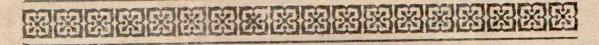
BOOK 11



DIRECTIONS

For Using the

White Rotary Sewing Machine



White Sewing Machine Company of Canada, Ltd.

Guelph, Ontario, Canada

WHITE COLD SWAGED FR. MACHINE FR. NEEDLES ROTARY

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※操操者與養養養養養養養養養養養養養養養養養養養養

Fac-simile of genuine Trade Mark Label.

Any needle offered for sale or use in White sewing machines, without the name white f.r. stamped on the shank is "bogus" Many of them will cause the machine to skip stitches, break thread, injure your machine, and invalidates the guarantee for free repairs. "Genuine White" needles have the name "White F. R." stamped on the shank. They are put up and sold only in packages with notice of the United States

trade mark registration on the outside label. Accept no other.

Machines 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.

In addition to putting the address in the box, we want the shipper to write and mail us a letter upon the same day he sends the machine, and inform us how, and by what line he ships; also write full particulars as to the trouble with the machine, and give us the PLATE NUMBER, Found On Bed Under Bobbin Winder, Close To Arm.

Be sure and give explicit directions how and where to return the machine.

INSTRUCTIONS

for using the

White Rotary Sewing Machine

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.

To avoid loosening of the needle, always use a screw driver to fasten the 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.

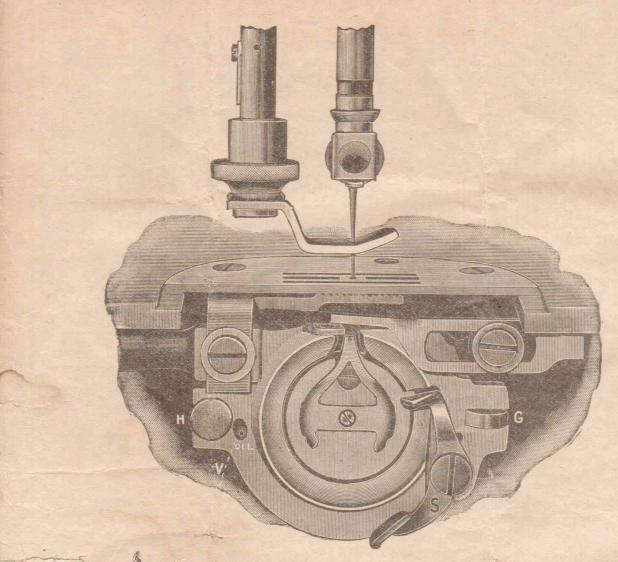
Cut of White Rotary flat shank needle showing exact length.

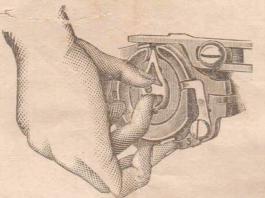
The size of the needle should conform to the size of the thread and both be suitable to the material sewed. Use as fine a needle as will permit the thread to pass freely through the eye.

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

		and the second second
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.





TO REMOVE BOBBIN CASE FROM SHUTTLE

Raise the take-up to its highest point. 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 be readily withdrawn from shuttle **F**. See page 5.

TO REMOVE SHUTTLE FROM SHUTTLE RACE

First remove the bobbin case. Turn the machine back on its hinges, then turn the machine 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 in hole on race cap marked **V** above and pin **W** in shuttle, see page 5, fig. 9.

4

TO REPLACE THE SHUTTLE

Turn the machine in direction for sewing 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 on thread cast off, so that the holes in the shuttle will drop on to the driving pins in race, 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 it would be well to remove shuttle and clean it and the race, which is but a moment's work.

To replace the bobbin case, it need not be held as when removing, but 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.

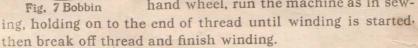
The thread should be allowed to project about one inch from

bobbin case tension.



Place spool on spool pin, pass the thread down through the rear hole in arm of cover plate, then to the left under and over the arm down through front hole. Put the end of thread through hole U in bobbin from inside out, place bobbin on bobbin winder spindle, raise winder so

belt will drive it, loosen thumb screw in hand wheel, run the machine as in sew-



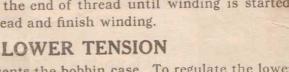
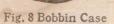


Fig. 8 represents the bobbin case. To regulate the lower tension, turn the screw T to the right to tighten, and to the left to loosen the same.



TO THREAD BOBBIN CASE TENSION

Place bobbin in case so that thread will come from bobbin on same side as hole B in bobbin case; pass thread through slot A to hole B thence across opening, drawing it down under lip C then pull it up until thread passes out under tension spring D.

The tension on bobbin case should be the same as the upper tension.



Fig. 9 Shuttle

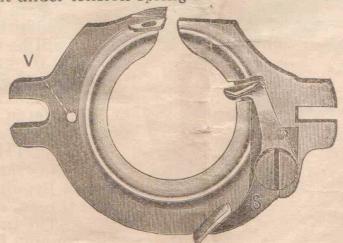
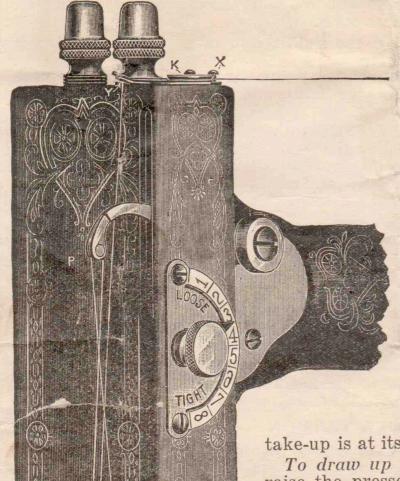


Fig. 10 Shuttle Race Cover

DIRECTIONS FOR THREADING

Place the spool on spool pin, take the thread in your left hand holding it taut with the right during the whole threading



operation. Pass thread from spool over check spring K at top of face and down under point L; now pull thread upward until it passes through the eye of spring N and into notch O, then into end of take-up P, then down through slot R in end of needle bar and through eye of needle from left to right, allowing about 3" of thread when

take-up is at its highest point.

To draw up the lower thread, raise the presser-foot, take hold of end of upper thread and turn the hand-wheel once around, (moving upper side of wheel from you) which will draw the lower thread up through needle hole.

Pass the ends of both threads under the presser-foot and you will be ready to sew.

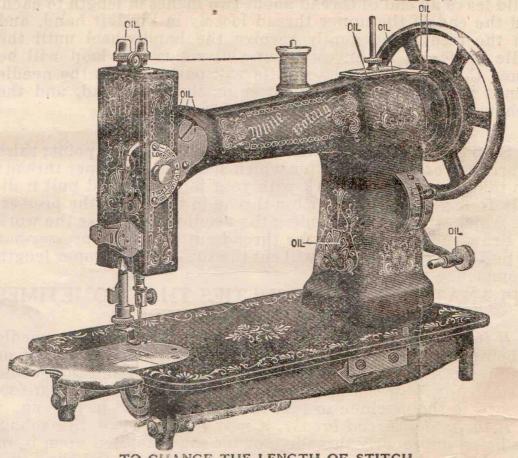
Note.—Do not run the machine with the presser-foot down on the feed without cloth under it. Do not pull cloth to or from you in such a manner as to bend needle.

THE TENSION

The illustration above represents the Tension Regulator and Indicator for the upper thread, an entirely new and useful device. The half circle is marked with a scale running from 1 to 8, with the word "loose" at fig. 1 and "tight" at 8, 1 being the slack and 8 the tightest tension.

Fig. 12.

OIL PLACES AS INDICATED BELOW



TO CHANGE THE LENGTH OF STITCH

The regulator is located at the right end of machine on the ront 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 REGULATE THE TENSION

To loosen the tension, turn the thumbscrew on the dial to the left which will move the pointer toward figure 1. To tighten it, turn to the right, moving the pointer toward 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 er thread is too tight, it will be drawn straight on the bottom of goods, When you desire the goods to look alike on thus: both sides, and be elastic, balance the tension thus:

THE TENSION RELEASER

The tension releaser is operated by the presser-bar lifter. 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.

PARTICULAR NOTICE—The tension cannot be regulated when the lifter is up because the Releaser is operated by the presser-bar lifter.

TO COMMENCE WORK

In threading the needle and bobbin case respectively, you should leave an end of thread about two inches in length to each. Hold the end of the upper thread loosely in the left hand, and with the right hand gently revolve the hand-wheel until the needle passes to its lowest point and returns, a loop will be formed through which the shuttle will pass, and, as the needle ascends it will draw up the lower or shuttle thread, and the machine is ready for practical operation.

TO REMOVE WORK

Stop the machine with the take-up at its highest point; raise the presser-foot with the lifter which slackens the upper thread; 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.

If the needle breaks, it is more than likely your own fault caused by pulling the goods to or from you in such a manner that the needle strikes the throat 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 presserbar nut 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 most sure to be caused by too

loose tension both top and bottom.

If the machine skips stitches, the needle is either bent or not

in right position.

If the stitches are not even, it may be caused by the presserfoot 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.

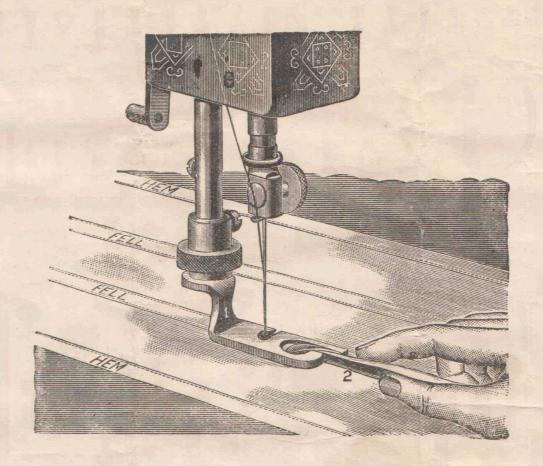
If the machine should be run without sewing and thread get in the shuttle race making the machine run heavy, take out bobbin case and run the machine in the wrong direction; it will

cut the thread out.

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 a very short piece and re-adjust the ends. The belt should not be so tight as to prevent an easy motion of the machine.

8

DIRECTIONS FOR USING THE ATTACHMENTS



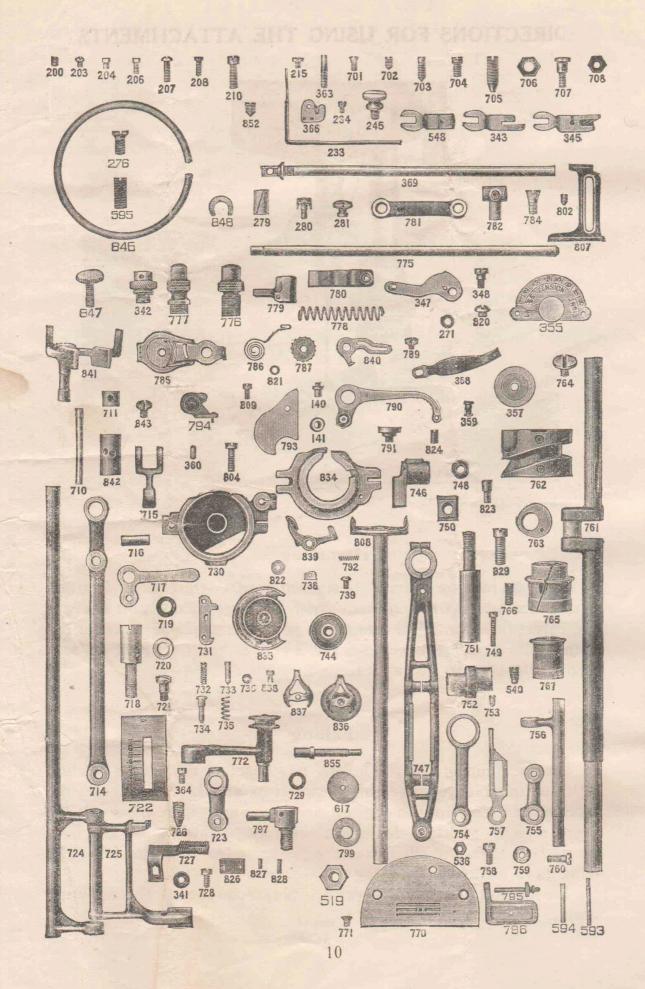
Hemming

Raise the take-up to its highest point, remove the presser-foot and its place attach the hemmer. Trim the edge of cloth on a curve and insert in hemmer far enough to permit the needle to enter the cloth at its extreme edge, (See Fig. 2 above), then proceed to sew teeping the edge turned as it feeds through.

Felling

The hemmer is also the feller. Sew together two pieces of cloth with the under edge projecting between 1/2 and 1/4 inch beyond the upper edge; then trim the edges if necessary and open the work flat wrong side up, and fold down the wider edge, toward the left, over the narrow edge, and then pass the ifolded edge into the feller the same as in ordinary hemming.

Illustration above represents an operator in the act of completing



No.	
140	Take up roller stud
200	Take up screw for needle bar bushing
200	279
203	Screw to fasten stitch indicator
	Screw to fasten stitch indicator plate 722 take up plate 793, check
	spring bracket 794
204	Screw to fasten attachment holder
000	342 to presser bar 775
206	Screw to fasten rear feed rock arm 723 to rock shaft 724 and thread
	pull off rock arm 755 to rock shaft
	756 and guide 780 to presser her
	756 and guide 780 to presser bar 775 and to connect 714 with 72; Screw for head of main connection
207	Screw for head of main connection
	141
208	Screw to bind screw 760 in shuttle
000	race
210	Screw to fasten 866 to bed 813 Screw to fasten face
215	Screw to fasten presser bar lifter
	block 779
233	Quilter Screw to fasten quilter and thread
234	Screw to fasten quilter and thread
0.4 1	cutter
245 271	Gauge screw Presser bar lifter washer
276	Screw to fasten 833 to face
279	Needle bar bushing
280	Needle screw and clamp
281	Needle screw and clamp Needle screw nut
341	Washer for 728
342	Attachment holder complete
343	Presser foot
347	Presser bar lifter and releaser cam.
348	Presser bar lifter and releaser cam. Presser bar lifter screw
355	Tension indicator complete
357	Tension disc
358 359	Tension spring on inside of face Screw and nut to connect 358 and
000	785
360	Guide pin in slot of tension plate 785
363	Screw to adjust lower end of face
364	Screw to adjust lower end of face Screw to clamp feed bar centers 726
000	in feed rock shaft 724
366	Thread cutter
519	Needle bar
536	Nutfor 797 Lock nut for 758 Screw to fasten 767 in arm
540	Screw to fasten 767 in arm
548	Foot gatherer
593	Stud for revolving spool standard
594 595	Screw to fasten 593 in arm
617	Bobbin winder pulley
701	Bobbin winder pulley Screw to bind needle bar link screw
-	784 in take up cam 762
702	Screw to fasten feed cam 763, and to locate take up cam 762
703	Serow to tighten take up cam 700
103	Screw to tighten take up cam 762 on shaft 761 and to fasten 842 in arm
704	Screw to fasten main connection stud
	751 in arm
705	751 in arm
700	Marte for 705
706	Nuts for 705 Screw to connect 754 with 756 and
.01	to fasten hobbin winder to arm
708	Screw to connect 754 with 756 and to fasten bobbin winder to arm Nut for 707 and 721
710	Pin in feed fork for shifting block
714	711
711 714	Suitting block in feed connection 714
715	Feed connection
716	Pin for feed connection link 715
717	Stitch adjusting lever
718	Stitch adjusting stud Friction washer for 717
719	Friction washer for 717
$\frac{720}{721}$	Sleeve for 718
121	to take up rear bearing of chuttle
	shaft 808

	No.	
	722	Stitch indicator plate
- 3	723	Rock arm on rear end of feed rock
		shaft 724
	724	Feed rock shaft
	725	Feed bar Centers for feed bar 725
	726	Centers for feed bar 725
	727	Feed
	728	Feed
		125
	729	Spring washer for bobbin winder
	700	frame
	730	Shuttle race
	731	Latch to hold shuttle race cover 834
E	732	on race 730
	733	Spring for 731
	734	Chuing pin to hold shuttle rose sower
	101	834 on race 730
- 3	735	Spring for 794
	736	Spring for 734 Washer on 734 Thread guide plate on 834
	738	Thread guide plate on 834
	739	Screw to fasten 738 to 834
	744	Bobbins
	746	Crank on rear end of shuttle shaft
		808
	747	Main connection complete
	748	Main connection roll
	749	Screw to adjust main connection to
		slide block 750
	750	Main connection slide block
	751	Main connection stud
	752	Feed raising and thread pull off cam Screw to fasten 752 to 808
	753	Screw to fasten 752 to 808
	754	Eccentric connection for thread pull
1.5		off Thread pull off rock arm Thread pull off rock shaft
	755 756	Thread pull off rock arm
	757	Thread pull off rock shart
	758	Thread pull off Screw to connect 757 to 755 Thread pull off slide block
	759	Thread pull off alide block
	760	Screw to connect 759 to shuttle race
	100	730
	761	Upper shaft
		oppor baute
	102	Take up cam
	762 763	Take up cam
	763	Take up cam Feed cam Screw to go in rear end of 761
	763 764 765	Take up cam Feed cam Screw to go in rear end of 761
	763 764	Take up cam Feed cam Screw to go in rear end of 761
	763 7 64 765 766	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369
	763 7 64 765 766	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761.
	763 764 765 766 767 770	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate
	763 764 765 766 767 770	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770
	763 764 765 766 767 770 771 772	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete
	763 764 765 766 767 770 771 772 775	Feed cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar
	763 764 765 766 767 770 771 772 775	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser screw
	763 764 765 766 767 770 771 772 775 776	Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser screw
	763 764 765 766 770 771 772 775 776 777	Take up cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser screw Needle bar cap Presser bar spring Presser bar lifter block
	763 764 765 766 770 771 772 775 776 777	Take up cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser screw Needle bar cap Presser bar spring Presser bar lifter block
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	763 764 765 766 777 771 772 775 776 777 777 778 779 780 781	Take up cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser bar Presser screw Needle bar cap Presser bar spring Presser bar guide Needle bar link
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	763 764 765 766 767 7770 7771 7772 7775 7776 7777 7778 7779 7780 7781 7782 7784	Take up cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser bar Presser screw Needle bar cap Presser bar spring Presser bar guide Needle bar link Needle bar block Screw to connect 781 to take up cam 762 Tension plate
	763 764 765 766 767 770 771 772 775 777 777 778 779 781 782 784 785	Take up cam Feed cam Screw to go in rear end of 761 Forward bushing for upper shaft Screw to fasten 765 in arm 814 and 782 to 369 Rear bushing for upper shaft 761. Needle Plate Screw to fasten 770 Bobbin winder complete Presser bar Presser bar Presser screw Needle bar cap Presser bar spring Presser bar guide Needle bar link Needle bar block Screw to connect 781 to take up cam 762 Tension plate
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	Bed	
	Arm	
*815	Face	Manual Control of the
820	Screw to fasten tension indicator	
	. 355 to 815	833 278
821	Washer on auxiliary spring 786	WALLAND SOL
822	Washer under latch 839	832 831
823	Stud for lower end of main connec-	830
	tion 747	
824	Screw to fasten crank 746 on rear	
	end of shuttle shaft 808 and to	
	fasten 842 in arm	
826	Plate for 725	
	Short rivet for 826	866
	Long rivet for 826	000
	Screw to fasten bed to arm	
	Hand hole cover complete	
	Latch for cover 830	865
	Spring for latch 831	4
	Catch on lower end of face to retain	667 BEB 209
899	cover 830 when raised	867 868 209
004		*845 Loose pulley on hand wheel
	Shuttle race cover	846 Wire retainer for 845
	Shuttle	847 Thumb screw in hand wheel
	Bobbin case complete	848 Lock washer for 847
	Bobbin case tension spring	852 Screw to fasten hand wheel to upper shaft
	Bobbin case tension screw	*853 Hand wheel
	Latch to retain bobbin case 836	855 Bobbin winder center
	Auxiliary cam	865 Sliding head latch
	Feed fork and stud complete	866 Cover for 865
	Bearing for feed fork stud	867 Spring for 865
843	Screw in end of feed fork stud	868 Separating washer for 865 and 866

Numbers preceded by a star (*) are not illustrated

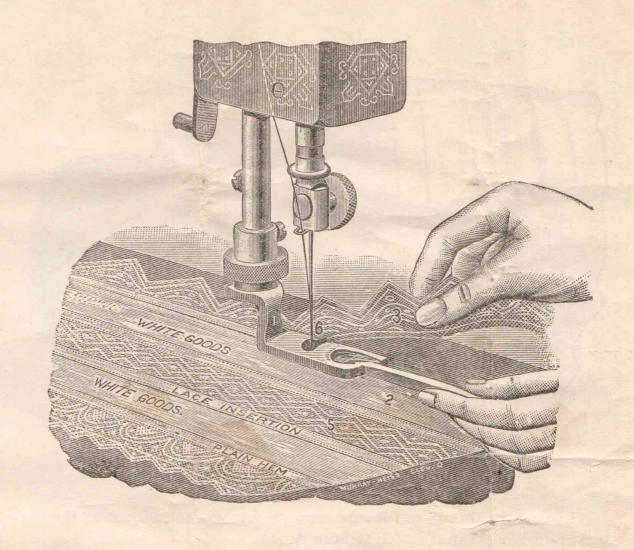
DIRECTIONS FOR USING THE FOOT GATHERER



Remove the presser-foot and replace with the Gathering Foot

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 tension.

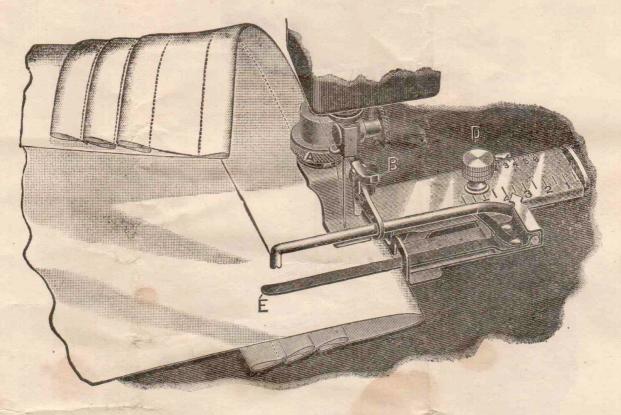


HEMMING AND SEWING ON LACE ONE OPERATION

Our hemmer and feller which accompanies each machine, is now made with a slot—6. (See illustration above.) In this slot place the edge of the lace and sew it on at the same time as in ordinary hemming.

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.



TUCKING

Loosen the thumb-nut A and remove presser-foot, adjusting the tucker on holder, after which tighten A.

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

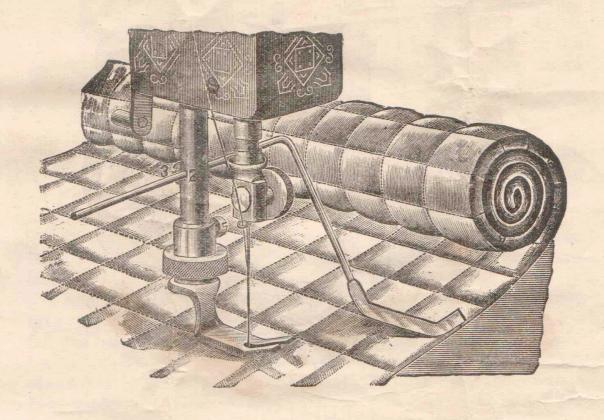
The figures on the back of cap show the width of tuck, and those on the front the width of space.

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.

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.



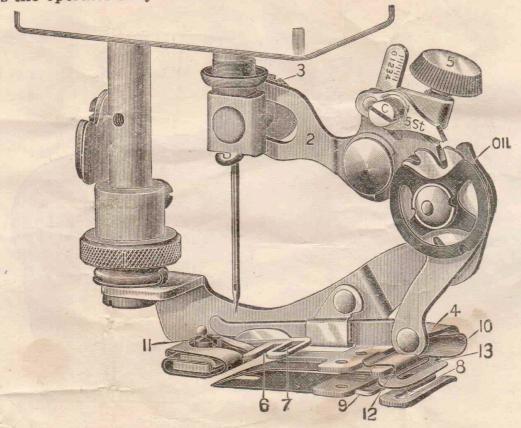
QUILTING

Pass the quilter through hole 2 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 3.

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.

The New Improved Five Stitch Ruffler is a ruffler which makes a gather or pleat either at every stitch or once in every five stitches as the operator may choose.



RUFFLING

Loosen thamb screw 1, remove presser foot and place the ruffler in holder, at the same time setting the ruffler arm fork 2 on needle

clamp screw 3, then tighten nut 1.

The goods to be ruffled must be placed between the two blue blades and then in gauge 12. Gauge 12 should be adjusted to the right or left to get the desired distance from the edge. The goods will guide itself.

To make a fine ruffle, shorten stitch of machine and move ad-

justing nut 5 upwards.

To make a heavy ruffle lengthen the stitch of machine and move adjusting nut 5 downward. Ruffling can always be duplicated by remembering the numbers on scale of ruffler arm, tension and stitch regulator.

TO RUFFLE ON BAND. Place band under both springs next to feed and over lip 9. If facing is required, place facing above both springs and under foot. Place the goods to be ruffled same as in

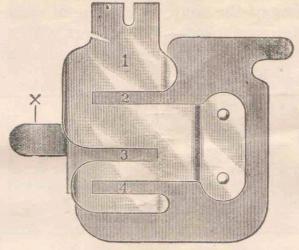
plain ruffling.

TO RUFFLE WITH A HEADING. Place the goods to be ruffled between the springs with heading to the right and adjust gauge 10

for desired heading.

TO MAKE SCALLOP RUFFLING. Remove gauge 12; cut Lonsdale cambric in strips one inch wide lengthwise of the goods. Fold in the center and press the folded edge down smooth, adjust the goods with folded edge to the left and between the springs. When sewing move the goods to the right and left alternately. Adjust fullness, bands, facing, etc. same as regular ruffling.

16



SHIRRING

Remove hand hole cover, insert ear of shirring plate into gauge screw hole in needle plate, and holding down the shirring plate replace hand hole cover over ear X on shiring plate.

Loosen screw 4, shown in illustration on page 16 and remove separator, placing the

goods to be shirred between the blades, and shirr at any desired distance.

Be careful not to use ruffler without the separator or shirring blade and cloth above, for in so doing the ruffler teeth will be broken or injured.

To put ruffling on a band edge, stitched, with or without piping, take striped calico or plain colored goods, cut on the bias in strips full one half inch wide, folding in center. Place the piping in guide 7 with folded edge to the right, then take the band and turn down on edge a quarter of an inch and place in guide 6 having both ends down under foot. The guide can be adjusted to right or left by loosening screw 11. Place the ruffling to the right between the blades and in guide 13; if wider ruffling is desired remove separator and use shirring slide. To use facing with shirring slide place facing under shirring blade 1 and in guides 2 and 4.

TO ADJUST RUFFLER FOR THE 5 TO 1 STITCH

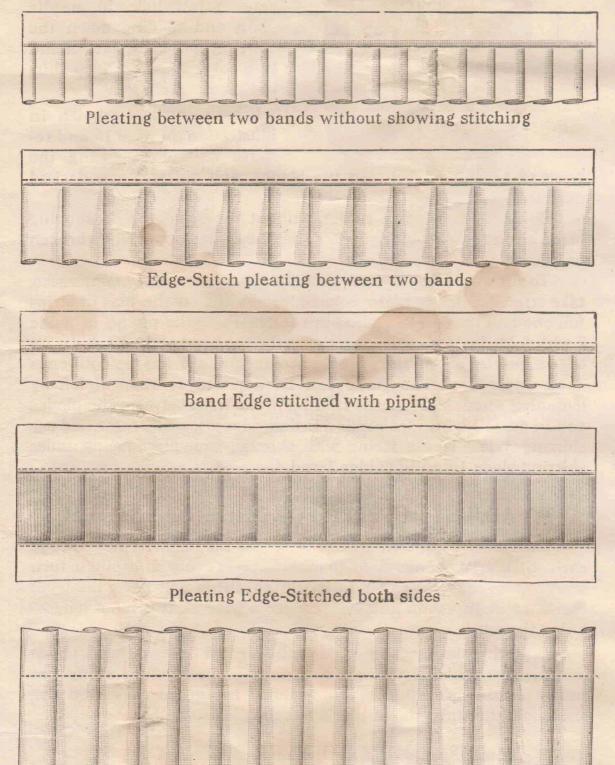
The ruffler as shown in cut is set for the regular one gather to each stitch. To change so as to make a pleat every fifth stitch, turn screw "C" to the right as far as it will go. This will bring the lever marked 5 St, in action and will produce a wide pleat without lengthening the stitch.

In placing the goods in ruffler to be pleated or if you wish to use bands, piping, etc. follow same directions as in regular ruffling. In heavy pleating the adjusting nut 5 should be turned entirely down, the longer the stitch the farther apart the pleats will be.

TO ADJUST RUFFLER BACK FOR REGULAR RUFFLING

Turn the screw "C" to the left as far as it will go.

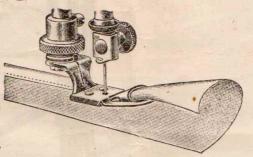
The following cuts show a few of the many varieties of work done on the five stitch ruffler, It does not require an expert; with a little care and patience in following directions, you can produce a great variety of work with ease and satisfaction.



Flounce Pleating of any width

HEMMING

We furnish with each machine our assorted widths of hemmers. Select the width desired and substitute it for the presser-foot. Take the cloth in both hands, the right hand in front of the hemmer and the left behind. Place the edge of the cloth in the hem-



mer drawing it back and forth until the hem is formed, stopping with the end under the needle. Drop presser-foot and commence to sew. Guide the cloth so as to keep the hemmer full. To change stitching near or far from edge, loosen thumb screw and move hemmer to right or left as desired and tighten screw.

BINDING

Remove the presser-foot and substitute the binder. Cut the binding % 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

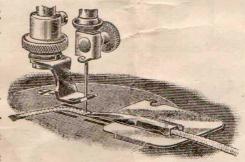
cloth with the left hand, and let the binding glide easily through the fingers of the right. To change the stitching near or far from the edge, move binder lug A to right or left as desired.

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.

Stand for Nos. 74, 75, 76, and 85 RIGHT LEG 625 BALANCE WHEEL BRACE 437 DRESS GUARD TREADLE 565 TREADLE SUPFORT 563 364 516 564 553 622 619 634 632 20

Parts for White Sewing Machines may be Secured Anywhere

List of Stand Parts for Ball Bearing Stands, White Box Top, White Automatic Swing Drops Nos. 70, 74, 75, 76, 77, 80 and 85 and Cabinets Nos. 72, 73 and 78

206	Screw to fasten link No. 621 to plate	570 Stud in dress guard for balance wheel
-	No. 630	568
207	Adjusting screw in lower end of pitman	571 Nut to fasten stud 570
209	Screw to fasten stud in treadle, treadle	572 Rear cone for balance wheel stud 570
	centers in treadle support and crank	573 Front cone for balance wheel stud 570
	pin in balance wheel	574 Ball race in balance wheel hub
911	Screw to fasten dress guard and brace to	575 Ball retainer for ball race 574
211	leg	576 Crank pin in balance wheel, for pitman
000		
	Stand caster	(including rear cone)
224	Pin in stand caster	577 Front cone for crank pin 576
225	Wood screw to fasten swing drawer to	578 Ball cage for crank pin balls, with balls
	table	*579 Pitman for No. 77
231	Stud in treadle, for pitman	*580 Treadle support for No. 77
309	Felt head tack	*581 Right leg for No. 77
	Set screw to tighten balance wheel cone	*582 Left leg for No. 77
7.55	573 and crank pin cone 577	*583 Pitman for box top
379	Balls for balance wheel and pitman, per	*584 Treadle support for box top
010	100	*585 Right leg for box top
*201	Brace for box top	*500 Toff low for how top
		*586 Left leg for box top
	Dress guard for box top	*587 Balance wheel for box top
	Rest pin in table for box top	*588 Stud in leg for balance wheel 587
	Brace for Nos. 74, 75, 76 and 85 drops	589 Treadle support for Nos. 72, 78 and
Marie Color	Pin in head carrier for slotted stop	cabinets
	Screw to connect cable to lid	*590 Pitman for Nos. 72, 73, 78 cabinets.
517	Screw to connect cable to lever	*592 Treadle for box top
519	Nut for adjusting stud	599 Wire bail for belt grip
*530	Drip pan for Nos. 70, 74, 75, 76, 77,	600 Clip for 599
	80 and 85	601 Spring for 599
531	Spring for swing bottom	*603 Treadle for No. 70
	Eyelet for 531	*604 Treadle support for No. 70
	Drip pan for Nos. 72,73 and 78	*605 Brace for No. 70
	Latch plate for vibrator head carrier	619 Cable adjusting lever
*550	Treadle for No. 80 drop	620 Adjusting stud and plate for cable lever.
*	Treadle support for No. 80 drop	621 Link to connect swing front to head
500	Caster for No. 80 drop	carrier
202	Treadle support for Nos. 74, 75, 76 and	622 Cable (20 in. long) for Nos. 70, 72,
F 0.4	85	74, 75, 76, 77, 78, 30 and 85
	Screw to fasten treadle support to leg	623 Cable guide
565	Treadle for Nos. 72, 73, 74, 75, 76, 77,	625 Right leg for Nos. 70, 74, 75, 76 and 85.
	78, and 85	626 Left leg for Nos. 70, 74, 75, 76 and 85
566	Treadle center	627 Brace for No. 77
567	Pitman for Nos. 70, 74, 75, 76, 80 and	*630 Support for cable adjusting lever No. 619
	85 drops	631 Head carrier hinge
568	Balance wheel for Nos. 70, 72, 73, 74, 75,	632 Pin for head carrier hinge No. 631
	76, 77, 78, 80 and 85	634 Swing cover for corner of head carrier
569	Dress guard for Nos. 70, 72, 74, 75,	*636 Treadle support for No. 73 cabinet
	76, 77, 78, 80 and 85	869 Latch plate on head carrier for 865
		ood Datest plate off fiead carrier for 000

Numbers preceded by a star (*) are not illustrated.

Where the parts such as pitman, treadle rod, etc. are ordered to be sent by mail, postage will be charged thereon,

JUST one more time saver which the busy user will eagerly welcome—a Scissors Gauge with which one can easily and accurately cut bands of various widths, either straight or on the bias.

It's an attachment, the value of which will be grasped on sight by every sewer and highly appreciated for its thorough utility.

This attachment is included free with the attachments supplied with this machine.

THE SCISSORS GAUGE

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

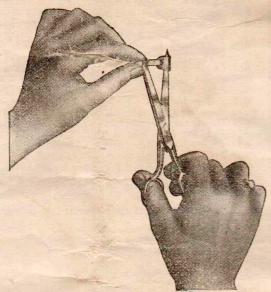
Place the gauge upon the scissors, as shown in the illustration, slip the edge of the cloth in the gauge and proceed to cut the band. The tape of the binder should always be cut on the bias, also the piping which is used with the ruffler.



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.

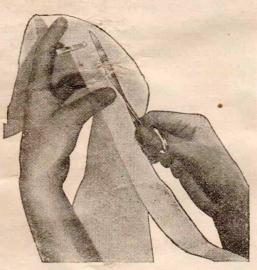
C is for corded or plain piping. The piping is cut bias and folded double to use with the ruffler.



Placing the Gauge on the Scissors

Buy a yard of 44 inch lawn. Cut it into bias strips % to 15-16 of an inch wide. Roll it on cardboard and keep it in the machine drawer. It will furnish the binding for the inside seams of the white sewing for months to come.

With the aid of this gauge any number of folds may be cut of exactly the same width. Those who have tried know the difficulty of doing this with the scissors alone. Everyone who uses a bias gauge is delighted with it.



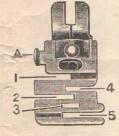
Cutting a Bias Band with the help of the Gauge.

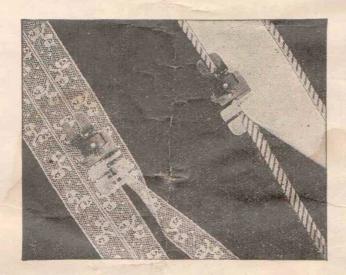
THE EDGE-STITCHER

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.

This Attachment is very useful in trimming such articles of clothing as aprons, women's and children's dresses and underwear, shirtwaists, silk blouses, boys' rompers and suits, or for articles for household decoration such as fine bureau scarfs and thin curtains, baby carriage covers and doillies.





Very beautiful effects may be obtained in yokes, guimpes, sleeves, collar and cuff sets, vestees, fichus, lace waists, camisoles, etc. by joining rows of lace insertion, alternate rows of lace and embroidery insertions, or alternate rows of tucking and lace insertions.

The folded tape, which may be purchased in any department store in all colors, qualities and widths, is indispensable to use with this attachment. The folded piping, which may also be purchased reducturned, will exactly fit the piping slot in this attachment.

How to Adjust the Edge-Stitcher

To adjust, move the lug A (see illustration) 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.

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 the guide.

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

Practical Uses of the Edge-Stitcher

- 1. Sewing lace and insertion together.
- 2. Sewing lace and embroidery insertions together.
- 3 Piping plaits and belts for children's clothes.
- 4. Sewing tape to top of stocking to prevent "runners" (patented).
- 5. Sewing insertion on material afterward cutting material away and turning edges back.
- 6. Sewing lace on edge of hem.
- 7. Setting in insertion with edges edge-stitched.
- 8. Sewing lace and ribbon together.
- 9. Covering seams with bias bands or finishing braids.
- 10. Sewing braid on heavy suits and dresses.
- 11. Sewing on bias bands for trimming-straight or curved.
- 12. French seaming.



In joining insertions of different patterns the piece with the neatest edge should be placed in slot No. 1 and this will be the upper edge when the work is finished. Slots Nos. 1 and 4 are used for this kind of work. III. I shows rows of insertion sewn together.

being placed in slot No. 1 and the lace in slot No. 4. If the embroidery used has a heavy edge it may be found more convenient to use III. 2 shows alternate rows of insertion and embroidery sewn together. Slots No. 1 and 4 are used for this purpose, the embroidery

III. 3 shows pieces of tucking put together with rows of insertion. The edge of the material is folded and placed in slot No. 1 and the slot No. 2 for the embroidery as this gives a wider over-lap.

lace is placed in slot No. 4.

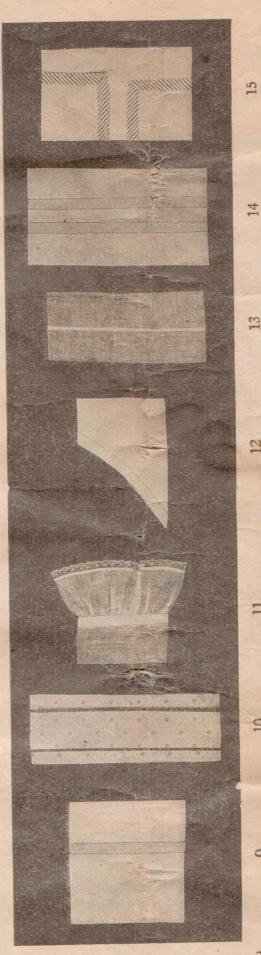
III. 4 shows ribbon and lace sewn tagether. The ribbon is placed in slot No. 1 and the lace in slot No. 4. This sort of work is very III. 5 shows a band of embroidely finished on edge with lace edging. The embroidery is placed in slot No. 1 and the lace in slot 4. popular for making camisoles and trimming underwear.

III. 6 shows lace insertion used as trimming. The insertion is placed in slot No. 1 and the material underneath the Attachment. The free edge of the insertion is then sewn in position with the presser-foot. The material is then cut away from the under side and the edges

III. 7 shows braid sewn to the garment to be used in trimming. Braid, ribbon or velvet may be used in this manner and is inserted in slot No. 1 with the garment underneath the Attachment. It is best to make a crayon mark or fold to indicate where the stitching is to come. turned back and a second row of stitching added for finish and strength.

III. 8 shows bias-folded material sewn to the edge of a garment to be used as a finish and trimming. This sort of trimming is used for aprons and children's clothes. The bias-folded material is inserted in slot No. 1 and the edge of the garment in slot No. 5 with the garment wrong side up, then fold the bias material back on the right side and stitch in position with the presser-foot.

PRACTICAL SUGGESTIONS



The folded tape is inserted in slot No. 1 and the edge of the hem in slot No. 5. Then turn hem and sew other edge in position with the Presser-foot. III. 9 shows folded bias tape sewn on the top of a hem for a finish.

III. 10 shows a box plait piped. Insert the piping in slot No. 3, and the edge of the plate in slot No. 4 for the wide piping effect.

narrow piping is desired insert the piping in slot No. 3 and edge of plait in No. 1.

III. 11 shows bias-folded material used to cover a seam. The folded strip is placed in slot No. 1 and the material underneath the Attachment. Care must be taken to keep the row of stitching as close to the seam stitching as possible. The free edge of the bias strip is then sewn in position with the Presser-foot.

III. 12 shows bias-folded material used to finish a curved edge. This finish is practical for underclothes. Insert the bias-folded material in slot No. 1 and the garment in slot No. 5. Turn the bias strip back and add a second row of stitching with the Presser-foot.

III. 13 shows a French seam stitched with the Edge-stitching Attachment. After the seam is stitched with the Presser-foot and the material turned on the wrong side ready for the finishing, it is inserted in slot No. 5 and adjusted to the proper distance. This is especially practical for fine work where the seam shows through the garment.

III. 14 shows bias-folded majerial sewn in position. To be used for boning or as a stay for children's underwaists, or for brassieres. The folded tape is inserted in slot No. 1 and the garment underneath the Attachment.

III. 15 shows bias-folded material used as a trimming. It is quite easy to turn corners using the Edge-Stitching Attachment. To turn the outside curve stop the machine where the corner is to be turned and fold the proper amount of material over, then insert it in the Attachment and stitch until another corner is reached. It is not necessary to remove the material from the Attachment to turn the inside curve. Slot No. 1 is used for this kind of work and the garment is placed underneath the Attachment.

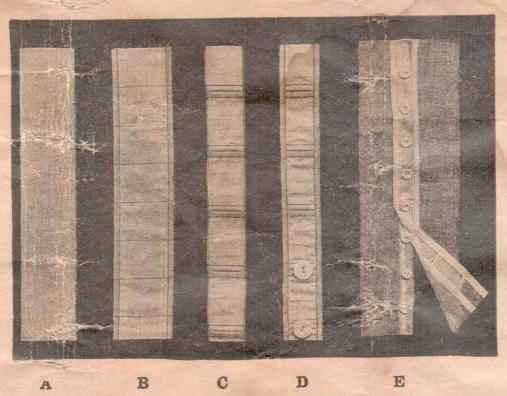
Practical Buttonholes made with the Binder and Hemmer

It is the desire of every women to understand the art of making fine buttonholes, but many women do not have the time to spend working them, even though they are skilled in the art.

Good practical buttonholes can be made on the sewing machine with the help of the Binder and Hemmer. These buttonholes are strong and durable and will wear as long as the garment. They are neat and good looking and a dozen can be made in a fraction of the time it takes to make one by hand. These buttonholes are especially practical for children's underclothes, rompers, dresses and for the backs of Princess slips.

Directions for Making

If the buttenholes are to be two inches apart, take a strip of material two inches wide and bind it as shown in B. The marks show this strip divided into sections. Each section is one-half inch wider than the button. If your button is one-half inch across add one-half inch, thus cutting your strip into pieces 1 inch wide. If the button is three-quarters of an inch wide, add one-half inch and cut strip into sections one and one-quarter inches wide.

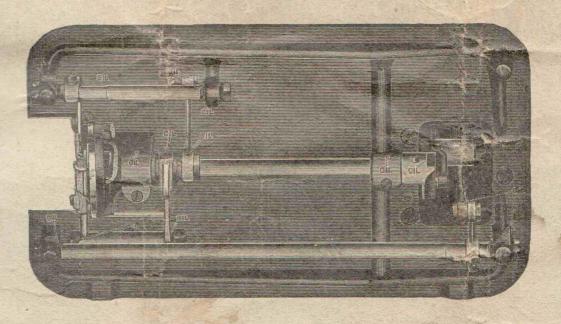


After your strip is cut into sections sew the pieces together as shown in C, using the presser-foot. Bind the edges with bias binding as shown in D. This makes a finished strip of buttonholes which are strong and practical for children's clothes.

E shows the same idea worked out with finer materials; the Foot Hemmer in stead of the Binder is used to finish the first strip, in order to get an effect dainty enough to use with dimity, batiste, etc.

E also shows the edges sewn to another piece of cloth, which in the case of practical sewing would be the garment. This is done when they are in the stage as shown in C, binding the edge of the garment in with the row of buttonholes, then stitching the free edge of the binding flat on the garment, using the presser-foot.

OIL PLACES INDICATED BELOW



KEEP MACHINE WELL OILED

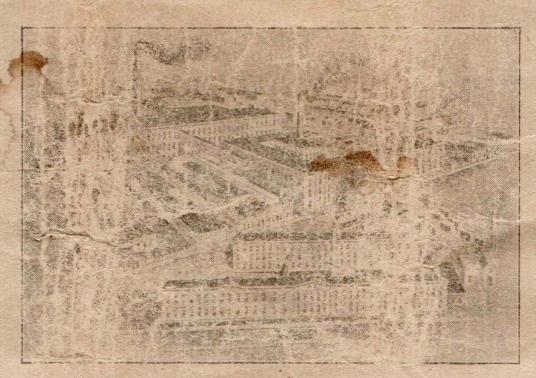
Oil in all the places indicated on page 7. To oil the under side of machine, slip the belt off the balance wheel and turn the machine back on its hinges and oil in places indicated above.

THE IRON STAND

Oil occasionals 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 thoroughly in places indicated above and on page 7, using Kerosene (coal oil) run the machine for a short time, wipe dry and oil with good sewing machine oil.



White Sewing Machine Company of Sanada, Lld. Factory, Guelph, Ontario, Canada