USER'S MANUAL

WHITE

ROTARY ELECTRIC SEWING MACHINES

SERIES 77

11205 after new

TO THE OWNER

When you invested in this White Rotary Electric you placed at your disposal the finest machine obtainable for home sewing. It was precision built for a lifetime of service and if reasonably cared for will deliver the maximum in satisfaction at a minimum of expense.

This manual provides all the information needed to properly care for and operate this White Rotary Electric Sewing Machine. Therefore you are urged to refer to it often, read the simple directions thoroughly and follow them closely, in order to familiarize yourself with the machine and obtain best results through its use.

You will find an alphabetical index to this manual on Pages 51 and 52.

WHITE SEWING MACHINE CORPORATION
CLEVELAND 11, OHIO

In Canada
WHITE SEWING MACHINE PRODUCTS LIMITED
602 King Street, W.,
Toronto, Ontario, Canada

KNOW YOUR SEWING MACHINE

See Fig. 1. In the accompanying illustration (Fig. 1) the principal parts of this White Rotary Electric are designated by their names. Study this picture carefully to familiarize yourself with the names and locations of these functional parts which will be referred to throughout this manual.

These operations are all performed while seated at the machine in sewing position.

MOTOR INFORMATION

LUBRICATION: Two grease cups, one at each end of the motor shaft (Fig. 2), provide for motor lubrication. Unscrew the grease cups and fill with special motor lubricant or petroleum jelly occasionally, depending upon use of the machine, or approximately every six months.

CONTROL: The desired speed is obtained by the amount of pressure on the knee lever. Increased pressure increases the speed of the machine.

PULLEY: Be sure the motor pulley (Fig. 2) is adjusted so it centers on the disc wheel of machine.

CONNECTIONS: The insulating bushing on cord leading from rheostat inside cabinet must be snapped into the hole in the bed of machine (Fig. 2). **Next,** connect the three contact connector plug to motor terminal block, as shown in Fig. 2. Then connect the long wall plug cord to any 110 volt (A-C or D-C current) electrical outlet, and machine is ready for operation.

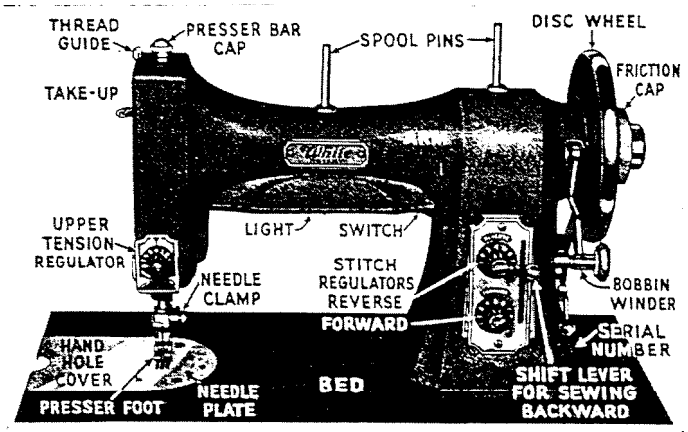


FIGURE 1

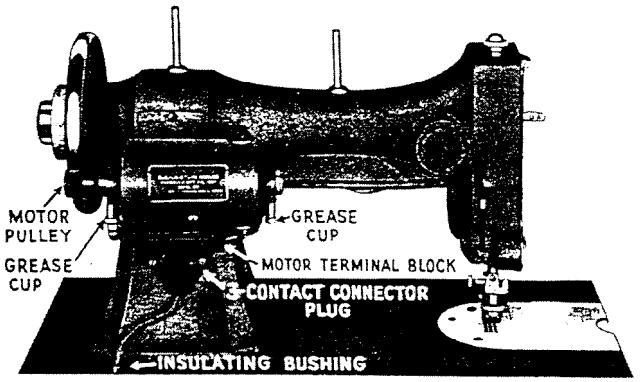


FIGURE 2

OILING MACHINE

Before starting to oil the machine it is very important that the disc wheel be turned by hand until the take-up (Fig. 1) is at **its lowest point.** Apply a drop of oil at points shown by arrows in Figs. 3 and 4. To reach points indicated in Fig. 4, tip the sewing head back on its hinges.

Depending on how frequently the machine is used determines the oiling requirements. Moderate use requires only an occasional drop of oil at the points indicated on the illustrations as shown. Avoid overoiling to prevent soiling materials.

For smooth operation and best results it is necessary to use high grade oil. White Sewing Machine Oil, obtainable from any authorized distributor, is especially prepared and recommended.

CLEANING MACHINE

If machine gets dirty or sticky as a result of using poor oil, or from long idleness, oil thoroughly with Kerosene (coal oil) at all points indicated. Then run machine for a short time, wipe dry and oil carefully with White Sewing Machine Oil.

THE DISC WHEEL

Whenever the disc wheel is turned by hand it should always be revolved in the same direction (**clockwise**) as the motor turns it.

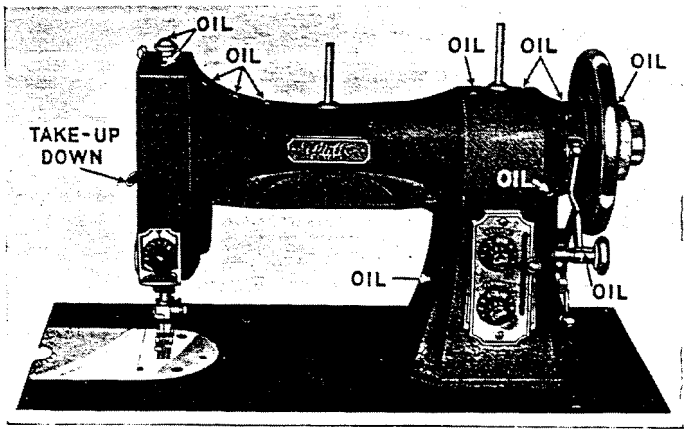


FIGURE 3

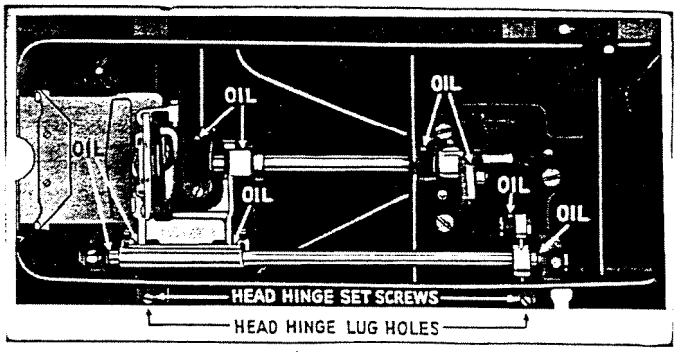


FIGURE 4

SETTING NEEDLE

See Fig. 5. Raise the needle bar to its highest point turning disc wheel by hand. Then loosen the needle clamp screw and the needle clamp will open itself. Place needle (flat side to the right) in the needle clamp and push it upward as far as it will go into the needle clamp hole, fastening the needle clamp securely with a screw driver. The needle should operate in the center of needle plate hole from front to back, but close to the right edge.

NEEDLES AND THREAD

When buying needles for this machine, be sure to ask for the genuine White Rotary needles. Imitation or "just as good" needles will cause trouble. Get the genuine "White", see Fig. 6 for exact length.

Never attempt to use a bent needle, nor one with a blunt point

The size of the needle should conform to the size of the thread and both be suitable to the material. Use a needle sufficiently large to permit the thread to pass freely through the eye. In general sewing use the same thread in the bobbin as used on top.

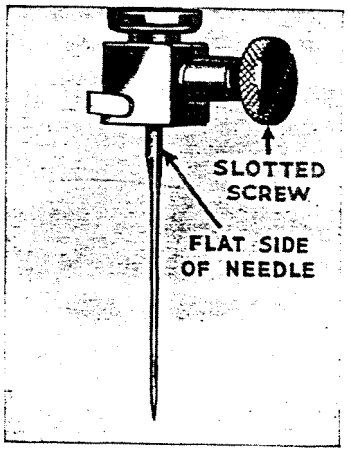


FIGURE 5

TABLE OF NEEDLE SIZES

The following table will show the size of needles generally used with various sizes of thread.

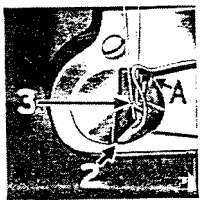
Cotton	Silk	Mercerized	Nylon	Needle Size
100	A	50	A	00
80 to 100	A	50	A	0
60 to 80	A	50	A	1
40 to 60		Heavy Duty		2
30 to 40		Heavy Duty		3
20 to 30		Heavy Duty		4

FIGURE 6

THREADING MACHINE

See Fig. 7. Raise the presser foot by raising the presser foot lifter. Then turn disc wheel by hand until the takeup (4) is at **its highest point.** Place spool of thread on the spool pin located in the center of machine arm, and throughout entire threading operation maintain a slight tension on the thread with the fingers of the right hand close to the spool.

With the presser foot raised take end of thread in left hand, holding it with the thumb and first finger, and hook under thread guide (1) **from front to back. Next,** lead thread downward and hook under tension plate hook (2) **from back to front. Next,** pull thread upward and away from you until it hooks into auxiliary spring (3) and falls into notch "A" *small illustration.* (If you fail to hook thread in auxiliary spring and then into notch A, stitching will loop on under side of material and may also become tangled in shuttle.) **Next,** continue upward and hook thread under guard and into take-up slot (4) **from back to front. Next,** pull thread downward and hook into needle clamp thread guide (5) **from right to left. Next,** through eye of needle **from left to right,** allowing about three inches of thread to project beyond eye of needle.



THE TENSION RELEASER

This is operated automatically by the presser bar lifter. When it is raised all tension is removed from the upper thread, and the sewing may be removed without tugging the thread.

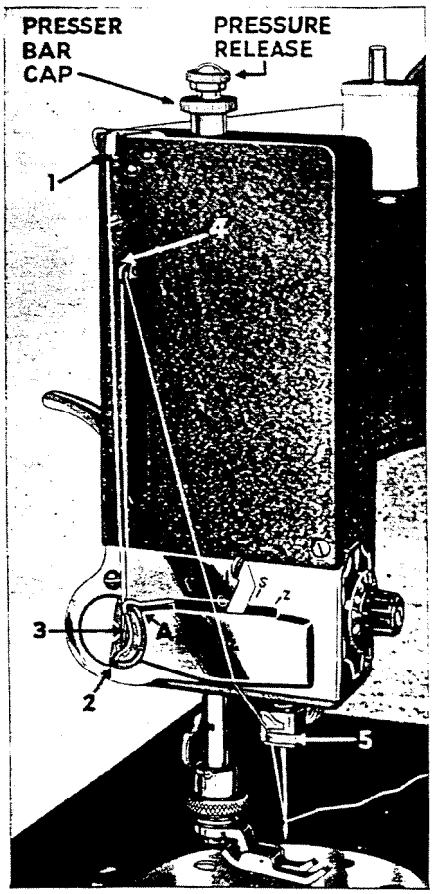


FIGURE 7

NOTE:
See "Darning", Pg. 47 for instructions on the use of the presser bar cap with pressure release shown in Fig. 7.

WINDING BOBBIN

See Fig. 8. Hold the disc wheel with the left hand and turn the friction cap counter-clockwise, loosening it so the wheel will run free without operating sewing mechanism.

Slip the bobbin onto bobbin winder spindle and push to the right as far as it will go.

Place spool of thread on right end spool pin. Take end of thread in fingers of right hand and hook it under guide (A) from left to right. **Next,** lead thread downward between tension discs (B), and put end of thread through hole in bobbin (C), letting about two inches of thread project through hole.

Next, pull lever (D) upward, engaging the bobbin winder pulley with disc wheel. **Next,** hold the end of thread extending through hole (C) with the left hand, run machine and complete the winding of bobbin. When bobbin is full the winder will disengage automatically.

Remove the bobbin from spindle, and clip off the end of thread projecting from hole (C). Hold disc wheel while tightening friction cap and machine is again ready for sewing.

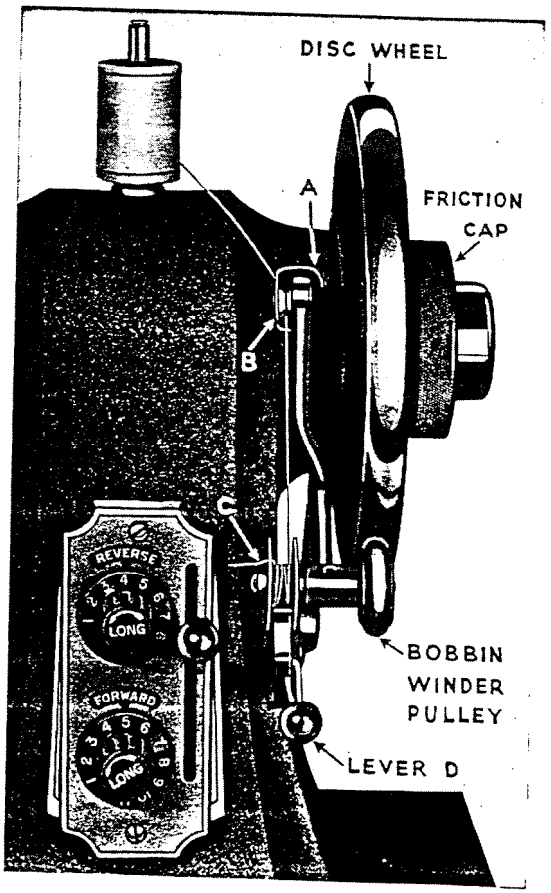


FIGURE 8

THREADING BOBBIN CASE

See Fig. 9. Holding the bobbin case in the left hand, with projecting tongue upward, place the bobbin over center spindle in the case, starting the thread into slot (A) as shown. Then after bobbin is all the way into case, pull end of thread along in slot toward projecting tongue until it emerges at point (B).

PLACING BOBBIN CASE

See Fig. 10. Remove hand hole cover (Fig. 1) by lifting it up at finger hole, permitting you to reach down through hole to shuttle. Hold bobbin case by lips C and D (Fig. 13) with first finger and thumb of left hand, at the same time depressing lip D with thumb. Reach down through hole and slip bobbin case into place over center pin of shuttle, with projecting tongue upright. Push in as far as case will go and release thumb pressure on lip (D), allowing it to snap upward into place, holding the bobbin case in position.

REMOVING BOBBIN CASE

See Fig. 10. After removing hand hole cover, reach down with left hand and take hold of bobbin case by lips C and D (Fig. 13) with first finger and thumb. A slight pressure with the thumb will depress lip D and the case may be readily removed.

Fig. 9

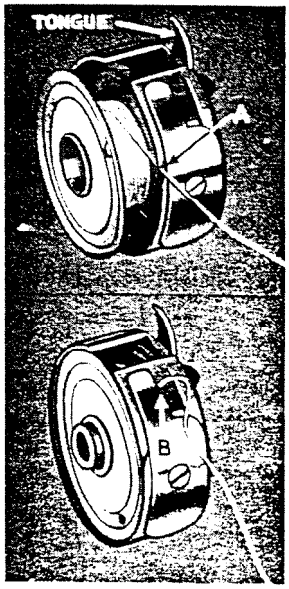
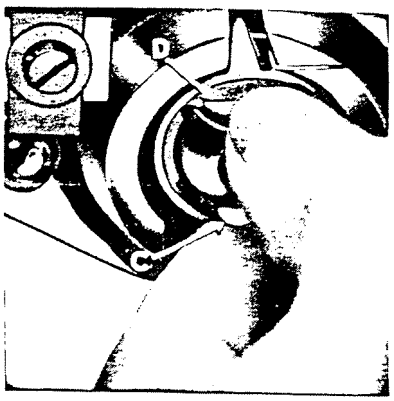


Fig. 10



PREPARING TO SEW

See Fig. 11. Hold the end of the upper thread loosely in the left hand, and with the right hand revolve the disc wheel until the needle goes all the way down and comes back up. A loop will form over the upper thread and be drawn up through the needle hole. Pull the thread forming the loop out straight. Then take the end of this thread together with the end of the upper thread and guide them underneath the presser foot (upper thread in presser foot slot), leading the ends away from you toward the back of the machine.

REMOVING THE WORK

Always stop the machine with take-up (Fig. 1) at **its highest point.** Raise the presser foot with the lifter. Holding the sewing with the left hand pull it directly toward the back of machine, keeping the top thread in the presser foot slot, to avoid bending the needle. Then lift the sewing and draw the threads, together, over the thread cutter (Fig. 1) pulling downward. Both threads will be cut the proper length to again commence sewing.

IMPORTANT WARNING

Never operate this machine when it is threaded without having material (fabric) under the presser foot.

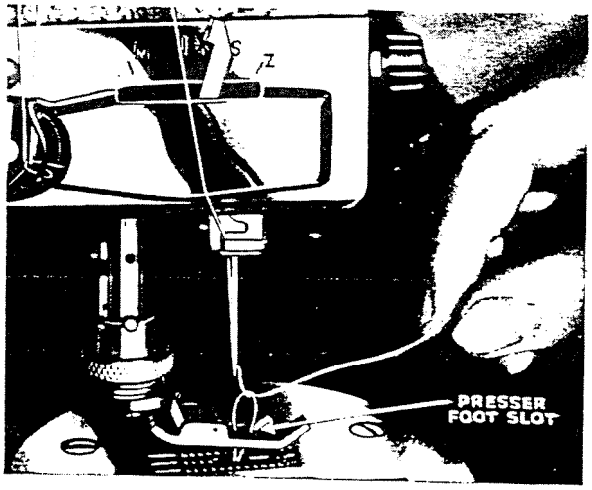
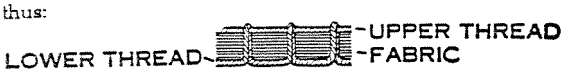


FIGURE 11

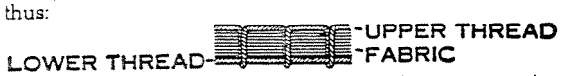
The small lever shown in position S, above, provides for delicate adjustment on the upper thread. It is normally left in position S for regular sewing. When using a White Zigzagger, you may move the lever toward Z, making the upper thread less taut. Moving the lever toward the * position may give better results with the ruffler or shirring foot, which frequently require a tighter upper thread. Extreme tautness on the upper thread is obtained with the lever at M, in which position it is rarely used except for special decorative stitching.

PROPER ADJUSTMENT OF TENSIONS

If the upper tension on thread is tight and the lower tension loose, the upper thread will be drawn to the top thus:



If the lower tension is tight and the upper tension loose, the lower thread will be drawn to the bottom thus:



When tensions (both upper and lower) are properly adjusted the stitches in material will look alike on both sides thus:

ADJUSTING UPPER TENSION

See Fig. 12. Be sure the presser foot is down whenever adjusting the upper tension, as the tension is automatically released when the presser foot is raised.
To **increase** the tension on the upper thread turn the dial clockwise (toward No. 8 under pointer etched in plate). To **decrease** the tension, turn dial counterclockwise (toward No. 1 under pointer).

With this foolproof regulator you may duplicate any particular tension you choose at any time without guesswork or time-wasting experiments. Just turn the dial until the number you desire appears at the top directly underneath the pointer.

ADJUSTING LOWER TENSION

Before adjusting tension be sure that the machine is threading properly with the thread in notch "A" as shown on page 8.

Incorrect threading will also cause imperfect stitching.

See Fig. 13. Tension on the lower thread is regulated by adjusting screw (T) in bobbin case. To **increase** the tension **tighten** the screw; to **decrease** tension **loosen** the screw.

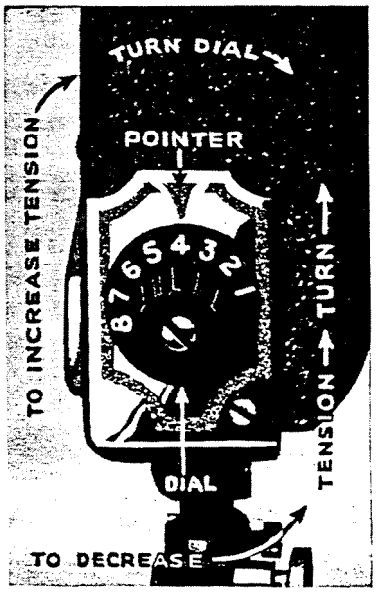


FIGURE 12

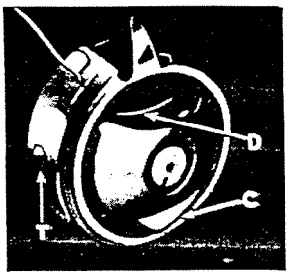


FIGURE 13

EWING BACKWARD

See Fig. 14. To reverse the feed and sew backward at any time, without stopping the machine, merely press shift lever (A) down in slot. The pressure of one finger is sufficient, and while lever is being held down the sewing will feed backward. When lever is released it returns automatically to its top position in the slot and the machine sews forward again in the regular way. The lever may be moved up and down at will, regardless of the speed at which machine is running. This is a fool-proof device as it is impossible for the operator to leave the machine set for reverse stitching.

ADJUSTING STITCH LENGTHS

See Fig. 14. The length of the stitch for normal sewing (forward) is regulated by the lower dial (B) and pointer. No. 1 on the dial indicates the shortest stitch and No. 11 the longest for regular sewing.

The length of the reverse stitch (sewing backward) is regulated by the upper dial (C) and pointer. No. 1 on the dial indicates the shortest stitch and No. 8 the longest for sewing backward.

These two regulators, operating independently of each other, make it possible to sew approximately the same length of stitch backward as forward, or a longer stitch for the regular sewing than is used for sewing backward, or vice versa, depending entirely upon how both dials are set.

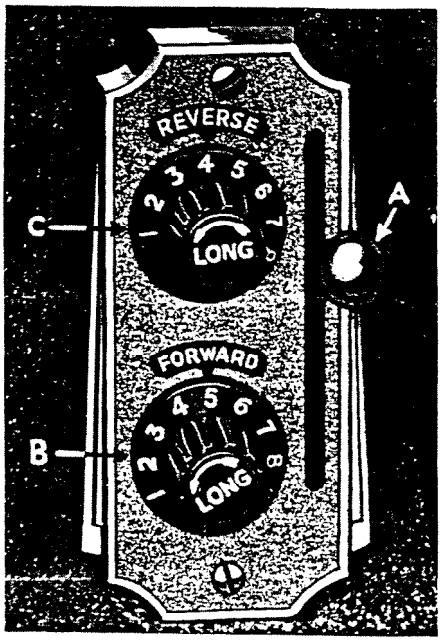


FIGURE 14

REMOVING SHUTTLE

See Figs. 15-16. Remove hand hole cover; then remove bobbin case, and tip the sewing head back on its hinges. Next, turn the disc wheel by hand until the **point of the needle just enters the needle plate hole.** Then push rear end of latch (L), releasing the shuttle race cover on one end, allowing the other end to be easily removed from under pin (X). The shuttle can then be removed by taking hold of its center pin (CP) with thumb and first finger.

When shuttle has been removed, clean it thoroughly, being sure that no thread is wound around center pin (CP). Also clean the shuttle race cover and the shuttle race (SR), carefully removing any threads or lint that may be in it, and be especially sure that driving pins (DP) are clean. Before replacing, place a drop of oil on tip of finger and apply on outer edge of shuttle and shuttle race and center pin (CP).

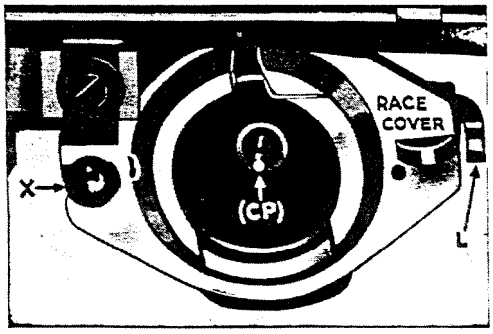


FIGURE 15

REPLACING SHUTTLE

See Figs. 15-16. With the head tipped back on its hinges, turn the disc wheel by hand until the **point of the needle just enters the needle plate hole** and so the arrow and the word "top" is exactly in the position shown. With the thumb and first finger of the left hand take hold of the center pin (CP) and hold the shuttle exactly in the position as shown in Fig. 16, so the word "top", stamped on shuttle, lines up with the word "top" in driver, then the driving pin holes (DPH) will slide over driving pins (DP) easily, and **without forcing,** allowing the rim of the shuttle to enter the shuttle race readily. The shuttle race cover will then go into place easily, the fork at one end fitting back of pin (X) and the slot in the other end passing over latch (L) which will snap back to its holding position when the shuttle race cover is pushed back into place.

Be certain of the position of the needle and arrow before attempting to replace the shuttle, and **do not force any of these operations,** as the entire assembly goes together very smoothly if the parts are properly placed.

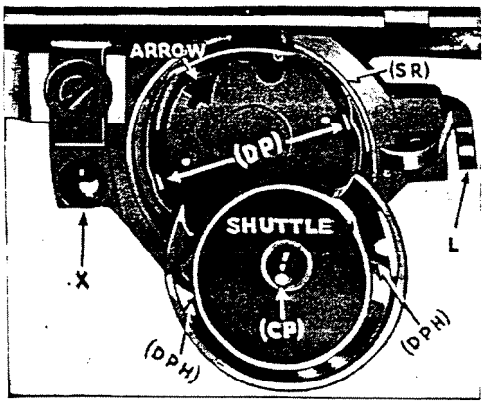


FIGURE 16

THE ATTACHMENTS

In the following pages of this manual there are many suggestions covering a variety of beautiful and worthwhile sewing that the user of a WHITE ROTARY ELECTRIC can now enjoy doing with this machine and its complete complement of attachments.

The machine itself is remarkable. Neither its operation nor that of the various attachments is either difficult or complicated. Yet in their use, one quickly gains the facility for doing every conceivable kind of beautiful sewing, with all the daintiness of expert hand work, yet having the perfection of mechanical precision—and without valuable time begrudged from other enjoyable occupation.

IMPORTANT

Most of the attachments used with this machine must be attached to the presser bar in place of the regular presser foot. To remove the presser foot from machine, raise the take-up to its highest point, loosen knurled thumb screw on presser bar. When replacing presser foot or putting on any attachment be certain it is pushed back onto presser bar as far as it will go. Always be sure that knurled thumb screw is tightened securely. It may be necessary to readjust tensions when using certain attachments.

THE NARROW HEMMER

To attach the Narrow Hemmer, raise thread take-up and needle to highest point. Loosen knurled nut above presser foot. Draw presser foot forward from groove to remove. Slide hemmer into same groove. Tighten knurled nut.

Begin at the point where hem is to start, fold ⅛-inch double fold of material up and crease for about 2 inches along edge. Bring the folded edge under the hemmer from the left and draw up into scroll to the depth of the fold. Turn the fold over behind the hemmer, positioning fabric so it has no second turn as it enters the scroll. Draw material gently forward again until leading end of fabric is directly under the needle. Lower needle through fabric. Place the thread ends under the hemmer toward the back. Lower presser bar. A slight pull on the threads will insure a smooth beginning. Stitch slowly, guiding material evenly into hemmer.

To trim a hem with two rows of embroidery floss, as shown, use floss in a loose lower-tension. Complete hem's first stitching, as above. Start second row from other end, entering edge in hemmer from right. Hem will move in far enough to touch left edge of scroll. Material must lie flat, without turning in scroll while sewing. Stitching will then appear at extreme edge.

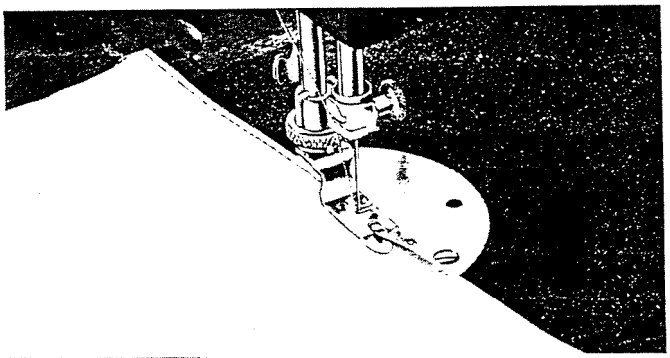


FIGURE 17

HEMMING AND LACE TRIMMING

The Narrow Hemmer when used for finishing and trimming eliminates many hours of labor as well as being an assurance against poor workmanship when other methods are employed.

Enter edge of material in hemmer as previously instructed for regular hemming.

Slip straight edge of lace into slot cut in hemmer for this purpose from the right, guide edge of lace along edge of slot evenly with the right hand. Use left hand to guide hemming.

One single stitching finishes hem and applies trimming to the wrong side of fabric.

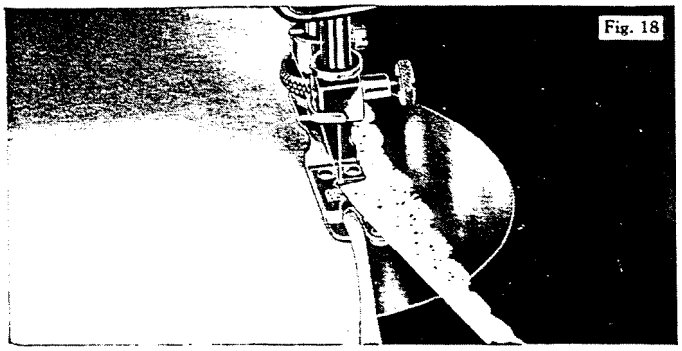


Fig. 18

APPLYING LACE (FRENCH STYLE)

Applying lace edge in this method is termed "French application" due to the fact that when hem is pressed back onto wrong side of fabric no stitching is visible It is also possible to have a little fullness in lace when applied in this manner.

Enter material to be hemmed as described for regular hemming but with right side of material face up.

Draw fullness up in lace by pulling one of the straight threads that form the selvedge. Enter this edge in hemmer from the left allowing the right side of lace to lie on right side of material as it is being hemmed. Feed lace edge into hemmer sufficiently so that the stitching in hem of fabric will hold lace at the same time.

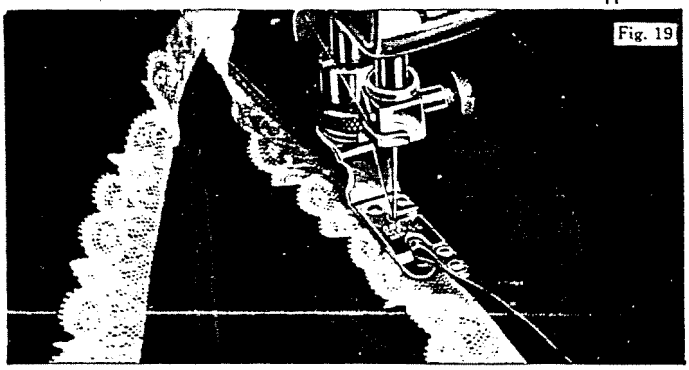


Fig. 19

THE HEMMED FELL

A felled seam of double strength is possible if the narrow hemmer is used as a guide for both stitchings. Place fabric to be seamed together with right sides facing and lower edge of seam extending ⅛-inch beyond upper as it is placed on machine. Feed both seam edges into the hemmer so that in stitching, the edge of upper section will be enclosed in the hem being turned in under section. The seam thus finished is termed a French seam. To fell this seam open fabric and crease seam so that turned edge of hem will be enclosed. Enter hem again in scroll of hemmer so that edge of hem feeds through hemmer scroll from the right as shown in illustration. The second stitching will then appear at extreme edge of turn with no guiding necessary.

THE SET OF HEMMERS

The wide hem being turned and stitched in Fig. 21 suggests only one size obtainable with each of the several hemmers contained in your set.

Attach hemmer of desired size to machine in place of presser foot.

These wide hemmers carry the fabric in a slightly different manner than described for the narrow hemmer.

Turn over for about 2 inches toward the wrong side about ⅛-inch along the edge of material to be hemmed.

Enter material in hemmer from the left and gradually feed it around and up toward the right until "spoon" portion is completely enclosed. Now draw material back toward you allowing the crease on turned edge of fabric to fit around edge of spoon.

In this manner the hem can be drawn back until needle enters extreme edge of material being hemmed. Hold onto both lower and upper thread and stitch in usual manner.

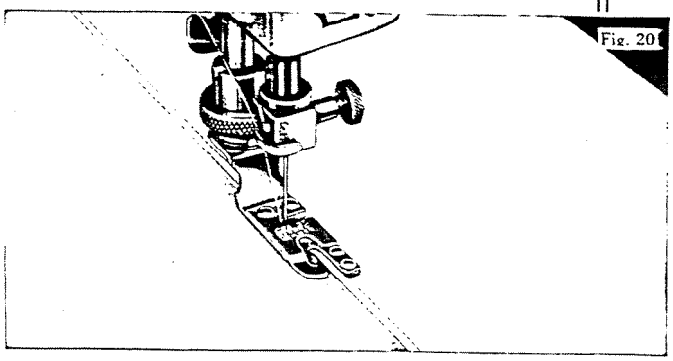


Fig. 20

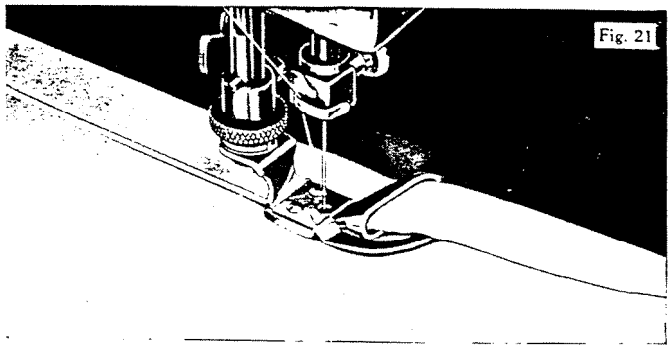


Fig. 21

COMBINATION TUCKER, EDGESTITCHER AND TOP BRAIDER

The attachment is fastened to machine in the same manner as the presser foot.

The five slots shown in the illustration serve as guides for piping and accurate stitching to appear at edge of folded fabric or lace edges when joined.

Slots 1, 2 and 4 are used when edges are to be joined daintily with no seam allowance. Slots 1 and 5 are used when a seam is required beyond the stitching. The folded edge is placed in slot 1, the raw edge or seam width is placed in slot 5.

Slot 3 carries piping which has been folded and cut ¼-inch wide. If folded edge faces the left a ⅛-inch piping will appear. If edge is reversed a 1/16-inch piping will appear.

This attachment is adjustable sidewise. Move lug "A" to right or left until stitching appears at edge of fabric where desired.

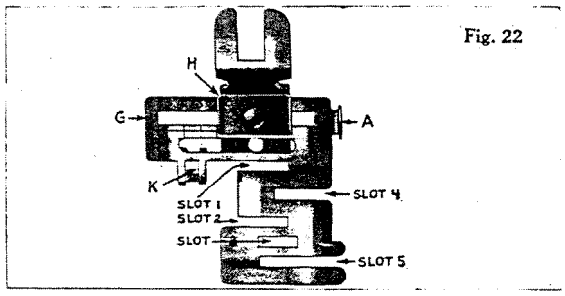


Fig. 22

WIDE TUCKS TRIM STITCHED

Tucks that range in size from pin width to ¾-inch can be stitched accurately when the Combination Attachment is used. Commercial patterns always perforate for a tuck crease and suggest its size.

The numbers 2 to 6 inclusive stamped on the back edge of the sliding guide (G) (Fig. 22) represent the width of tuck in eighths of an inch. After folding the material for the first tuck, introduce the folded edge into the guide slot which is nearest the needle. When the left hand edge of the friction spring (H) coincides with the number 2 on the scale a ¼-inch tuck results.

In like manner:
Set the guide at 3 for a ⅜-inch tuck
Set the guide at 4 for a ½-inch tuck
Set the guide at 5 for a ⅝-inch tuck
Set the guide at 6 for a ¾-inch tuck

Fig 23 shows the widest width tuck stitched with No. 3 DMC on the bobbin.

Pattern perforations on a ¾-inch tuck are usually spaced 2½ inches apart so that when stitched, tucks are closely spaced yet not crowded. To further enhance these tucks a row of DMC is stitched to the extreme edge of tuck as shown in Fig. 23. Set attachment so that edge of slot 1 is directly in front of needle for decided edge stitch.

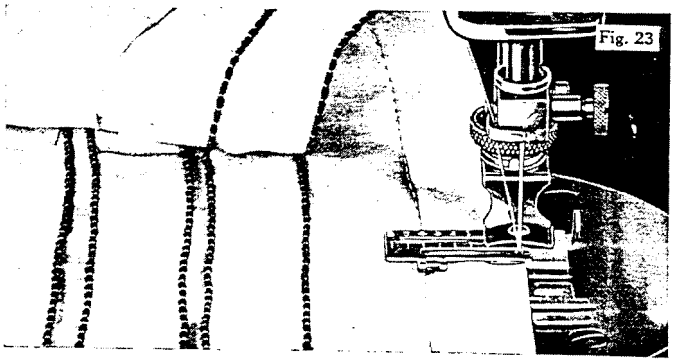


Fig. 23

HREE EDGES HELD IN ONE TITCHING

Slots 1, 2 and 4 are utilized to advantage when it is necessary to face a garment that is being lace trimmed.

Set attachment so that edge of slot 1 is directly in front of the needle. This means that turned edge of garment is placed in slot 1, lace edge in slot 4 with binding facing edge in slot 2; thus 3 edges are held correctly in one single stitching as clearly portrayed in Fig. 24.

When sewing laces or soft materials together, it is better to hold the edges slightly overlapped. This will prevent the lace from feeding away from guide.

When the attachment is properly adjusted, the most inexperienced operator may sew yards of lace or material together with no difficulty.

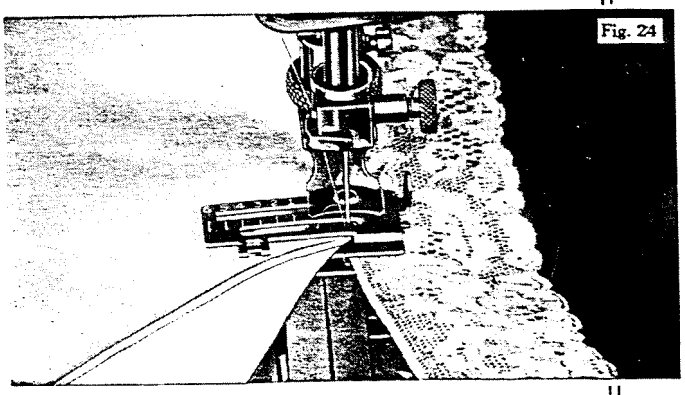


Fig. 24

OP BRAIDING AND EMBROIDERY

Braids such as soutache or floss of the same size can be applied to fabric in designs that are most attractive. Fig. 25 shows silk soutache being applied to rayon taffeta.

By moving lug "A" draw the edgestitching portion of attachment toward the right and set braiding guide "K" directly in front of the needle so that needle pierces the center of trimming as it is being stitched. Enter the braid into the hole K (Fig. 22). The design to be braided should be plainly marked or stamped on the top or right side of fabric. Stitch along this design, being sure that the soutache braid is feeding freely into the hole K without twisting. To turn a corner, stop the machine with the needle down through the braid in the exact corner of the design, raise the presser bar just enough to permit the turning of the fabric in the desired direction, lower the presser bar and proceed as before.

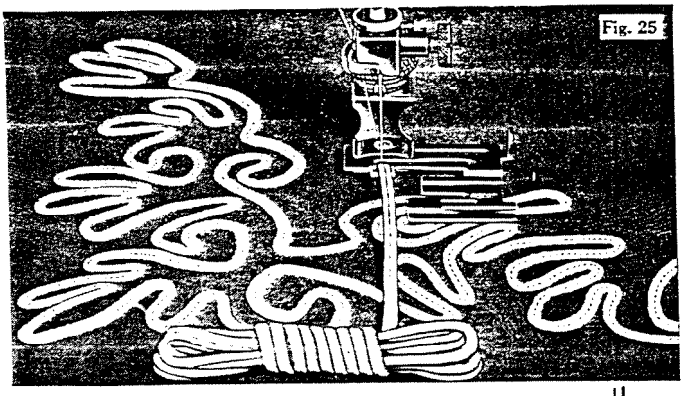
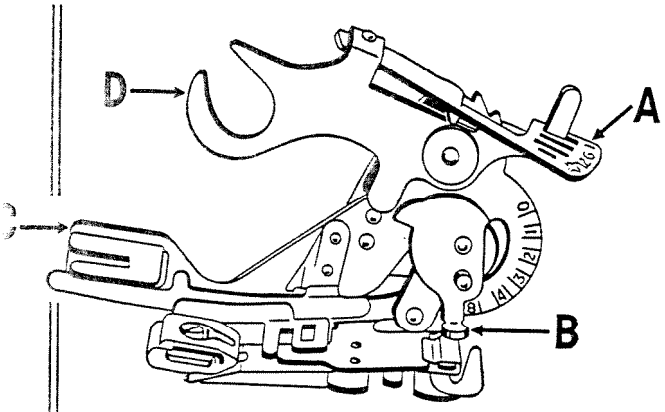


Fig. 25



A. Slots to space fullness at number of stitches.

B. Slide lever to regulate depth of pleat.

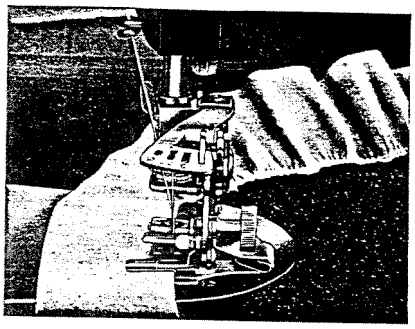
Attach Ruffler by placing the foot C on attachment holder and the fork arm D astride the needle clamp screw.

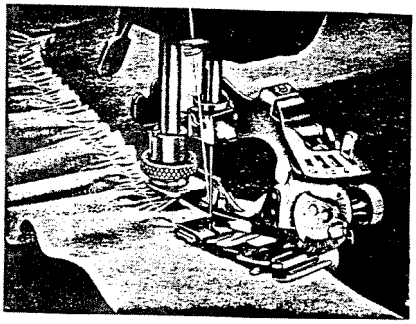
See that needle goes down in center of needle hole in Ruffler.

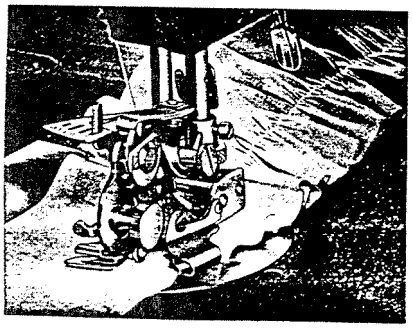
Ruffling. Enter material to be ruffled between blue blades. Edge of material is guided into one of several slots or adjustable guides provided for different widths of seam allowance or headings, as shown in pictures on page 34.

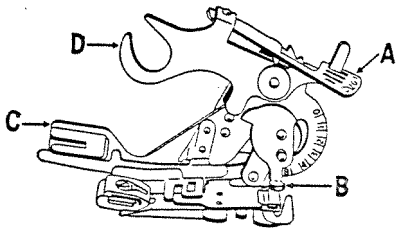
At point A, set pin in No. 1 opening for gather at every stitch. At point B, loosen screw and set lever for depth of gather No. 1 makes the finest gather. Length of stitch on sewing machine varies amount of fullness.

THE RUFFLER





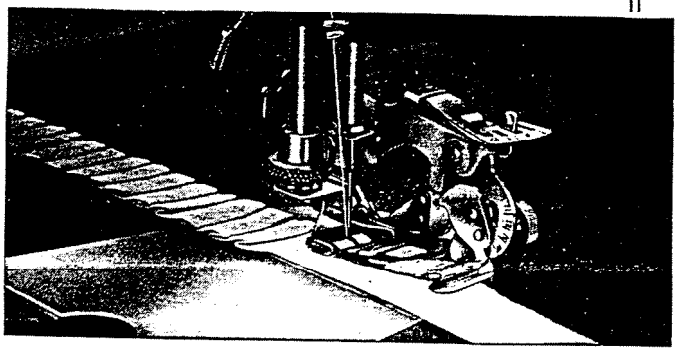




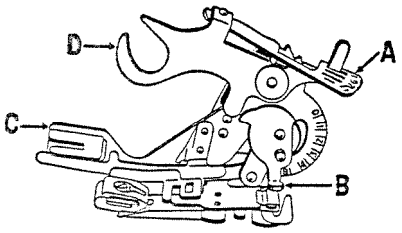
Pleating can be formed in a wide range of effects. The Ruffler can be set for deep or shallow pleats, spaced close together or far apart.

SIX-STITCH PLEATING

At point A set pin in No. 6 opening for pleat every sixth stitch. At point B loosen screw, slide lever down to deepen pleat. Space pleats by length of stitch on sewing machine.

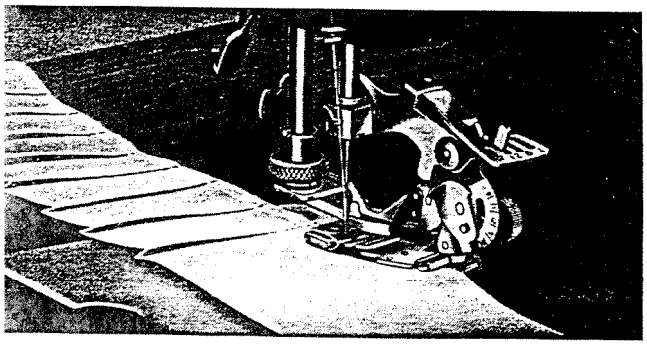


HE RUFFLER



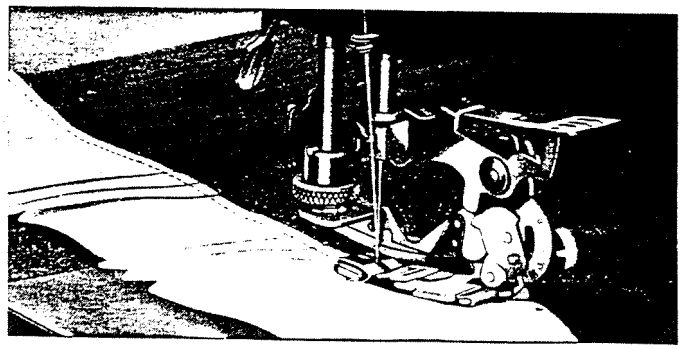
TWELVE-STITCH PLEATING

At point A set pin in No. 12 opening for pleat every twelfth stitch. At point B loosen screw, slide lever down to deepen pleat. Space pleats by length of stitch on sewing machine.



GROUP PLEATING

Set Ruffler for six-stitch or twelve-stitch pleating, as above. Proceed to make first group of pleats. Stop sewing. At point A set pin in neutral opening marked star. Stitch without pleating to point where next group of pleats begin. Reset pin at point A to previous pleating position.



SHIRRING

The Shirring Plate is used to make wide ruffles, deep headings on ruffles, and for continuous rows of shirring.

TO USE SHIRRING PLATE:

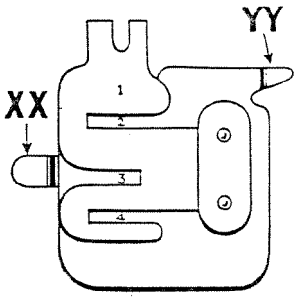
1. Remove handhole cover. Put Shirring Plate on machine with point YY in screw hole on needle plate. Point XX goes in squared opening of needle plate, and is held in place with handhole cover, replaced at this point.

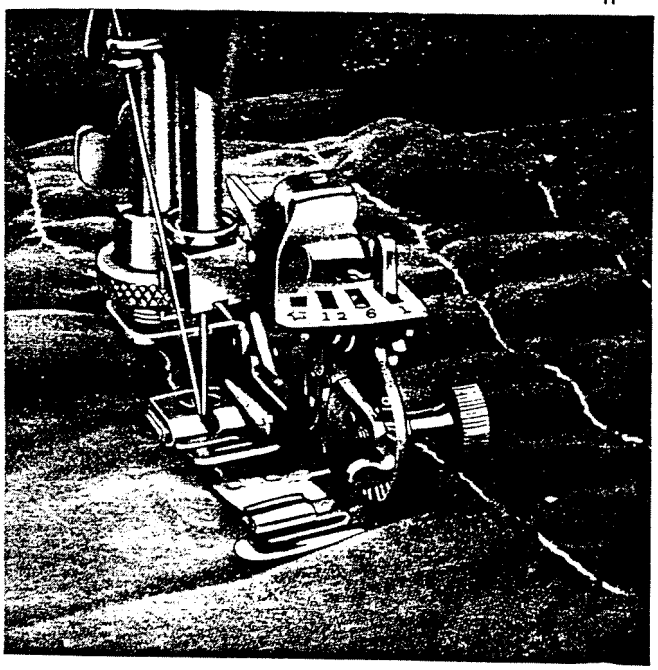
2. Remove lower blade and heading guide by loosening small screw on right side of Ruffler, and slipping forward. Tighten small screw.

3. Put Ruffler on machine as before.

4. Set attachment for ruffling.

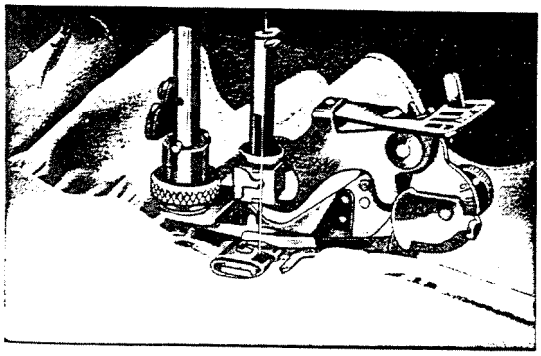
For several rows of shirring, it helps to use the Quilting Guide for spacing.





PIPING AND EDGESTITCHING TO RUFFLE

Use Ruffler with Shirring Plate. Enter material to be ruffled between blades from right. Guide into seam-allowance slot of Shirring Plate. Place piping through squared opening on left. Fold under edge of base fabric. Guide folded edge into slot above piping and above blades. To adjust the guide so needle sews on very edge, loosen screw behind needle hole and slide accordingly.



MAKING BIAS BINDING

First make a true bias of the material to be used for binding by meeting the warp (or length of material), to the woof (or cross of material).

Cut material carefully through crease where corners fold thus obtaining two sections of true bias. Figs. 36-37 very clearly explain this work.

To cut material into strips to be used with the Binder, insert bias edge of material into Cutting Gauge.

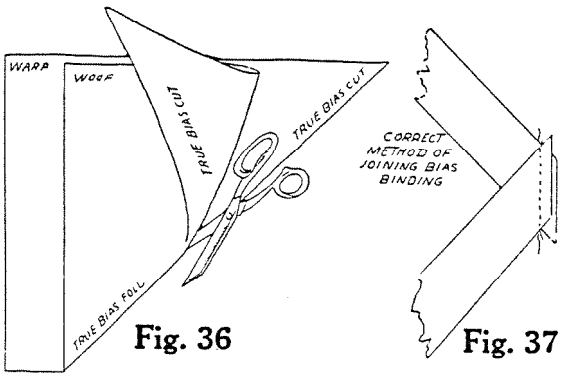


Fig. 36

Fig. 37

CUT MATERIAL SUFFICIENT TO DO ALL BINDING

Strips of binding can be neatly and correctly joined by meeting the right sides of material and laying the length, or warp ends, across each other with the points projecting the same width as seam desired.

Start stitching at angle on grain of material, finishing at angle on other side of binding.

Press seam open and clip seam edge close to line of stitching.

HE CUTTING GAUGE

The Cutting Gauge is used as a guide when cutting bias bands for use as binding; or narrow bands either straight or bias to be used as facings, pipings, cording or narrow ruffling.

The inch and fractions thereof designated on the Cutting Gauge enables one to cut material of any texture perfectly for use with the Binder.

⅞-inch or $\frac{15}{16}$-inch is correct for firmly woven materials.

1-inch to 1¼-inches is correct for materials that stretch more readily.

Attach Cutting Gauge to lower point of scissors, move gauge slide to width of band desired. The gauge slide is adjustable and can be moved to the left or right. Insert the material to be cut between the blades of the Cutting Gauge with the edge of material against the slide, then cut, moving the scissors forward in short even clips.

It is important that bindings to be used with the Binder be cut on a true bias to produce perfect work. Only a true bias will stretch evenly.

Fig. 39

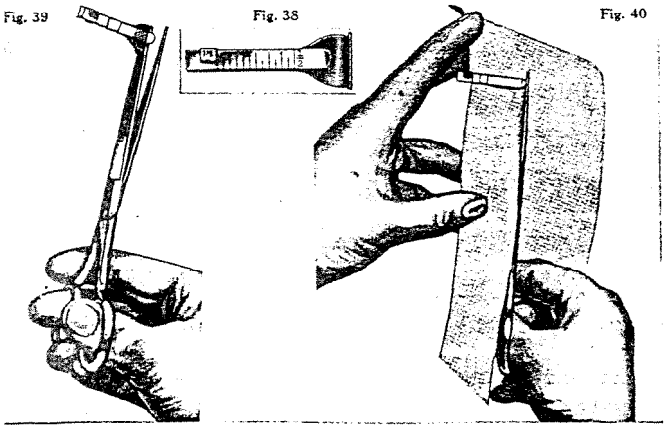


Fig. 38

Fig. 40

THE MULTIPLE SLOT BINDER

Five slots are designed in the Binder Scroll for the purpose of carrying commercial single fold bindings of as many different widths ranging from size 1 to 5 inclusive.

Bias bindings cut $\frac{15}{16}$-inch wide of self or contrasting materials can also be used but must be entered through the open mouth of the scroll.

The single fold commercial bindings must be used in the slots of binder and it is well to note before entering them that the widest half of fold in binding is the lower half. A good quality commercial binding is thus folded to insure sufficient binding when curved edges are encountered.

Remove presser foot and attach Binder in its place.

Clip binding to a desired point and draw it through the slot designed for its width by using a strong pin. Draw binding beyond needle and stitch for a few inches to determine where stitching is desired.

The Binder is adjustable sidewise and can be moved to make stitching line appear at extreme edge of binding which is desirable.

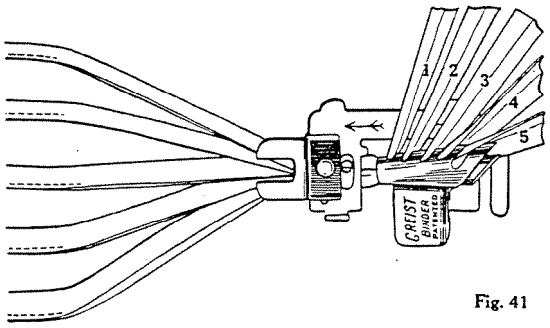


Fig. 41

THREE TONE BINDINGS

Fig. 42 shows in detail the use of three different colored bindings answering the need for a trim and finish that is reversible.

The bindings used for this net cascade are sizes 1, 3 and 5. Size 1 binding is entered in slot 1 first, size 3 second and size 5 last. Bindings size 5 and 3 show as a double piping on both sides of the cascade while size 1 encloses and holds the material being piped as well as the pipings. The material thus trimmed is entered between the scrolls of the binder and guided well into the scroll with the left hand.

Two-tone bindings are also very attractive and offer wide possibilities in the choice of color and size. When combining bindings always skip one size between each width being used.

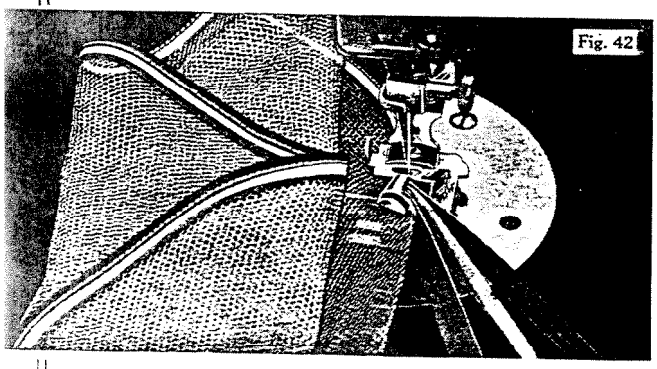


Fig. 42

BINDING SCALLOPS

Binding curves should offer no hardship when Binder adjustment is correct and material being bound carefully guided between the scroll of the Binder.

When binding small, decided curves as shown in Fig. 43 the material being bound is guided well into the Binder close to the needle. Use the third finger of left hand for this work and note how simply a curve can be bound while the finger rests on the apron of Binder.

The illustration shows how material appears as it is held by the stitching of binding. Never draw on the edge of a curve to force its full length between the scrolls.

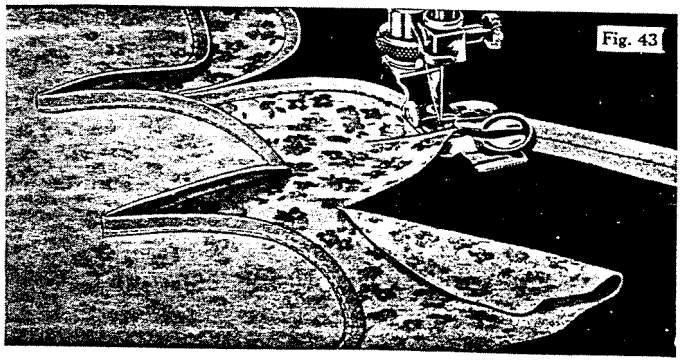


Fig. 43

BINDING AS A TRIMMING

Now that dainty bindings can be applied with a minimum of effort one will desire to trim with bindings where successive rows of trimming are desired.

After deciding upon the width of binding to be used enter it in the slot of Binder designed to carry it.

The garment to be trimmed is placed under the Binder using the outer or inner edge of Binder frame as a space guide between each additional row of bindings as it is being stitched.

QUILTING

When it is necessary to make many rows of stitching that run parallel to one another, the Quilter Guide makes this task a pleasure. It insists on keeping rows stitched evenly apart.

Remove Regular Foot and replace with Quilting Foot. Loosen screw in back of presser bar sufficiently to allow quilter guide wire to enter hole. Stitch the first row of stitching at point desired. Determine the spacing needed between each stitching. Set Quilter Guide for this spacing allowing the arm of the Quilter Guide to rest easily on the row of stitching while the needle pierces the material at the point set for each additional row. Tighten screw to hold Quilter Guide in place.

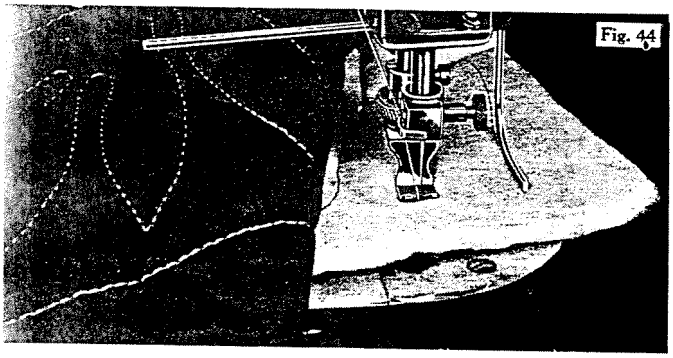


Fig. 44

When stitching a thickness of several sheets of wadding use a long stitch and fairly loose tension on the machine and use the Quilting Foot. If quilted stitching calls for slight puckering, place cheesecloth over the wadding and keep the right side of fabric down on bed of machine. The design for quilting is on the cheesecloth.

To trim stitch several thicknesses of closely woven materials such as broadcloth coatings, etc., loosen the Presser Bar Adjusting Cap Screw slightly so that no definite line of the foot's pressure or the feed imbedded into the material shows on the finished garment.

MACHINE DARNING

Set the machine for a short stitch. Release the pressure on the presser bar, turn the top knurled section of the presser bar cap (pressure release) Fig. 7, Page 9, one quarter turn counter-clockwise.

Hold the fabric taut, or insert in embroidery hoops, and pull forward then backward, then from side to side until the hole is completely filled.

When darning is completed, push down on the pressure release until it meets the lower section of the cap, then give the top one quarter turn clockwise, locking the cap securely.

THE SHIRRING FOOT

Wherever gathers are employed on a single thickness of fabric the task can be turned over to the Shirring Foot. Fig. 45 shows rows of shirring closely spaced in groups of four rows accomplished with the Shirring Foot.

The length of stitch and the tension control the fullness.

For fine gathers regulate your machine stitch for short stitching, to increase the fullness lengthen the stitch, for still greater fullness tighten the top tension slightly.

Carefully guide the fabric as it is being gathered so that at all times it feeds to the needle singly.

Use the Quilter Guide for evenly spaced rows of shirring.

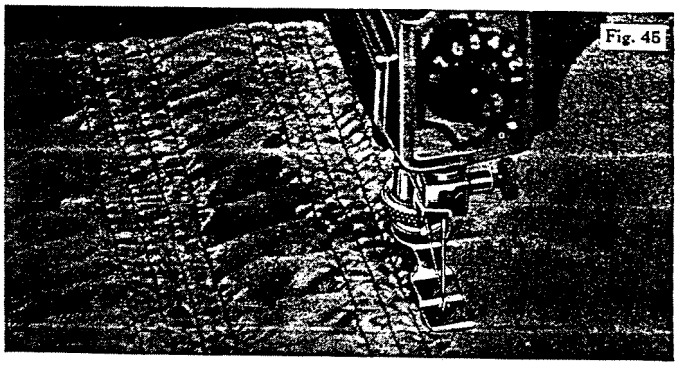
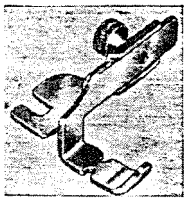


Fig. 45

IE COMBINATION ADJUSTABLE ZIPPER ITACHING AND CORDING FOOT



This attachment is designed so it can be adjusted for stitching either left or right side of cording in a seam or for stitching right or left side when attaching a slide fastener. Adjust by loosening thumb screw and sliding foot to desired position on bar.

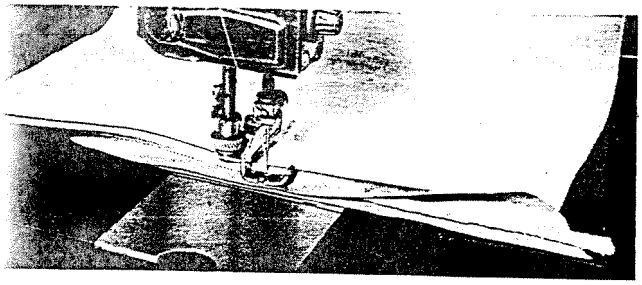


FIGURE 46

SERTING CORDING

Remove the regular presser foot and attach the Adjustable Combination Attachment in its place. Loosen the thumb screw on the attachment and move the foot to the right if the cording is to be to the left of the needle. See that the needle goes down in center of the needle hole before tightening the thumb screw.

Fold a strip of bias over the cord, right side out, and place under the attachment. Stitch along close to the cord.

Fig. 46 shows the Adjustable Attachment being used to cover cord and join it to a fabric edge in one stitching.

When the fabric is extremely bulky, loosen the Presser Bar Adjusting Cap Screw slightly to allow the fabric to feed more freely under the adjustable combination attachment.

ATTACHING A SLIDE FASTENER

Remove the regular presser foot and attach the Combination Attachment in its place. Loosen the thumb screw on the attachment and move the foot to the right or left as desired. See that the needle goes down in center of the needle hole before tightening the thumb screw.

The needle holes on either side are cut deep enough to allow sufficient space between the metal of the slide fastener and the line of stitching so the fabric will not catch in the slide pull as it is being opened and closed.

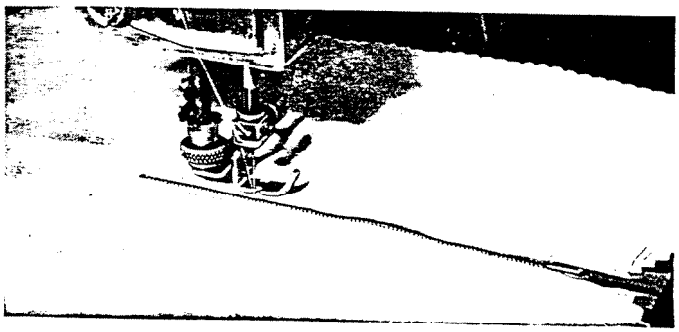


FIGURE 47

Fig. 47 shows a slide fastener being stitched in a garment with the Combination Adjustable Zipper Attaching and Cording Foot positioned to the right of the needle.

GENERAL INFORMATION

If upper thread breaks, it may be caused by: needle improperly set; machine not threaded correctly; upper tension too tight; needle too small for thread being used, especially if thread varies in thickness; needle eye too sharp; needle rubbing against presser foot in passing it.

If lower thread breaks, it may be caused by: bobbin case not threaded correctly; lower tension too tight; bobbin wound too full, causing thread to slip over the outer rim.

If needle breaks, it may be caused by: pulling the sewing, causing needle to strike the needle plate; attempting to sew very heavy seams in hard surfaced fabrics such as canvas without sufficient pressure on the presser foot. To increase pressure on the work tighten the presser bar cap; to decrease pressure loosen it.

If machine makes loop stitches, it is probably caused by too loose tension, both upper and lower.

If machine skips stitches, it is probably caused by: using wrong needle; bent needle, or needle not properly set. Use only genuine White Rotary needles.

If stitches are not even, it may be caused by: too short a stitch; pulling the sewing; using too fine a needle with too coarse or uneven thread.

If machine runs hard, it may be caused by running the machine while threaded without having material under presser foot, causing the shuttle race to become clogged with thread. Remove bobbin case and turn disc wheel in **wrong direction** for several revolutions, which action will cut the thread out; or remove shuttle as directed and clean shuttle race and driving pins.

SUPPLIES OR SERVICE

When in need of any supplies, parts or repair service for this machine call the dealer from whom it was purchased, if possible. If not, get in touch with your nearest White Sewing Machine authorized distributor, who handles only genuine parts and supplies and employs properly trained service men.

Some minor difficulties occasionally encountered, together with directions for overcoming them, are listed on Page 50.

Do not permit unqualified agents or unauthorized repair men to tamper with your machine.

Should it ever be necessary for you to return your entire machine, the sewing head, motor or any parts to the factory for repairs or adjustment, be sure to enclose your name and address in the box or package. If shipped by freight or express, the charges must be PREPAID. At the same time send a letter separately, explaining in detail just what is being returned and why, always giving the serial number of the machine which you will find on the side of the arm below the disc wheel. Also state plainly where return shipment is to be made, and whether by freight or express.

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