

Every Naumann sewing machine must have the name on the front of the arm,

## Naumann

while the registered trademark must be stated on the foundation plate.

The machine comes with a factory certificate.







**Bobbin Shuttle** 

Sewing Machine



### Nv 4008 Holl. ty pt Pg.



### CHANGES FROM THE ORIGINAL DUTCH MANUAL:

Translated into English.

All figure drawings were wiped of figure numbers.

Figure 1a was annotated.

Replacement Figures 11, 12, & 13 taken from a Singer 27K/28K manual.

A replacement Figure 15 was created using Figure 5 as a template.

Unnumbered figures numbered Figure 18a through 18h.

Consolidated sentence/paragraph fragments and moved figures where possible to increase readability.

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### MANUAL

### for using the

### **Bobbin Shuttle Sewing Machine**

### **Contents:**

### Page

1. General Information 3
2. The Drive Belt 3
3. Disengage/Engage the Motion Clutch 4
3a. The Hand Crank 4
4. Treadle Practice 5
5. Removing the Shuttle 6
6. Winding a Bobbin 7
7. Inserting a New Bobbin 8
8. Loading the Shuttle
9. The Presser Foot
10. The Needle 9
11. The Stitch Plate 10
12. Threading the Upper Thread 10
13. Raising the Lower Thread 11
14. Sewing 12
15. Thread Tension 12
16. Upper Thread Tension Adjustment 13
17. Lower Thread Tension Adjustment 13
18. The Stitch Length Mechanism14
19. The Thread 14
20. Skipped Stitches 15
21. An Uneven Seam 15
22. Machine Maintenance 15
23. Accessories 17
24. Attachments for the Sewing Machine 18-24
<ul><li>24. Attachments for the Sewing Machine</li></ul>

### **1. General Information**

Read these instructions carefully, making every movement on the sewing machine. Never use force. Use only the recommended sewing machine oil for lubrication. To obtain good results, use the needles specified for this machine (see Section 10 The Needle).

If the machine should fail due to the passage of time or due to improper handling, one should not call in one or the other mechanic, but go to our representative where the machine was purchased. He knows it best and has an interest in keeping it in good order.

Shuttles, bobbins and other parts must always be purchased from our representative.

### 2. The Drive Belt

Once the packaging of the machine is removed, place the belt in the belt slot of the flywheel and insert it through the holes of the table top around the axis of the undercarriage flywheel, then hook it together and rotate the wheel one or more time.

This is where the drive belt comes to rest on the drive wheel. The belt should not be too tight or the machine will run with difficulty. If, over time, the belt becomes somewhat loose, it should be made proportionately tighter.

### 3. Disengage/Engage the Motion Clutch

If the knob "a"(Figure 1) is turned in the direction of the arrow 1 (hold the drive wheel), the motion clutch is disengaged. If the knob "a" is turned in the direction of the arrow 2 (hold the drive wheel), the motion clutch is engaged.

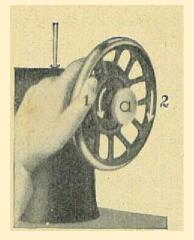


Figure 1 Disengage/Engage the Motion Clutch

### **3a. The Hand Crank**

The hand crank is only supplied with hand or treadle machines on special order. It is attached behind the arm of the sewing machine and is connected to the machine by a pawl "a" (Figure 1) which engages in the spokes of the wheel. By pressing a finger on "a," from the inside out, the connection with the wheel can be broken again. The wheel must be turned in the direction of the arrow. The crank 5 (Figure 1a) is held by spring-loaded pin 4 and is released by pulling back pin 4 and can then be placed around the wheel, as otherwise the cover would not go over the upper part of the machine.

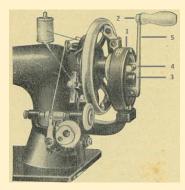
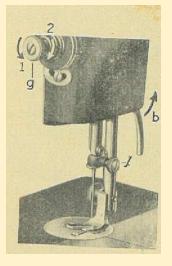


Figure 1a The Hand Crank

Oiled through holes 1, 2, 3 (Figure 1a). The number and location of oil holes vary between different models of hand cranks.

### 4. Treadle Practice



### **Figure 2 Treadle Practice**

Remove both upper and lower thread, and raise the presser foot lever "b." (Figure 2). Disengage the motion clutch.

The handwheel must never run in the wrong direction. Start the handwheel in the right direction with one's hand.

Place one's feet in a comfortable position on the treadle foot rest, and start practicing pedaling until one gets the feel of it.

Rethread the upper thread path, reinsert the shuttle, and reengage the motion clutch. Place a scrap of fabric under it (some scrap, not actual sewing) and lower the presser foot lever again.

Now begin to pedal and practice this until one has mastered sewing. It is wrong to pull on the fabric, as this can bend the needle. The machine should never be started with the presser foot down without fabric underneath.

One should pay attention to the noise the machine makes when it is running. The size of the kick should not dominate.The tone of the machine should be a regular whirring tone.

### 5. Removing the Shuttle

The sliding plate "c" (Figure 3) is opened by turning the handwheel and the shuttle is brought into the forward position to see exactly the places and how the thread has been inserted.

This will be useful in the following exercises.

Then one presses on the spring (d), which ejects the shuttle (Figure 3), and take out the shuttle. The bobbin will fall out of the shuttle by itself.

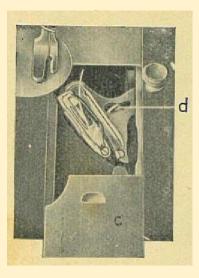


Figure 3 Removing the Shuttle

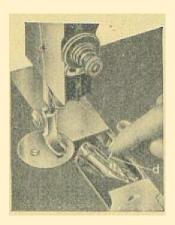


Figure 4 Inserting Shuttle in Shuttle Holder Tray

Care must be taken: after the shuttle has been placed in the shuttle holder tray, both slides of the shuttle compartment must be closed before the machine is set in motion.

Otherwise, the shuttle may jump out and render the work useless. (Figure 4).

### 6. Winding a Bobbin

The thread runs from the spool of thread through the rear guide hole 1 (Figure 5) between the two tension discs 2 through the slot in hole 3 of the lever, of the thread guide 4 and is then inserted into the hole of the copper disk of the coil from the inside out. Now the spring bolt 5 is pulled back slightly and the disc with holes is placed in the thread winder 6 in such a way that it engages in one of the holes of its disc and the thread is gripped thereby at the same time. Now one starts pedaling, after releasing the mechanism and pressing lever 7 from below. The thread is now evenly rolled onto the bobbin. When the bobbin is full, the thread winder will jump out of the drive wheel by itself.

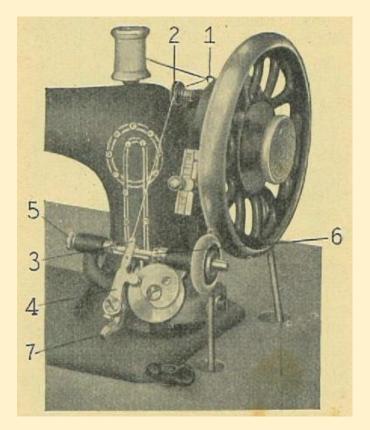


Figure 5 Winding a Bobbin

### 8. Loading the Shuttle

### 7. Inserting a New Bobbin

Hold the shuttle with the left hand, with the point turned towards oneself [Figure 6] and insert the bobbin in such a way that the thread can be unwound from top to the right so the blunt part of the bobbin comes out.

Hold the bobbin and the shuttle and guide the thread up to the end of the slot (Figure 7), then again vertically until the thread has slipped under the pointed part of the tension spring and check the tension of the shuttle by pulling the thread (Figure 8).

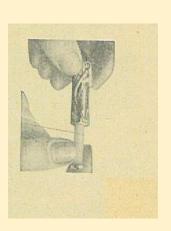


Figure 6

Figure 7

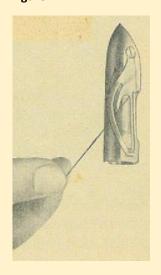


Figure 8

Please make sure that the shuttle holder tray is fully forward, place the shuttle in it and close the slide c. (Fig. 9)

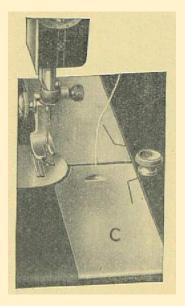
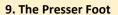


Figure 9 Close the Slide



If one is sewing thin fabrics, it will be effective if one turns screw "K" (Figure 10) back slightly (turn it counterclockwise) to reduce the pressure on the fabric.

### 10. The Needle

To insert a new needle, raise the needle bar to its highest point and insert the needle, (flat side to the right) until she strikes from above. Then the screw of the needle holder is tightened.

### Only type No. 705 needles are used.

Туре	Cotton Yarn	
No. 705	No.	
Batist, netting, tulle	No. 7	100 - 150
Very fine linen, fine		
Calico, fine silk fabrics	No. 8	80 - 100
Linen, silk fabrics	No. 9	60 - 80
Chunky linen, heavy		
fabrics	No. 10	50 - 60
Fine woolen fabrics,		
Leather stitching	No. 11	30 - 50
Woolen fabrics, Sheets	No. 12	20 - 30

### 11. The Stitch Plate

The regular stitch plate should be exchanged with the small hole stitch plate, which is provided when sewing with a thin needle and thin thread.

When inserting the stitch plate, make sure that the needle is positioned exactly in the center of the hole in the plate.

### 12. Threading the Upper Thread

The upper thread runs from the thread spool 1 (Figure 10) through the thread eye 2 (hook in) between the two tension discs 3 (insert in) through the spring 4 (hook in) through the hole in the lever 5 through the hole 6 in the front plate (hook in from behind) through the hole of needle holder 7 (place in front) and is inserted from left to right through the eye of the needle. The thread should hang about 10 cm from the hole.

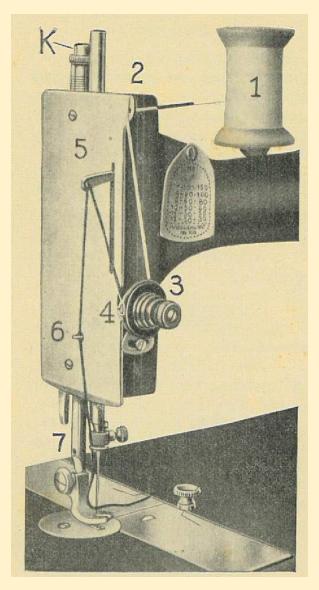


Figure 10

### 13. Raising the Lower Thread

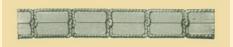
The upper thread is held in the left hand, the gear wheel is turned and turned (towards oneself) and the thread is tightened slightly, causing the lower thread is raised. Now put both thread ends to the back and hold them in one's hand until the first stitches have been sewn.

### 14. Sewing

Place a piece of fabric underneath for a trial sewing and begin to sew. Do not pull or slide the work with one's hands, otherwise the needle could easily break.

### **15. Thread Tension**

Look closely at the sewn seam. It should be the same as Figure 11, i.e. the threads should join each other in the middle of the fabric. A stitch is perfect if it looks the same from both sides.



### **Figure 11 A Perfect Stitch**

The tension of the upper thread is then equal to the tension of the lower thread.

The machines are always regulated before they are delivered.



### Figure 12 Upper Thread Tension Too Strong

If there are clear loops at the top (Figure 12), then the tension of the upper thread is too strong or the tension of the lower thread too slight.

If there are loops on the underside (Figure 13), the tension of the upper thread is too weak.

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Figure 13 Upper Thread Tension Too Weak

Which of both is the case can easily be determined by checking the tension of the threads by hand (that of the upper thread with the presser foot loosened).

### **16. Upper Thread Tension Adjustment**

If it is too strong, the nut "g" must be turned in direction 1 (Figure 2) according to arrow.

### **17. Lower Thread Tension Adjustment**

If the tension spring is too strong, the screw of the tension spring is turned out slightly by means of the screwdriver that is provided, but not so far that it protrudes outwards, otherwise the thread will get stuck on it and can break. If it is too weak, one must loosen the tension spring screw slightly.

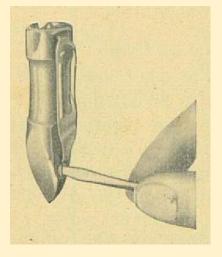
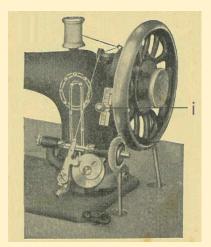


Figure 14 Loosening Tension Spring

The stitch length mechanism (Figure 15) allows for precise control of the stitch length.



### Figure 15 Stitch Length Mechanism

If the knob screw "i" is set to 0 -- the fabric will not be fed at all, if one presses it down, the stitches will become longer and longer.

If one wants to sew backwards with the same length of stitch, then screw in the screw "i" until it stops and it is knocked upwards over the zero point.

### 19. The Thread

The thread can break, when:

a) the stitch plate hole is rough or the needle is bent,

b) if the thread tension is too great,

c) the thread is too thick or not evenly thick or the needle is too fine,

d) the slide tension screw has been unscrewed too far,

e) if instead of the large-hole needle plate, the small-hole plate is taken using thick needles and thick thread.

f) if the wrong type of needle is used,

g) the needle is not seated properly.

The cause can be:

a) that the machine has been twisted due to improper handling,

b) the needle is bent, too low, or misplaced,

c) the thread is too thick, the needle is too fine.

### 21. An Uneven Seam

occurs when:

a) the bobbin is wrong and set, so that the thread is pulled away in the wrong direction,

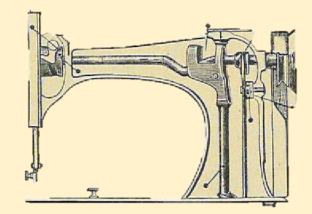
b) the top and bobbin threads are not precisely controlled by the tensions (see Article 15 Side 12-13),

c) Fabric, thread and needle do not match, so needle or thread is too thick or too thin,

d) the bobbin is not evenly wound.

### 22. Machine Maintenance

The machine must always be kept clean and well oiled.



### Figure 16

The places that need lubrication are indicated by a dot and a line (Figure 16).

To oil them, only the finest sewing machine oil should be used. All other types harden in the machine and make them unusable.

# 



The parts to be oiled, [Figure 17].

The places where lubrication is required are indicated by a point and a line, are indicated in figures 16 and 17. The machine must be oiled continuously at points 1 - 6. (Figure 18) Point 6 is opposite the footboard.

Figure 18.

If the machine has not been used for a long time, all parts should be particularly well cleaned with petroleum. This work is done in this way until all residues of dirt have been dissolved by the petroleum, after which everything is wiped clean. Then one can oil again with sewing machine oil.

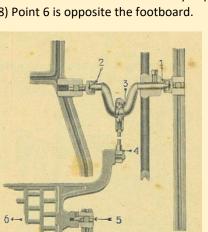
### 23. Accessories

With every shuttle sewing machine one will receive:

1. 10 needles in different thicknesses, including one in the machine.

- 2. 6 bobbins in a box, one of which is in the shuttle.
- 3. 1 regular presser foot on the machine.
- 4. 1 seam guide with screw.
- 5. 1 narrow hemmer and a wide hemmer.
- 6. 1 ruffler.
- 7. 1 adjustable hemmer.
- 8. 1 Quilter and 1 Quilt Button.
- 9.1 braider.
- 10. 1 spring to regulate the thread.
- 11. 1 slide to arrange the stitches.
- 12. 2 screwdrivers and 1 screwdriver for the shuttle.
- 13. 1 oil can.
- 14. 1 bottle of oil.
- 15. 1 user manual.
- 16. 1 box for the tools.

Other devices are supplied at extra cost on request.

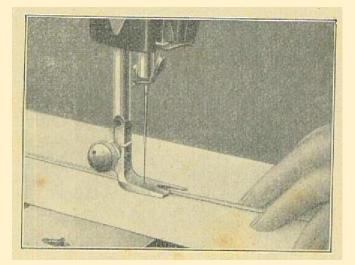


Then one takes the fabric, pulls it in the seamer as the picture shows, and carefully begins to sew.

### 24. Attachments for the Sewing Machine

### **The Sewing Machine**

To sew over, place two pieces of fabric on top of each other, but leave the edge of the piece underneath to protrude about 4 mm. The protruding side alone must match the hemmer. Walk through the sewing machine. In this way the two pieces are sewn together.

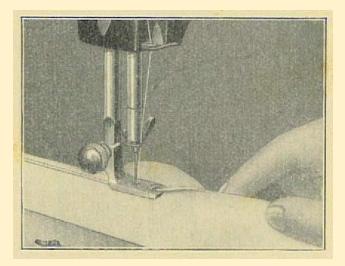


### Figure 18a The Foot for Narrow Hems

Then the fabric is laid out, the seam is smoothed and the lace that is now formed is passed one more time through the sewing machine to sew it flat.

### The Hemmer for Narrow Hems

After the hemmer has been screwed on in place of the normal presser foot, bring the beginning of the fabric to be hemmed and which has been turned 1 mm wide with a pointy object as far as it will go towards the cove of the hemmer, to the needle The fabric should be guided in this way during sewing. That the hemmer is completely filled and the seam in the cove is turned sufficiently. But there should never be too much walk in. This happens very easily when the fabric in front of the hemmer's cove is pressed in too much by hand. By training one will soon learn the right way.



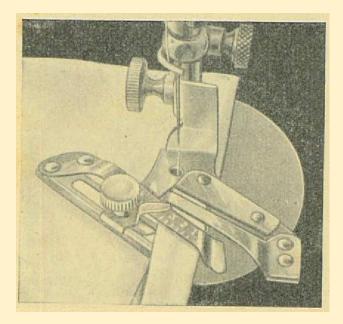
### Figure 18b The Foot for Wide Hems

### **The Wide Hemmer**

It is used for hemming very thick fabrics or two fabrics at once. The use is exactly as described above. Also beautiful seams can be achieved with the broad seamer, as described above with the sewer.

### **The Adjustable Hemmer**

The adjustable hemmer is closed when the ruler is tightened with the thumb screw, and is used for sewing particularly wide or thick seams. One proceeds exactly in the same way as with the narrow seamer, by bringing the bent beginning of the fabric into the cove under the needle and making sure that there is always enough fabric in the seamer, so that the edge turns twice.



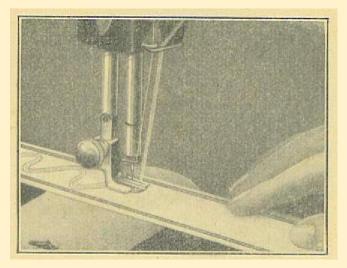
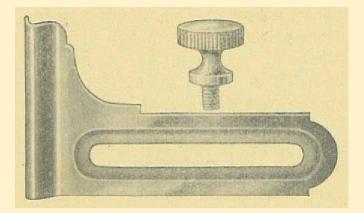


Figure 18d The Sliding Braider

### The Seam Guide

When a seam has to be made that must run parallel to one side, the seam guide is screwed onto the plate with the appropriate thumb screw, which fits into the hole to the right of the stitch plate.



### Figure 18e The Seam Guide

Depending on the desired distance from the side of the fabric, the fabric, put the straight side of the ruler less or more away from the needle.

The ruler is also useful for sewing pleats and folds or for sewing one seam next to another in the same direction or in a straight direction. This saves time-consuming drawing lines.

### Figure 18c The Adjustable Hemmer

To use this hemmer for hemming of different widths, loosen the screw in the groove. The plate and division can then be moved. The narrowest hem is obtained when the pointer is set to 0; the higher the number one takes, the wider the seam becomes. The loosened screw must be retightened before sewing.

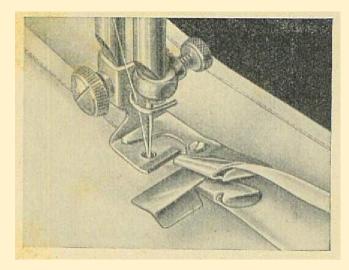
### **The Sliding Braider**

The braid is wound smoothly on a bobbin, put it on top of the pin and the braid through the eyelet for thread to presser foot. This has, as shown, an oblique opening through which the braid is pulled downwards, so that it lies just under the needle during sewing. With some practice one will quickly become familiar with the use, as with the other feet.

### The Binder

### **The Ruffler**

The ribbon trimmer is used to trim clothes and laundry.



### **Figure 18f The Binder**

Pinning on the tape is saved. The band is placed between the two hooks (holders) in such a way that it moves loosely between them and the borders are made in this position (like the ruler) with the screw on the plate. The fabric is now placed under the presser foot, between the two hooks that already hold the band, so that it lies around the fabric and can thus be sewn. With the help of this simple tool one can catch up on the bottom one of two fabrics placed on top of each other, while the top one remains smooth. The fabric to be drawn up is placed under the ruffler on the fabric slider and that which is to remain smooth, scrub in the slide of the inhaler. The fabric slider only reacts to the bottom fabric, leaving the other behind. The bottom fabric will then lie in small pleats. The larger the stitch is made, the larger the pleats become. One gets dense folds when one puts on the outer fabric. For large tailoring companies and for the manufacture of laundry it is recommended to purchase the self-inhaler and the selffolder, which can be ordered from the seller of the machine or from the factory.

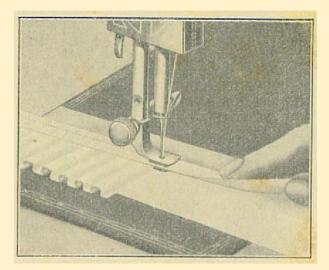
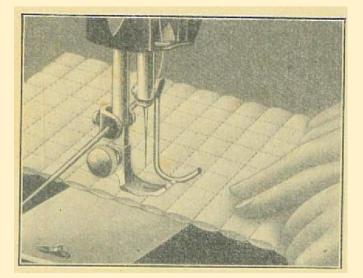


Figure 18g The Ruffler

This is important when sewing quilted pieces. With the help of these, one can sew rows and squares of equal width, without the need to be drawn in advance. The quilter, a bent piece of metal, is passed simultaneously through the lateral holes in the quilting bracket and into the conveyor rod, as shown in the drawing, and fastened to the conveyor rod with the screw in the back of the bracket. It can be set wide or narrow.



### Figure 18h The Quilter

First make a straight seam, which has been drawn, then slide the fabric as far to the right of the seam as the rows should be apart, and then fasten the quilt so that the bottom part just falls on the first seam. When sewing further, one should make sure that the seam in question is guided exactly along the quilter. The same is done with the following seams and square.

### **Preparation of the Machine**

At the highest position of the needle, the presser foot with the screw is removed. Then the conveyor rod is lowered so as not to preclude the tension of the upper thread. In order to be able to manually control the movement of the embroidery frame when embroidering and darning and thus change the length and direction of the stitches as necessary, the needle plate is exchanged for the embroidery stitch plate (see Fig. 19).

### **Thread and Needle**

When darning, use good machine darning thread No. 50 or no. 60.

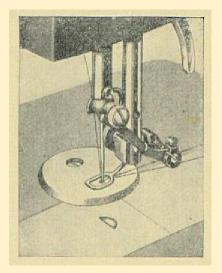
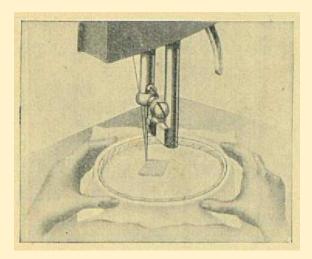


Figure 19 The Darner

For embroidering, the best machine silk or colorfast embroidery thread is used for the upper thread, while for the bobbin thread also machine thread No. 50 or no. 60 takes. The gauge of the needle should be in proportion to the thread, about No. 7 or no. 8.

### **Embroidery Frame**

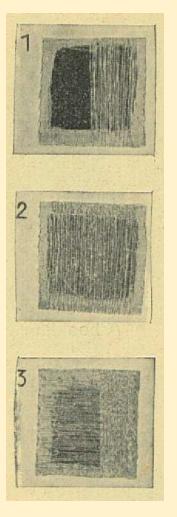
The fabric that one wants to darn or embroider is stretched in an embroidery frame and then it is smoothed out. If the window does not close properly, one can make do by moving the outer frame, by means of a screw or by wrapping the inner frame with fabric.



### **Figure 20 The Embroidery Frame**

### The Darning

The darning also serves as a preliminary exercise for embroidering. The lower thread is pulled upwards and both ends of the threads are held by hand until the first stitches are done. The needle is inserted about 1/2 cm in front of the hole and now with quick pedaling and slow, regular sliding of the window (Figure 20), short stitches are sewn across the hole, also 1/2 inch past the hole.



### Figure 21 Darning

Thus, by sliding the window forwards and backwards, one lays seam after seam in the same weaving threads (Figure 21), until the whole hole is evenly covered. Now one turns the window a quarter of a turn, and stops in the same way across it until the hole is completely covered. If the hole is very large, the hole can be tightened, which is darned on both sides and then darned across the hole across the darning cotton.

### **Floral Embroidery**

If one has obtained some sureness by darning, then then one can begin embroidering simple easy patterns.

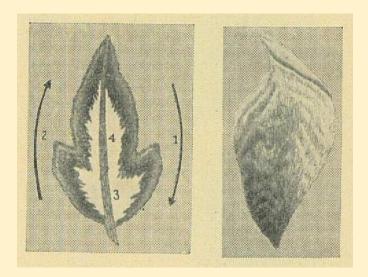


Figure 22 Leaf Embroidery

Figure 23 Leaf Emb.

The pre-drawn outline must be exactly followed, the threads direction and position are treated exactly as with the hand embroidery.

### **Open Hem Embroidery (Fig. 25)**

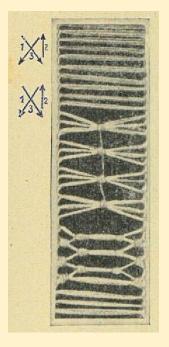


Figure 25 Open Hem Embroidery

One can make this by machine not only faster, but also much finer than by hand. After the necessary threads have been drawn out, at the simple open seam the threads that remain are tied together at the edge by means of cross-stitching. The order of the stitches is shown by the arrows on 25. If the threads are gathered in the middle, one goes ahead with a normal stitch and gather the necessary number of threads with grappling stitches. If one wants to create a special embellishment, one can draw another wave-shaped sewing stitch through the open seam when it's finished.

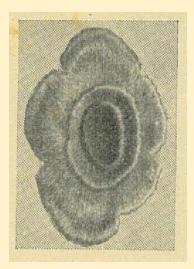


Figure 24 Flower Embroidery

The bobbin thread should always be fine, (yarn No. 100 to 150).

The fabric is first sewn with small stitches and then cut out according to the pattern. Then begin the lace stitch and draw the longitudinal seams in equal distances over the cut fabric, moving the steps and the fabric back at the same time, after which the longitudinal seams are crossed with transverse seams.

Each transverse thread must be connected to the longitudinal thread by crossing over.

Obtain small, round buttons. One lets these places go around the needle several times. After finishing the pattern, make a thin cord around the cut places and embroider over that cord. In this work one should use embroidery silk of the same color and then tighten the tension of both threads a little more than with normal embroidery.

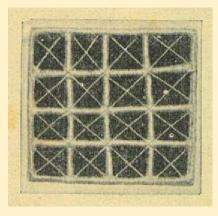


Figure 26 Cut Fabric Embroidery

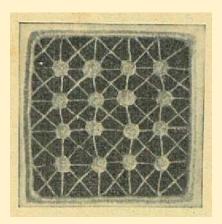


Figure 27 Cut Fabric Embroidery

The pre-drawn letters are first worked with long stitches, as appropriate, and then

embroidered over with even, closely spaced cross stitches.



Figure 28 Monogram Embroidery

One can also use ordinary thread as bobbin thread for embroidering letters.

### **Prick Patterns**

Finally, the machine can also be used for pricking patterns as a direct substitute for a special machine and even the most difficult drawings can be pierced. For this, however, a special needle without an eye must be used, which can be obtained from the dealer or the manufacturer.