

NECCHI

instructions

for the use
and maintenance
of your

NECCHI
NORA



1869
margherita

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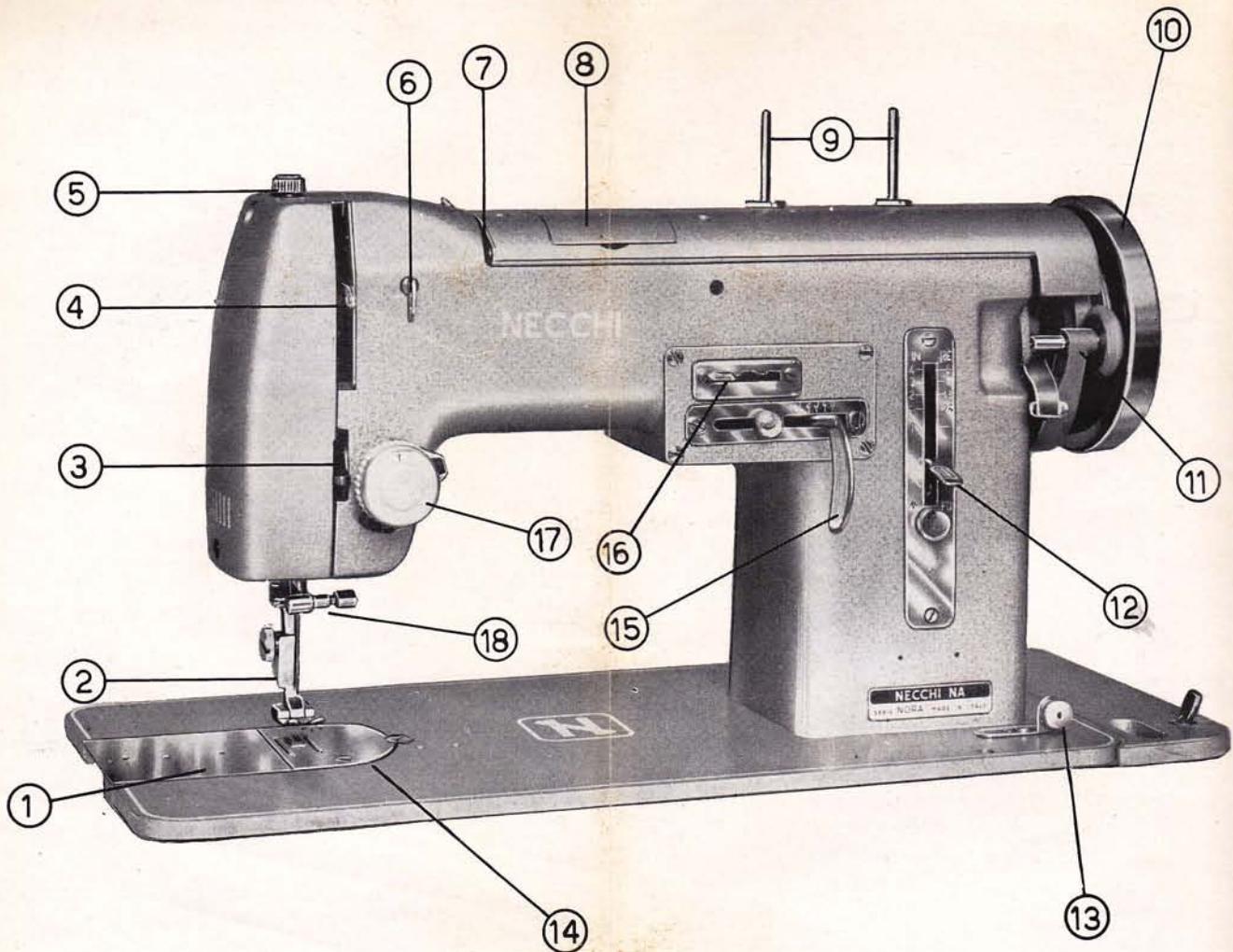
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NAME OF PARTS

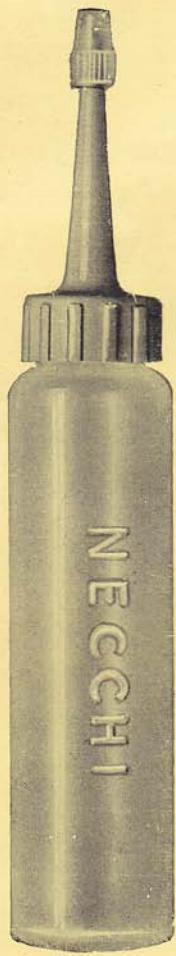
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|-------------------------------|--------------------------------------|
| 1 - Sliding plate. | 10 - Flywheel |
| 2 - Presser foot. | 11 - Bobbin winder. |
| 3 - Thread guide hook. | 12 - Stitch length regulating lever. |
| 4 - Take-up lever. | 13 - Bobbin winder thread guide. |
| 5 - Pressure regulating knob. | 14 - Needle plate. |
| 6 - Thread guide. | 15 - Zig-zag stitch lever. |
| 7 - Thread guide. | 16 - Needle position lever. |
| 8 - Button. | 17 - Thread tension knob. |
| 9 - Spool pins. | 18 - Needle clamp. |

FOREWORD

The sewing machine that you have purchased, Madam, is a high-precision mechanical gem, which is the final result of years of research by our technicians, the work of thousands of specialized workers and the employment of modern and complex installations.

This machine offers you the possibility of executing a vast range of sewing jobs on light and heavy fabrics; it darns and embroiders easily and perfectly; you will only have to follow the instructions of this booklet and we suggest that you read them carefully so that you may fully master the many possibilities inherent in your machine.





HOW TO USE THE OIL FEEDER

Stopper

Cap

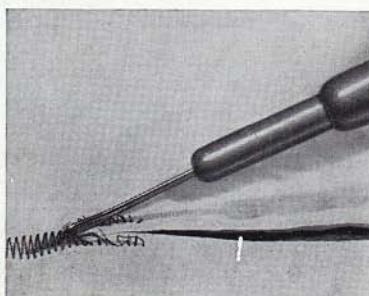
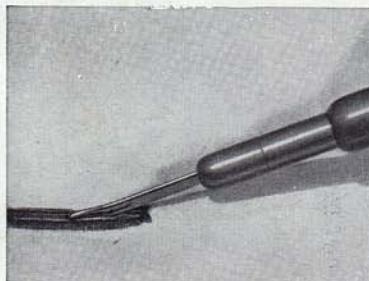
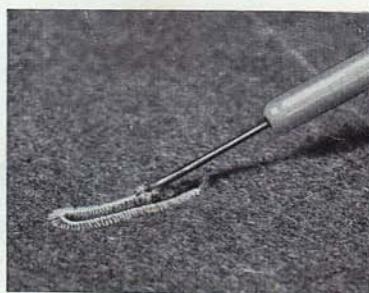
Oil container

To oil machine, remove stopper from oil tube, turn oil feeder around to reach portion to be lubricated, then gently press sides of oil container.



When filling oil container, remove cap with oil tube

NECCHI BUTTONHOLE CUTTER



Chapter 1

GENERAL INSTRUCTIONS

1. GENERAL NOTE

As any high-precision mechanism, the NORA sewing machine requires careful handling and maintenance. Regular lubrication is essential for trouble-free running and the good condition of the machine.

Following the directions given in this booklet, the various sewing performances of this machine will be easy and cause no inconvenience. Care must be taken, of course, to select needle and thread in accordance with the fabric to be sewn.

2. TO OIL MACHINE

To maintain the machine in perfect working order, it is essential to oil it regularly.

Only a high quality precision machine oil must be used.

Do not use olive oil, or any other vegetable oil, since such oils get hard soon, thus clogging the machine, and cause it to run hard.

Use NECCHIOIL, available at your NECCHI dealer, or a good quality light sewing machine oil. All the oiling points of the machine are shown in Figs. 1, 2, 3, and 4.

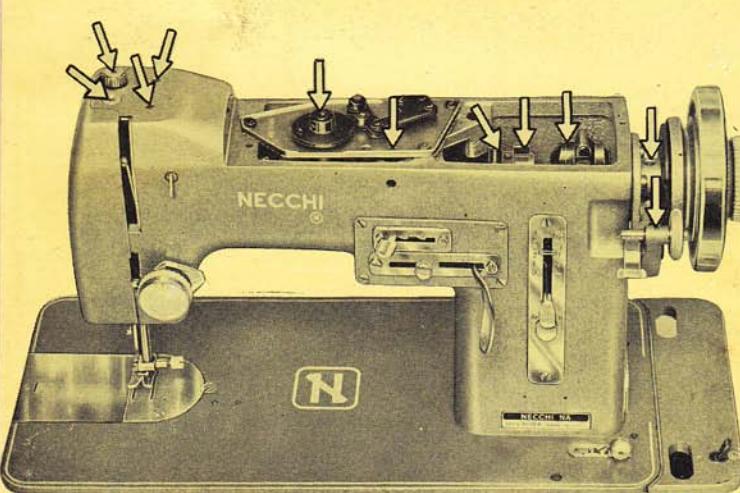


Fig. 1

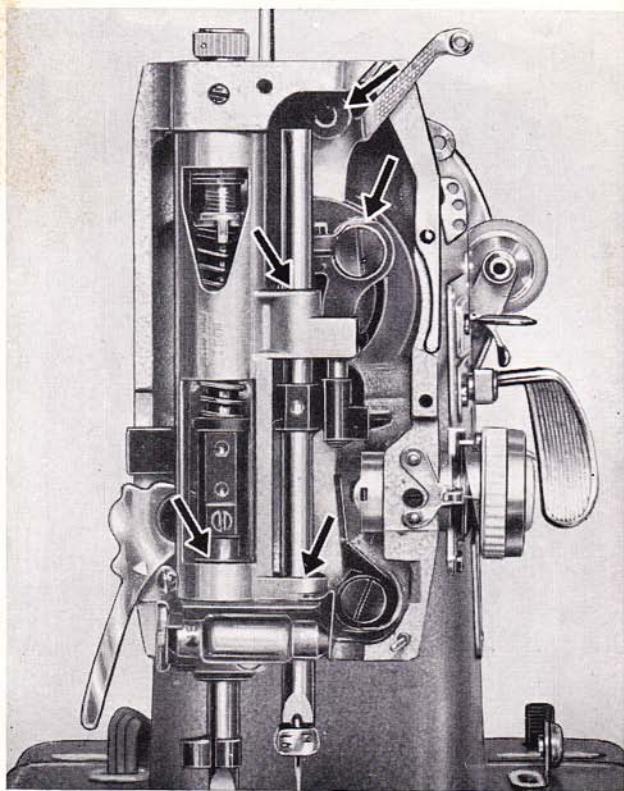


Fig. 2

To oil the points, indicated in figs. 1 and 2, remove the upper cover and the front plate, after having removed their fastening screws.

If used daily, the machine should be oiled every day. For intermittent use (once or twice weekly), oil it once a week.

Do not flood the machine with oil.

One or two drops of oil in each oil hole will suffice.

3. SOME DIRECTIONS OF A GENERAL NATURE

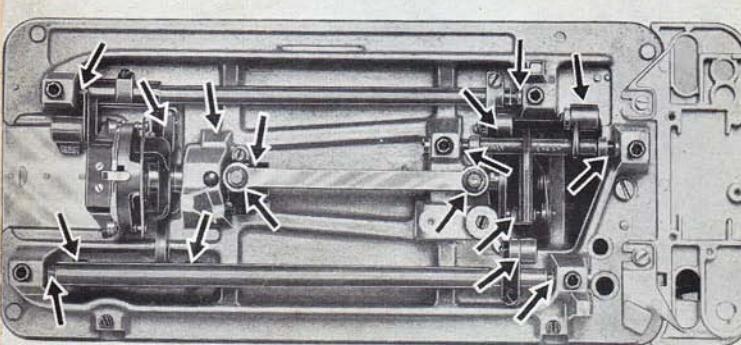
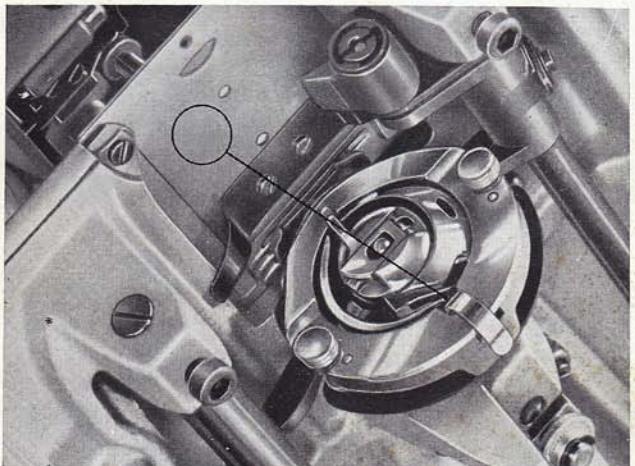
- 
- a) The balance wheel must always be turned toward the operator.
 - b) Do not operate machine with presser foot resting on feed dog, unless there is fabric between presser foot and feed dog. Also, always keep a small piece of fabric between presser foot and feed dog, even if machine is not in use.
 - c) Do not pull or push fabric by hand during sewing since this action will bend needle. The machine automatically feeds the fabric without assistance.

Fig. 3

Keep machine in a dry place.

4. RECOMMENDED NEEDLE AND THREAD SIZES

The following table shows the various sizes of threads and needles to be used in accordance with materials to be sewn:



	Sizes of thread		Sizes of needles	
	mercerized cotton	silk	syst. 15 x 1	syst. 705
Muslin - Batiste - Fine linens - thin fabrics	80 to 150	O and. 00 twist	10	70
Shirtings - Sheetings - Heavy silks	80 to 60	A & B twist	14	90
Heavy weight linens - Woollen goods	60 to 40	C twist	16	100
Heavy weight woollens - Woven coating	40 to 30	D twist E	18	110
Heavy fabrics in general	30 to 24	twist	20	120

Fig. 4

5. TO INSERT THE NEEDLE

- a) Bring needle bar to its highest position by turning balance wheel toward you.
- b) Loosen the screw « A » and insert needle into needle clamp as shown in Fig. 5. Make certain that flat side of needle shank is toward the right.

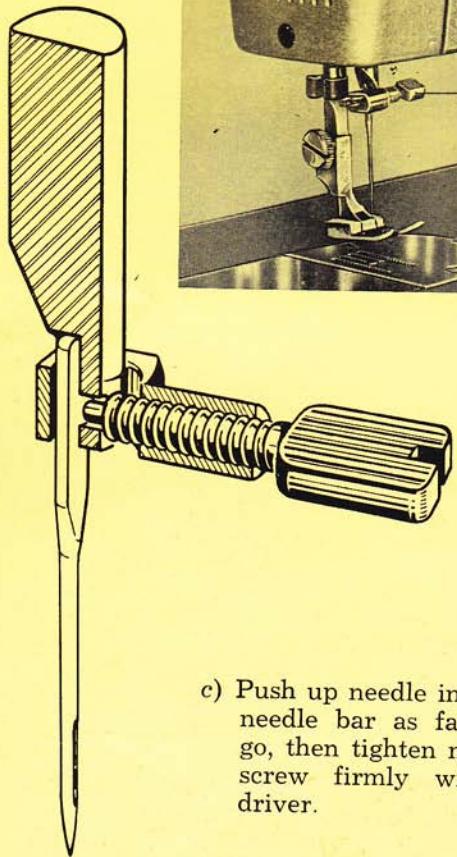


Fig. 5

- c) Push up needle into groove of needle bar as far as it will go, then tighten needle clamp screw firmly with a screw driver.

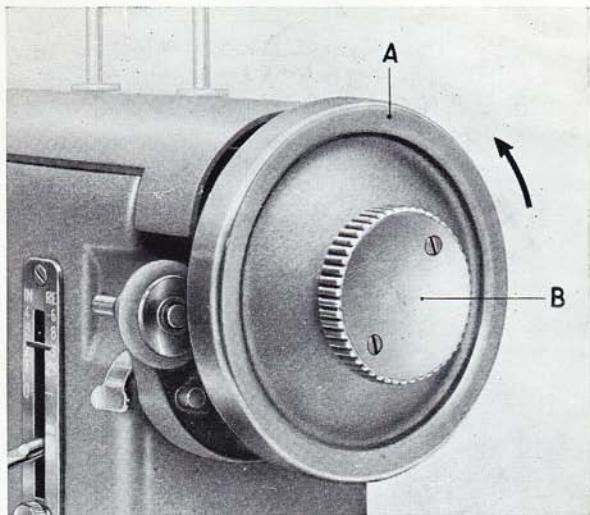


Fig. 6

6. TO WIND EMPTY BOBBIN

- a) Disconnect balance wheel « A » (Fig. 6) from sewing mechanism by holding this wheel with left hand and turning stop motion knob « B » toward the left (counter-clockwise) with the right hand, until the knob feels loose.

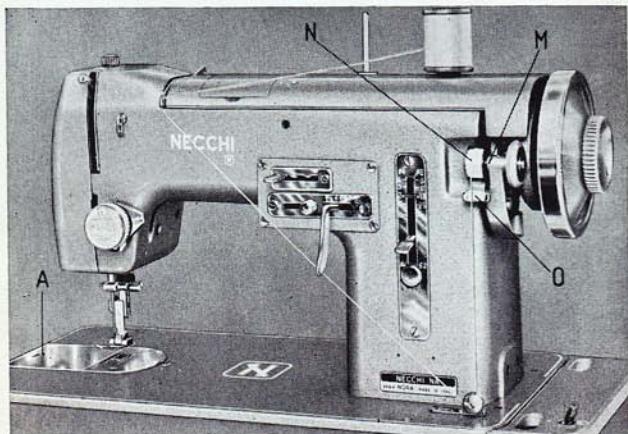


Fig. 7

- b) Run thread from spool, as shown in Fig. 7, and wind a few turns of thread by hand on empty bobbin "N" which then is placed on spindle "M".
- c) Press lever "O" against bobbin and run machine at medium speed to fill the bobbin. Bobbin winder will automatically disconnect and stop when bobbin is full.

7. TO REMOVE BOBBIN CASE, TO EXCHANGE BOBBIN AND TO INSERT BOBBIN CASE INTO SHUTTLE

- a) Raise presser foot and turn balance wheel toward you till needle reaches its highest position.
- b) Move slide plate "A" entirely to the left (Fig. 7).
- c) With thumb and forefinger of one hand, lift latch "B" of bobbin case (Fig. 8) and pull bobbin case out of machine.

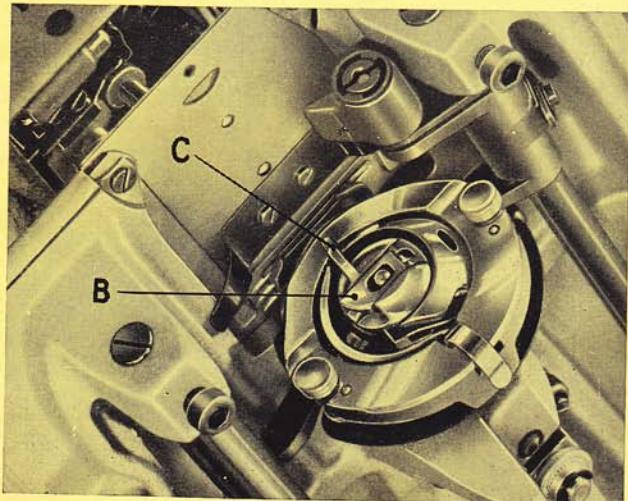


Fig. 8

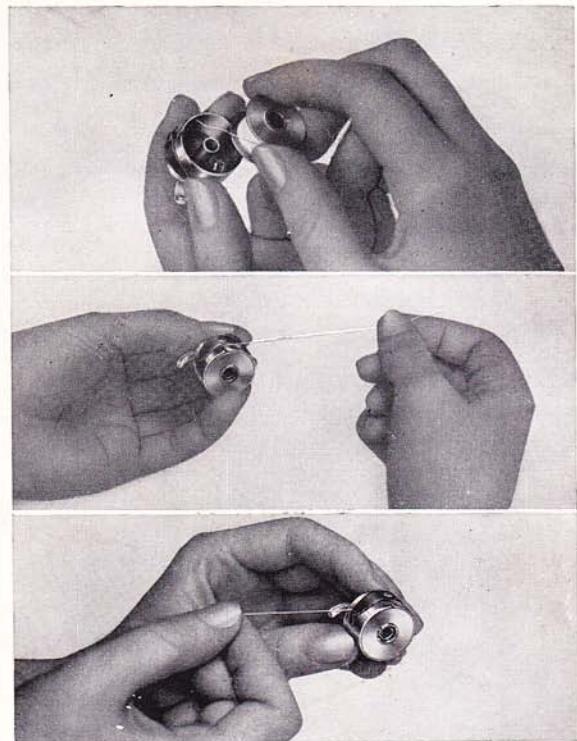


Fig. 9

- d) Insert filled bobbin into bobbin case and draw bobbin thread under the tension spring as shown in Fig. 9. Leave about four inches of loose thread hanging down from bobbin case.
- e) With thumb and forefinger of left hand, take bobbin case (into which full bobbin has been inserted) by the latch and place it on the center stud of the shuttle. The position finger "C" (Fig. 8) must go into the notch on top of the race plate.

Release latch and press bobbin case into shuttle as far as it will go. Push slide plate "A" (Fig. 7) to right, closing it.

To prevent breaking of the upper thread, it is essential to thread the machine as described below:

- a) Bring needle to its highest position by turning the flywheel toward you.
- b) Run spool thread through the two holes of the thread guide on the upper cover-plate.
- c) Run spool thread over the machine arm through two holes of guide « B ».
- d) Draw thread down, then insert it from right to left in slot of tension discs housing « C ».
- e) Hold thread with thumb of right hand between tension housing « C » and upper guide « B » on machine arm, then pull thread with left hand towards the right, until check spring « M » leads thread behind hook « D » and a slight click is heard.
- f) Bring thread from right to left through eye « E » of the thread take-up lever.

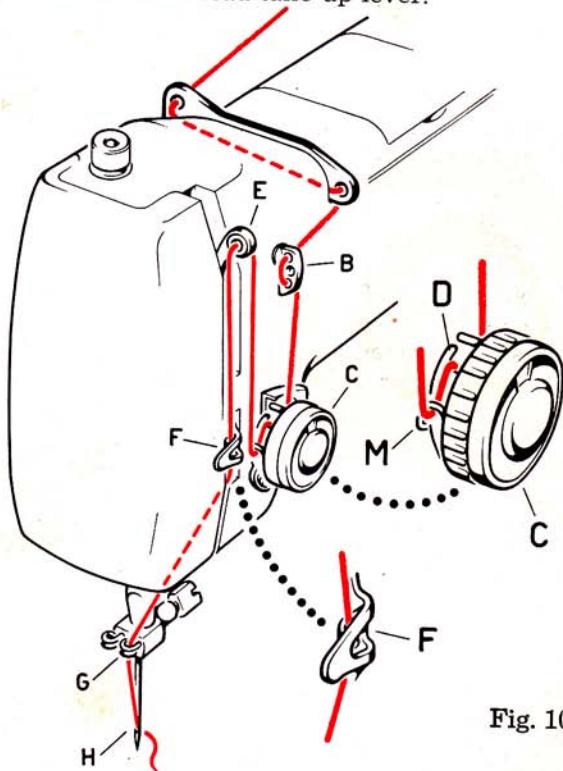


Fig. 10

- g) Hold thread with both hands and pull thread behind guide « F » : continue pulling it sideways towards the right until it clicks into a small channel inside guide « F » which secures thread.
- h) Draw thread into the slot between the face plate and the machine arm.
- i) Pass it through the hook of the needle clamp « G » and, finally, thread it from left to right through the eye « H » of the needle, leaving a loose end of about 4 inches.

9. TO START SEWING

- a) With left hand, hold end of needle thread so that thread remains loose. At the same time, with right hand, turn balance wheel slowly toward you until needle goes down and up again to its highest position. This will cause the bobbin thread to be caught by the needle thread.
- b) Now, by drawing the upper thread by hand, the lower thread will be pulled up through the stitch hole of the needle plate.
- c) Place ends of both threads, away from you, underneath the presser foot, then place fabric between presser foot and needle plate and lower the presser foot.
- d) Start sewing slowly while holding the ends of both threads for the first three or four stitches. This will prevent the threads from getting tangled under the needle plate, jamming the shuttle or breaking the needle.

10. TO ADJUST TENSIONS

If the thread tensions are correctly adjusted, the stitches will look alike on both sides of the fabric since the two threads will interlock inside of the material (Fig. 11).



Fig. 11

If the upper tension is too strong, or the lower tension too weak, the threads will interlock as shown in Fig. 12 (needle thread lies flat on top



Fig. 12

of fabric, and bobbin thread will be pulled up to top side of fabric and appear there in form of small knots).



Fig. 13

If the lower tension is too strong in relation to the upper tension, the threads will interlock as shown in Fig. 13 (needle thread will be pulled down to underside of fabric and appear there in form of small knots or loops).

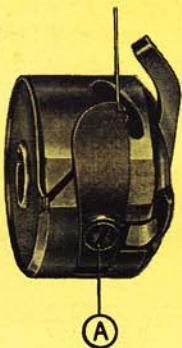


Fig. 14

The upper tension can be increased by turning the knob « A » (Fig. 10) clockwise; it will be decreased by turning the same knob counterclockwise.

The tension of the bobbin thread (lower tension) increases by gently tightening screw « A » (Fig. 14); it decreases by loosening this screw.

11. TO REGULATE LENGTH OF STITCH

To set the required length of stitch:

- a) loosen knurled thumb screw « P » (Fig. 15).
- b) Push down lever « O » and stop it with the indicator « N » at the number on the graduated scale, which corresponds to the desired stitch length.
- c) Tighten again thumb screw « P ».

For reverse sewing with the same stitch length, simply push lever « O » upward against indicator « N ».

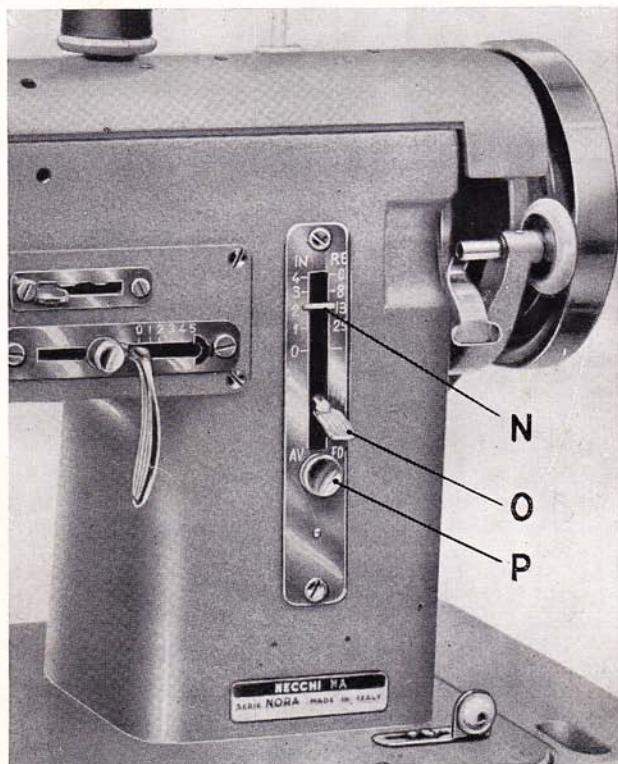


Fig. 15

12. TO DROP FEED DOG

- a) Push slide plate « A » entirely to the left (Fig. 16).
- b) To lower the feed dog, press down drop feed lever « B » completely.
- c) To raise the feed dog again, bring up lever « B » completely.

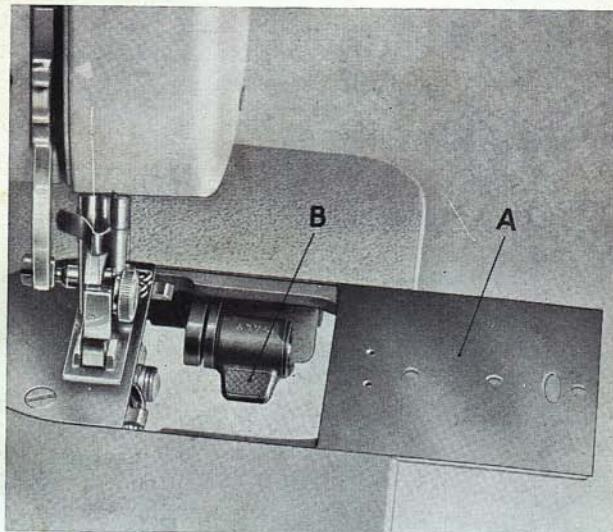


Fig. 16

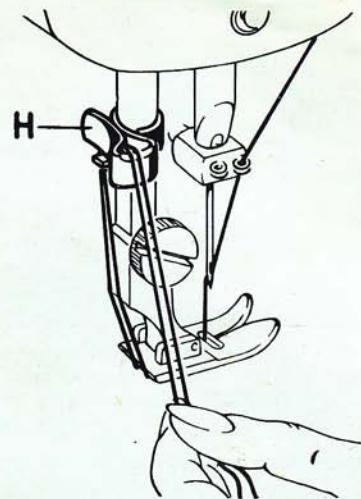


Fig. 17

By following this procedure the ends of needle and bobbin thread will then be automatically held by the thread cutter and the machine will thus be ready for the next sewing operation without the necessity of holding these threads by hand for the first few stitches.

13. TO USE THREAD CUTTER

- a) After a sewing job is finished bring thread take-up lever to its highest position by turning the balance wheel toward you.
- b) Lift presser foot and draw fabric about four inches away from you.
- c) Keeping threads taut, draw them through the thread cutter « H » (Fig. 17) cut them and remove the fabric.

14. TO CLEAN THE SHUTTLE

If balance wheel of machine turns heavily or jams slightly, this may be due to a piece of loose thread which has been caught between shuttle and shuttle race.

To correct this condition carefully proceed as follows:

- a) Bring needle to its highest position.
- b) Tilt machine backward on its hinges.
- c) Remove bobbin case then snap out the two

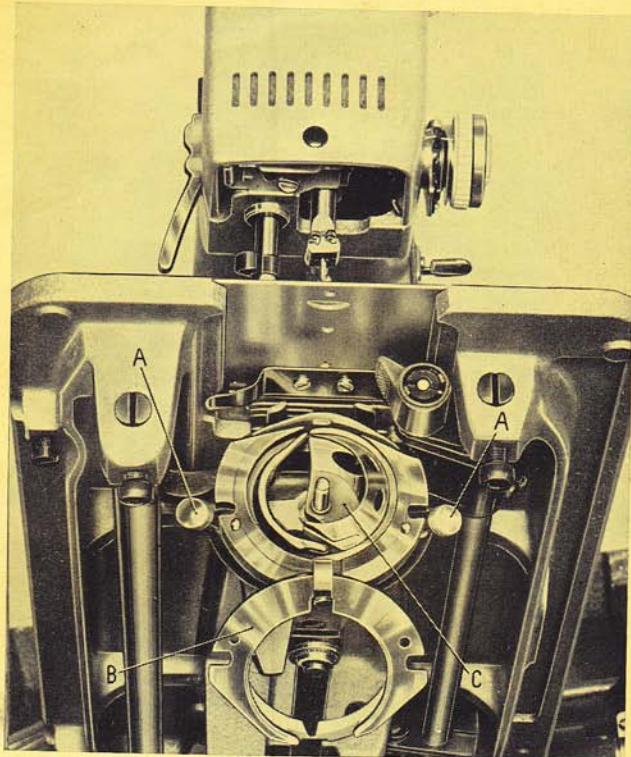


Fig. 18

- buttons « A » (Fig. 18) by spreading them apart thus releasing race cover plate « B » which then must be turned away from the race.
- d) Remove shuttle « C » by gripping its center stud with thumb and forefinger. Shuttle race is now free for cleaning.

Remove lint and pieces of thread from shuttle race, using a rag or a small soft paint brush, then clean also the shuttle. Finally, put a drop of oil into the shuttle race and oil the rim only of the shuttle. To insert the shuttle into its race, and to reassemble the shuttle race, follow a procedure reversed to that outlined above.

15. CAUSES OF MINOR DIFFICULTIES

Needle (upper) thread breaks

It may be due to the following reasons:

- a) Needle is inserted incorrectly.
- b) Needle thread is improperly threaded.
- c) Needle thread tension is too tight.
- d) Needle thread is of wrong quality for fabric being used.
- e) Needle thread has knots.
- f) Needle eye is rough or sharp.
- g) Point of needle is damaged (bent over or blunt).
- h) Stitch hole in needle plate is rough or sharp.
- i) Needle is too fine for thread in use.
- j) Machine is started at full speed.
- k) Machine is started with thread take-up lever not in its highest position.
- l) Bobbin case has rough spot due to being hit and damaged by needle.
- m) Shuttle has rough or sharp spots.

Needle breaks

It may be due to the following reasons:

- a) Pulling fabric to or from you in such a manner that needle strikes needle plate.
- b) Needle is bent or has blunt point.

Bobbin (lower) thread breaks

It may be due to the following reasons:

- a) Bobbin thread tension is too tight.
- b) Bobbin is wound unevenly.
- c) Bobbin is too full and binds in bobbin case.
- d) Dirt or lint in bobbin case.

Skip stitches

It may be due to the following reasons:

- a) Needle is inserted incorrectly.
- b) Needle is bent or blunt.
- c) Thread is too heavy for the size of needle.
- d) Needle is of wrong size for fabric in use.

Uneven stitches

- It may be due to the following reasons:
- a) Presser foot not resting evenly (fully) upon fabric.
 - b) Insufficient pressure on presser foot.
 - c) Feed dog is set too low.
 - d) Pulling fabric instead of allowing it to be fed by machine.
 - e) Stitch is too short.
 - f) Using too fine a needle with too coarse or uneven a thread.

Machine does not sew straight stitch

This may happen only if the discs have not been removed from Automatic Mechanism. (See Instructions, page 47).

Heavy turning or jamming of machine balance wheel

It may be due to following reasons:

- 1) A loose piece of thread has become wedged between shuttle and race (see General Instructions No. 14).
- 2) Transmission belt between motor and balance wheel is too tight (adjust it by loosening the screws which fix the motor to the machine).
- 3) Machine is not lubricated.
- 4) Needle has blunt point.

In case you cannot find or adjust the trouble, call for a mechanic at your local NECCHI dealer.

IMPORTANT: It is possible that, after considerable use, some of the parts inside or underneath your machine will require adjustment. If, by referring to the aforementioned causes of trouble, you are not able to bring your machine into working condition and to obtain a perfect seam, do not try to repair the machine yourself. Call your local NECCHI sewing machine dealer. He has excellent facilities and the technical knowledge required to put your machine into perfect working order.

16. LIGHTING AND ELECTRICAL RUNNING OF THE MACHINE



To start the machine:

- a) When connecting machine with electric current, make certain that your electric power line carries AC (alternating current).
- b) Push switch «Light» to the «ON» position. When switch is in this position, a red signal light will appear on face plate, indicating that machine is under current.
- c) The «Speed» switch, located on the other side of the motor, has two positions. When this switch is in «MAX» position, machine can run with highest possible speed which can be regulated by pressing against lever of motor control (knee control or foot control). By pushing speed switch to «MIN» position, machine will run with a reduced speed which can also be regulated by means of the motor control.
- d) In order to regulate the brightness of the built-in sewing light, simply turn the knurled portion of shade «A» by hand.



b) Loosen upper tension slightly.
This makes it possible to effect long and loose stitches that can be easily removed.

3. TO SET MACHINE FOR DESIRED ZIZ-ZAG STITCH WIDTH

- Loosen button « A » (fig. 19).
- Set zig-zag stitch lever « S » at desired width on graduated scale.

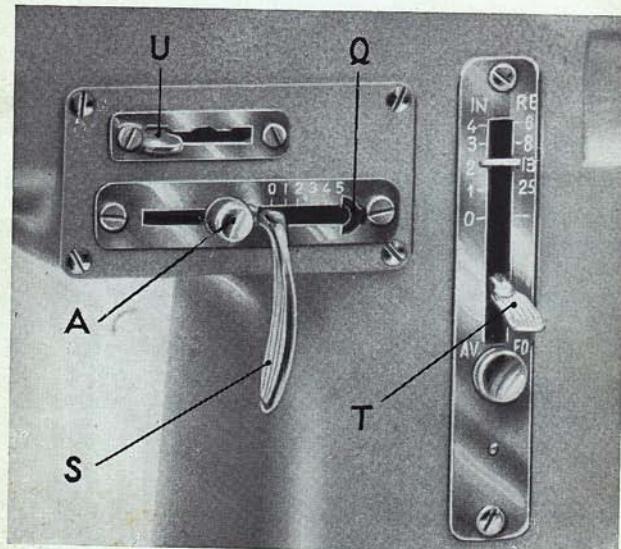
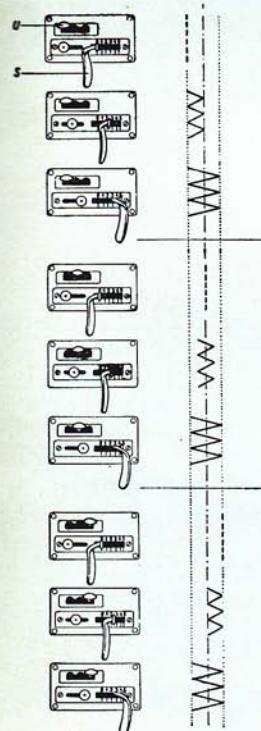


Fig. 19

- Tighten button « A » again, thus blocking index « Q ». This will limit the zig-zag width.
- Fig. 20 shows how the stitching of a narrow zig-zag can be shifted from the center to the left, or to the right, by means of lever « U » (Fig. 19).



Needle position lever « U » on the left.

Needle position lever « U » in the centre.

Needle position lever « U » on the right.

Fig. 20

4. EMBROIDERY

a) TO MAKE « SATIN STITCH », Fig. 21



Fig. 21

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set for desired stitch width
Stitch Length Lever: Set as close to zero mark as possible, so that the fabric is still being fed freely and the stitches do not pile up.

Threads: Use Embroidery Thread No. 50 for the needle and for the bobbin.

Thread Tensions: Use fairly loose upper tension (between « 0 » and « 1 ») and a rather tight lower tension. This will cause the lower thread to exert the proper pull on the upper thread. The upper thread will lie flush on the upper side of the fabric, and part of it will also be visible on the lower side of the fabric. The lower thread should appear on the underside of the fabric as a seam which is almost straight.

Presser foot: Use Hinged Grooved Satin Stitch Foot.

Procedure: Commence sewing. Follow the above procedure for all fancy embroidery work (decorative stitches) in which the « satin stitch » is the basic stitch for all straight running designs.

b) TO MAKE DESIGN Fig. 22.



Fig. 22

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set at mark « 5 ».

Stitch Length Lever: Set as for « satin stitch ».

Procedure: Commence sewing and move zig-zag stitch lever slowly from « 0 » to « 5 » and then flip the lever quickly back to « 0 ». Repeat operation as many times as desired. The length of the design depends upon the speed at which the zig-zag stitch lever is operated.

c) TO MAKE DESIGN Fig. 23.

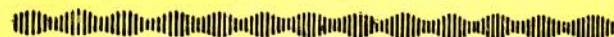


Fig. 23

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set at mark « 5 ».

Stitch Length Lever: Set as for « satin stitch ».

Upper Tension: Same as for « satin stitch ».

Procedure: Commence sewing and move zig-zag stitch lever rapidly from « 0 » to « 5 » and back again to « 0 ». Repeat operation as many times as desired. The length of the design depends upon the speed at which the zig-zag stitch lever is operated.

d) TO MAKE DESIGN Fig. 24.

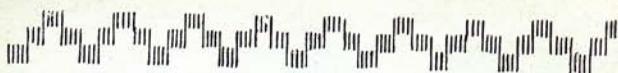


Fig. 24

Needle Position Lever: In left notch.

Zig-Zag Stitch Lever: Set at mark « 1.5 ».

Stitch Length Lever: Set as for « satin stitch ».

Upper Tension: Same as for « satin stitch ».

Procedure: Commence sewing and move the needle position lever rapidly from the left notch to the centre notch, then to the right notch, and back again, using all three notches. The length of design depends upon the time the needle position lever remains in each one of the three notches.

e) OTHER STITCHES

By using the various stitch lengths and widths, and by moving the levers « U » and « S » (fig. 20) a number of new ornamental designs can easily be obtained.

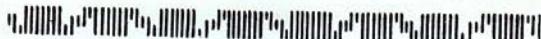


Fig. 25



Fig. 26

Figs. 25 and 26 illustrate two examples of possible designs.

5. TO EMBROIDER AND MONOGRAM WITH DROPPED FEED

NOTE: Silk, Nylon, or mercerized machine embroidery thread are generally used for this type of work.

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set for desired stitch width.

Stitch Length Lever: Set as for « satin stitch ».

Upper Tension: Same as for « satin stitch ».

Feed Dog: Proceed as explained in chapter 1, paragraph No. 12.

Needle plate: Replace normal needle plate by the needle plate having one slot only (Embroidery and Darning plate).

a) Remove presser foot.

b) Clamp fabric, on which embroidery has been designed, in the hoop.

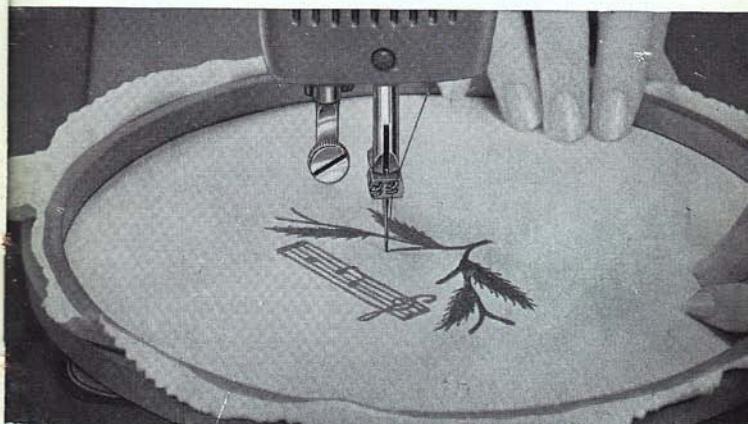


Fig. 27

- c) Place hoop with fabric under the needle (Fig. 27), so that fabric rests flat on bed of machine.
- d) Bring Presser Bar Lever to its lowest position.
- e) Hold hoop and needle thread with the left hand and, with the right hand, turn the flywheel slowly towards you in order to bring the lower thread up through the fabric and out of it.
- f) Hold both threads with left hand and commence sewing slowly while holding the hoop with the right hand.
- g) Move hoop slowly and make certain to move it only when needle is out of fabric.

6. HEMSTITCHING

a) NARROW STRAIGHT STITCH HEM

Needle position Lever: In centre notch.

Zig-Zag Stitch Lever: At extreme left.

Stitch Length Lever: Between « 3 » and « 4 ».

Upper Tension: Normal.

Presser Foot: Use straight stitch narrow hemmer foot.

Procedure: Leave hemmer foot in raised position. Fold over edge of fabric about one-eighth of an inch, for a length of about two inches, and insert the fold from beneath the hemmer foot into the spiral tongue (scroll) of the foot. This scroll turns in the edge of the fabric and forms the hem.

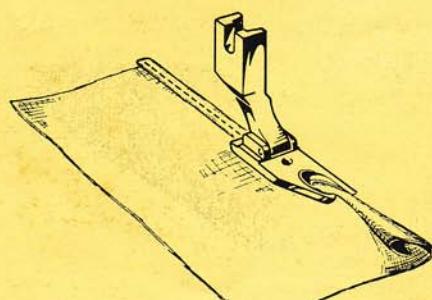


Fig. 28

Move fabric back and forth carefully until hem forms itself into the scroll, then pull fabric toward you until its end is just below the needle. Lower hemmer foot and commence sewing (Fig. 28). Guide and feed just enough material into hemmer foot to fill out scroll.

Caution: Do not crowd fabric into scroll and do not leave scroll only partly filled with fabric.

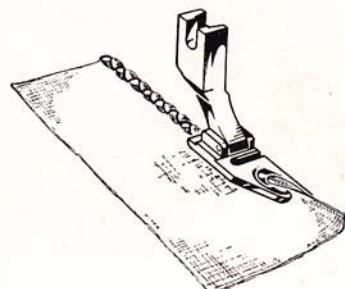


Fig. 29

b) SHELL STITCH

This type of stitch is best done on silk and soft rayons only.

Needle Position Lever: In centre notch.

Zig-zag Stitch Lever: Between « 2 » and « 3 ».

Stitch Length Lever: Between « 2 » and « 3 ».

Upper Tension: Normal.

Presser Foot: Use zig-zag shell hemming presser foot.

Leave hemmer foot in raised position.

Procedure: Insert edge to be hemmed into scroll of presser foot, then carefully slip fabric through scroll until the end of fabric is just below needle. Lower hemmer foot and commence sewing, guiding and feeding just enough fabric into hemmer to fill out scroll (Fig. 29).

7. BUTTONHOLES

Needle Position Lever: In left notch.

Zig-Zag Stitch Lever: Proceed as follows:

- a) Loosen button « T » (fig. 30) and bring index « Q » on mark « 1,5 »;
- b) Bring lever « S » against index « Q »;
- c) Insert plate « F » under button « T » and move it until it is against lever « S ».
- d) Fix plate « F » into place by tightening button « T » after having moved lever « S » on position 3.

Stitch Length Lever: Near to « 0 ». In order to obtain the correct adjustment, try out on a piece of fabric similar to that used to make the buttonhole.

Stitches should neither overlap nor be too far apart.

Upper Tension: Set on n. 5. Use n. 40 mercerized cotton thread.

Lower Tension: Slightly loose. Use n. 50 mercerized cotton thread.

Presser Foot: Use special presser foot as shown in Fig. 31.

Procedure

- a) Place the fabric under the presser foot and adjust the graduated guide according to the desired length of the buttonhole.
- b) With the zig-zag stitch lever against plate « F » (Fig. 30), make the first row of stitches (Fig. 32, Operation I) going as far as to reach the limit marked by the guide.
Leave the needle in the fabric to the right of the stitching.
- c) Raise the presser foot and turn the fabric half

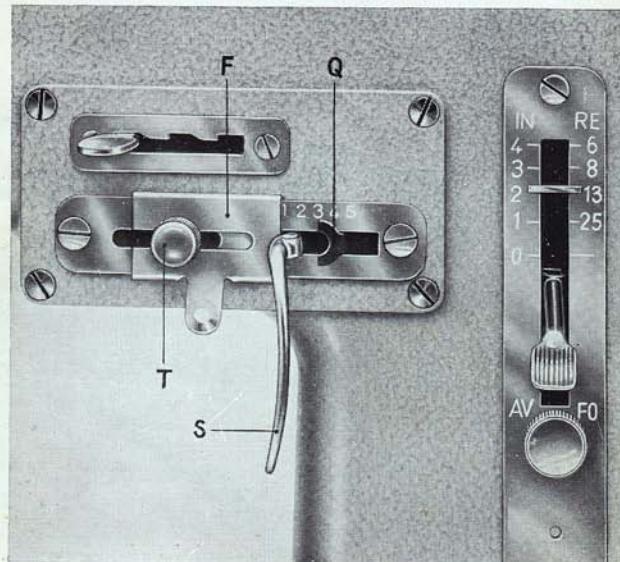


Fig. 30

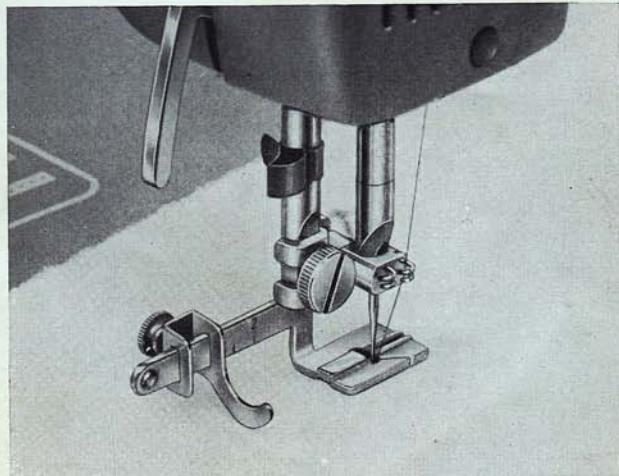


Fig. 31

- a turn round the needle (fig. 32, Operation II). Lower presser foot.
- d) Raise the needle from the fabric and move the zig-zag stitch lever to the right index stop.
 - e) Make the first bar tack with 3 or 4 stitches (fig. 32, Operation III) and stop with the needle out of the fabric.
 - f) Move the zig-zag stitch lever to the left index stop, which should be at « 1,5 » and make the second row of stitches as long as the first (fig. 32, Operation IV).
 - Stop with the needle out of the fabric.
 - g) Move the zig-zag stitch lever to the right index stop and make the second bar tack (fig. 32, Operation V).
 - h) Raise the presser foot, cut the two threads leaving 5-6 centimeters (2-2½ inches) and remove the fabric. Pull the lower thread and with the aid of an ordinary needle draw the upper thread through the fabric in order that both ends are on its wrong side.
Then knot the two threads together.
 - i) Finally cut the fabric between the two rows of stitches with the special Necchi buttonhole cutter.



Fig. 32

Buttonhole with cord (gimp).

On thick soft fabrics where the rows of zig-zag stitches would sink in, it is necessary to support these rows of stitches by means of a gimp (cord) which in the course of making the buttonhole is covered with zig-zag stitches.

The procedure of making « Gimp buttonholes » is, in general, the same as that described for the normal ones with the exception, however, that the lower tension should be decreased slightly.

Insert cord into small hole in front of buttonhole foot and draw about one inch through of the back, then stitch over the cord.

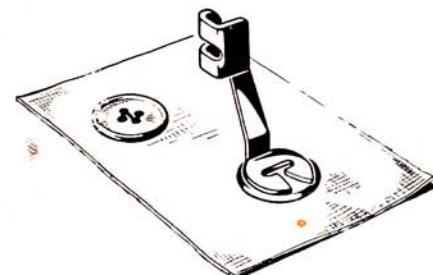


Fig. 33

8. BUTTON SEWING

Needle Position Lever: In left notch.

Zig-Zag Stitch Lever: Between « 4 » and « 5 » (in accordance with the distance between holes of button).

Upper Tension: Normal.

Feed Dog: To be dropped. (See Instructions Chapter 1 Par. No. 12).

Presser Foot: Use button sewing foot. Leave button sewing foot in raised position.

Procedure: While lowering presser foot, place button between presser foot and fabric so that holes of button are in line with zig-zag stitch.

Turn balance wheel slowly toward you so that needle goes through left hole of button.

Continue turning flywheel by hand, making certain that needle enters the right hole of button properly and does not hit button. If needle does not clear button, change the zig-zag width by readjusting zig-zag stitch lever to meet holes in button.

Run machine at medium speed, making about five to six stitches.

Bring zig-zag stitch lever to extreme left, making a few straight stitches in the same hole (to tie up zig-zag stitch and thus prevent unravelling).

9. RAISED STITCH APPLIQUE

(Decorative Cord Stitch)

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: The zig-zag stitch should be just wide enough to cover the thickness of the cord.

Stitch Length Lever: Set for « satin stitch ».

Upper Tension: Same as for « satin stitch ».

Procedure: Use zig-zag stitch cording foot (feston foot).

Insert cord into the hole in the base of cording foot, then pull it, from front to back, through the hole and guide it afterwards underneath the presser foot.

Commence sewing, running the machine slowly. Follow the design carefully until you have become accustomed to guiding the fabric (Fig. 34).

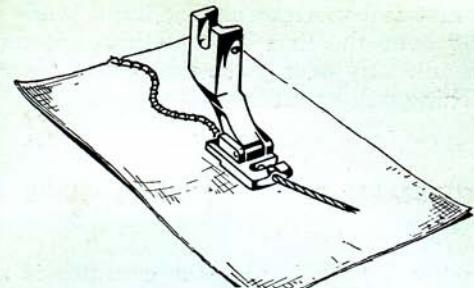


Fig. 34

10. QUILTING

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: At extreme left.

Stitch Length Knob: Any desired length.

Upper Tension: Normal.

Presser Foot: Zig-Zag Stitch Hinged Foot.

Procedure: Attach adjustable quilting stitch guide to presser foot bar, as shown in Fig. 35. Place fabric under presser foot and line it up under needle on line to be stitched. Move curved guide bar to right as far as necessary to mark desired line of parallel stitching. Stitch first line.

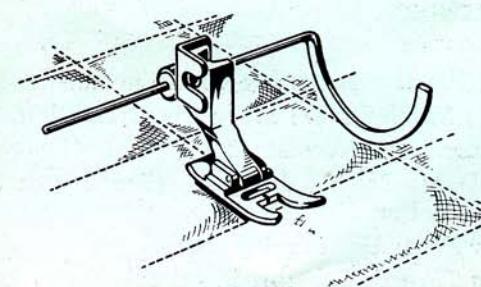


Fig. 35

Move material to right until curved guide bar is directly over the first stitched line. Needle will then be directly over point where the second line of stitching will be made.

11. ADJUSTABLE CLOTH STITCHING GUIDE

With the aid of this guide the operator is able to sew as close to the edge of the fabric as desired, and to keep the stitches at a uniform distance from the edge.

- a) Attach cloth guide to needle plate by means of thumb screws which fit into the screw holes in the bed of the machine (Fig. 36).
- b) After having adjusted cloth guide to desired distance from needle tighten screws securely and commence sewing.

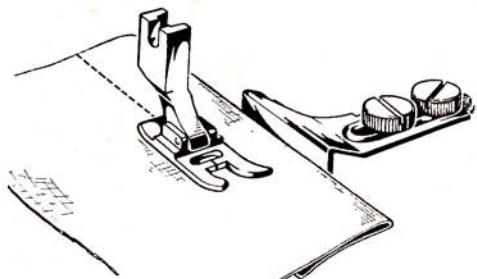


Fig. 36

12. DARNING

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Move to extreme left.

Upper Tension: Normal.

Feed Dog: To be dropped. (See Instructions Chapter 1, Par. No. 12).

Presser Foot: Use darning foot.

Sewing Thread: Use thread suitable for article to be darned.

Procedure: Start sewing moving material back and forth, until the hole is filled with parallel lines of stitches. Next, turn fabric around and start sewing again, moving it back and forth until the first lines of stitches are fully covered crosswise by the second ones.

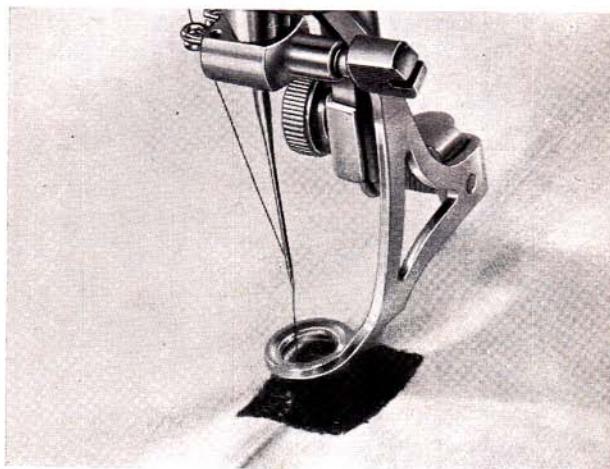


Fig. 37

13. CIRCULAR SEWING

The slide plate « A » of the machine is provided with three holes « H » (See Fig. 38) which makes it possible to perform circular sewing.

To do circular sewing proceed as follows:

Insert the small rubber stopper « B » into one of the three holes « H » of the slide plate. The choice of the hole « H » depends on the diameter of the circle to be sewn. The farther away the rubber stopper is from the needle, the larger will be the circle sewn.

Place fabric under the presser foot, then take an ordinary thumb tack « C » and push it, through the center of the circle to be sewn, into the rubber stopper (as indicated in Figs. 38a and 38b).

Fig. 38

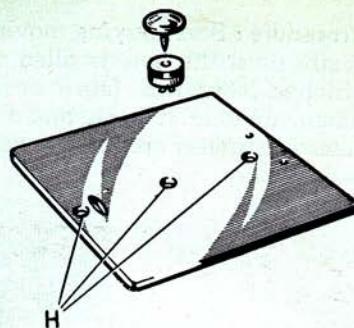


Fig. 38 a

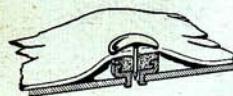


Fig. 38b

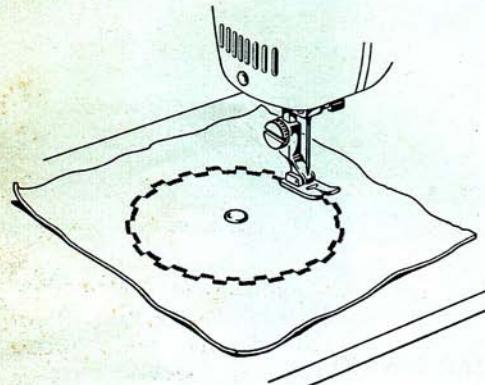


Illustration Fig. 38b shows the type of work done by circular sewing.

Illustration Fig. 38a shows a cross-section of the fabric to be sewn, the slide plate and a small rubber stopper which is included in the accessory box of the machine.

While sewing, keep finger placed on the thumb tack so that the fabric, revolving around the centre point of the design, does not slip or become detached (which may cause irregularities in the embroidered design). Circular sewing should be done only with materials possessing a certain consistency such as corduroy, stiff woollens, leather and firmly woven cottons, etc. Lighter materials, for the purpose of circular sewing, should be placed in an ordinary embroidery hoop.

Chapter 3

AUTOMATIC SEWING MECHANISM

1. AUTOMATIC SEWING

With the aid of the Automatic Sewing Mechanism it is possible to perform automatically a very large variety of decorative stitches and embroidery designs. This is done by means of specially shaped discs, called "cams", which are inserted in the machine.

2. HOW TO INSERT CAMS IN MACHINE

Proceed as follows:

- a) Lift up the lid.
- b) Insert desired cam onto the rotary shaft so that the mark pivot slips into the corresponding hole of the cam (fig. 39).

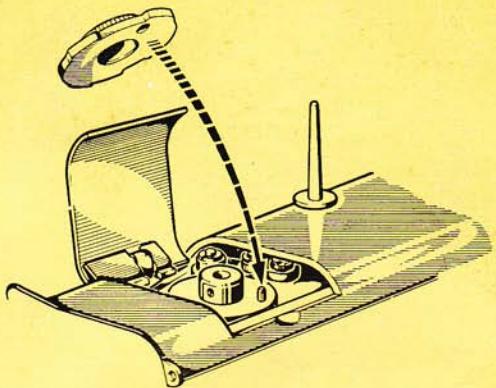


Fig. 39

For this operation, it is necessary to move lever U toward the right (fig. 40).

3. TO REMOVE CAMS

- Lift up the lid.
- Move lever U towards the right and remove the cams.

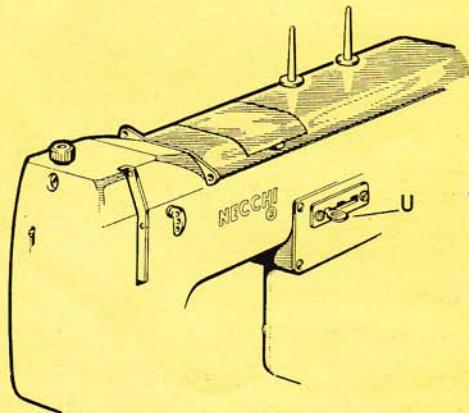


Fig. 40

★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

C - Stitch length regulating lever

★	A	B	C	Design
9661400	0	0,2 0,1		
	0	0,5		
	0	0,2 0,1		
	1	0,2 0,1		
9661410	0	0,2 0,1		
	0	0,5		
	0	0,2 0,1		
	1	0,2 0,1		

★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

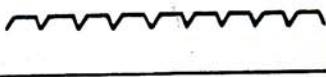
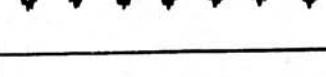
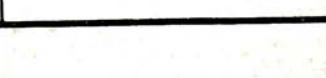
C - Stitch length regulating lever

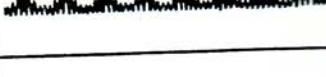
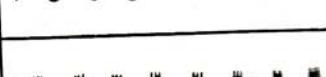
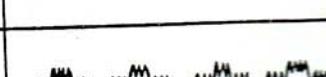
★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

C - Stitch length regulating lever

		A	B	C	Design
9661420	1	0,2 0,1			
	2	0,2 0,1			
	0	0,2			
	1	0,2 0,1			
	0	0,2 0,1			
	1	0,2 0,1			
	0	0,2 0,1			
	0	0,5			

		A	B	C	Design
9661440	0	0,2 0,1			
	0	0,5			
	1	0,2 0,1			
	0	0,2 0,1			
	0	0,2			
	0	0,2			
	1	0,2 0,1			
	1	0,5			

★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

C - Stitch length regulating lever

★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

C - Stitch length regulating lever

Design				
★	A	B	C	
9661990		0	0,2 0,1	
		0	0,5	
		1	0,2 0,1	
		1	0,2	
9662020		0	0,2 0,1	
		0	0,5	
		2	0,2 0,1	
		1	0,2 0,1	

Design				
★	A	B	C	
9662060		0	0,2	
		0	0,5	
		1	0,2 0,1	
		1	0,5	
9662070		0	0,2	
		1	0,2 0,1	
		2	0,2 0,1	
		3	0,2 0,1	

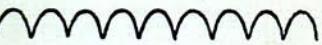
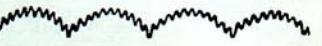
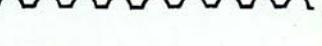
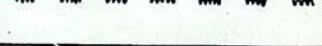
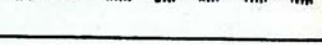
★ - Cam number

A - Needle position lever

B - Zig-zag stitch lever

C - Stitch length regulating lever

Chapter 4

	★	A	B	C	Design
9662080	■■■	0	0,1		
	■■■	1	0,5		
	■■■	2	0,2 0,1		
	■■■	0	0,2		
9662100	■■■	0	0,2		
	■■■	1	0,2 0,1		
	■■■	3	0,2 0,1		
	■■■	0	0,2		

APPENDIX

1. NOTE

The instructions given in this chapter are for the use of some attachments, supplied with the machine to increase the range of its performances.

2. TO THREAD NEEDLE WITH NECCHI AUTOMATIC THREADER

- Take needle threader between thumb and forefinger of right hand (Fig. 41b) and place it against needle so that needle fits in groove « B » (Fig. 41a) and uppermost portion of plastic body « A » touches the underside of needle clamp. Slip spring jaws « C » (Fig. 41a) over needle, then swing needle threader slightly against needle until threader hook « D » passes through the eye of needle (Fig. 41b).
- With thumb and forefinger of left hand, pass thread under threader hook and hold it there under tension (Fig. 41c).

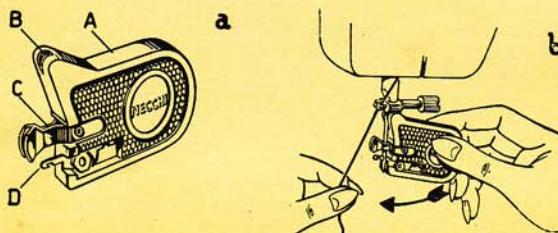
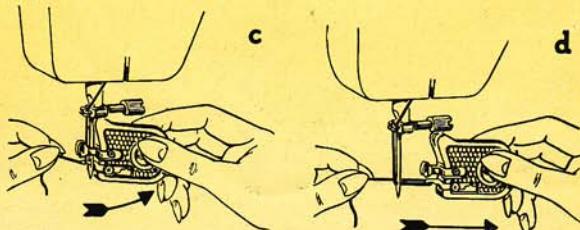


Fig. 41



- Gently swing needle threader upwards (see arrow (Fig. 41c), then draw it away from needle (Fig. 41d). The threader hook will draw thread through the eye of needle.

Each NECCHI Needle Threader is equipped with a double hook which can be easily turned in case of breakage.

3. BLINDSTITCHING (with blindstitch guide)

By means of blindstitching, it is possible to sew together two pieces of fabric (a flat piece « A » and a folded piece « B ») in such a manner that the seam is not visible on one side of the fabric.

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set between marks « 2 » and « 4 », according to the thickness of the fabric, in

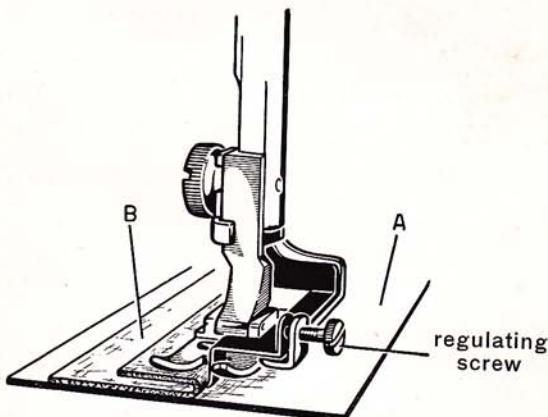


Fig. 42

such a way that needle enters in the middle of the folded fabric « B », as shown in Fig. 42.

Stitch Length Lever: Set at « 4 ».

Upper Tension: Normal.

Presser Foot: Normal zig-zag stitch hinged foot with blindstitch guide attached to the presser bar, as shown in Fig. 43.

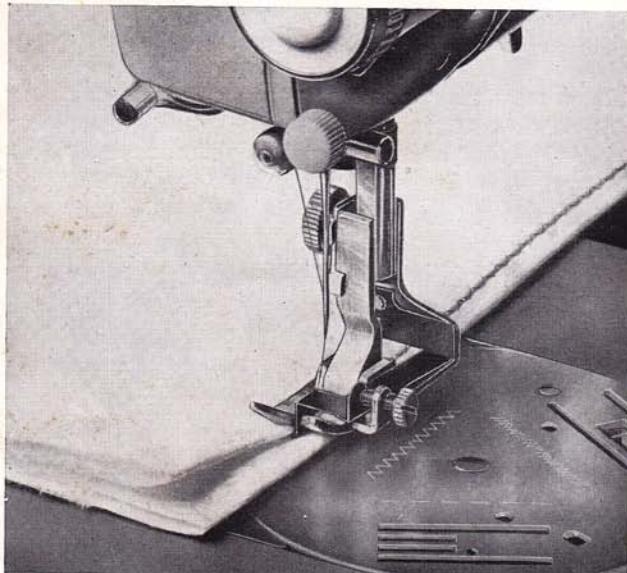


Fig. 43

Procedure

- a) Place the first fabric unfolded on bed plate of machine. The seam will appear on the underside of this fabric.
- b) Place second fabric, properly folded, above the first fabric, as shown in Fig. 42.

c) Lower presser foot and commence sewing. See that the folded edge of the upper fabric is always in touch with the rim of the blindstitch guide.

If the seam appears on both sides of the fabric, decrease the width of the zig-zag stitch.

If needle does not hit the folded edge of the upper fabric, the width of the zig-zag stitch is to be increased accordingly.

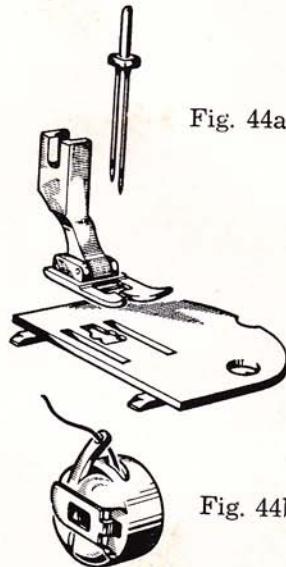
4. SEWING WITH THE DOUBLE NEEDLE

The Double Needle makes it possible to sew with two threads of the same colour, or of different colours, at the same time, thereby increasing the variety and attractiveness of decorative seams that can be made with this sewing machine.

To sew with the Double Needle, the machine must be prepared as follows:

- a) Insert Double Needle (Fig. 44a) in the same manner as the regular single needle. Bring needle bar to its highest position by turning flywheel toward you, then loosen needle clamp screw, remove single needle and insert double Needle (with flat side of shank toward the right) into groove of needle bar. Push Double Needle up into clamp, as far as it will go, then tighten needle clamp screw firmly. Do not bend needles when inserting them into needle bar.
- b) Substitute regular hinged presser foot with the double needle presser foot (Fig. 44).

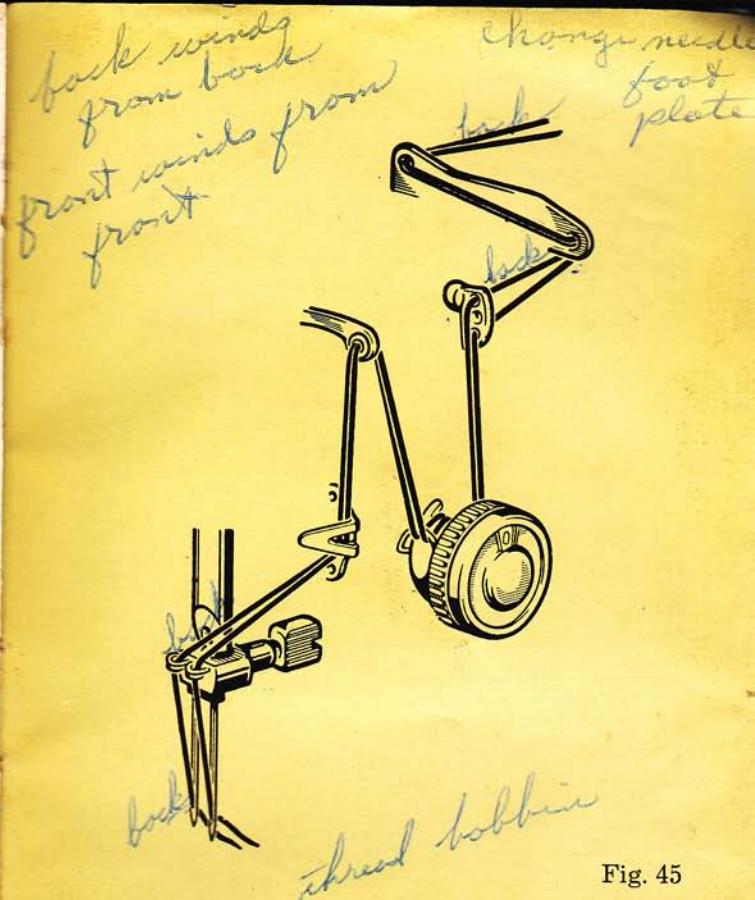
- c) Substitute also the normal needle plate with that for use with a twin needle included in the accessory box.
- d) When sewing with the Double Needle, the lower thread, after having passed below the tension spring of the bobbin case, must go through the hole in the positioning finger of the bobbin case (Fig. 44b).



For double needle sewing, the upper and lower thread tensions must be adjusted very carefully. The lower thread tension must be slightly slackened.

When sewing with the double needle, the machine must be threaded as illustrated in Fig. 45.

NOTE: The two spools must be placed exactly as shown in Fig. 45.



5. TYPES OF DECORATIVE STITCHES OBTAINABLE WITH THE DOUBLE NEEDLE

a) TO MAKE DESIGN Fig. 46.

Needle Position Lever: In centre notch.

Zig-Zag Stitch Lever: Set at extreme left.

Stitch Length Lever: Set at « 3 ».



Fig. 46

b) TO MAKE DESIGN Fig. 47.



Fig. 47

Needle Position Lever: Move rhythmically back and forth between right and left notches.

Zig-Zag Stitch Lever: Set at « 2,5 ».

Stitch Length Lever: Set as for « satin stitch ».

c) TO MAKE DESIGN Fig. 48.

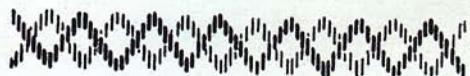


Fig. 48

Needle Position Lever: Move regularly from left to right and viceversa.

Zig-Zag Stitch Lever: Set at « 1 ».

Stitch Length: Set as for « satin stitch ».

6. BIAS BINDER (Fig. 49)

Needle Position Lever: In left notch.

Zig-Zag Stitch Lever: For straight stitch binding: move to extreme left.

For zig-zag stitch binding: set to desired width, but not larger than « 3 », otherwise needle will hit binder and break.

Stitch Length Lever: Set at desired length.

Upper Tension: Normal.

Presser Foot: Remove zig-zag stitch hinged foot and attach Bias Binder to presser foot bar.

Procedure: Use size No. 5 unfolded binding and clip its end to a slender point (see Fig. 50) so that it can easily be drawn through the scroll in the binder. By using a long, strong pointed pin, the bind-



Fig. 49

ing can be drawn more easily through the scroll of the binder toward the needle. Now sew for a few inches to determine the setting of the binder at the edge of the binding.

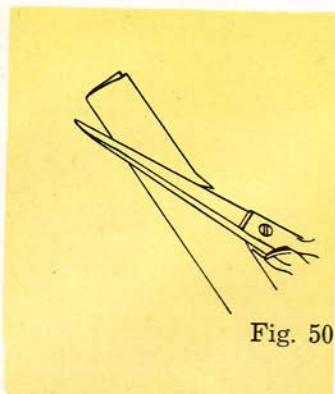


Fig. 50

small scallops or curved edges. Use the third finger of the left hand for this work and note how simply a curve can be bound while the finger rests on the fabric above the apron of the binder.

7. RUFFLING AND PLEATING WITH THE RUFFLER

Fig. 51 indicates the principal parts of the ruffler with the use of which the operator should be thoroughly acquainted. These parts are as follows:

- A - SHANK - to be attached to presser foot bar.
- B - FORK ARM - to be placed astride the needle clamp.
- C - ADJUSTING SCREW - regulates and then holds the fullness (size) of gathers and pleats, after pointer « F » has been set to desired position on dial « G ».
- D - PROJECTION - goes through slots in Adjusting Lever « E ».

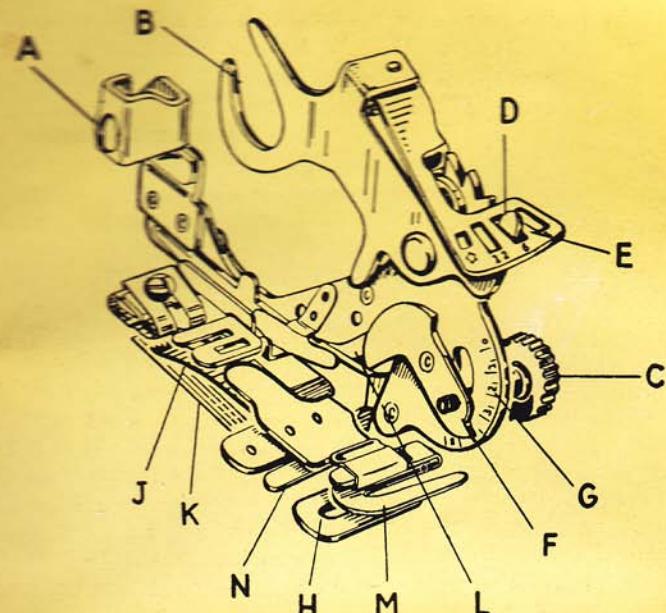


Fig. 51

E - ADJUSTING LEVER - to set Ruffler for gathers or pleats, also for disengaging ruffler when neither gathers nor pleats are required.

F - POINTER - for setting the fullness (size) of gathers and pleats.

G - DIAL - numbered from « 1 » to « 8 » and used for setting the fullness of gathers and pleats.

H - SEAM GUIDE - guide on bottom part of ruffler, containing slots into which edge of material is placed to keep heading of ruffle even; also for separating material to be ruffled from material to which ruffle is to be attached.

J - RUFFLING BLADE (FEED BLADE) - the upper blue steel blade with teeth at end, to push material in pleats toward the needle.

K - SEPARATOR BLADE - the lower blue steel blade without teeth, which prevents the feed dog of the machine from coming into contact with feed blade of ruffler, or with material to which ruffle or pleating is to be applied.

L - HEADING GUIDE - can be adjusted for different sizes of heading.

M - SLIDING GUIDE - can be adjusted for various widths of seams or headings.

N - SEPARATOR GUIDE - for separating material to be ruffled from material to which ruffle is to be attached.

INSTRUCTIONS FOR USE

To Attach Ruffler to Machine:

Raise needle to highest position and remove presser foot. Place fork arm of ruffler astride the needle clamp, and at the same time attach shank of ruffler to the presser bar. Tighten thumb screw firmly. See that needle enters centre of needle hole in ruffler.

To Ruffle (Gather):

- 1) Raise adjusting lever « E » (Fig. 51) and move it to the left until projection « D » enters in slot marked « 1 ».
- 2) By loosening and moving plastic adjusting screw « S », set pointer « F » to desired number on dial « G », to obtain the fullness of ruffle desired. Tighten firmly screw « C » after setting. The ruffling blade « J » will now move forward and backward once at every stitch.
- 3) Insert material to be ruffled between the two blue blades (LINE 2, Fig. 52).
- 4) Draw material slightly away from needle, lower presser bar and sew. Fig. 53 shows the ruffle being made by the ruffler.

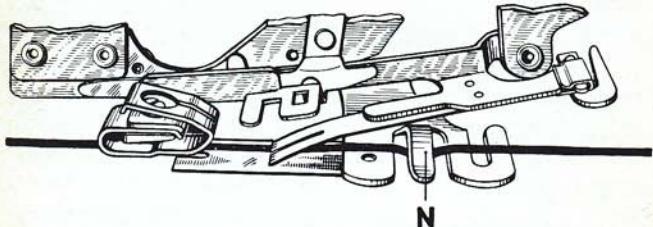


Fig. 52

- 5) For gathering, set machine for a shorter stitch; for full gathering set it for a longer stitch.

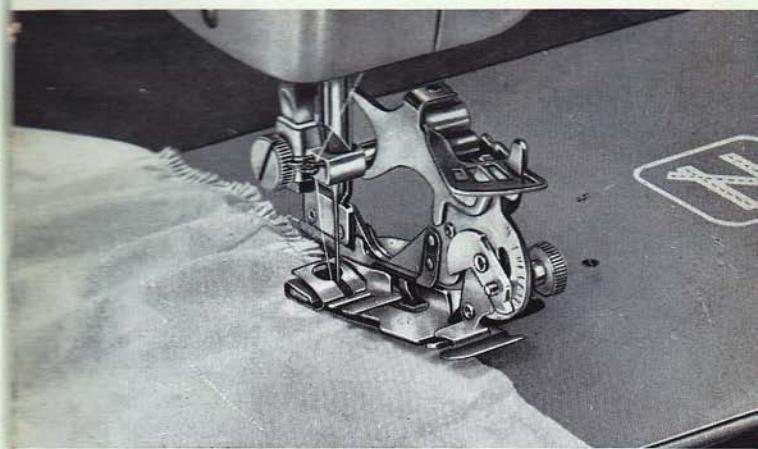


Fig. 53

To Make Ruffle and Sew it to Garment in One Operation:

- 1) Insert material to be ruffled between the two blue blades and under the separator guide « N » (LINE 2, Fig. 54).
- 2) Place material (garment, etc.) to which ruffle is to be attached under separator blade « K » and under separator guide « N » (LINE 1, Fig. 54).
- 3) Proceed as for plain ruffling (gathering), Fig. 55 shows how to make a ruffle and to attach it in one operation.

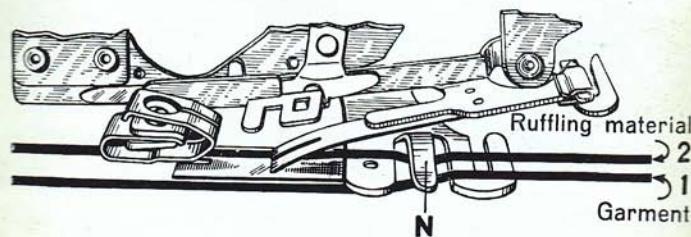


Fig. 54

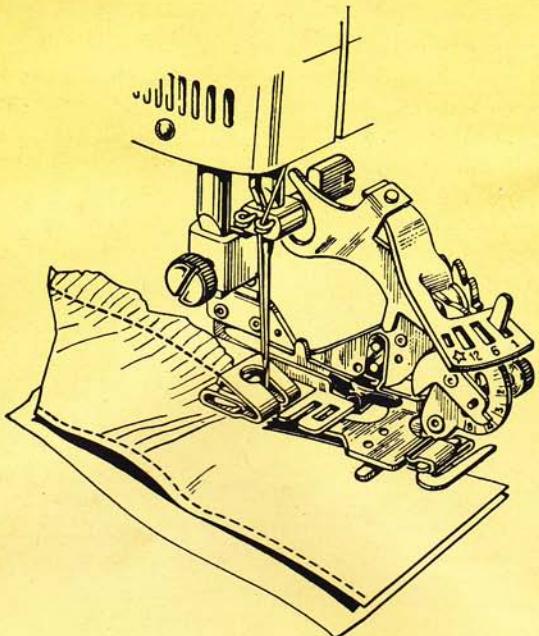


Fig. 55

To Make Ruffle and Attach it With a Facing to Garment:

- 1) Insert material to be ruffled between the two blue blades and under the separator guide «N» (LINE 2, Fig. 56).
- 2) Place material (garment) to which ruffle is to be

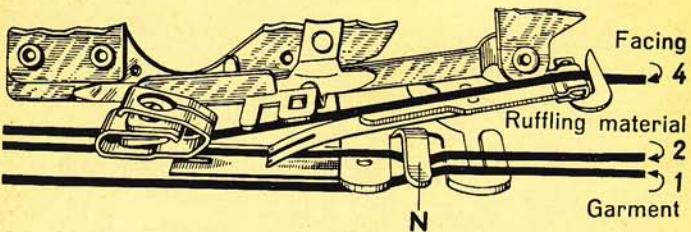


Fig. 56

attached under separator blade «K» and under separator guide «N» (LINE 1, Fig. 56).

- 3) Place facing material over upper blade (LINE 4, Fig. 56). If facing is to be on *right* side of garment, place right sides of garment and ruffle together.
- 4) Lower presser bar and sew. Fig. 57 shows the procedure described above.

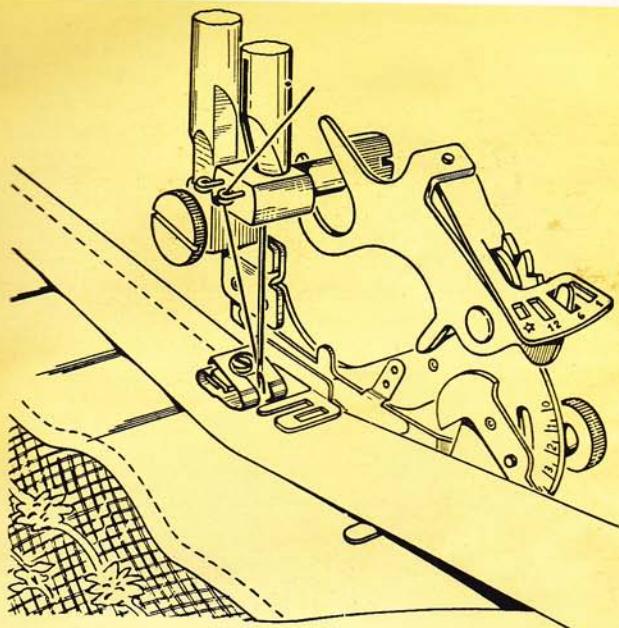


Fig. 57

To Pipe a Ruffle and Attach it to Garment:

- 1) Insert material to be ruffled between the two blue blades (LINE 3, Fig. 58).
- 2) Place piping material in ruffler (LINE 5, Fig. 58), with folded edge of piping to right.
- 3) Fold edge of material to which piping and ruffling are to be attached and insert it in ruffler (LINE 6, Fig. 58).
- 4) Lower presser bar and sew. Fig. 59 shows the procedure described above.

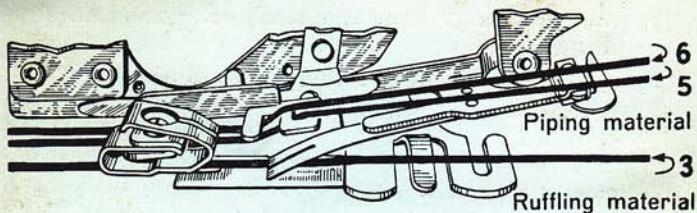


Fig. 58

To Make a Pleat Once Every Six Stitches:

- 1) Raise adjusting lever « E » (Fig. 51) and move it to the right until projection « D » enters in slot marked « 6 ».
- 2) By loosening and moving plastic adjusting screw « C », set pointer « F » to a number between « 3 » and « 8 » on dial « G », depending upon depth of pleat desired.

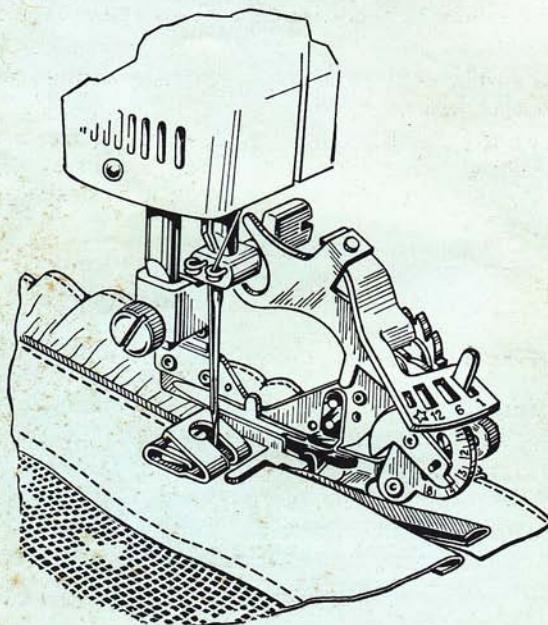


Fig. 59

- 3) Insert material to be pleated between the two blue blades.
- 4) Draw material slightly away from needle, lower presser bar and sew.

To Make a Pleat Once Every Twelve Stitches:

- 1) Raise adjusting lever « E » (Fig. 51) and move it so that projection « D » enters in slot marked « 12 ».
- 2) Follow same procedure as described in preceding chapter.

To Do Group Pleating

The ruffler can be adjusted for group pleating by lifting the adjusting lever « E » (Fig. 51) and moving it to the right until the top of the projection « D » enters the short slot indicated by a star.

This should be done at those sections of the material where it is desired to make a space between the pleats.

The ruffler will then stop pleating and only plain stitching will be done.

When the desired space has been made, move the adjusting lever « E » until the projection « D » enters either of slots « 6 » or « 12 », as desired.



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