

FIVE STITCH ATTACHMENT
BOOK 12

DIRECTIONS

FOR USING THE

**White Rotary Sewing
Machine**

Manufactured by
WHITE SEWING MACHINE COMPANY
Cleveland, Ohio, U. S. A.

Edition--February, 1927

Good oil is an absolute necessity in the smooth running of a sewing machine.

WHITE Sewing Machine Oil, especially prepared, is a quality product that will satisfy you in every particular.

BE SURE TO ASK FOR IT.

Do not permit unknown repair men to tamper with your WHITE machine. When repairs are needed get in touch with the nearest White store, then the work will be done right.

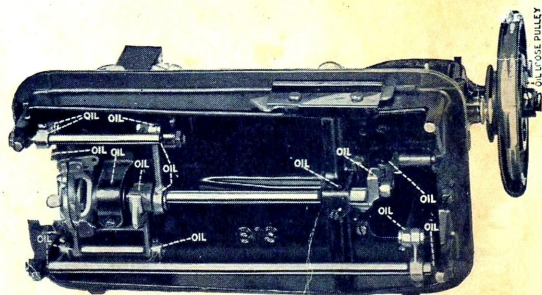
MACHINE OR HEADS RETURNED TO US FOR REPAIRS

Should have the name and address of the shipper inside of the box, and the express or freight charges PREPAID.

Also be sure to write us promptly stating how and when the machine was shipped and tell us just how it acts. Give the plate number of the machine (this is found on bed plate under the bobbin winder and close to the arm).

Write us plainly how we are to return the machine—whether by freight or express and where it is to be sent.

To oil the two places under spool pin plate, unscrew the spool pin and turn plate half way around. After oiling turn plate back into place.



Under view of Rotary Head showing Oiling Places.

Be sure to keep machine well oiled. To oil the under side of machine, slip the belt off the hand wheel, turn machine-head back on its hinges and oil in all places shown above.

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INSTRUCTIONS

FOR USING THE

White Rotary Sewing Machine

The Treadle Movement

The treadle movement should be thoroughly learned, so that you can readily revolve stand wheel by pressure on treadle with both feet.

Remove belt from the wheel (see directions below) and place your feet on the treadle directly over the treadle support; take hold of stand wheel and turn it from you, allowing the feet to move freely with the motion thus commenced, and continue this by an alternate pressure of heel and toe until a regular and easy motion is obtained.

Do not attempt to learn anything else until you are proficient in the use of the treadle, so as to be able to start and stop the stand wheel without turning it in the wrong direction.

Directions For Removing Belt From Machine

To remove belt from head when machine is open, raise the lid with the left hand as tho about to close machine, which will lower head just enough to give the belt free play. Then grasp belt with right hand and slide it over the hand-wheel from you.

To replace it, lift the lid to about the same position as before, grasp belt with right hand and pull it over hand-wheel towards the front of machine.

To Operate The Machine

Having become perfectly familiar with the treadle movement, now replace belt connecting hand-wheel of the machine with the stand wheel; raise the presser foot with the lever and unthread the needle; then place your hand on top of the hand-wheel and start to turn hand-wheel away from you and continue the motion thus imparted, with the feet, as per instructions above.

After becoming proficient in this motion and without the machine being threaded, place a piece of cloth between feed and presser foot; let presser foot down upon it and operate the machine in this way until you can guide the material in desired direction.

Do not pull cloth to or from you as it will bend or break the needle.

Never run Machine with needle threaded without goods under presser-foot. Run Machine so that upper side of hand wheel moves from you.

To Set Needle

Raise the needle-bar to its highest point; loosen the thumb screw and press it to the left to permit the shank of the NEEDLE to pass up between the clamp and needle-bar as far as it will go, flat side to the *right*—the needle being flattened on one side so it will set itself perfectly, then fasten securely by tightening thumb-screw.

The Iron Stand

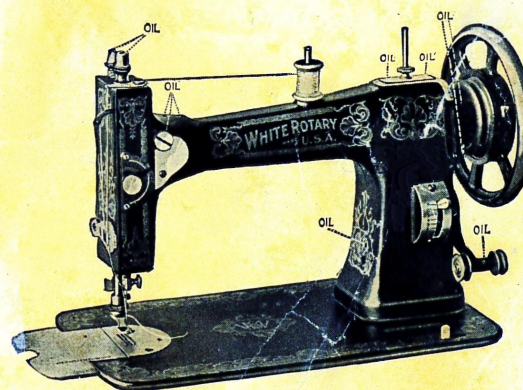
Oil occasionally the treadle centers, upper and lower end of pitman and the balance wheel hub bearings. Whenever you oil the machine work it a little to distribute the oil. After standing a few moments take a soft cloth and clean the superfluous oil from the Japaned parts of machine.

To Clean Machine

If the machine is dirty or gummed up with poor oil, oil the top, under-side of head and stand thoroughly in places indicated, using Kerosene (coal oil), run the machine for a short time, wipe dry and oil with White sewing machine oil.

Rotary Head Showing Oiling Places

Oil Places As Indicated Below



To thoroughly oil places shown on top of arm near face, first turn hand-wheel until the take-up reaches its highest point. Then apply the oil.

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.

This attachment is very useful in trimming articles of clothing for women and children, etc., etc.

STAND FOR STYLE No. 61

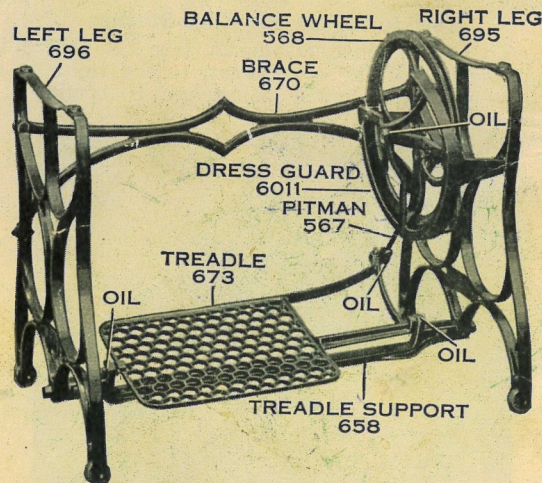


Illustration of stand and parts, also showing places for oiling.

To avoid loosening of the needle, always use a screw driver to fasten same, the needle nut being slotted for that purpose.

The needle, when descending, should pass CENTRAL, in the needle hole from FRONT to REAR, but close to the right side of the hole, as it prevents the needle from glancing into the race and being caught by the shuttle.

Needles And Thread To Be Used

The MOST IMPORTANT consideration is to buy and use perfect needles—not bent, nor blunt points.

When ordering needles for this machine, be sure to ask for the genuine White Rotary flat shank needles which are stamped on the shank "White F. R." Imitation or "just as good" needles will cause trouble. Get the genuine White F. R.

Cut of White Rotary flat shank needle showing exact length.



The size of the needle should conform to the size of the thread and both be suitable to the material sewed. Use a needle sufficiently large to permit the thread to pass freely through the eye.

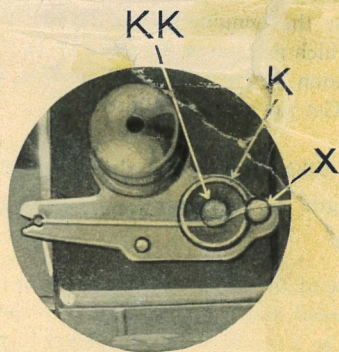
A No. 1 needle should be used for all kinds of family sewing where thread from numbers 70 to 90 is used. There is very little need to use a coarser cotton than No. 30, because

stitches made by a sewing machine are doubly as strong as those made by hand. In general sewing use the same thread above and below.

The following index will show the size of needle, thread and silk to be used

Cotton Thread	Silk Thread	No. of Needle
150 to 300	000	00
90 to 150	00	0
70 to 90	0	1
50 to 70	A & B	2
30 to 50	C	3
20 to 30	D	4

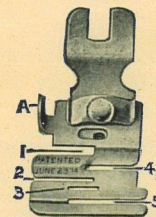
For colored thread use needles one size larger than given in index above.



The above illustration is a picture of the machine as you look down upon it and shows the points at which the thread passes as described on the opposite page (5).

THE EDGE-STITCHER

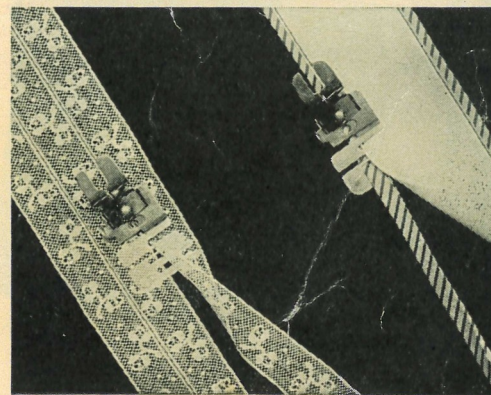
A Combined Edge-Stitching, Lace-Joining and Piping Attachment



The Edge-Stitching Attachment is fastened to the machine in the same manner as the Presser-Foot. The different slots which are numbered from 1 to 5 in the illustration serve as guides for sewing together laces, insertions, embroideries, sewing in position folded or hemmed edges, bias-folded material or piping, etc.

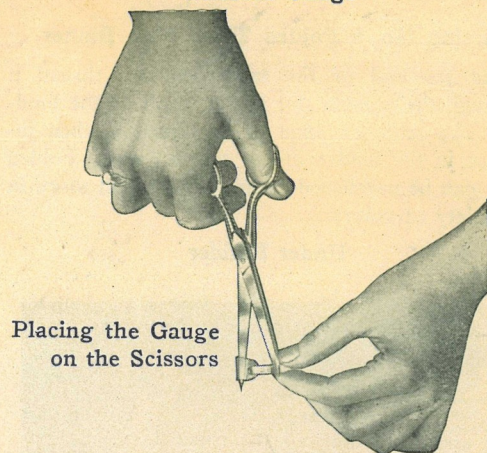
How to Adjust the Edge-Stitcher

To adjust, move the lug A (see cut above) at the left of the attachment, to the right or left until the desired adjustment is obtained.



When sewing two pieces of lace together, it is very necessary that the attachment is adjusted to stitch exactly on the edge, so that the edges will not fold over when laundered.

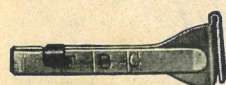
Scissors Gauge



Placing the Gauge
on the Scissors

For cutting bands of various widths, either straight or bias. The sliding scale is adjustable for the widths of band desired.

Place the gauge upon the scissors, as shown in the illustration; slip the edge of the cloth in the gauge and proceed to cut the band. The tape for the Binder should always be cut on the bias, also the piping which is used with the Ruffler.



The Scissors Gauge

The letter F indicates the proper width for a bias fold, which is to be one-half of an inch wide when finished.

The letter B indicates the width for cutting bias bands which are used with the binder.

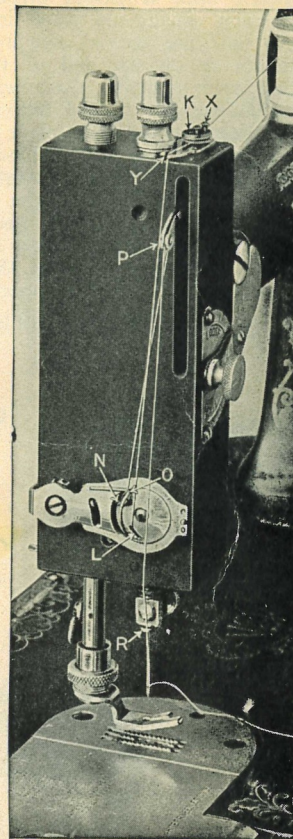
C is for corded or plain piping. The piping is cut bias and folded double to use with the ruffler.

Directions For Upper Threading

1. Place your machine in proper position for threading by raising the presser foot, using the lever at the back of the face; then turn the hand wheel so the take-up P is at its highest point.

2. Place the spool of thread on the spool pin near the center of the arm; with the first finger and thumb of the right hand to put a slight tension on the thread while doing the subsequent threading operation. Then take the end of the thread between the thumb and first finger of the left hand. Next we refer you to illustration on previous page (4).

The thread should pass back of pin X (not wound around) and under washer K but in front of pin KK then to open slot Y. Next take the thread and hook it under the point L of the tension plate, hooking under



from side of machine nearest you. Move the hand toward the back, and pull the thread upward until it passes through the eye of the auxiliary spring N, and into notch O. We now pull the thread upwards, hooking it into the spring on the end of the take-up P. All these steps can be done without changing the position of the thread between the thumb and first finger. We now place the thread through the guide R on end of needle bar, which is done by pulling it in through the slot. We are now ready to snip off the end of the thread, and thread it through the needle, threading from the left to the right. Allow about two inches of thread to project beyond the needle when the take-up is at its highest point.

To Thread Bobbin Case

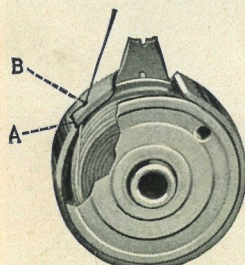


FIG. 1

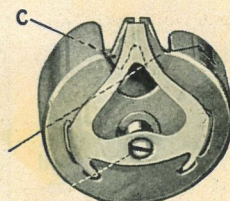


FIG. 2

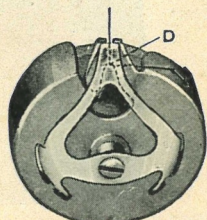


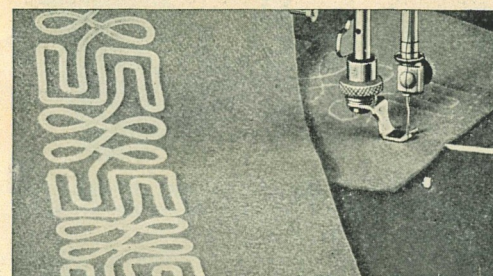
FIG. 3

See Instructions Next Page

Using No. 6 Folded Tape With Binder

Cut the end of the tape bias and thread it through the outside slot in the scroll of the binder. The seam or edge to be bound is then inserted in the binder in the regular way. Folded tape can be purchased in any department store in a variety of colors.

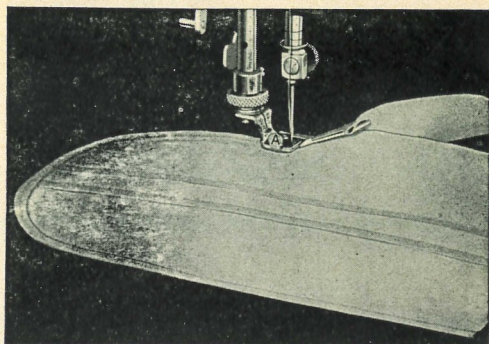
Under Braider



Substitute the under-braider foot (which is found in the box of attachments) for the regular presser-foot. Place under-braider on machine same as the shirring plate, draw the braid under and through the tube and a little past the needle. The pattern to be braided should be stamped on the wrong side of the cloth. Place the goods under the presser-foot same as in regular sewing, following pattern carefully. This stitches the braid on the cloth from the underside.

Binding

Remove the presser-foot and substitute the binder. Cut the binding $\frac{7}{8}$ inch wide (on the bias if convenient). Pass the binding through the



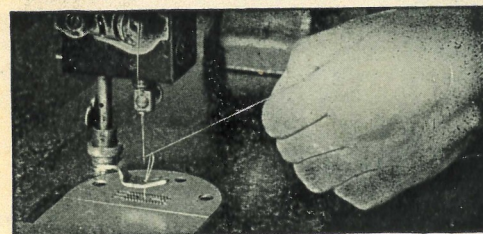
scrolls of the binder and under the presser-foot. Place the edge of the goods to be bound between the scrolls of the binder, drop presser-foot, guide the cloth with the left hand, and let the binding guide easily through the fingers of the right. To change the stitching near or far from the edge, move binder lug A to right or left as desired.

To Thread Bobbin Case

Place the bobbin in case so that thread will come from bobbin on same side as hole B in bobbin case (see Fig. 1); pass thread thru slot A to hole B, thence across opening, draw it down under lip C (see Fig. 2), then pull it up until thread passes out under the tension spring D (see Fig. 3). The tension on bobbin case should be the same as the upper tension.

To Draw Up The Lower Thread

Hold the end of the upper thread loosely in the left hand, and with the right hand gently revolve the hand-wheel, turning the top side from you until the needle passes to its lowest point and returns. A loop will be formed thru



which shuttle will pass, and, as the needle ascends it will draw up the lower or shuttle thread. The ends of the threads should then be passed under and to the rear of presser-foot.

The machine is now ready for practical operation.

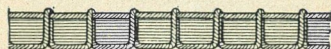
THE TENSION INDICATOR

To Regulate The Tension

To loosen the tension, turn the thumbscrew on the dial to the left which will move the pointer towards figure 1. To tighten it, turn to the right, moving the pointer towards No. 8. By this means



the same tension can always be duplicated, thus obviating the necessity of experimental trials, as is the case with other machines. If a tight tension is desired, both upper and under threads must necessarily be tight. If the upper thread is tight and the lower thread loose the upper thread will be drawn to the top thus:



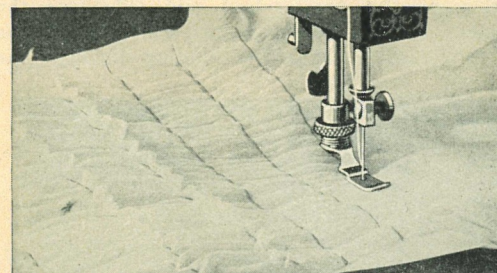
If the lower thread is too tight, it will be drawn straight on the bottom of goods, thus:



When you desire the stitches to look alike on both sides, and be elastic, balance the tension thus:



Directions for Using the Foot Gatherer



Remove the presser-foot and replace with the Foot Gatherer.

To Gather, Puff or Shirr

Place the goods under the foot the same as in ordinary sewing. For fine gather use a short stitch. To increase the fullness, lengthen the stitch. For greater fullness tighten top tension.

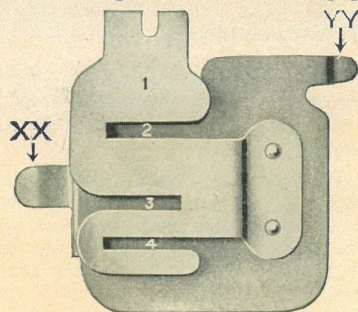
Making Gathers or Plaits in Groups

You will find it desirable when making garments, such as petticoats, shirts, etc., to make or have the gathers or plaits in groups, especially where the gathers are used at the side with a plain space or surface between.

This type of work can be done by pushing adjustment "E" forward. The ruffler will then sew plain until the adjustment "E" is again pulled toward the operator. You will no doubt find it necessary to mark your material in order to measure for even spaces between the gathers or plaits. Your ruffler should be well oiled at place indicated.

Shirring

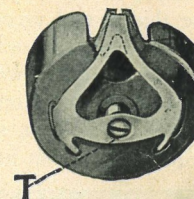
Remove hand-hole cover, insert ear "YY" of shirring plate into gauge screw hole in needle plate, and holding down the shirring plate, re-



place hand-hole cover over ear "XX" on shirring plate. With a screw driver loosen screw on right side of ruffler and remove the lower blue blade or separator, placing the goods to be shirred between the blades and shirr at any desired distance from edge of goods. Be careful not to use ruffler without the separator or shirring blade and cloth between, for in so doing, the ruffling teeth will be broken or injured against the feed.

Lower Tension

Cut herewith represents the bobbin case. To regulate the lower tension, turn screw T to the right to tighten and to the left to loosen same.



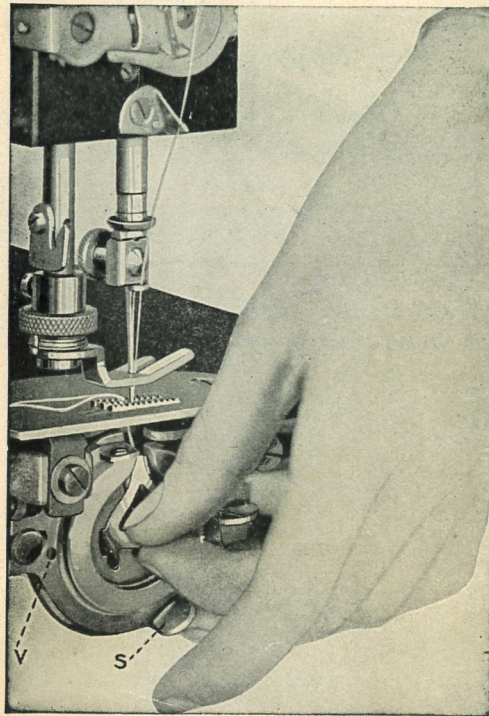
The Tension Releaser

The tension releaser is operated by the presser-bar lifter lever. By means of it, all tension is taken off the upper thread when the presser-foot is raised, and the work can be taken out without pulling the thread down by hand.

Always regulate tension of upper thread when presser foot is down.

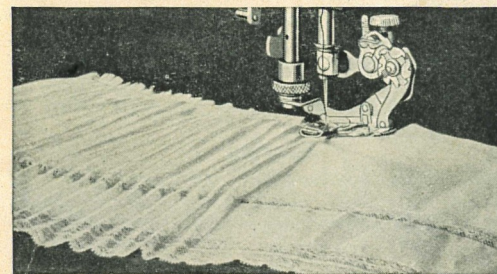
To Remove Bobbin Case From Shuttle

Raise the take-up to its highest point and with the thumb and second finger of left hand, clasp bobbin case as shown in cut, then lift latch S with the third finger, when bobbin case may readily be withdrawn from shuttle. Occasionally oil slightly in hole on shuttle race cover marked V, as per illustration herewith.



To Pipe or Edge-Stitch

To pipe or edge-stitch a ruffle, the piping is placed in the ruffler thru hole "H," and edge to be piped is creased and inserted in gauge "I." If stitching comes too far from the edge, loosen screw "J" and adjust gauge "H" to the left.



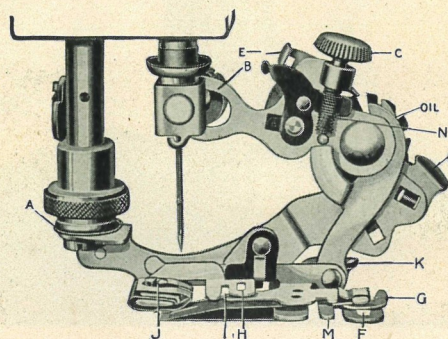
Tighten screw "J" thoroughly after adjusting is done. The ruffle to be piped is placed at the right of the blades and in guide "G" to keep ruffle heading even.

To adjust for plaiting, turn adjusting screw "C" down as far as it will go; pull adjusting lever "D" toward you. Insert the cloth between the blue springs, the ruffler will then make one plait at every fifth stitch. The space between plaits can be regulated by adjusting the stitch on the machine, a longer stitch makes a wider space between the plaits and a shorter stitch brings the plaits closer together.

To Adjust Ruffler Back for Regular Ruffling

Turn screw "C" to left until end of screw is $\frac{1}{8}$ of an inch below the blue spring "N," and push adjustment "E" from you and move stitch regulating lever on arm of sewing machine to between "1" and "2".

the right or left to get the desired distance from the edge; the goods will guide itself. To make a fine ruffle, have arrow on stitch regulating lever on sewing machine between "1" and "2" and turn



adjusting thumb-screw "C" up until the end of screw is $\frac{1}{8}$ of an inch below the blue spring "N." To make a heavy ruffle, lengthen the stitch to between "2" and "3," (see stitch regulator), and turn adjusting thumb-screw "C" downward until the desired fullness is obtained.

To Ruffle on Band

To ruffle on band, place band under both springs next to feed and over lip "M." Place goods to be ruffled between the springs and in gauge "F." If a facing is required, place facing above both springs and under foot.

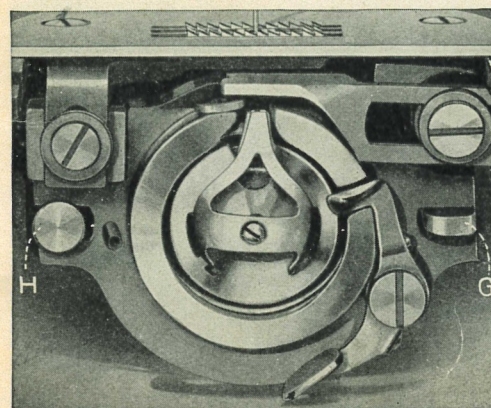
To Ruffle With a Heading

To ruffle with a heading, place the goods to be ruffled between the springs with heading to the right and adjust gauge "K" for desired heading.

To Replace Bobbin Case

To replace the bobbin case, simply slip it on the pin in shuttle with the tension projecting upward, and push it into shuttle, as far as it will go, when the spring latch will pass over and retain it in that position.

The thread should be allowed to project about two inches from the bobbin case tension.

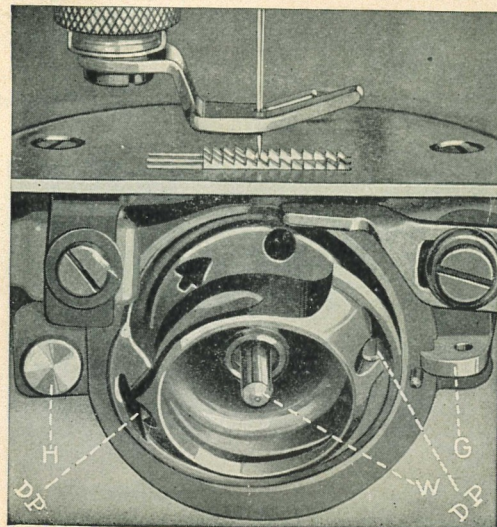


To Remove Shuttle From Shuttle Race

First remove the bobbin case (see cut, page 10.) Turn the head back on its hinges, then turn the hand-wheel from you in the same direction as in sewing, until the point of the needle just enters the needle-plate hole; push on rear end of latch G and at the same time pull shuttle-race cover away from shuttle and toward latch G from under pin H; the shuttle can now be removed.

When shuttle has been removed from race be sure to clean both and oil the race slightly before

replacing. Occasionally oil slightly pin W in shuttle. Also see that no thread is wound around bottom of center pin W.



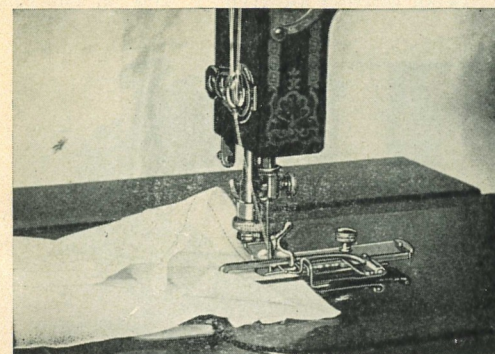
To Replace The Shuttle

Turn the hand-wheel from you until the point of the needle just enters the needle plate hole; take the shuttle by the center pin **W** with the left hand and place it in the race, so that point of shuttle will be from you and over arrow, *this is imperative*, so that the holes in the shuttle will drop on to driving pins in race, as shown by initials **DP** above, then replace the shuttle race cover.

DO NOT FORCE the shuttle into race. It will enter readily when in proper position.

Should the machine at any time act badly in sewing or running, remove shuttle, clean it and the race, which is but a moment's work.

The edge of the last tuck made should always pass under the spur placed immediately



in front of the marking blade. This will prevent the finished tuck from passing over the marker and will greatly assist in guiding the work.

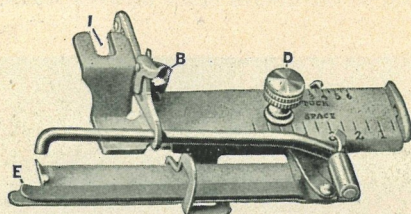
To tuck without marking, throw the lever **B** up.

Ruffling

Remove the presser-foot from machine by turning the knurled thumb-nut on presser bar to left. Place ruffler foot "**A**" in position on the attachment holder and at the same time set the fork arm "**B**" astride of the needle clamp, pushing ruffler from you and turn thumb-nut to the right, fastening firmly. See that needle goes down in center. The goods to be ruffled must be placed between the two blue blades and then in gauge "**G**." Gauge "**G**" should be adjusted to

Tucking

Loosen the thumb-nut on presser bar and remove presser-foot, adjusting slot 1 of tucker on holder, after which tighten the thumb-nut.



To regulate the size of tuck, loosen screw D and place gauge for any desired width, moving to the right for wide and to the left for narrow tuck.

To regulate the space between tucks, loosen screw D and move the marker to the left for a wide space and to the right for narrow. After adjusting tighten screw D.

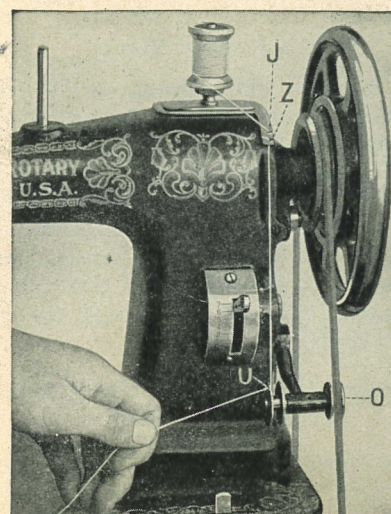
The figures on the back of cap show the width of tuck, and those on the front the width of space.

By adjusting gauge and marker so that the indicators will point to the same figures, the tucks will meet.

To COMMENCE TUCKING, fold the cloth for the first tuck and place it beneath the creaser and lip E, with folded edge against the guide; drop the presser-foot and sew as usual.

To Wind the Bobbin

Slip the clutch latch out of hand wheel, so that wheel will revolve without running the machine. Raise the bobbin winder, then slip the belt from the front to the back of pulley O. Place spool on spool pin, pass thread down thru notch J in arm



of cover plate, then wind it once around the arm of cover plate and down thru notch Z. Place bobbin on spindle, pushing it to the right as far as it will go. Put end of thread thru hole U in bobbin from inside out, run the machine, turning wheel as in sewing, holding on to the end of thread until the winding is started, then break off thread even with hole U and finish winding. Do not allow end of thread to lie over edge of bobbin.

To Change The Length Of Stitch

The stitch regulator is located at the right end of machine on the front side of arm. TO SHORTEN stitch move the lever down. TO LENGTHEN stitch move lever up. No. 1 indicates the shortest, and No. 7 the longest stitch.

To Remove Work

Stop machine with take-up at its highest point; raise the presser-foot by means of the lifter; then take hold of your work with your left hand and pull it directly from you, keeping the top thread in the slot of the presser-foot, which will prevent bending the needle. Now raise the work and draw the threads into the thread cutter on the presser-bar and pull downward, which will cut the threads the proper length to commence work again.

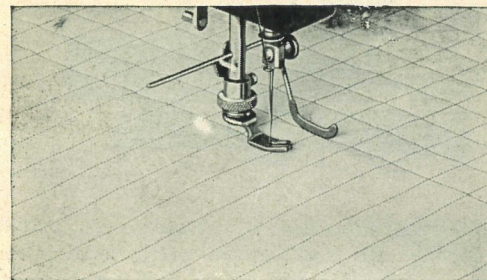
Explanation of Difficulties That Sometimes Occur With Beginners

If the upper thread breaks, it may be caused by the needle not being properly set, or the machine not threaded correctly, or the upper tension too tight, or the thread uneven and the needle too small for it, or the needle eye too sharp, or the presser-foot attached to the machine so that the needle rubs it in passing.

If the under thread breaks, it may be caused by the bobbin case being improperly threaded, or too much tension upon it, or by the bobbin being wound too full so that the thread slips over the ends of the bobbin in the bobbin case.

Quilting

Pass the quilter through hole in presser-bar, adjust the quilter guide to the right of the needle according to the desired space between seams, and



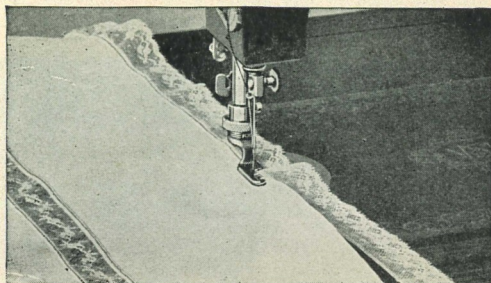
high enough to allow the goods to pass freely under it, and then fasten the quilter securely by screw.

In starting to quilt use the outer edge of the cloth for the first guide, or else crease the cloth on the right and let the quilter guide follow the crease, quilt the remainder by keeping the guide in a line and over the last seam stitched.

Notice—Large quilts should be made in squares or sections and then sewed together. In quilting squares or diamonds the seams should be on equal bias.

Hemming And Sewing On Lace One Operation

Our hemmer and feller which accompanies each machine, is now made with a slot— (See illustration above.)



In this slot place the edge of the lace and sew it on at the same time as in ordinary hemming, having the right side of material down.

Wide Hemming

Any width hem can be made with the hemmer and feller upon thin fabrics by simply folding the goods the desired width of hem and then passing the edge through as in narrow hemming.

If the needle breaks, it is probably caused by pulling the goods to or from you so that the needle strikes the needle-plate and is bound to break. The needle may, however, break in trying to sew extraordinary heavy seams when the pressure on the presser-foot is not heavy enough.

To create more pressure upon the goods turn the thumb screw on top of the presser-bar to the right; to decrease the pressure turn it to the left.

If it makes loop stitches, it is probably caused by too loose tension both top and bottom.

If the machine skips stitches the needle is either—bent, in wrong position, or it is the wrong make of needle—use no other than the genuine White Rotary F. R. needles.

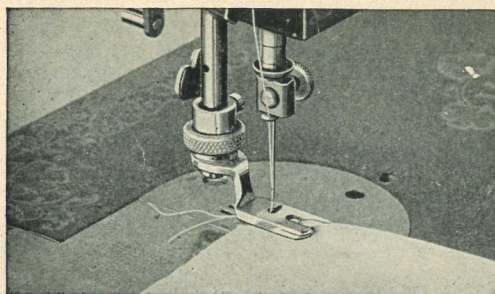
If the stitches are not even, it may be caused by the presser-foot not resting evenly upon the fabric sewed, or by the feed not being high enough, or by the stitch being too short, or by pulling the cloth or by using too fine a needle with too coarse or uneven thread.

If the machine should be run without sewing and thread gets in the shuttle race making the machine run heavy, take out bobbin case and run the machine in the wrong direction and it will cut the thread out; or remove shuttle and clean the race and driving pins. (See cut, page 12.)

Notice.—The leather band should always be tight enough not to slip. If it slips or does not force the needle through thick goods, cut off about $\frac{1}{4}$ inch and re-adjust the ends. If after trying this there is not a sufficient amount, repeat the operation. The belt should not be so tight as to prevent an easy motion of the machine.

Hemming

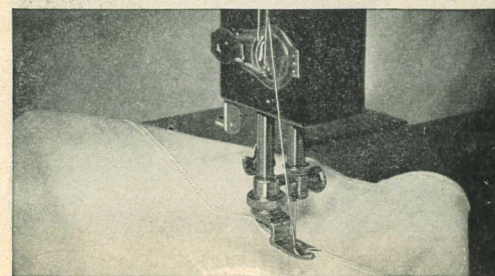
Raise the take-up to its highest point, remove the presser-foot and in its place attach the hemmer. Starting about $\frac{1}{4}$ " from the



corner, trim the cloth round. Turn edge of cloth over to form hem for about one inch from corner. Insert in hemmer far enough to permit the needle to enter the cloth at its extreme edge (as above), then proceed to sew, keeping the edge turned as it feeds through. If the seam is too near the edge of the hem towards the cloth, move the hemmer towards the right by pushing the hemmer towards the right. If the seam is too near the edge of the hem away from the cloth, move the hemmer towards the left. You will find in the box an assortment of wider hemmers, which may be used for heavier work where you want to make wider hems. The principle of using is the same. No difficulty will be encountered if the hem is started by folding the goods preparatory to feeding it into the hemmer.

Hemming and Felling

A fell is made with the foot hemmer. You place two pieces of goods with the face side together. The lower piece of goods should project towards the right about $\frac{1}{8}$ " beyond the edge of the upper piece of goods. Place both beneath the hemmer, using the hemmer as a presser-foot, sewing a seam about $\frac{1}{8}$ " from the edge of the upper piece of goods. We will now open out the seam so that the face



side of the goods is flat on the machine. If the work is carefully done no trimming will be necessary, but if it is discovered that the edge of the lower piece of goods projects upwards an uneven amount, the high point should be trimmed off, making a uniform amount of material to make the fell. The goods should be straightened out flat so that the goods is stretched at the seam. We will now start the seam through the hemmer, which should stitch down the raw edge of the goods, making what appears to be a hem. The amount of goods required to make a fell will depend somewhat on the size of the hemmer, and the thickness of the material. If the work is carefully done, two seams will appear as in the cut above.