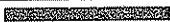


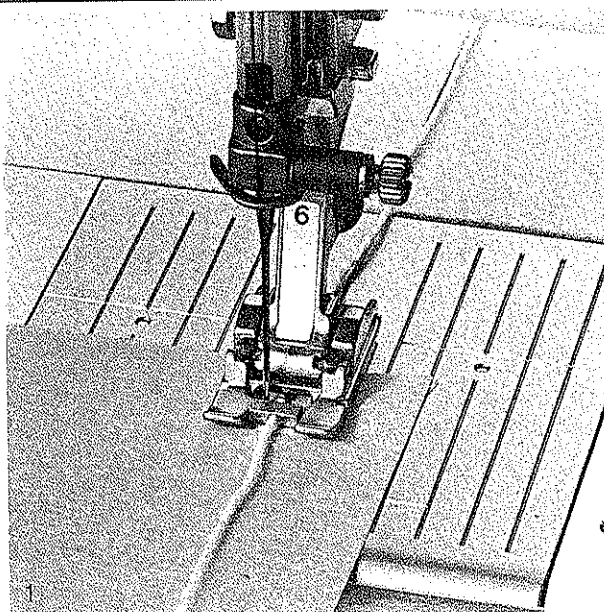
# Gathering

## Normal gathering

Small pieces of thin fabrics can be gathered as follows:



Presser foot:	0
Stitch:	-----
Stitch width:	0
Stitch length:	4-5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Sew two rows of straight stitches. Then hold the two lower threads and gather the fabric to the required width.



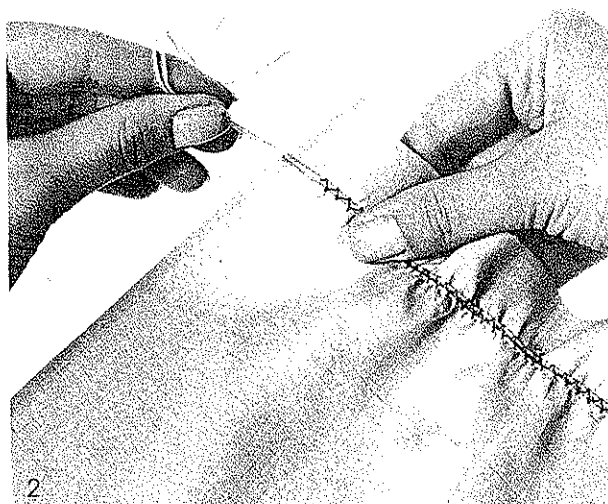
## Gathering with perle cord

Long pieces of fabric



Presser foot:	6
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	2
Stitch length:	2-5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Thread the perle cord through the hole in the embroidery foot and oversew with zig-zag (Fig. 1). Always sew 2 rows, approx. 2 mm ( $\frac{1}{8}$ "") apart. Then pull the two

ends of the perle cord to gather the fabric (Fig. 2).

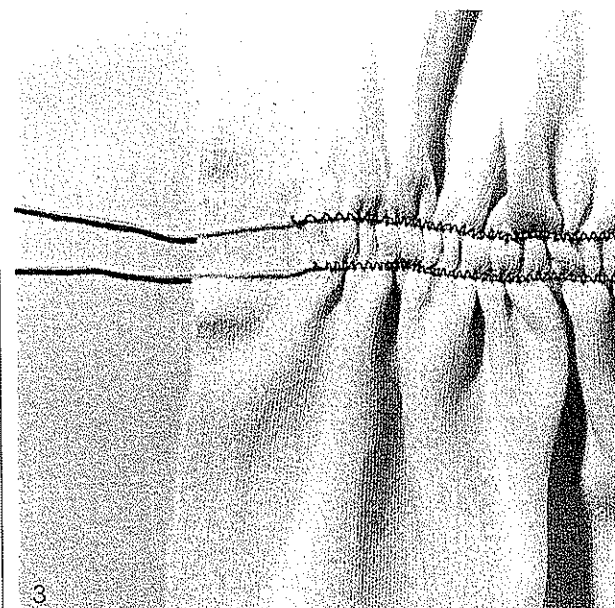


## Gathering with shirring elastic

Presser foot:	6
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	2
Stitch length:	2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Thread the shirring elastic through the hole of the embroidery foot and oversew with zig-zag. Stretch the shirring elastic while sewing. The more the elastic is stretched,


the tighter the gathers will be. Guide the previous row to the edge of the foot when sewing subsequent rows. Stretch the fabric flat for sewing each row.



# Edgings on woven fabric

## Fine edging


For frills, scarves, neckerchiefs, serviettes etc.

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Stitch:	ΛΛΛΛΛΛΛΛΛΛΛΛΛΛΛΛ
Stitch width:	1½-2
Stitch length:	¾-1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Fold approx. 1 cm (¾") of fabric to wrong side and press. Sew a zig-zag over this pressed edge. Guide the fabric edge to the centre of the foot, as



when oversewing edges. Finally, cut off surplus fabric from the wrong side against the zig-zag stitches (Fig. 1).

## Lace and insertion on woven fabric

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

## Scallop edge

For collars, frills, tablecloths, place-mats, lining hems etc.

Presser foot:	6
Thread:	embroidery thread no. 30
Needle:	80-70
Stitch:	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Mark the required line. Baste paper or tear-away backing underneath. Sew scallop stitch. Remove paper and cut round scallop (Fig. 3).

### 1st step:

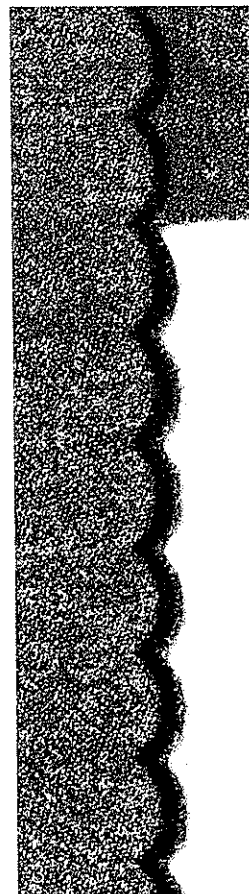
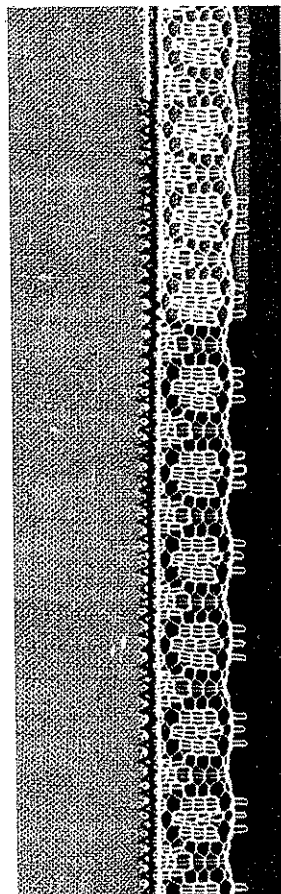
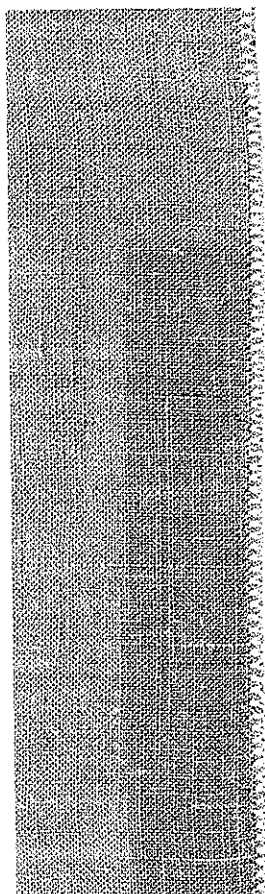
Stitch: -----  
Stitch width: 0  
Stitch length: approx. 1½

Pin lace into position, baste and sew with straight stitch.

### 2nd step

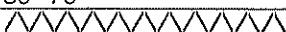

Stitch: ΛΛΛΛΛΛΛΛΛΛΛΛΛΛΛΛ  
Stitch width: 1½-2½  
(according to lace)  
Stitch length: approx. 1  
(according to lace)

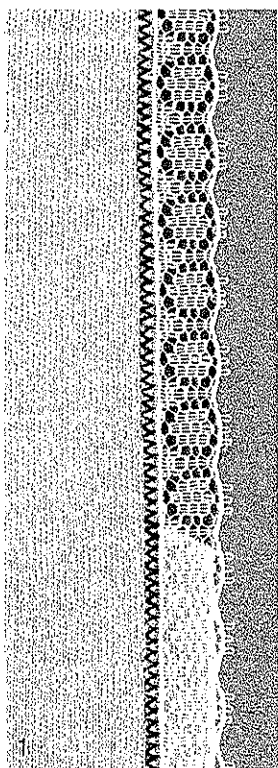
Press edge to wrong side against straight stitch. From the right side, over-sew the edge of the lace with a zig-zag. Cut off surplus fabric from the reverse side against the zig-zag stitches (Fig. 2).



# Edging on jersey fabrics

## Lace on jersey fabric

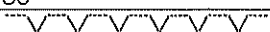

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Stitch:	
Stitch width:	1 1/2-2
Stitch length:	approx. 1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

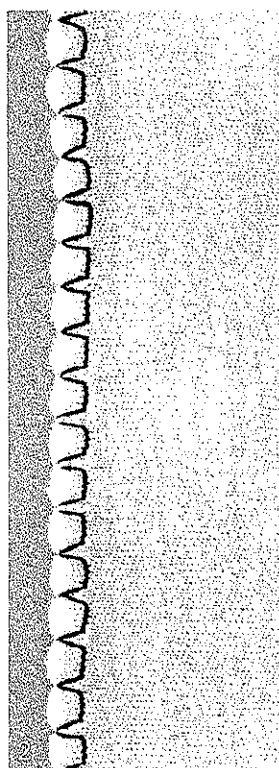


Pin on lace, sew with zig-zag over the edge of the lace. Cut off surplus fabric from the wrong side against the zig-zag stitches (Fig. 1).

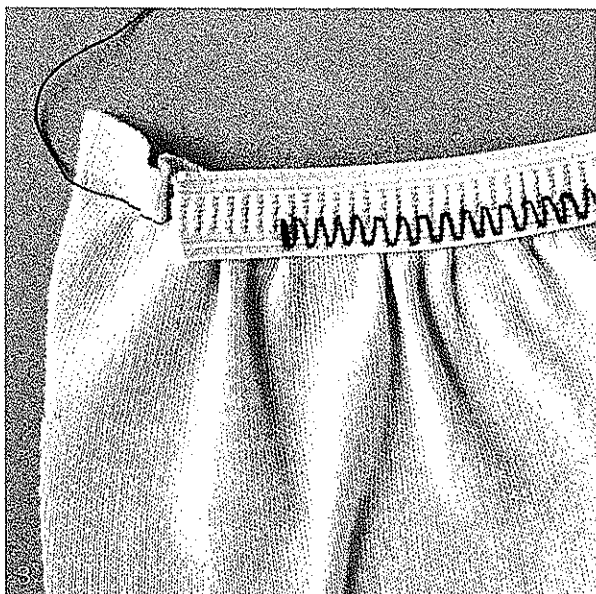
## Shell edging

Especially for fine fabrics and jerseys

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	1-1 1/2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

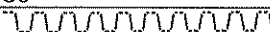



Place work under the presser foot so that the folded edge to be sewn is on the left. The needle, on its left swing, should go just over the edge (Fig. 2).



## Elastic

Particularly for underwear and sports underwear

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	3
Stitch length:	1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

The simplest method is first to gather the fabric: sew a long straight stitch, then pull the lower thread and gather the garment to the desired width.

Pin on the elastic and sew. Cut off surplus material from the wrong side (Fig. 3). The elastic should not be stretched while sewing.

Appliqué is a method for sewing on shapes and figures, allowing full rein to your creative talents. There are various methods for sewing appliqué. The basic technique is described here.

## Guiding the work

It is possible to work with or without a ring, but stretched fabric can be guided more easily. Therefore it is a good deal easier to learn with fabric in a ring.

## The most important ground rules:

- Watch the work through the zig-zag slot of the presser foot.
- Stop the machine to reposition hands.
- Turn the work only while sewing, except in the case of very small curves, otherwise an uneven edge will result.

## Guiding with ring

The ring is guided mainly by the left hand. You must hold it firmly, and be able to turn it easily.

Position hand initially as for darning. Draw the index finger straight back to the inner edge of the ring (Fig. 1). The middle and ring fingers remain extended.

## Important note:

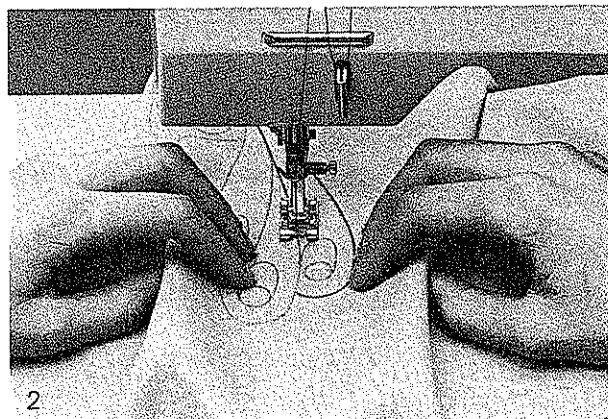
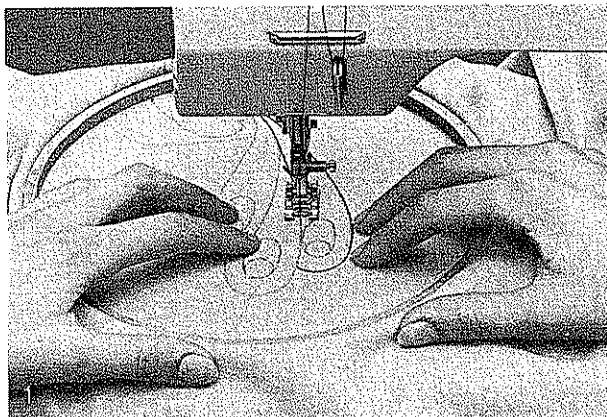
Do not hold the index finger parallel to the thumb, otherwise movement of the hand is restricted.

## Guiding without ring

Some fabrics, eg. velvet, cannot be stretched in the frame. Nevertheless, it should be guided in as stretched condition as possible.

Place thumbs under the fabric. With large pieces of work, make a fold. Guide close to the foot. In this way the work can be stretched to some extent and turned easily (Fig 2).

Presser foot:	6
Thread:	darning thread/ embroidery thread
Needle:	80
Stitch:	~~~~~
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



## Procedure

Trace reversed motif with tracing paper on to the wrong side of the background fabric. The motif can also be traced on to thin iron-on interfacing and ironed on to the wrong side of the fabric. This is recommended for coarse and uneven fabrics.

Stiffen appliqué fabric with iron-on interfacing and baste to the right side.

## 1st step

Stitch width  $\frac{1}{2}$ –1  
Stitch length approx.  $\frac{1}{4}$

- a) From the wrong side sew along the marked lines.
- b) Cut off surplus fabric from the right side neatly against the sewn lines. Remove from the ring in order to do this.

## 2nd step

Stitch width  $1\frac{1}{2}$   
Stitch length IIIII

On the right side, cover the cut edge with satin stitch. Sew corners and small curves stitch by stitch. Finally, trace through lines which are not appliquéd and sew from the right side.

# Multi-colour appliqué

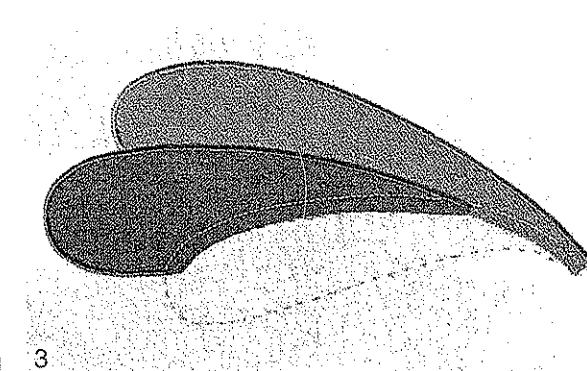
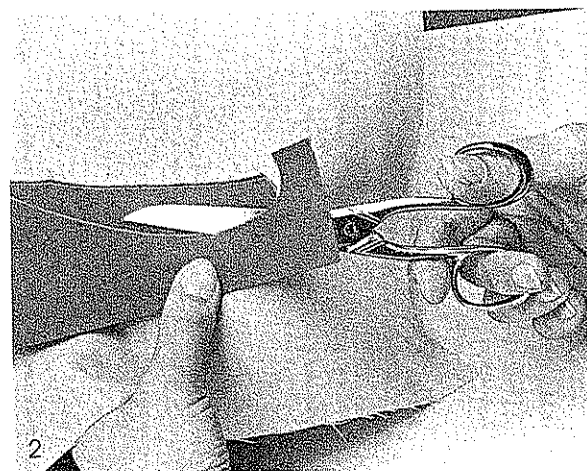
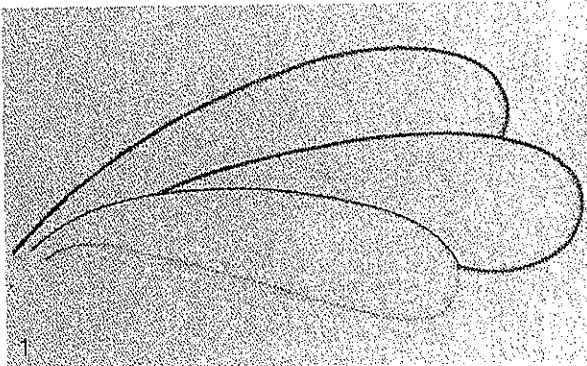
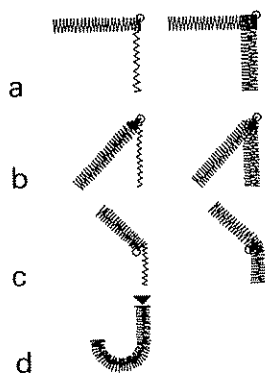
## Corners and small curves

a) **Right-angled corners:** Stop with the needle in the fabric on the outer edge, turn the work and continue to sew. The corner will then be over-sewn.

b) **Pointed corners:** Sew to  $\frac{1}{2}$  cm ( $\frac{3}{16}$ "') before the corner. Then turn zig-zag back to 0 while sewing. Raise the foot, turn the work, reset zig-zag to  $1\frac{1}{2}$  and carefully continue sewing.

c) **Blunt corners:** Sew until the needle is exactly in the centre of the angle, then sew the corner radially; i.e. after each stitch, place the needle in the centre of the angle. Raise the foot and turn the work very slightly.

d) **Small curves** should also be sewn radially.



The appliqué pieces must overlap.

## Lower appliqué piece:

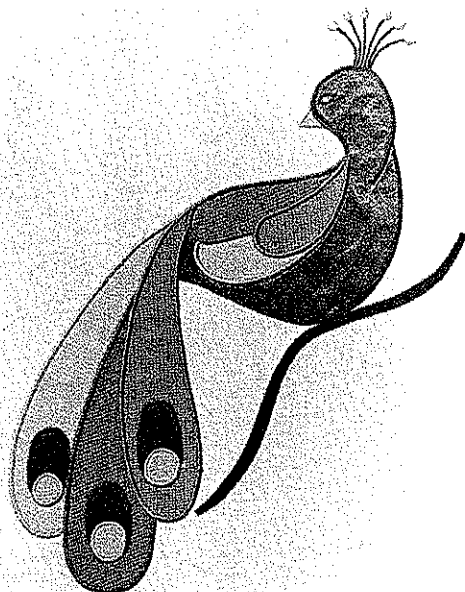
1. Pin on the appliqué fabric. Sew the first step. Where colours overlap, sew only with a straight stitch, the other lines with zig-zag (Fig. 1).

2. Cut away surplus material. **Note:** Where a straight stitch has been sewn, leave 2 mm ( $\frac{1}{16}$ "'). Where a zig-zag has been sewn, cut away fabric completely (Fig. 2).

3. When satin stitching the edges, do not sew over the straight stitch lines. These will be covered over by the next piece of appliqué (Fig. 3).

## Upper appliqué piece:

Proceed as with normal appliqué.



To ensure success in sewing machine embroidery, a certain amount of basic knowledge and practice is necessary, as with any other handicraft, be it hand embroidery, knitting or weaving. It is worth practising. With a little skill, you can create works of art according to your own designs. Practise in the sequence described. Each step is based on the previous one. Even practising can be enjoyable.

## Basic practice for decorative stitches

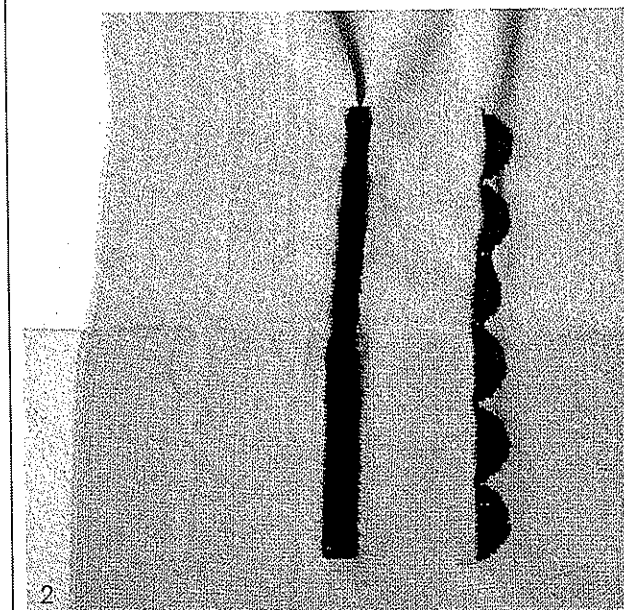
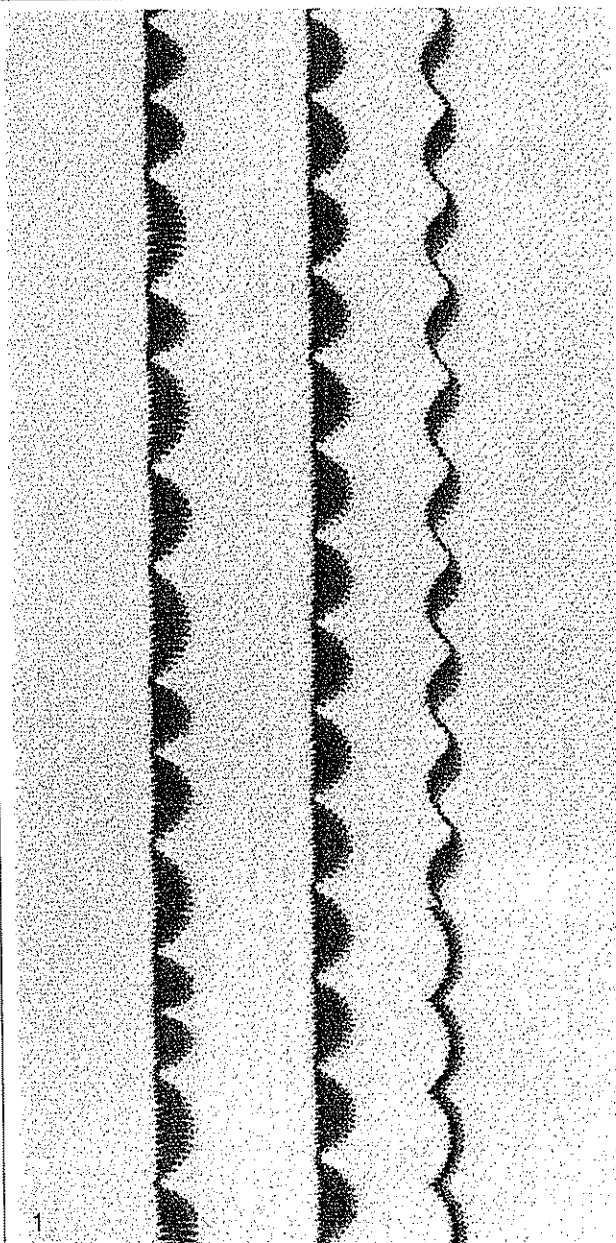
1. Leaves (pattern indicator exercise)
2. Flowers
3. Parallel sewing of patterns
4. Sewing and calculating corners
5. Sewing and calculating curves.

A light-coloured, even and rather firm cotton fabric is best for practice (folded double, instead of paper underlay). If necessary, starch material a little.

## Guiding the fabric

Make sure that the fabric runs evenly under the presser foot. Pulling, pushing or restraining the fabric will produce irregular patterns (Fig. 1).

Use the sewing table. Do not place the machine on the table edge.



## Paper or tear-away underlay

To ensure that the fabric does not «cave-in» due to the width of the stitch, always pin paper or tear-away backing underneath (Fig. 2). Suitable paper is pattern paper, typing paper, unprinted newspaper, but not tissue paper. For translucent fabrics, use a translucent paper or an organdie fabric.

## The pattern indicator

(Fig. 3)  
The pattern indicator shows how far a decorative pattern has been sewn.

- a) The red line indicates the beginning and end of a pattern.
- b) The black line shows the centre of the pattern.
- c) The broken bar (horizontal black lines) warns that the pattern is nearly finished.

3

a)



b)


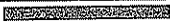


c)



## 1. Leaves

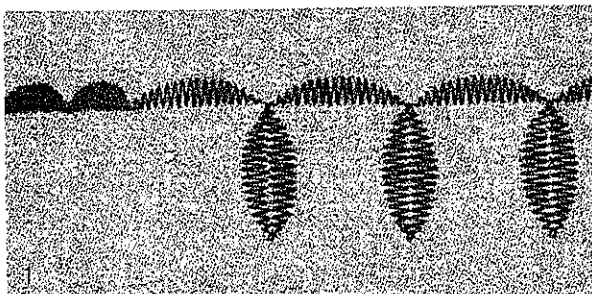
Practise watching the pattern indicator

Presser foot:	6
Thread:	embroidery thread no. 30
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	approx. 1/2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

1. Sew pattern about as far as the centre of the pattern. While doing so, watch the sewing only in the zig-zag slot of the foot. After the centre of the pattern, sew slowly, so that you do not go past the end of the pattern. Towards the end of the pattern, check whether the pattern indicator is at the warning lines. **If so, watch only the pattern indicator.**

2. Lower needle into fabric (by tapping rear of foot control or by turning the handwheel)

3. Turn the work and sew the next half of the leaf in the same way (Fig. 1).



## 2. Flowers

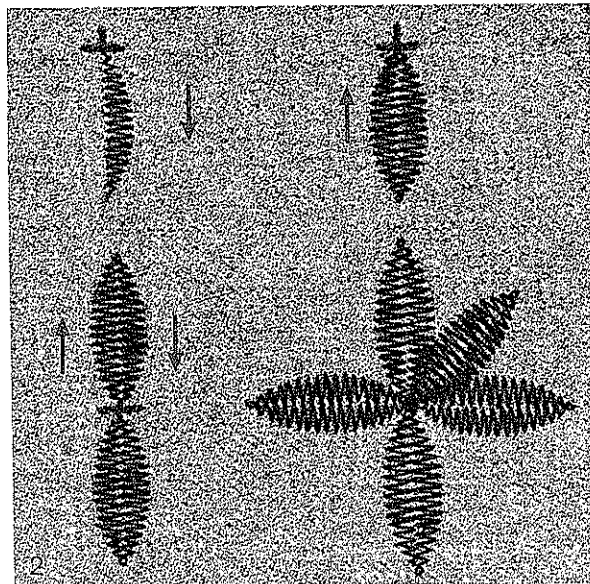
(Fig. 2)

1. Always start in the centre.



2. When sewing the second half, towards the centre of the flower, on no account «over-run» the red line at the end of the pattern indicator, otherwise the next leaf will be longer or shorter or out of line.

3. When the needle reaches the centre, always check that it really is at the central point of the design. If not, re-position the needle precisely to the centre.

4. For intermediate leaves, place the needle on the central line between the leaves already sewn.

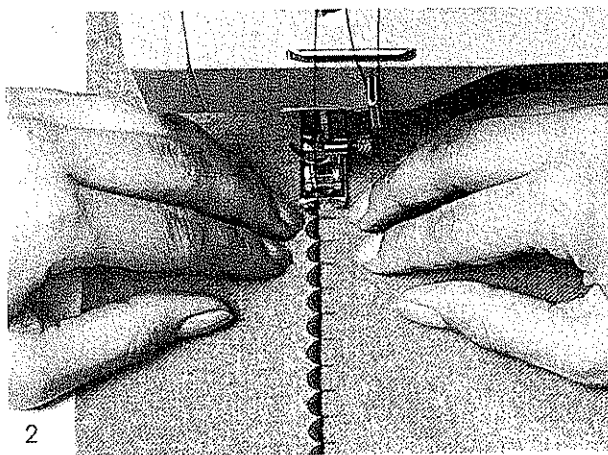
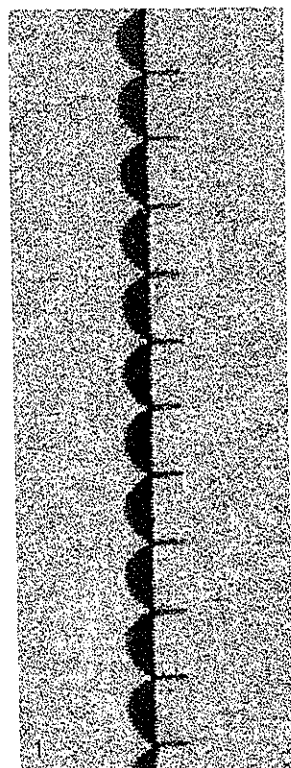


## 3. Parallel sewing of patterns

Presser foot:	6
Thread :	embroidery thread no. 30
Needle :	80
Stitch :	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog :	sewing
Colour indicator:	

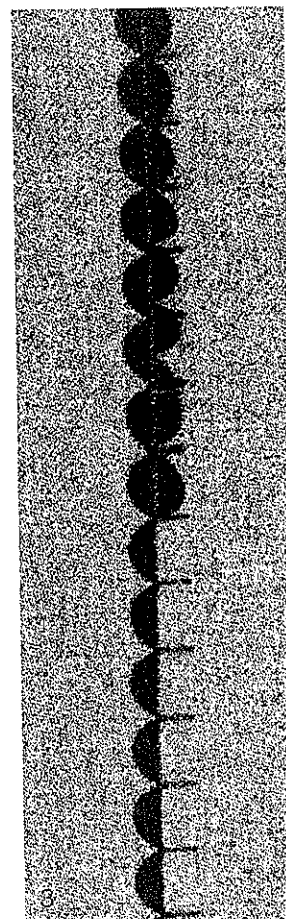
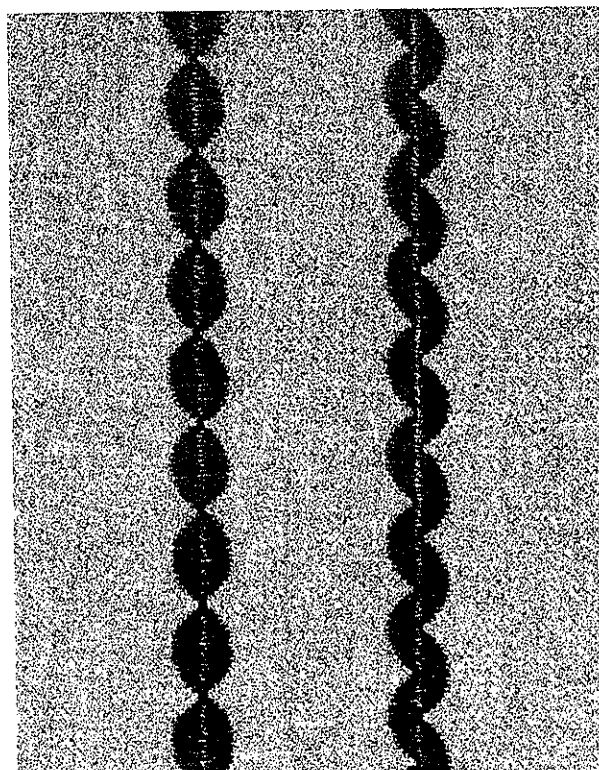
Sewing two perfectly matching parallel lines of embroidery patterns can be a problem. When working the 2nd row of sewing the 1st row will run partly under the foot. This acts as a thick fabric would do and shortens the stitch slightly. This must be compensated. With practise it is possible to sew two exactly matching rows of patterns.

1. Sew the first row. Turn the work and mark a line out from the end of each pattern, for practice only (Fig. 1).





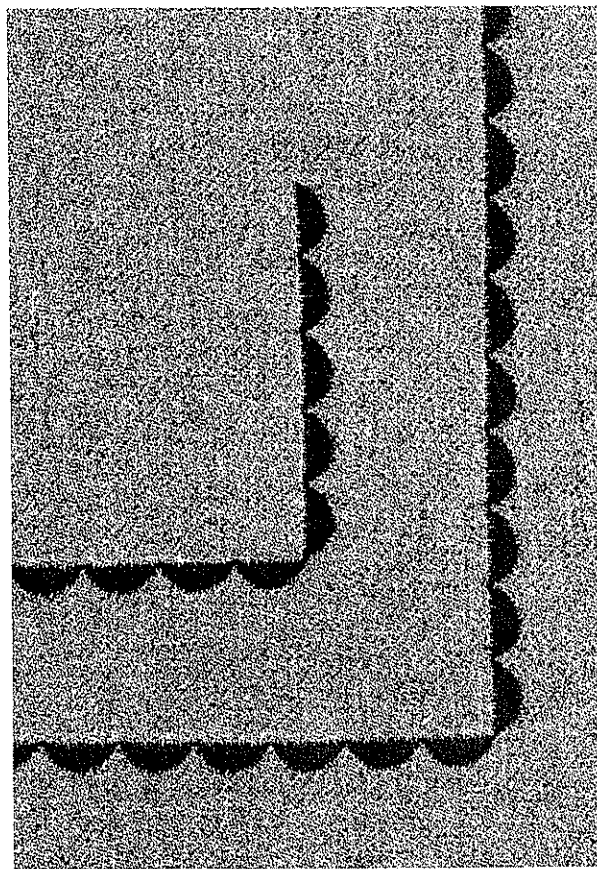
2. For the 2nd row guide the fabric with fingers very close to the foot. All fingers should be on the fabric but the middle fingers are the ones that do most of the work. These should always be against the marked line. This means that at the end of each pattern your middle fingers must move down to the next marked line (Fig. 2).

As you sew each individual pattern push the fabric slightly so that they match. Under no circumstances raise the presser foot and move the work. This procedure takes practice and you cannot expect perfectly matching patterns at your first attempt. Always sew slowly.



## 4. Sewing and calculating corners

Presser foot:	6
Thread:	embroidery thread no. 30
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



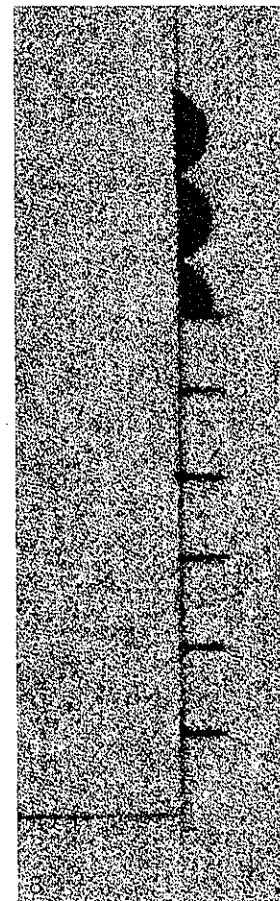
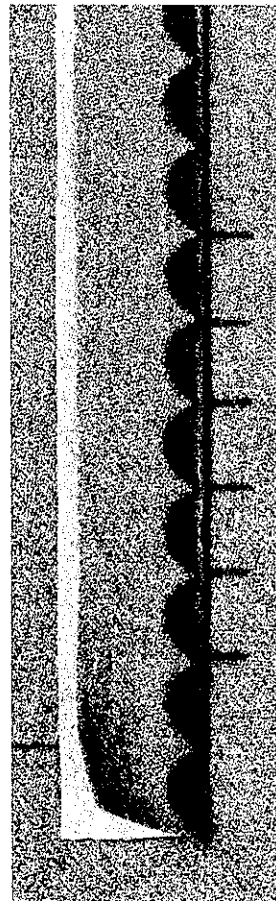
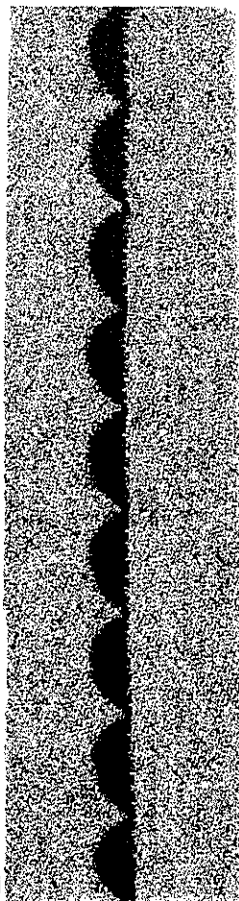
When sewing towards a pre-determined corner, you do not know in advance whether the pattern will end exactly in the corner.

The following calculation can be made, to ensure that the pattern ends at the corner:



1. Sew a testpiece on a remnant of the same fabric, sewing at least six repeats, with a paper underlay (Fig. 1).

2. Place the testpiece to the pre-marked corner and mark the end of at least six patterns on to the fabric (Fig. 2).

3. When sewing towards the corner, you can stop 6 patterns away and see whether the patterns will line up, or whether it will have to be adjusted by slightly restraining or pushing the fabric. This adjustment will not be noticable spread over 6 patterns (Fig. 3).



## 5. Sewing and calculating curves

Presser foot:	6
Thread:	embroidery thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

### 1. Sewing curves

A curve or a rounded line can be divided into small straight sections. Accordingly, a decorative pattern can be sewn along a curve, with the individual patterns being sewn «straight».

Practice method: Divide the pre-marked curve into straight sections, with dots along the line, corresponding to the length of the patterns. Sew the first pattern. Lower the needle into the fabric, raise the presser foot, turn the work until the next point is in line in front of the needle, lower the foot, sew the second pattern etc. (Fig. 1).

With a little practice, you will soon be able to estimate the distances between the dots, ie. the length of the pattern, so that the dots no longer have to be marked.

### 2. Calculating circles or closed shapes

If a closed circle (up to  $\varnothing$  2½ cm / 1") or a closed shape has to be sewn, the patterns will have to be calculated to ensure that they match up.

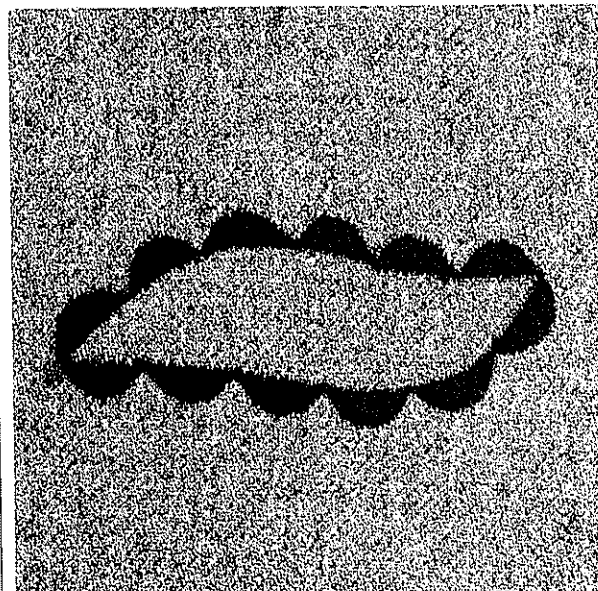
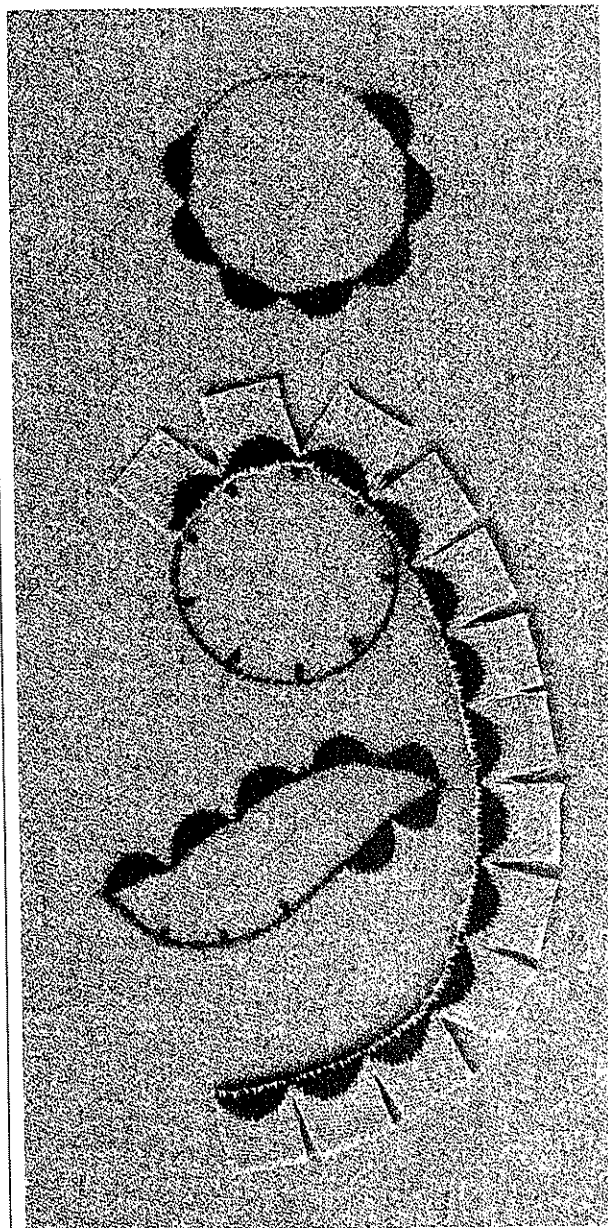
Method: (figs. 2 and 3)

– Sew a sufficiently long testpiece (with paper underlay). Cut off the edge of the fabric fairly close to the straight edge of pattern.

– Snip into the curved side of the pattern.

– Place the testpiece on the circle or shape, and check whether the patterns match up.

If not, alter the stitch length very slightly and sew a new testpiece. As soon as your calculation is correct, transfer the dots on to the motif.

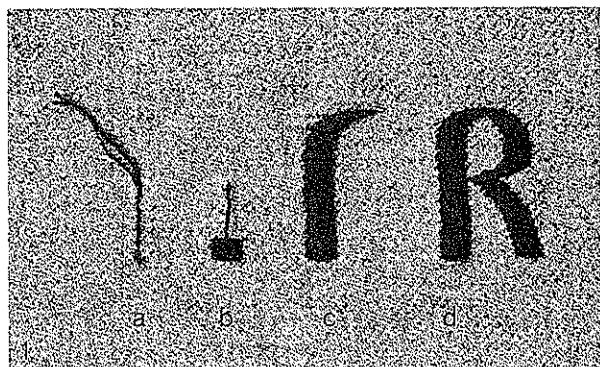


# Monograms

## The following applies to «free-hand» monograms

Presser foot:	— (possibly no. 9)
Thread:	darning thread / embroidery thread
Needle:	80
Stitch:	^/~/~/~/~/~/~/~/~/~/~/
Stitch width:	5–2
Stitch length:	0
Needle position:	centre
Feed-dog:	lowered
Colour indicator:	

**Work without presser foot. However: Lower the presser foot lever,** otherwise loose stitches will result. Always stretch the work in a ring. With thin fabrics, use a paper underlay as well. If you are worried at first about embroidering without a presser foot, you can use darning foot no. 9 (or the Free-hand embroidery foot no. 24 – special accessory). In most cases, darning thread is used. For large monograms, eg. on towels, embroidery thread is also suitable.



## Learning and practising

– To begin with, do not pre-mark monograms, but «write» them freely. Concentrate only on guiding the ring.  
– Select stitch width 5 and do not sew letters of more than 2 cm (¾"). (Large monograms are more difficult as you must hold the hoop steady for longer.)

– The letters R and B are particularly suitable for practising.  
– Later on, practise some pre-marked monograms. The marked line should lie in the centre of the zig-zag stitch.  
– Run the machine at about three-quarters speed, but guide the ring slowly, evenly and smoothly.

## Method: (Fig. 1)

a) Bring the lower thread up through the fabric. Secure with a few straight stitches. Cut off both thread ends.

b) Set to zig-zag. Using the handwheel, sew 1–2 trial stitches. Make sure that zig-zag stitches cover the securing stitches.

c) Move ring towards you, as if writing with it. Do not twist the ring however. The wide and narrow parts will come automatically. As soon as a curve starts, guide the ring along the curve without twisting it.

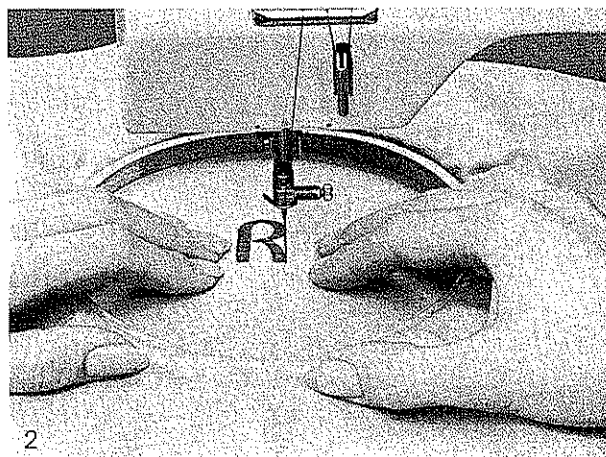
d) Finally, secure with straight stitches.

## Guiding the embroidery ring

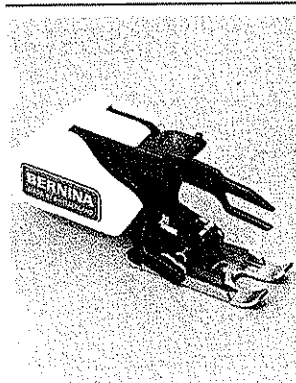
The stitching of an even monogram largely depends on the correct holding of the ring. The more correctly and firmly it is held, the more attractive the monogram will appear. Hold the ring as for darning (Fig. 2). Make sure that only the ring is being held. Any finger pressure on the fabric will result in irregular and jerky movements, producing uneven monograms.

## Important

Work as far as possible to the centre of the ring, otherwise it will be very difficult to guide evenly.



# BERNINA Walking foot



The BERNINA Walking foot makes it easier to sew difficult fabric, eg.

## **a) fabrics that do not feed easily such as:**

leather suede  
imitation leather  
imitation suede  
plastic-coated fabrics  
laminated fabrics etc.

## **b) Fabrics that tend to slip, such as:**

stripes  
checks  
satin  
velvet  
corduroy  
stretch towelling  
velour  
Helanca etc.

## **Preparation of the fabric**

Pin pieces together as usual, basting where necessary. In the case of cross-wise stripes, insert pins crosswise.

## **Sewing machine settings**

Select stitch and basic setting for stitch width and stitch length as usual. Adjust according to fabric. Carry out a sewing test.

## **Note:**

In the red stitch range, the maximum stitch length is 3 mm = stitch length 3.

## **Sewing tight curves**

Do not turn the fabric while sewing, but stop the machine (needle in fabric), raise the foot and turn the fabric slightly. For this work, you should definitely use the presser foot lifter.

Full operating instructions with each Walking foot.

