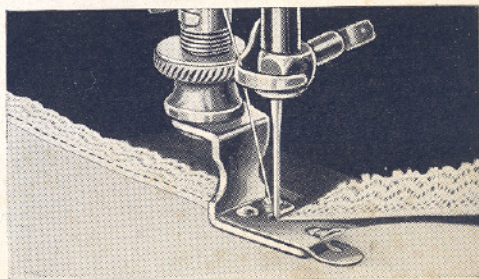
To thread the bobbin case with mercerized floss follow instructions for regular threading; but eliminate threading into slots (A) & (B). This is accomplished easily if floss is thrown around fourth finger of left hand (forming a tension) before it enters position (C) and tongue (D). Threading in this manner requires no change in bobbin tension.

Set Sewing Machine stitch longer than for regular stitching; 6, 8 or 10 are commonly used. Draw up floss from bobbin before starting to stitch as instructed on page 6.

To trim a hem with contrasting color as illustrated, complete hem's first stitching, then start work from other end and enter edge of hem in hemmer from the right. The hem will fill the scroll and stitching will appear at extreme edge.

HEMMING AND SEWING ON LACE

These two tasks can be accomplished in one operation. The material to be hemmed is inserted into the Hemmer in the regular way; the lace edge is inserted in the slot as illustrated at right. Guide the lace well into the slot so that the needle will pierce the edge at each stitch.

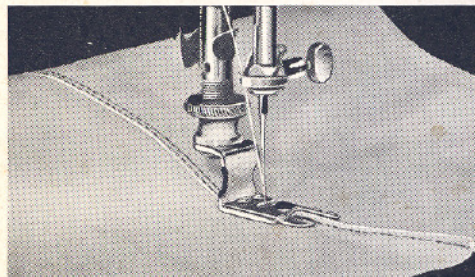
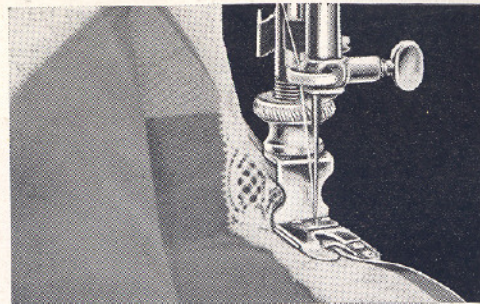


APPLYING LACE (French Style)

Lace edge, when applied, as illustrated is termed "French Application" due to the fact that when hem is pressed back onto wrong side of fabric no stitching is visible. It is also possible to draw up a little fullness in lace when applied in this manner.

Enter material to be hemmed as described for regular hemming; right side of material face up.

Draw fullness in lace by pulling one of the straight threads that form the selvedge. Enter this edge in hemmer from the left allowing right side of lace to lie on right side of material as it is being hemmed. Feed lace in at edge of hemmer sufficiently so that the stitching in hem of fabric will hold lace at the same time.



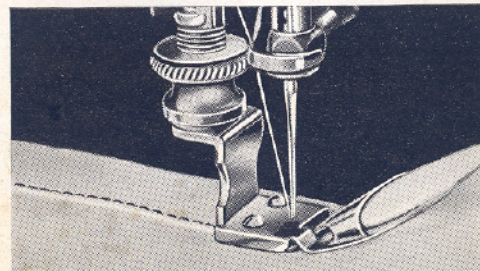
French Fell Seam

A French seam is made in the same manner as described above by sewing two edges of cloth together, making a hem in one and sewing the edge of second piece within it.

The French seam can be turned into a fell seam by entering the edge of hem into the hemmer from the right, as illustrated. A seam thus stitched is simple to make and affords great strength to garments.

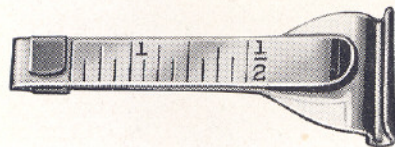
LARGE HEMMERS — A1251

Attach the desired size of Hemmer to machine in place of presser foot; crease over $\frac{1}{8}$ inch of material to be hemmed for about two inches before inserting edge of goods. Enter material and guide it around scroll of Hemmer using both hands to draw it back and forth a few times while gradually feeding the cloth into the Hemmer so as to fill the scroll completely. Draw material back so that creased edge fits around edge of scroll in Hemmer and selvedge edges meet. Hold both upper and under threads and proceed to stitch.



Should stitching appear too far from edge of hem loosen thumb nut and move Hemmer toward the right. If it appears dangerously close to edge of hem move Hemmer toward the left.

As material is stitched through the large Hemmers the turn at edge of hem is visible. Allow the hem to ride freely through the Hemmer, never drawing on the edge being turned, but gently retarding the material under the Hemmer, using the left hand.

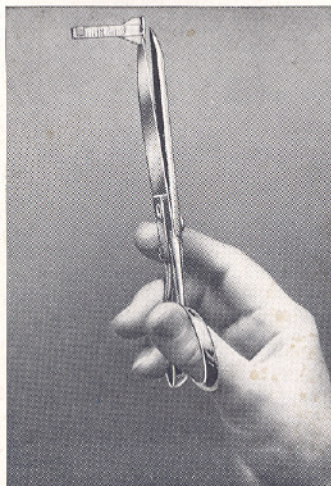


THE BIAS GAUGE — C1263

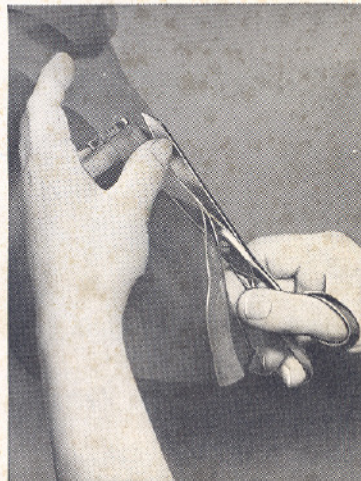
The Bias Gauge is used as a guide when cutting bias bands for use as binding; or narrow bands either straight or bias to be used as facings, pipings, cording or narrow ruffling.

The inch and fractions thereof designated on the Bias Gauge enables one to cut material of any texture perfectly for use with the Binder.

7/8 inch or 15/16 inch is correct for firmly woven materials.
1 inch to 1 1/4 inches is correct for materials that stretch more readily.



Bias Gauge on point of scissors



Guiding material through Gauge

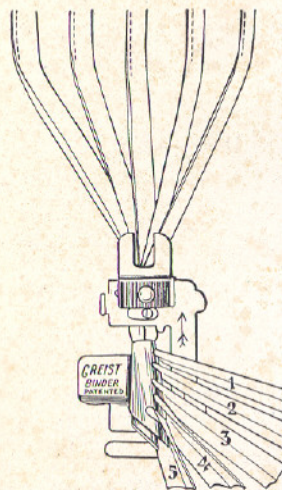
It is important that bindings to be used with the Binder be cut on a true bias to produce perfect work. Only a true bias will stretch evenly.

To prepare material for bias bindings fold it so that the warp and the woof are parallel and cut through the fold.

After cutting material into bias strips, the strips should be stitched together at the diagonal ends and the seams pressed flat.

Attach Bias Gauge to lower point of scissors, move gauge slide to width of band desired. The gauge slide is adjustable and can be moved to the left or right. Insert the material to be cut between the blades of the Bias Gauge with the edge of material against the slide, then cut, moving the scissors forward in short even clips.

THE MULTIPLE SLOT BINDER — A1256
Attach Binder to Machine in Place of Presser Foot



The Multiple Slot Binder is designed with slots to accommodate five different widths of commercial binding in addition to the familiar 15/16 inch bias cut binding which every woman has always used, making it herself with the aid of the Cutting Gauge from self material or otherwise.

The single fold commercial binding must be used and entered in slot of same size as illustrated at left. They are fed, respectively, through the five slots in the binder scroll, beginning with the smallest.

Commercial Binding is already folded over at each edge toward the center, slightly more on one side than the other so that when they meet a slightly wider turn appears on one side. The wider side should be the lower side when binding is entered in Binder.

Clip binding to a decided point and draw it through the slot designed for its width by using a strong pin. Draw binding beyond needle and stitch for a few inches to determine where stitching is desired.

The Binder is adjustable sidewise so that stitching can be made to appear properly close to the edge of binding.

Adjust Binder to right or to left so that stitching appears close to folded edge of binding.

PIPIINGS ENCLOSED IN BINDING

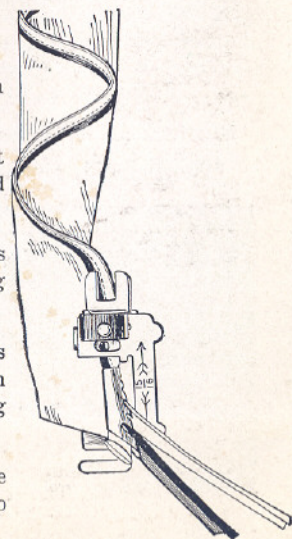
When using the Multiple Slot Binder a garment can now be piped and bound in one stitching.

The narrowest width should be entered in its slot first and drawn through to the needle, then followed by the others.

Illustration shows clearly the detail of two bindings being used on sheer fabric as a finish and trimming to a cascade.

Red binding size No. 5 acts as a piping and is entered in slot 5. No. 3 white binding is entered in slot 3 and holds the edge of cascade and red binding in one stitching.

The finer quality bindings are best suited to the double effects in piping and binding. Binding when too heavy makes trimming bulky.



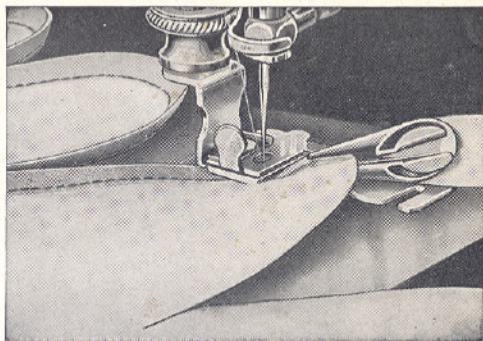
BINDING SCALLOPS

When using bias binding that has been cut 15/16" wide it is entered around the scroll of the Binder as shown in illustration of bound scallops.

Binding curves should offer no hardship when Binder adjustment is correct and material being bound carefully guided between the scroll of the Binder.

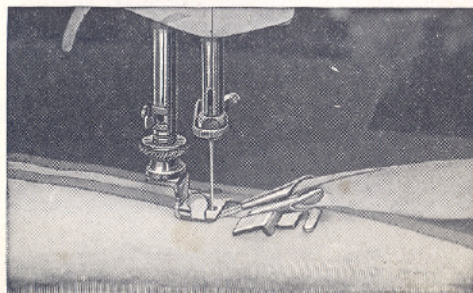
When binding small, decided curves, as shown in illustration, the material being bound is guided well into the Binder close to the needle. Use the third finger of the left hand for this work and note how simply a curve can be bound while the finger rests on the apron of the Binder.

Never draw on the curved edge of scallop to force its full length between the scrolls, but at the point where scallops meet, turn succeeding scallop back to a definite angle, stitch to meet edge of turned scallop. Allow needle to remain in work, raise presser bar and turn work so that edge of next scallop is ready for stitching.



TRIMMING WITH BINDING

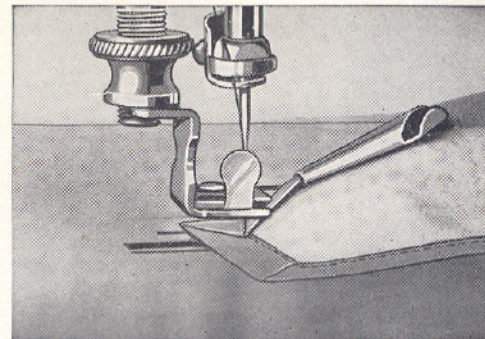
Bindings are frequently applied as a trimming. Bindings of any width can be applied but the dainty narrow widths are most popular.



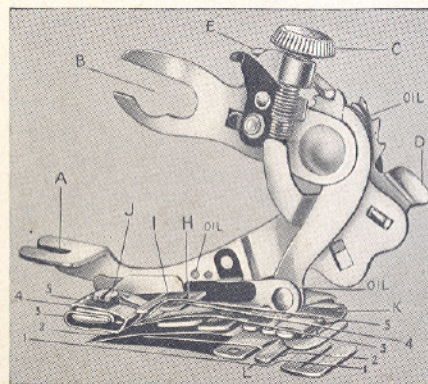
Place garment to be trimmed under the Binder and enter binding in its correct slot. Use frame of Binder as a space guide. For space between narrow bindings use inner edge of frame. To space wider apart for the wider bindings use the outer edge of frame.

BINDING A SQUARE CORNER

To finish a square corner with binding, Commercial Folded Binding is used. Select the size desired and enter it into slot designed for it. Stitch binding on first edge to within 1/8" of second edge. Now, draw work and binding forward and out of the Binder for about 2 or 3 inches. Mitre both top and bottom edges of binding and pin them into position. Draw work and binding back into the Binder until machine needle is above corner. Allow needle to enter binding and wind loose upper thread back onto spool, then continue stitching. Loop on bobbin thread can be threaded into a sewing needle and fastened.



THE FIVE STITCH RUFFLER — A1257



The Five Stitch Ruffler will make plain ruffling or plaiting, and by a simple adjustment without removing the Attachment from the machine, will make a plait every fifth stitch, or in groups of any desired number.

To attach—remove Presser Foot; attach Ruffler Foot "A" in place with fork arm "B" astride needle clamp screw. Tighten holder nut; see that needle passes thru center of needle hole in foot of Ruffler.

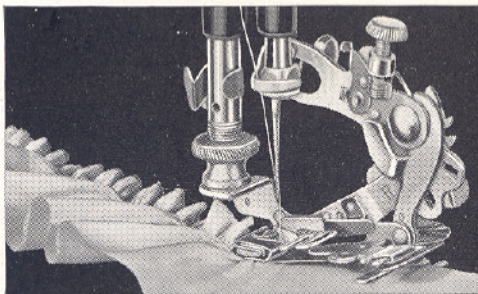
Place goods to be gathered between the blued blades following line 2. Push forward until under needle

hole; lower Presser Bar and proceed to sew.

By a simple adjustment the Five Stitch Ruffler will make four types of ruffling:

- Gathered
- Single stitch plaiting
- Five stitch plaiting
- Group plaiting

GATHERING WITH RUFFLER

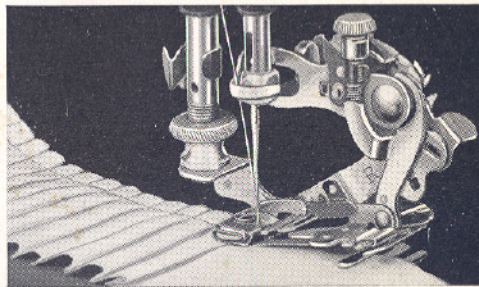


By regulating the adjusting screw and length of stitch, all variations from a very scant to a very full ruffle can be made.

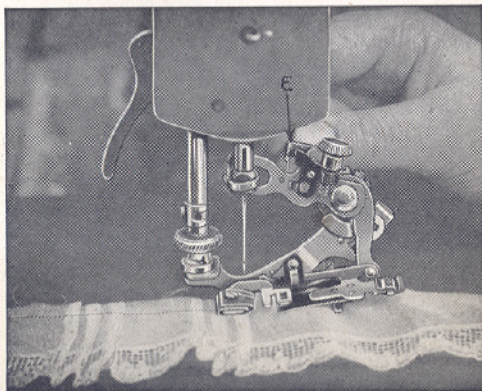
To make a scant ruffle, turn adjusting screw "C" to the left one turn at a time until the fullness is satisfactory. To make a fuller ruffle, turn screw "C" to the right. See illustration page 22. Adjust to suit.

FIVE STITCH PLAITING

To plait a single stitch ruffle keep lever "D" down and set stitch on machine fairly long. Turn adjusting screw "C" down toward the right as far as it will go for the largest plait. The size of the plait can be varied by the setting of screw "C".



To make a five stitch plaited ruffle pull lever "D" up as far as it will go and keep adjusting screw "C" down as far as possible. The length of stitch will determine the distance between each plait.

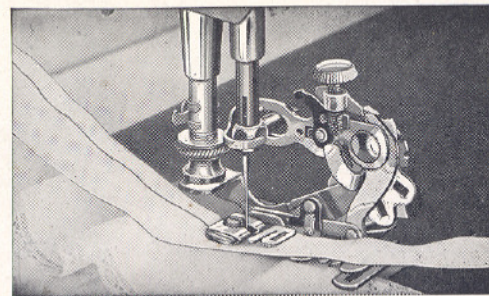


Group plaiting is accomplished with Ruffler set as for five stitch plaiting. After the first group of plaits have been stitched set the Ruffler into neutral by pushing adjustment "E" forward lifting the pawl out of contact with the ratchet wheel of Ruffler. Plain stitching can then be accomplished covering the space between groups. Pull adjustment "E" forward again for the next group of plaits. Continue until all plaiting has been accomplished.

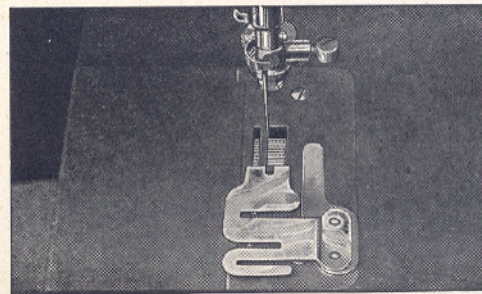
RUFFLING AND SEWING TO GARMENT

A gathered or plaited ruffle can be made and attached to a garment in one operation. A piping or facing may also be added at the same time.

Ruffle to be gathered or plaited is placed between the blued blades — following line 2. The garment is under the Ruffler — following line 1. Facing is placed on top of blued blades — following line 3. When adding a piping the piping is inserted in slot "H" with folded edge of piping toward the left — the facing is then placed above piping guide "H" following line 5. See illustration of Ruffler at bottom of page 21 where Ruffler adjustments and guiding points are designated.



THE SHIRRING PLATE — A1259



The Shirrer is used with the Ruffler and is intended for shirring in rows, or for a heading more than an inch wide.

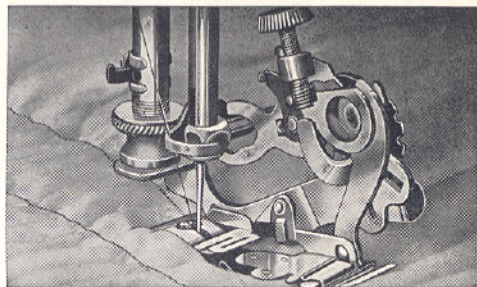
The Shirrer is attached by fitting the end prong into far hole on the bed of the machine, and the prong on the under side into hole nearest you and pushing forward into place.

Shirring acts as a foundation to many lovely trimmings and the Ruffler can be set to accomplish the holding of a given amount of fullness accurately. Gather a scrap of self material, gaining the fullness desired by adjustment described on page 22. Cut 2 inches from the gathered strip and pull out the gathers. If 2 inch strip measures 3 inches it will prove that 1½ times the finished amount will be required for finished fullness. If 2 inch strip measures 4 inches when strip is ripped, twice the amount of material will be required for fullness.

Remove the under blade from Ruffler by loosening the small screw on right side—tighten screw again to prevent loosening. Attach Ruffler to machine in regular way, over Shirring Plate.

Never use under blade on Ruffler with Shirrer.

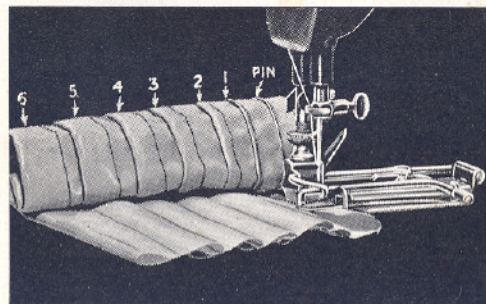
The Quilter, if used with the Ruffler, will act as a guide to evenly space rows of shirring.



THE TUCKER — A1258

Substitute Tucker for presser foot. See that needle passes through center of needle hole in foot of Tucker and tighten attachment holder nut.

A single screw adjustment governs the size of tucks and spacing between tucks.



It is possible to stitch tucks ranging in size from pin tucks to one inch.

If pointer on Tucker is set at 6 and the space marker also at 6 a tuck one inch in size will result with no space between.

Loosen the thumb screw on top of tucker and set pointer for desired size. To the right for wide tucks, to the left for narrow. Move marker to space between tucks and tighten thumb screw.

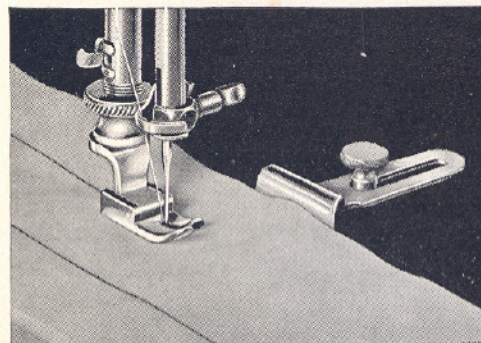
Crease first fold in material and insert it in the Tucker, from the left, between smoother and blade, with the portion of material to be tucked uppermost. Lower the presser-bar and proceed to sew, keeping the crease against the guide.

When the tuck is finished, flatten it away from the crease just marked so that it lies in the proper direction. Next, crease the material along the line made by the marker and proceed in the same manner as above for the next tuck, but this time catch the edge of the first tuck under the hook just in front of the

marker. It is unnecessary to guide the cloth, as the Tucker does this unaided.

When making the last tuck, lift the operating lever up out of the way of the needle clamp in order that no mark may be made where a mark is not desired.

THE CLOTH GUIDE — C1250

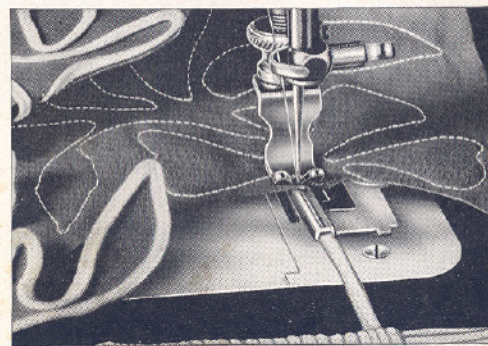


This Attachment is used as a guide for straight stitching when making wide hems or deep tucks.

Attach to bed of machine with Thumb Screw. Allow fold of material to rest against guide.

BRAIDER PLATE — A1260, AND BRAIDER FOOT — A1261

Substitute Braider Foot for Presser Foot, for use with the Braider Plate which is attached to the bed of the machine in the same manner as is the Shirring Plate. First insert braid in tube on Braider and then draw well up under needle. If stitching does not come in center of braid, the tube may be adjusted slightly.



Attach braiding design firmly to wrong side of material, insert material face down, under foot but over Braider Plate. Lower Presser Bar and proceed, guiding pattern so that braid will be pierced at each stitch. When design is finished pierce material and draw the ends of the braid thru to wrong side and fasten.