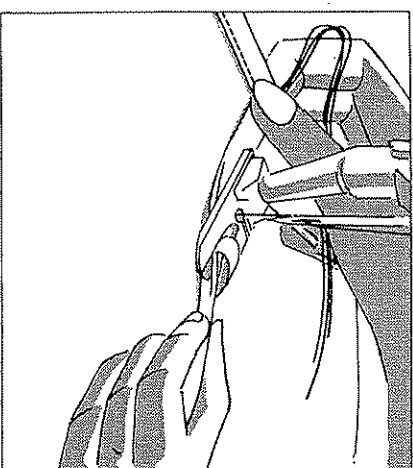
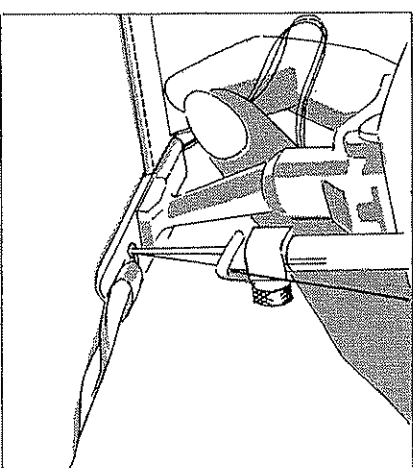


Hold corner (together with thread) with thumb and forefinger of the right hand and lay the work near the presser foot.



With the left hand hold the first fold near the presser foot and draw through the spiral on the foot. Still holding the fabric taut draw it towards you and lay the end under the needle. Stick the needle in and lower foot.

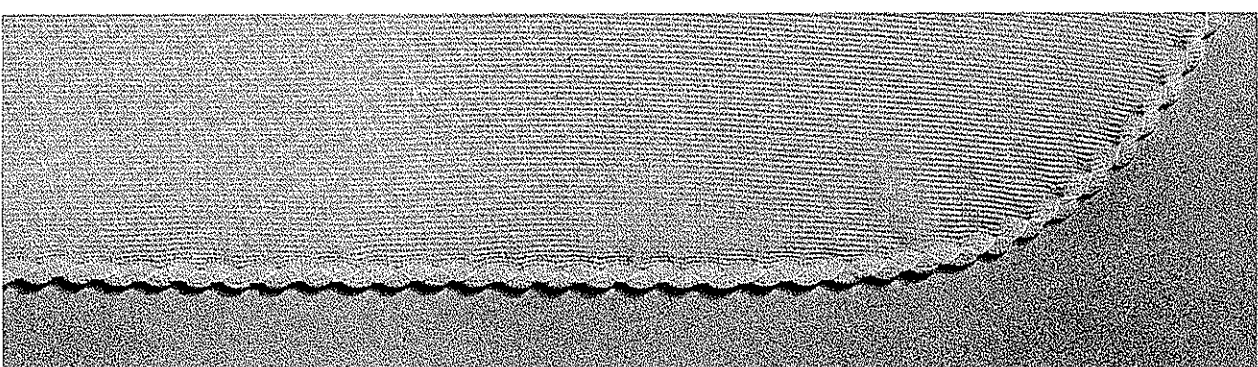


To facilitate sewing on the corner one should hold the tacked thread together with the sewing thread and pull gently until the presser foot no longer lies on the corner.



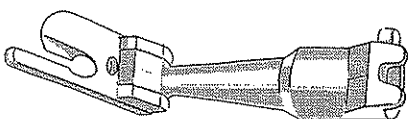
Shell hemmer 168
Needle: 80—70
Mercerised sewing
thread No. 30

Stitch width: 4
Stitch length: $2\frac{1}{2}$ —3
Automatic: 0 WWV and WV
Needle position: center
Feed control: WV
Use the same method as for normal hemming.

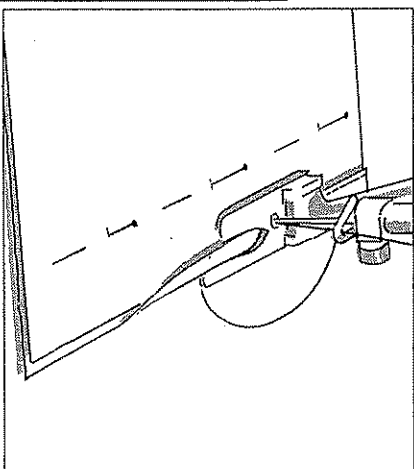


The Lap Hemmer (Feller)

Lap hemmer 174
Needle: 80-70
Mercerised sewing
thread No. 30

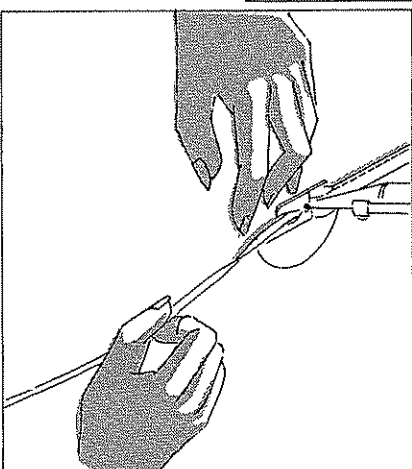


Stitch width: 0
Stitch length: $1\frac{1}{2}$ -2
Automatic: 0 WWW and WW
Needle position: center
Feed control: MM



First operation:

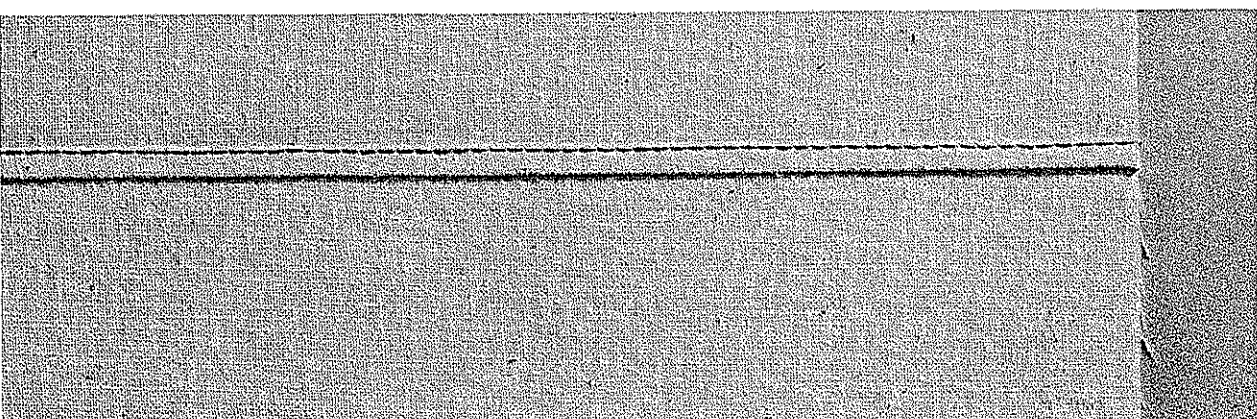
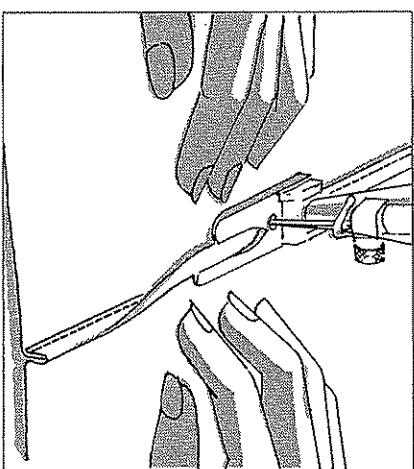
Pin both pieces of fabric together so that the piece underneath projects by 3 mm ($\frac{1}{8}$ "). Fold overlapping piece over the top piece and slide it under the presser foot. Sew a few stitches. Leave needle in the fabric, lift presser foot and guide fabric into the foot.



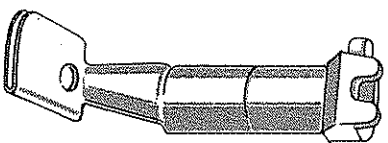
When sewing make sure that the same width of material enters the feller all the time. Guide the fabric as you do when sewing a hem.

Second operation:

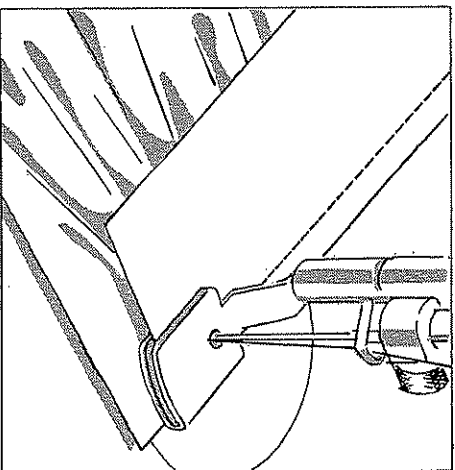
Now iron seam well, guide it again into the feller and sew the second row of stitches. Pull fabric slightly sideways on both sides of the feller.



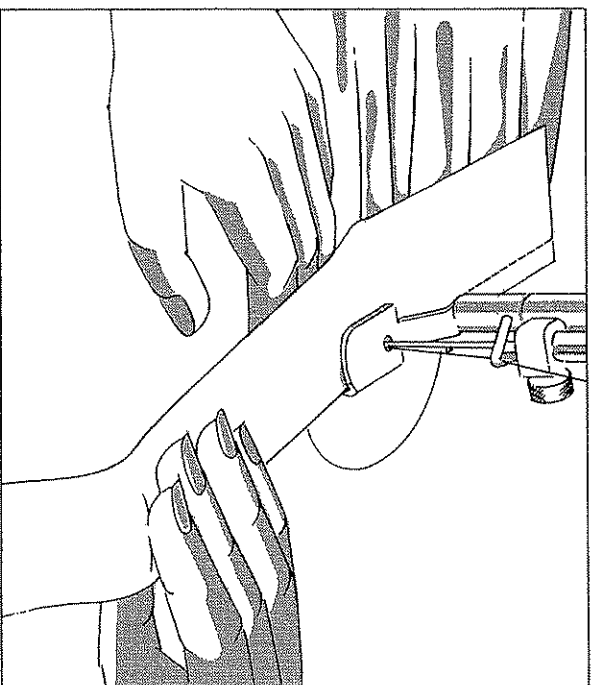
Presser foot:
Gatherer 179
Needle: 80-70
Mercerised sewing
thread No. 30



Stitch width: 0
Stitch length: $1\frac{1}{2}$ -4
Automatic: 0 WWWW and MW
Needle position: center
Feed control: \overline{w}



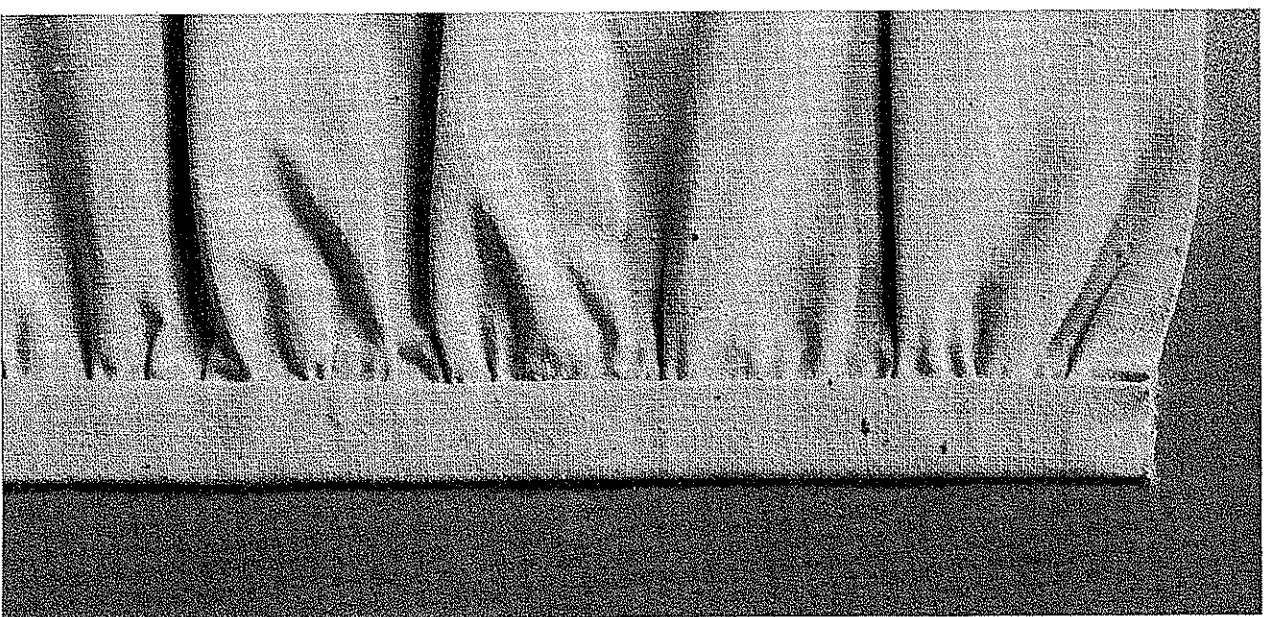
The material to be gathered always lies **under** the foot and the flat piece in the slot.



The flat piece of material is inclined to slip out of the slot. In order to avoid this the work should be guided as shown in the illustration, by holding the lower piece with the left hand and the upper piece with the right hand. Always pull slightly towards the right hand corner of the presser foot.

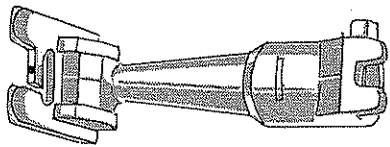
Calculation: The amount of gather depends on the length of the stitch. The longer the stitch the tighter the gather.

For tight gathering the upper piece of material can be pulled a little.



Applique work

Embroidery foot 030
Needles: 80-70
Thread:
Embroidery thread
No. 50/100



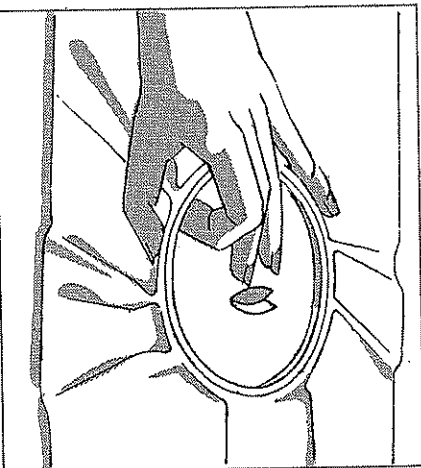
Automatic:
Needle position: 0 WMMW/ and MW/
Feed control: center
MMW

Guiding the work

You may work with or without the frame; however, taut material can be guided more easily.

Important: The machine feeds automatically but only in a straight line. For curves the work must be guided by hand i.e. the frame or the material must be lightly held by one or both hands and should not be pressed onto the sewing table.

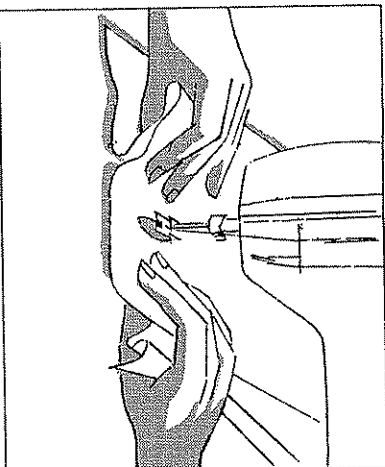
Guiding with the frame: The left hand must hold the frame steady, because often the frame is guided during sewing with this hand only.



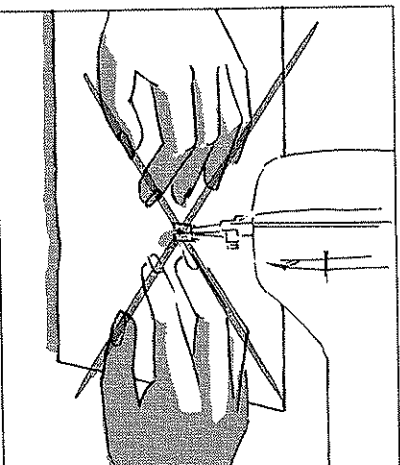
First put your hand in the position as when darning. Then draw forefinger back to the inner edge of the frame. Extend the middle and the ring fingers. Your hand now has complete control of the frame and the best possible freedom of movement.

Notice: Do not place the forefinger parallel to the thumb, otherwise the movement of your hand will be restricted.

Guiding without frame: "You can only guide the work if it is held lightly." Nevertheless, it is essential to hold the material itself rather taut. This is the only way the work can be turned as the design requires.



Correct: Place thumbs under the material. Make a fold if the piece of work is large (see diagram). Guide near the presser foot.



Incorrect: This way is incorrect as pressure on the work will result.

Working sequence

Preparation: Trace design on the wrong side of the material with the aid of special tracing paper. See that the motive is in reverse. The design can also be traced onto iron-on Viline and the Viline ironed on to the wrong side of the material. (Especially recommended for rough and irregularly woven fabrics that are difficult to draw on.) If a design that is to be used often trace on thin Viline and then transfer it onto the material. Viline can be tacked on to a garment to stiffen it if desired.

1st run:

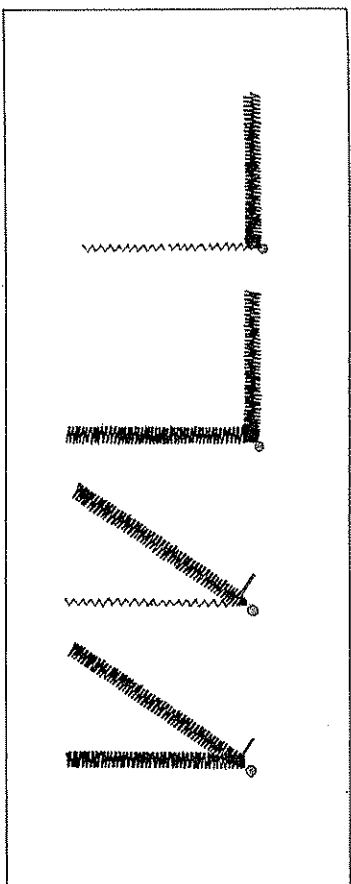
Stitch width: $\frac{1}{2}$ - 1
Stitch length: $\frac{1}{4}$ - $\frac{1}{2}$

Track material for applique onto the right side.
1. Sew along the traced lines on the wrong side.
2. Turn to right side and cut away neatly along the sewn lines any surplus applique material. (At the same time remove the frame.) Hold scissors correctly.

2nd run:

Stitch width: $1\frac{1}{2}$
Stitch length: almost 0

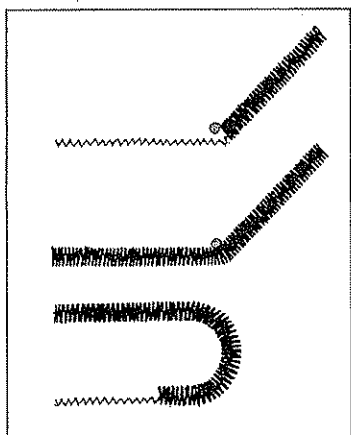
Cover the cut edge on the right side with Satin Stitch. Sew corners and small curves, stitch by stitch (using hand wheel).
Finish by tracing the lines through that were not appliqued and sew from the right side.



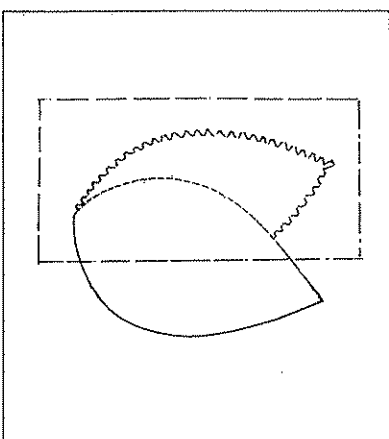
Sewing the corners

1. Rectangular corner: Put the needle on the outer edge, turn the work and continue sewing. The corner will now be oversewn.

2. Pointed corner: Stop sewing $\frac{1}{2}$ cm ($\frac{1}{8}$ ") in front of the corner. Then turn back zigzag while sewing onto 0. Raise presser foot and turn the material. Set zigzag onto $1\frac{1}{2}$ again and carefully continue sewing.



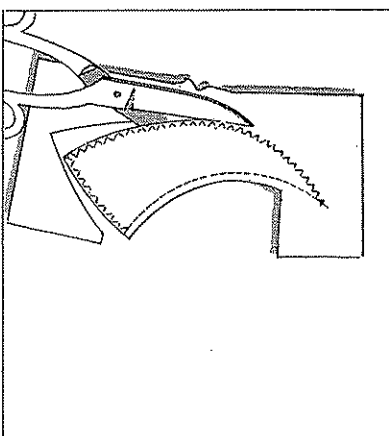
3. Blunt corner: Sew until the needle is in the middle of the angle. Then sew out from center, replacing the needle in the middle after every stitch, raising the presser foot and turning the work slightly. **Curves:** Using the same method as for blunt corners.



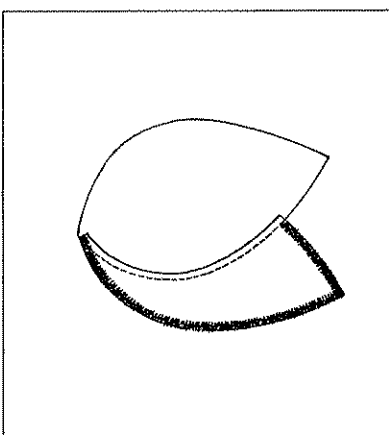
Multi-colour applique work

The lower part:

1. Only this part of the applique material should be tacked on. Sew around: Where the colours overlap use straight stitch and zigzag the other contours.

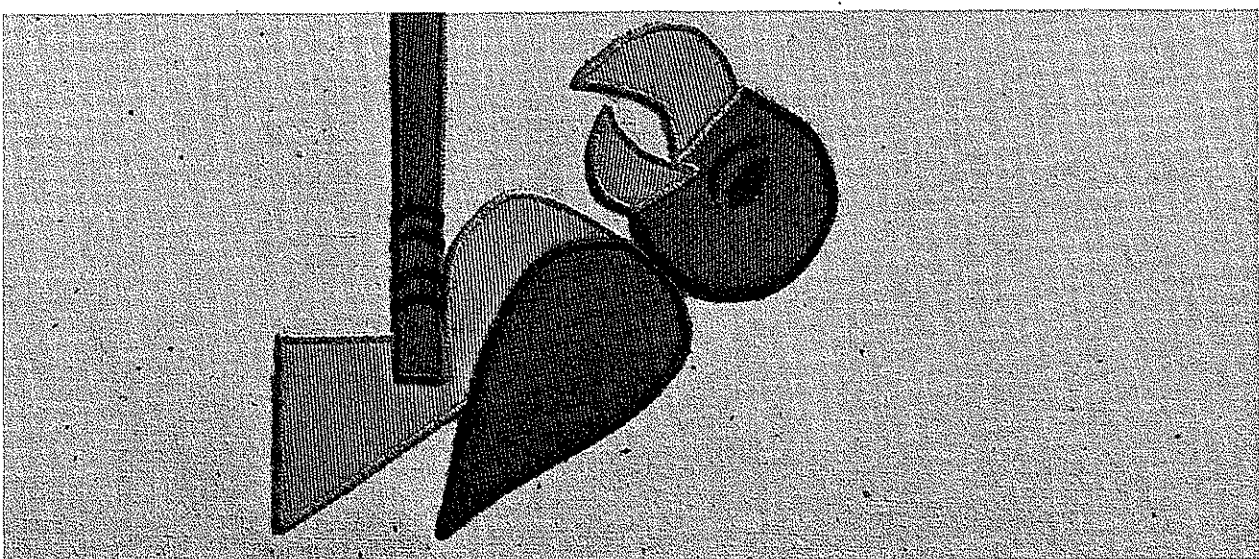


2. Trim away surplus applique material, cutting as closely as possible to zigzag stitches. Where a straight stitch has been used leave $\frac{1}{2}$ cm ($\frac{1}{8}$ ") beyond stitches.

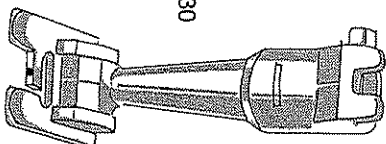


3. When covering the contours leave the straight stitched edge uncovered. This will be covered again by the next part.

Top part: Complete in the usual manner for applique work.



Satin Stitch embroidery



Embroidery foot 030

Needle: 80

Thread:
Embroidery
thread No. 30/60

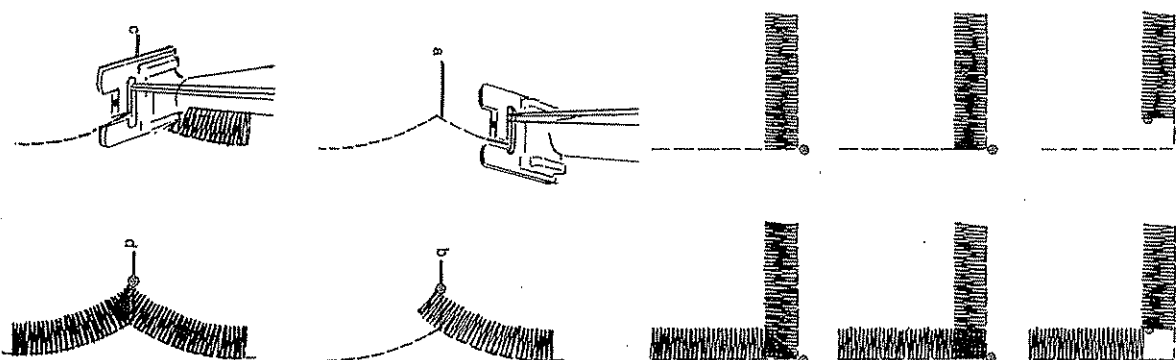
Stitch width: 4 almost 0
Stitch length: almost 0
Automatic: 0 WWWW and WW
Needle position: center
Feed control: MM

Remember the following

when embroidering over satin stitch and ornamental stitch seams:

The stitch length for embroidery is to be adjusted to a short length. The material may block progress when the foot moves over a seam already embroidered. By guiding the work close to the foot and assisting its movement the difficulty can be removed.

If the foot is almost over the edge of the seam, hold the material back a little otherwise the foot will glide away and this will result in a long stitch (which will look as if a mistake has been made).



Satin stitch corners

1. Open corner: Sew until a space the width of the stitch is left in the corner. Place needle on the inside edge. Turn work and continue sewing.

2. Closed, oversewn corner: Sew to the corner. Put needle on the outer edge, lift presser foot and turn work. Lower foot again and continue sewing (help a little by placing finger near the foot, see embroidery over satin stitch or embroidery seams).

3. Corner with diagonal design (rectangular): Sew to the corner. Place needle on the outer edge. Lift foot, turn sewing work. Needle position, left or right (according to design) sew zigzag on 0. Lower foot. **Now whilst sewing slowly** turn zigzag onto 4 again; sewing slowly!

4. Corner with diagonal design (for feathering). Needle position left!

a) Lay the work under the foot so that the design can be seen in the slot that runs lengthwise. b) Sew to the corner, i.e. till the needle is about to make a stitch from the left on the line drawn to assist you. c) Raise foot, turn work and turn zigzag to 0. Lower foot again. Make sure that the design appears once again in the slot that runs lengthwise. d) During sewing turn the zigzag again slowly onto 4; sew slowly!

Borders for table-cloths, table-napkins, doilies etc.

Border scallops

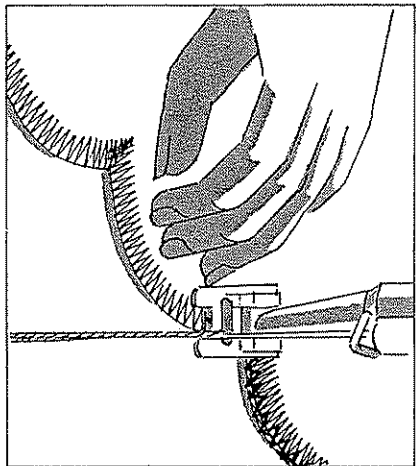
Preparation: Draw the scallops with the aid of a cardboard stencil onto the material. Mark all the corners with white crayon. Underlay with paper.

1st run:
Stitch width: 4
Stitch length: almost 0

Sew satin stitch seam. Remove paper and carefully cut round the scallops.

2nd run:
Stitch width: 2½–3
Stitch length: 1–1½

Oversew edge with zigzag. At the same time guide a pearl cord along the edge making sure that it does not slide over or under it.



Note: The machine feeds in a straight line and not in curves. The border cord must therefore be held **straight** and the scallop edge must be guided on this straight line. **Guide slowly and near the foot.**

Straight border

Preparation:

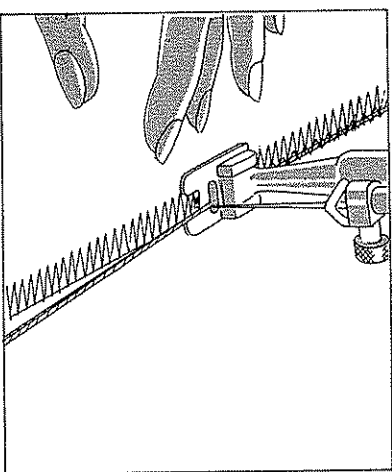
Draw border line, underlay with paper.

1st run:

Stitch width: 4

Stitch length: almost 0

Sew satin stitch seam. Remove paper and cut away surplus material.

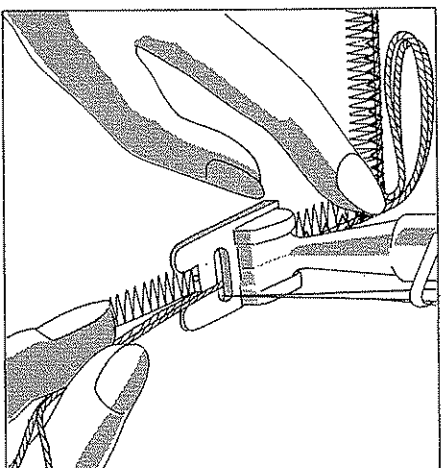


2nd run:

Stitch width: $2\frac{1}{2}$ —3

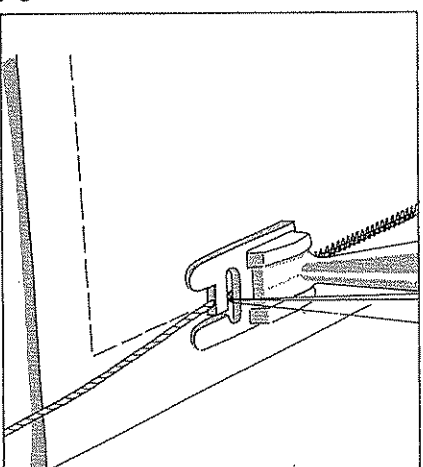
Stitch length: 1— $1\frac{1}{2}$

Oversew edge with zigzag. At the same time guide through pearl cord (No. 8 three- to five-ply) taking care that it neither slides over or under the edge.



Corner: Sew to the corner. Lower drop feed control. Sew three stitches using the handheel. Leaving the needle in the work at the inside edge, raise foot, turn work. Make a loop with the cord, lower foot and sew further three stitches. Raise drop feed control and continue sewing carefully. Pull on the loop until the foot no longer lays on the corner. To make loop disappear pull the ends of the cord. (See diagram.) Push corner stitch over the corner and continue sewing.

Narrow border



1st run:

Foot:

Embroidery foot

Stitch width:

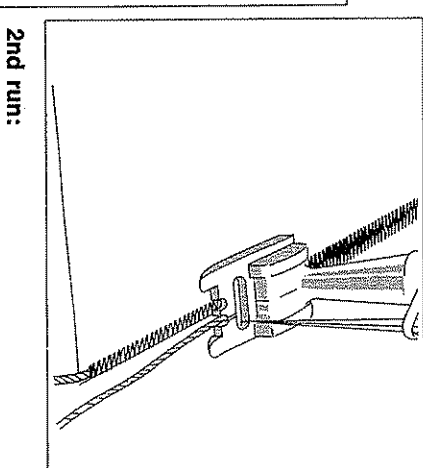
$1\frac{1}{2}$

Stitch length:

$\frac{1}{4}$

Needle position: left

Draw pearl yarn No. 5 or 8 (according to material) through the hole of the embroidery foot. Sew seam with satin stitch. Cut surplus material away carefully.



2nd run:

Foot:

Small button-hole foot

Stitch width:

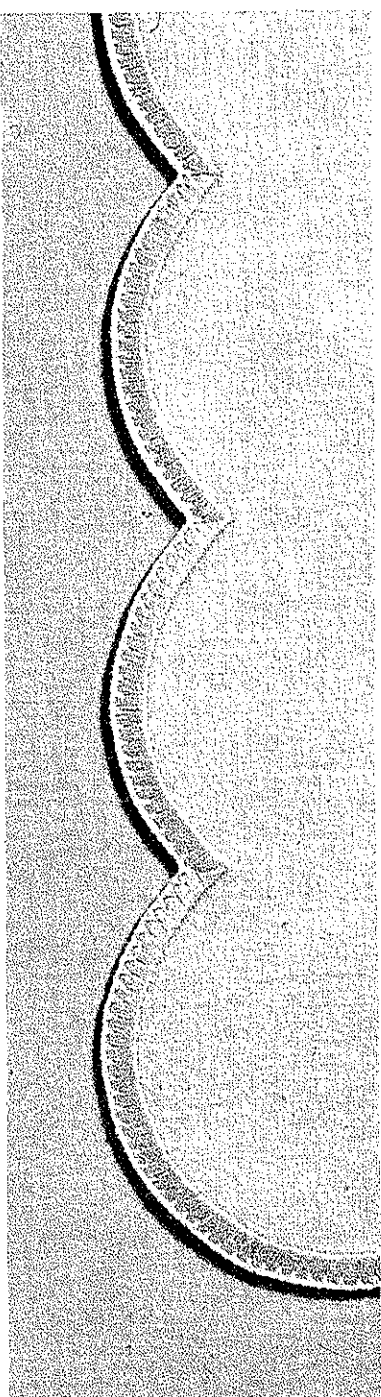
2—3 (according to material)

Stitch length:

almost 0

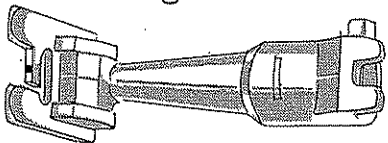
Needle position: left

Now completely cover the first satin stitch seam with a second. Lay the work under the foot in such a way that the satin stitch seam is in the left slot of the foot. Place the cord (mostly 1-ply) into the right hand slot of the foot. In this way the yarn is joined exactly to the edge. Make the corner in the same way as with the wider border.



Embroidering with the automatic

Embroidery foot 030
Needle: 80
Thread:
Embroidery
thread No. 30/60



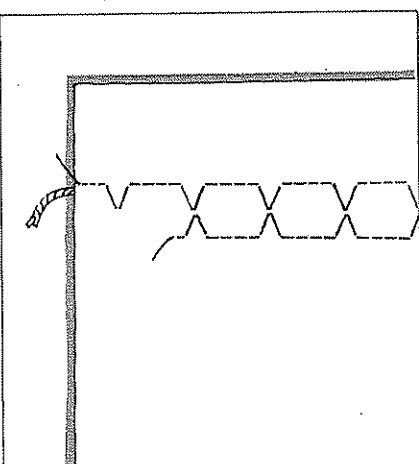
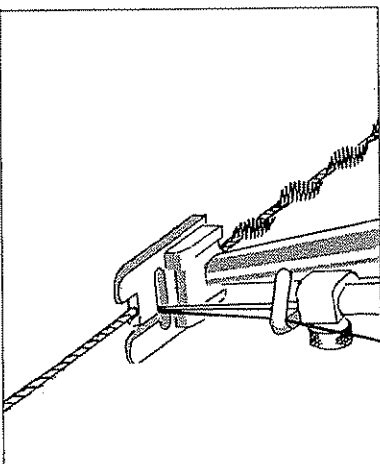
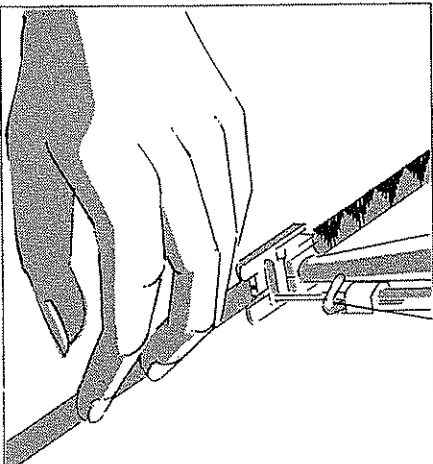
As with hand embroidery, one must have a knowledge of the basic rules for embroidery with the automatic. It is worth while spending some time studying and practising these rules.

Before you begin any embroidery work note the following:

1. Attach embroidery foot, have paper ready.
2. Use the same colour embroidery thread for the top and the bottom.
3. Practise with a remnant of material (and underlay with paper).
4. Observe work in the foot **hole**.
5. Always embroider first and then complete the rest of the sewing.

Braiding

Stitch width: 4
Stitch length: almost 0
Automatic: As desired and 1—20
Needle position: center
Feed control: MM



With one-sided patterns watch whilst sewing only the left-hand side of the braid, for the pattern must completely cover the edge. (Lay the braid on the material straight. Guide near the foot; stretch braid a little.) When both sides of the pattern are the same, which alternately both left and right edges of the braid, so that they are well oversewn by the pattern. (Watch the sewing procedure in the foot **hole**!)

Over-embroidering with cord

Stitch width: 4—3
Stitch length: almost 0
Automatic: As desired and 1—20
Needle position: center
Feed control: MM

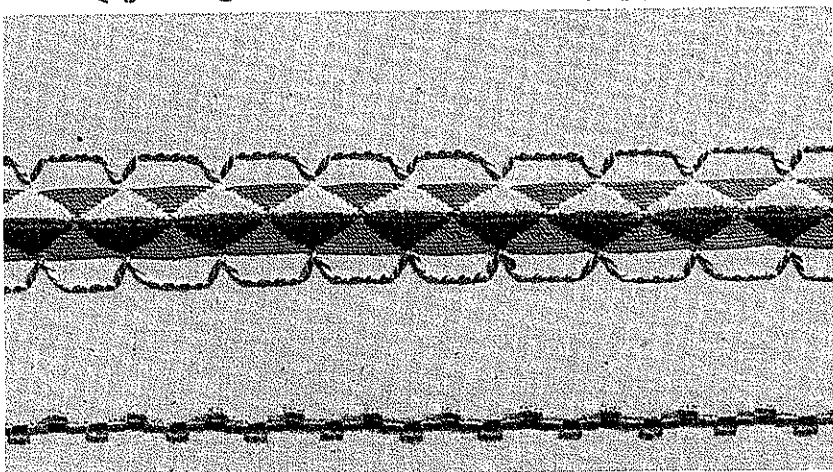
Guide cord (Lurex thread) at the same time through the hole in the embroidery foot.

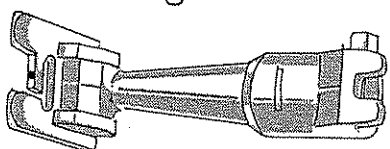
Cord in the bobbin case

(also plain or metallic thread)

Stitch width: 4
Stitch length: 2—3
Automatic: (No. 1) or (No. 2) and 1—20
Needle position: center
Feed control: MM

To be worked on wrong side. Trace design onto paper or Vliene. Loosen bobbin tension and tighten upper tension a little.





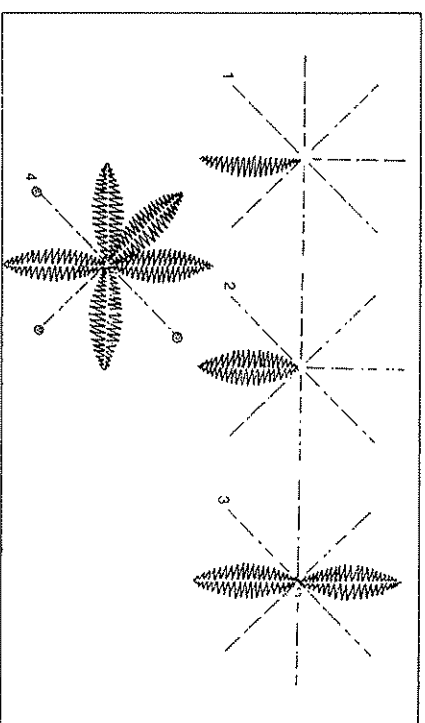
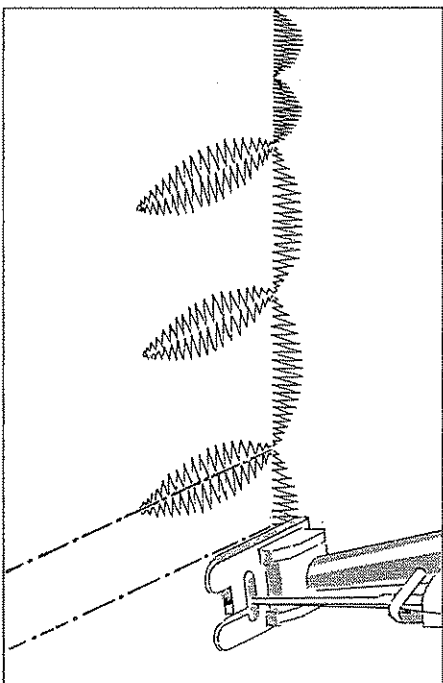
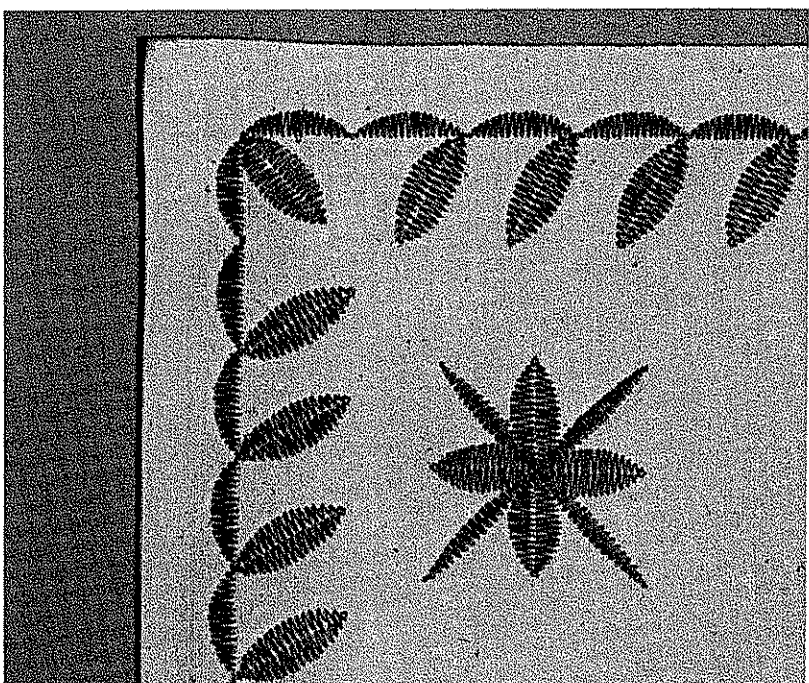
Embroidery foot 030
Needle: 80
Thread:
Embroidery
thread No. 30/60

Stitch width: 4—2
Stitch length: $\frac{1}{4}$ — $\frac{1}{2}$
Automatic: As desired and 1—20
Needle position: center
Feed control: \overline{mm}

Lengthening the pattern

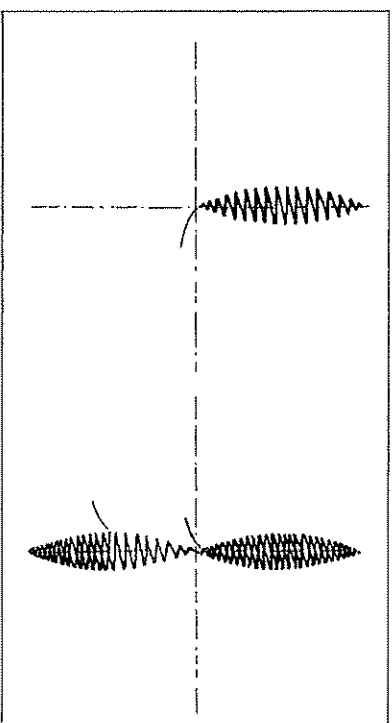
It is recommended to practise this technique before one sews flowers and stars. (Watch the sewing through hole of the foot.)

1. Hold right hand on the hand wheel.
2. After sewing half of the motif (one small leaf = two motifs) sew slowly to avoid sewing past the end of the pattern.
3. When the pattern is finished it will be indicated on the pattern indicator.
4. The parallel position of the leaves is attained when the foot stands parallel to the middle of the previous leaf.



Flowers and stars

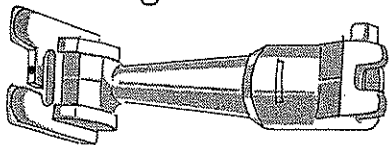
1. Always begin in the middle.
2. Do not sew past the end of the pattern when in the center of the star, otherwise the leaf opposite will either be longer, shorter or displaced.
3. When the needle has reached the center, **always** make sure that is really in the middle. If it is not exactly in the middle put it there.
4. For the leaves in between, position the **needle** on the middle line between the leaves already sewn.



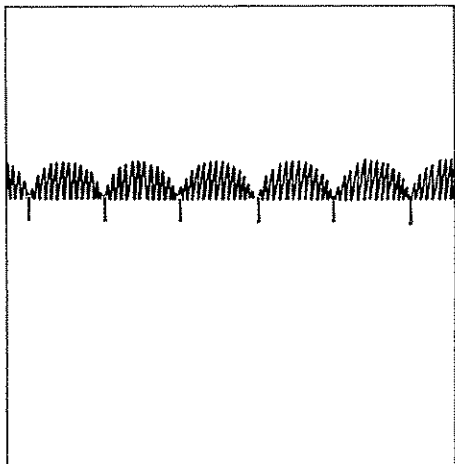
Oversew each leaf once again on this motif.

Embroidering with the automatic

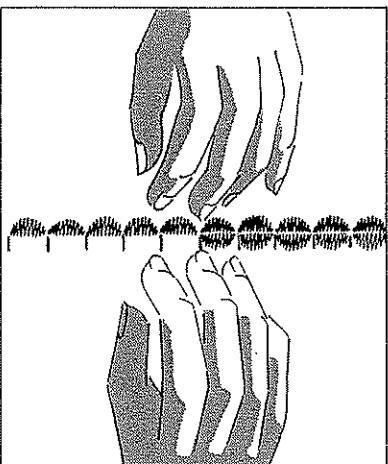
Embroidery foot 030
Needle: 80
Thread:
Embroidery
thread No. 30/60



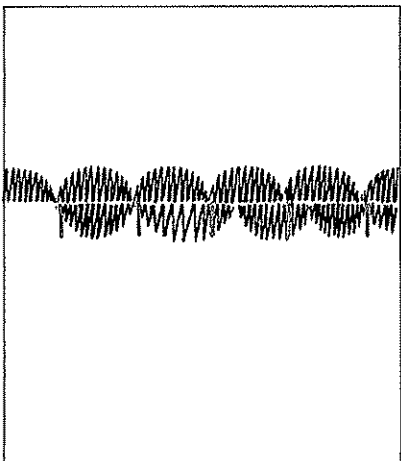
Stitch width: 4-2
Stitch length: almost 0
Automatic: As desired and 1-20
Needle position: center
Feed control: MM



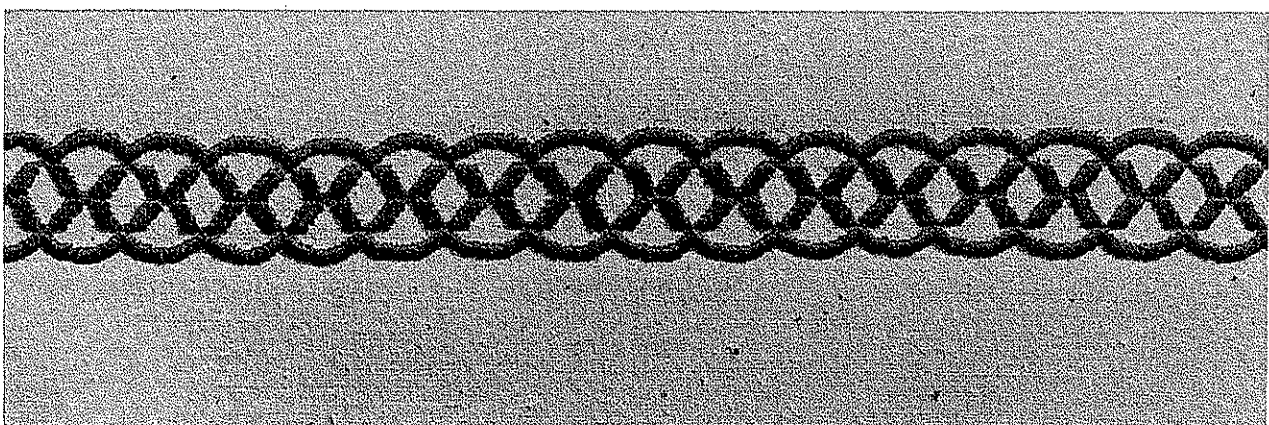
1. Sew first side. Turn work and mark all the places for the motifs (for practice only).



3. The first few patterns are usually not successfully positioned, because the guiding feeling is missing. Never, however, raise the foot and place the needle on a new pattern beginning.



4. If the motifs do not match up push the work slightly. The result will be a longer motif but the next pattern should match correctly.



Placing two patterns opposite one another

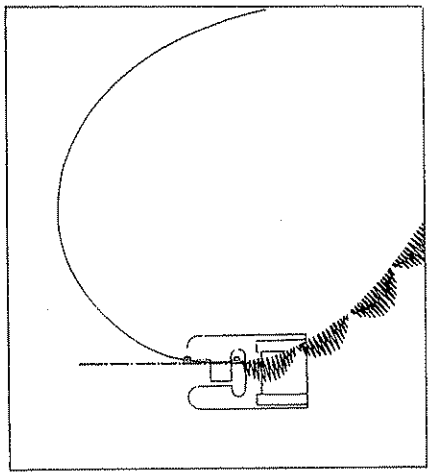
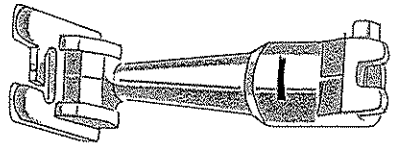
If two patterns are to be placed opposite one another, one side of the presser foot runs on the previously sewn pattern. In this way the density of the satin stitch becomes closer, and the patterns may not correspond automatically. To correct this readily the work should be assisted a little. It is worth while practising this guiding technique first. As soon as it is mastered, it will be a joy to do.

The best way to practise: Use smooth, ironed cotton (not too large, approximately 8x8"), underlay with paper.

2. When resuming sewing, guide near the foot in such a way that all fingers lie on the material; **however**, the middle fingers guide the most. They must be always **exactly on the mark**. (After a motif has been sewn the fingers move down to the next one, i. e. from motif end to motif end.)

Embroidering with the automatic

Embroidery foot 030
Needle: 80
Thread:
Embroidery
thread No. 30/60



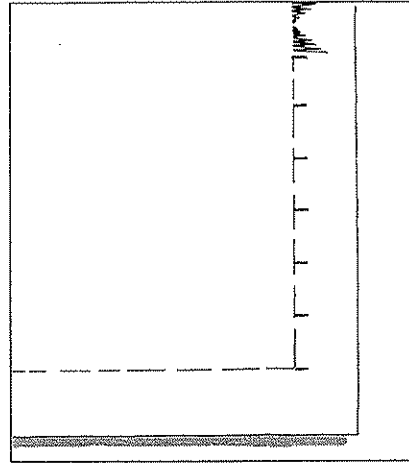
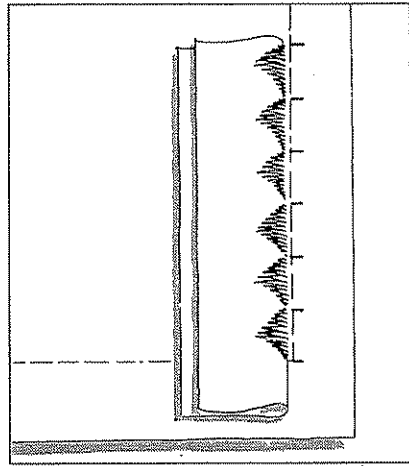
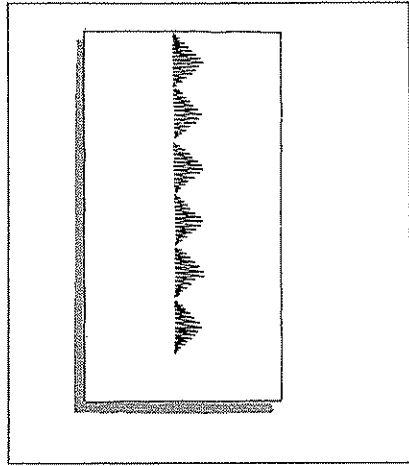
When one motif is finished leave the needle in the work, raise foot and turn slightly, then sew next motif.

With very small curves one can assist guiding the material during sewing. (Thumbs under the material, see Applique: Guiding without frame.)

Stitch width: 4—2
Stitch length: almost 0
Automatic: As desired and 1—20
Needle position: center
Feed control: mm

Sewing small curves

If one imagines a curve made of small straight lines then it is understood that one can sew the individual motifs of a curve in the same manner.

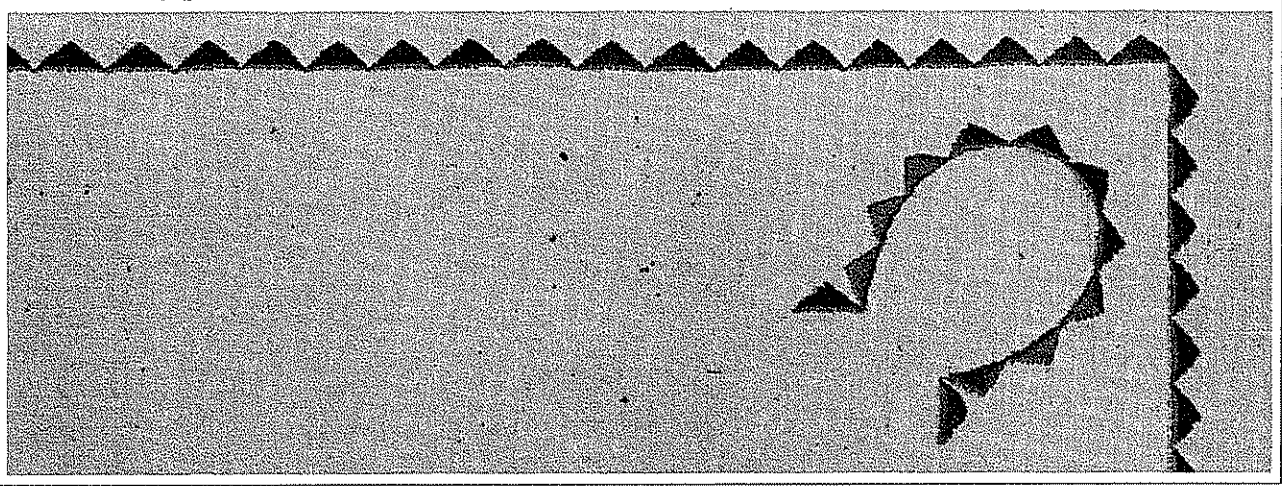


Preparing a triangle

Practise with a remnant of material (underlay with paper)

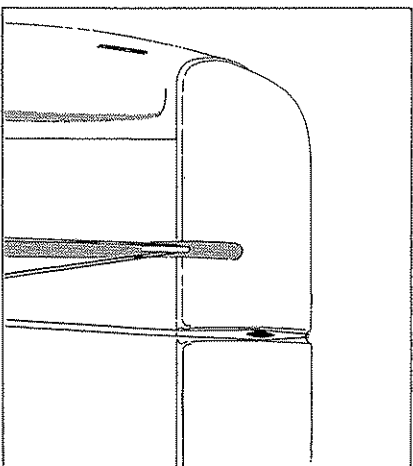
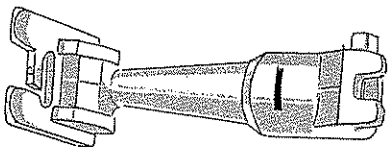
Lay this trial piece on the marked corner and transfer it onto the material (at least 6 motifs).

In this way one can see whether the pattern has to be balanced by pushing or pulling the material.



Double needle

Embroidery foot 030
Thread:
Embroidery thread
No. 30 or 60



Double needle

These special needles produce very beautiful effects on delicate materials, be it shades of one colour or different colours.

When threading through the thread tension, make sure that one of the threads goes left and the other right of the tension disc.

Adjustment

Automatic: As desired and 1—20
Needle position: center
Feed control: $\frac{1}{4}$ —1

Double needle

Stitch width: $2\frac{1}{2}$
Stitch length: $\frac{1}{4}$ —1
(according to pattern)

