Needles and Thread for Chain Stitch Machines

It is very important that the proper needles be used on chain stitch machines and that the proper size of needle and thread for the work to be done are selected. By referring to the following table this may easily be done. Note especially that on the finer goods, such as chiffon and the lightest grades of silk, lawn and batiste, a finer thread and stitch is used than on lock stitch machines.

### RELATIVE SIZES OF NEEDLES, THREAD AND STITCHES

**For SINGER Chain Stitch Machine No. 24**
(Class and Variety of Needles Used, 24 x 1)

<table>
<thead>
<tr>
<th>CLASS OF WORK</th>
<th>SIZE OF NEEDLE</th>
<th>COTTON</th>
<th>SILK</th>
<th>STITCHES FOR INCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgette, chiffon, net, light weight synthetic fabrics, heavy duty sheet, batiste and other feather weight or sheer fabrics. For infants' clothes and/or children's clothing, plus fine linen and all-deline or geotextile fabrics.</td>
<td>9</td>
<td>200</td>
<td>000</td>
<td>30</td>
</tr>
<tr>
<td>All medium, light weight suiting, suiting, for children's clothes, woollen, shantung, chiffon, silk, jersey, etc.</td>
<td>9</td>
<td>150</td>
<td>000</td>
<td>30</td>
</tr>
<tr>
<td>Light weight suiting, flax dress silks and nylon, denim and fabric furnishings, Fine worsted and rayon/cotton mixture.</td>
<td>11</td>
<td>100</td>
<td>000</td>
<td>35</td>
</tr>
<tr>
<td>Heavy suiting, suiting, heavy denim and gabardine. For stitching aprons and men's work shirts.</td>
<td>10</td>
<td>50</td>
<td>E</td>
<td>10</td>
</tr>
<tr>
<td>Heavy weights of suiting, ramie, bed ticking, canvases, print furnishing, boys' dark suits, work or sport uniforms.</td>
<td>10</td>
<td>30</td>
<td>E</td>
<td>12</td>
</tr>
</tbody>
</table>

For needles and thread suitable for various classes of work on lock stitch machines, see table on page 13.
The binding must measure from \( \frac{3}{4} \)" to one inch in width, depending upon the texture of the material. Fabrics finished with dressing, such as percale or cambric, will work successfully when cut \( \frac{3}{4} \)" wide, while soft material such as batiste, lawn or silk must measure from \( \frac{3}{4} \)" to one inch in width. A trial with the Binder will quickly determine the proper width for the material to be used. When binding is cut too narrow, the edges will not turn in, and if too wide, will fold over in plaits.

The cutting gauge will insure an even width of binding and a quantity can be cut in a short time.

Joining Bias Strips

One yard of yard-wide material will make about 30 yards of bias strips \( \frac{3}{4} \)" wide. It is usually an economy to purchase this amount and save any surplus for future use.

![Image of bias strips]

**Fig. 44. The Right Way to Join Strips**  **Fig. 45. The Wrong Way to Join Strips**

Cut the strips, lay the two diagonal ends together, as shown in Fig. 44, and stitch the ends together. The stitching should be as close to the edge as possible so that the seam will pass through the Binder freely. When the strips are straightened out, as shown in Fig. 44, the edges will be exactly even. Do not join the strips as shown in Fig. 45, as the edges will be uneven when straightened out. It is advisable to press the seams open with an iron and if the strips are not to be used immediately they should be wound on a piece of cardboard to keep them from stretching.

To Cut Bias Randa Quickly Without the Cutting Gauge

Take a yard of material, Fig. 46-A, and fold in the center from corner to corner, as shown at B. Fold twice again as shown at C and D. Mark material with a pencil the desired width, as shown at D. Cut carefully on the lines, as shown at E. If the material is folded accurately and is carefully marked, the strips

![Image of cutting bias strips]

**Fig. 46. Cutting Bias Strips Without the Gauge**

will be of even width. This method of cutting can be used successfully on material that has a dressing, but is not practical for soft batiste or silk.

The Binder

The Binder is included in the set of attachments furnished with most Family Machines. The work of this attachment consists in turning the edges of bias material and applying it to the seam or edge of a garment at one stitching. When properly adjusted and operated, the stitching will come close to the edge of the binding.

Attaching the Binder to the Machine

Raise the needle to the highest point and remove the presser foot from the machine by loosening the thumb screw which holds it in place. Compare the foot of the Binder and the presser foot, and you will see that they are attached to the machine in the same manner. Attack the Binder to the presser bar. Turn the balance wheel slowly toward you to make sure that the Binder is properly attached to the bar and that the needle goes through the center of the needle hole.

Inserting the Binding in the Binder

Fold the binding in the center and cut to a point, as shown in Fig. 48. Insert the pointed end in the binder scroll, Fig. 49, until the pointed end comes through the lower end of the scroll.

![Image of inserting binding]

**Fig. 47. The Binder**

**Fig. 48. Cutting Point on Binding**

**Fig. 49. Inserting Point**
The Adjustment and Operation of the Binder

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

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 required when binding curves than is necessary when binding a straight edge.

To adjust the Binder for stitching, loosen screw B, Fig. 50, and move scroll to the right for a narrower adjustment and to the left for a wider adjustment. Care should be taken to see that the screw is well tightened after making an adjustment. To become perfectly familiar with the adjustment of the Binder, practice is necessary. Never pull the binding as it feeds through the Binder, as bias material is very easily stretched and will be too narrow when it reaches the needle. When this occurs the edges will not be turned.

Binding May be Purchased Cut and Folded for Use with the Binder

Folded bias binding may be purchased for use with the Binder. This binding comes in a variety of materials and colors. Folded bindings for use with the Binder must measure ½” in width. The No. 6 width in standard brands usually measures ⅝”, but it is always well to be sure of this before purchasing.

Folded binding is inserted in the outside slot of the Binder, as shown in Fig. 51. The Binder is adjusted and operated in the same manner as when using unfolded binding. One-half inch head or ribbon may be used in the same manner.

A binding inserted in the outside slot of the Binder will be turned only once. It is therefore necessary to have finished edges when using binding in this slot.

Plain Bound Seams

A plain bound seam is practical for many garments, such as petticoats, wash dresses, children’s clothes, etc. Make a plain seam and trim close to the line of stitching.

Insert binding in Binder, adjust to sew close to the edge, insert the seam in the scroll of the Binder and start sewing, taking care to hold the edge well within the Binder scroll to insure a flat seam.

Open Bound Seams

An open bound seam is practical on woolen garments where a double seam would be too bulky. The seam is stitched in the regular way after the garment is fitted. It is then trimmed evenly about ⅛” from the line of stitching and pressed flat with an iron. Both edges of the material are then bound with suitable material. Serge or woolens may be bound with lightweight percale.
Binding Outside Curves

Practice is required to bind a curved edge properly. The edge to be bound must be held well within the straill of the Binder in order to make it not pull out.

When binding a curved edge (see Fig. 54) the scroll at a point close to the needle, turning 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 bindings, the scroll should be adjusted a little to the left.

Binding applied with the Binder will have a neat tailored finish that cannot be gained by binding the binding in position and then stitching with the presser foot.

Binding Inside Curves

It will be necessary to practice binding an inside curve on various kinds of material; as this curve is found on nearly all garments which may be finished with a bound edge.

When binding an inside curve with the Binder, straighten out the edge as it is being fed into the attachment. When doing this, care should be taken 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.

Applying a French Fold to a Curve

Binding makes a very attractive trimming when applied as a French fold in a contrasting color, or when made of white and applied to a colored garment. To apply the French fold to a garment, insert the binding in the Binder in the regular way and place the garment to which the trimming is to be applied directly under the attachment. See Fig. 57.

It is well to mark a line on the material where the fold is desired.

Binding Plackets

It may appear difficult at first to bind a placket with the Binder, but it is very simple after you have learned to fold your material properly at the point of the placket. Fold the material, as shown in Fig. 58, so that the entire edge to be bound will be in a straight line. This is done by placing the placket open in a continuous line and folding under the surplus material at the point of the placket.
Insert the edge of the placket in the Binder and stitch the binding on as usual. Run the machine slowly as the point is reached and take care that too much material is not allowed to feed into the Binder. As soon as you have reached the point of the placket, fold material to the other side of slit and blind to the end.

For practice, cut a slit about five inches deep in muslin and learn to fold it in a straight line before starting to bind. When you have mastered the placket you will find it quite easy to bind scallops.

The bound placket is practical to use on any garment where a wide overlap is not desired.

If snap fastenings are used, they may be sewn to the edge of the binding and the turned-back edge may be blind-stitched to the garment, as shown in Fig. 90.

Beard Scallop

The point at the top of the scallop is bound in exactly the same manner as the placket. Practice the binding of a small single scallop first before attempting to bind a row of scallops.

If the material is soft and liable to stretch, add a row of machine stitching close to the edge of the scallop before starting to bind the edge.

Binding a Square Corner with the Binder

While it is not possible to make a perfect mitered corner with the Binder, it is possible to make a practical corner for use on pockets, collars, button holes, etc. To bind a square corner, bind one edge of the material until about one-eighth inch from the edge. Stop the machine with the needle in the material, raise the presser bar, place the small screw driver or the skiletto in the socket of the Binder and assist in turning the material squarely around in position to bind the other edge.

FIG. 41. TURNING A SQUARE CORNER

When the material is turned in the proper direction, push up sufficient binding on the under side to allow for turning the corner. See Fig. 61. You will find it quite easy to make this corner after a little practice. If the binding is not caught on the under side of the corner, it may be fastened down with a hand sewing needle.

Another way to bind a square corner is to bind one entire side, cut the binding off, bind the other side and then miter the corner by hand.

Making Button Loops with the Binder

To make button loops, first stitch together a piece of binding of the desired material and length by using the Binder. You will then have a quarter-inch fold with the edges stitched together. Cut a strip of binding long enough to make a loop of the desired size and fold it to a point, as shown in Fig. 63. Fasten the loop at the point with a hand sewing needle.

FIG. 61. MAKING BUTTON LOOPS

The loops may be fastened to the garment in any desired manner. If used as a trimming they may be applied under a back or plait, and when used on the edge of the garment they may be applied with a facing.
Bound Buttonholes Made with the Binder

Take a strip of material as wide as you wish to make your buttonholes and bind each side. For example, if you wish to make your buttonholes two inches apart take a two-inch strip of material as shown in Fig. 65, at A, and bind each side as shown at B.

Measure the diameter of the button you wish to use and cut the bound strip into pieces one-half inch wider than the button. See Fig. 65-B. After the strip is cut into sections, bind them together so that the bound edges just meet, as shown in Fig. 66. Bind one edge of this strip, using the Binder, and before binding the other edge, place the edge of the garment even with the strip of buttonholes and bind both edges at one stitching. See Fig. 67. The free edge of the binding can then be stitched flat to the garment.

If an extra-strong buttonhole is desired, a linen tape may be used for the binding. This must, however, be one-half inch in width and be used in the outside of the Buttonhole.

Making Cut-In Buttonholes with the Binder

The cut-in buttonhole is made in the same way as the pocket. Cut a slit in the edge of the material to the depth you wish to make the buttonhole and shape it as shown in Fig. 68, at A. Fold the material in the same manner as in binding a pocket. See Fig. 69. Turn off the edge of the binding, as shown in Fig. 69, at B, and bind the edge with the Binder as shown at C.

Binding and Applying Rick-Rack Braid to the Edge of a Garment at One Stitching

Rick-rack braid may be purchased at any notion counter and comes in a variety of colors and widths. This braid makes an attractive trimming for hose, gowns, and aprons and may be applied to an outside or an inside curve at the same time the edge is bound.

Insert the edge to be bound, together with the rickrack braid, in the scroll of the Binder, as shown in Fig. 70. Care should be taken to see that the braid does not feed too far into the scroll.

The rick-rack braid should never be allowed to feed beyond the edge of the material to be bound. When this is done, the bias binding is forced away from the scroll of the Binder and the needle will not catch the edge of the binding when binding a curve.

A fine rick-rack braid is most effective trimming on organdie dresses or collar and cuff sets.

This braid is very inexpensive, and solves the problem of trimming cotton garments when a little decoration is needed.
If it is difficult to hold the braid even with the edge when binding, first stitch the braid in position with the passer foot and then apply the binding. An additional row of braid may be sewn to the free edge of the binding if a more elaborate trimming is desired.

Rick-rack braid may be applied equally well to outside or inside curves and because of the weave will lie flat after the garment is laundered.

Other types of cotton braid trimmings may be applied in the same manner.

**Finishing the Neck Edge of a Garment with Binding**

The problem of a neat binding for the neck edge or sleeves of a garment is easily solved by applying binding with the Binder. Fig. 72 shows the neck edge of a garment trimmed with a narrow plaiting which was made with the Ruffler as directed on page 62. After the plaiting was stitched to the edge of the garment, the seam was trimmed close to the line of sewing and the edge bound with suitable material using the Binder.

Silk binding may be applied in this manner by cutting the silk on a true bias, using the cutting gauge as directed on page 61. When using silk for binding, a small strip should be cut first and tested in the Binder to determine the correct width. Soft silk will work satisfactorily when cut about one inch in width.

**Applying Military Braid with the Binder**

Most attractive trimmings for surge or other woolen dresses may be developed by using military braid as a binding. The braid must measure one-half inch in width for use with the Binder and it must be inserted in the outside slit.

**A Suggestion for Trimming**

Binding may be stitched flat to the material to form a lattice effect by placing the binding in the Binder in the regular way and the material to which the binding is to be applied under the attachment, following directions for making French folds on page 69. Binding may also be applied to paper in this manner, and when the paper is torn away the binding will be stitched together in the form of a lattice insertion, which makes a most attractive trimming for dresses of silk or cotton.