

Western Electric

No. 2

Portable Sewing Machine



Rotary Instruction Book

GUARANTEE***Western Electric***
Portable Sewing Machine

WE hereby warrant this Sewing Machine to stand the wear incident to family use for a period of FIVE YEARS, from the date of purchase, during which time we agree to replace all defective parts free of charge (excepting only the breakage of needles and shuttles).

This machine and motor have been carefully inspected and adjusted and there are no defects in material or workmanship. Natural wear and tear is not considered a defect in material or workmanship.

This guarantee is not valid unless you fill in and mail to us the attached postcard.

\$1253 /

Introduction

THIS is to show you how to use the Western Electric Portable Sewing Machine. It is to tell you new things about your sewing which will interest you, too, and which will help you get the best out of your machine.

Read it all, it will help you.

Many times just a simple thing will cause you trouble. You can avoid this by thoroughly knowing your machine before you start to use it. There is a photograph of the machine on page 3. Study it. It will familiarize you with each part.

Each machine is inspected, tested and well oiled before it leaves the factory. During its shipping, though, dust and dirt sometimes collect, especially around the oil holes. So clean it thoroughly with a soft cloth before you start to sew.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

General Instructions

BEFORE the machine is used clean and oil it thoroughly according to instructions on page 5.

The needle is important. Study the lesson on page 10. It shows you just how to set your needle. And when you need new ones consult the chart on page 11 for the size you should buy. It gives detailed information.

Thread the machine as shown in the diagram on page 9. Incorrect threading will cause the thread to break or loop.

Thread the bobbin case as shown on pages 7 and 8. Do not allow dirt or dust to collect under the spring on the bobbin case, as this will give you an uneven tension and will spoil the appearance of your stitch.

Unless there is cloth between, do not leave the presser foot down on the feed while the machine is running, as this injures both.

Read the motor lesson on page 4 carefully. It will show you how to start the machine and how to control it.

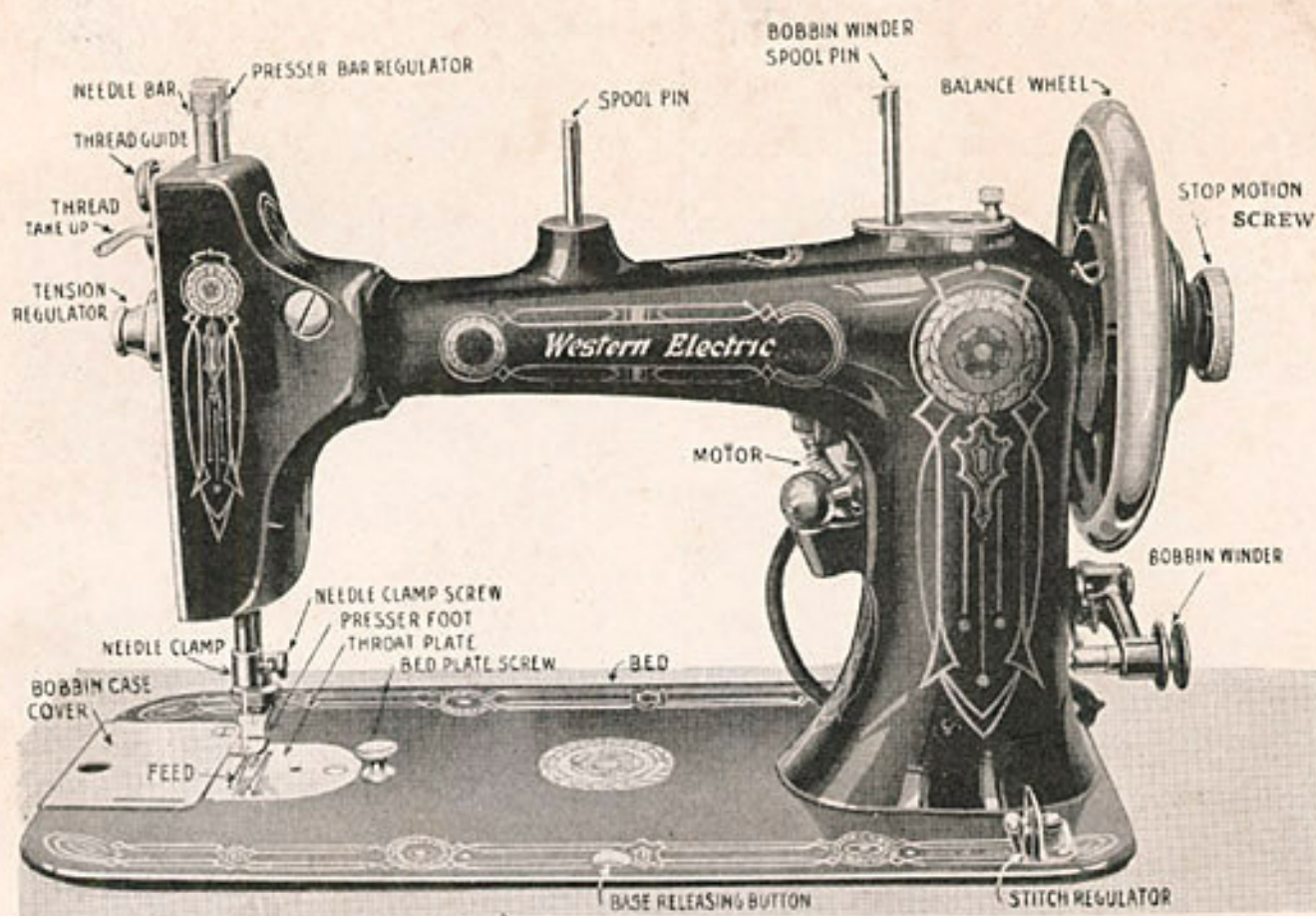
Know your attachments.

This machine is equipped with a full set of attachments. They will help you to do all kinds of family sewing. The lessons on pages 16 to 34 will show you the best use for each attachment.

Do not attempt to change any of the adjustments on this sewing machine. You will only make trouble for yourself if you do.

Do not turn any of the screws to see what they control. The machine has been properly adjusted at the factory and the adjustments **should not** be interfered with. If you have trouble and cannot determine the remedy from this book, take the question up with the dealer who sold you the machine. If this is not convenient, write us, and we will be glad to advise you.

Your Machine



The above figure has been prepared for your convenience. By referring to it you can determine the different working parts of the machine and can easily apply each lesson given in this book.

In case something goes wrong with your machine and you wish to consult your dealer, first refer to this chart. It will then be easy to explain the trouble.

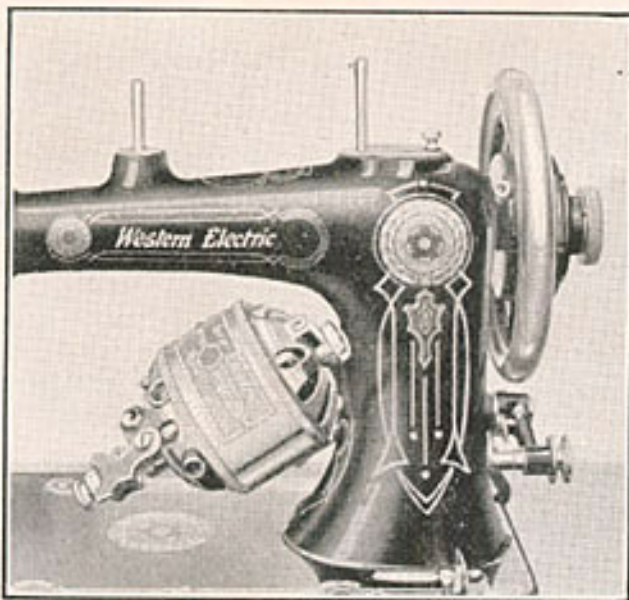


Fig. 1.—The machine with motor under arm.

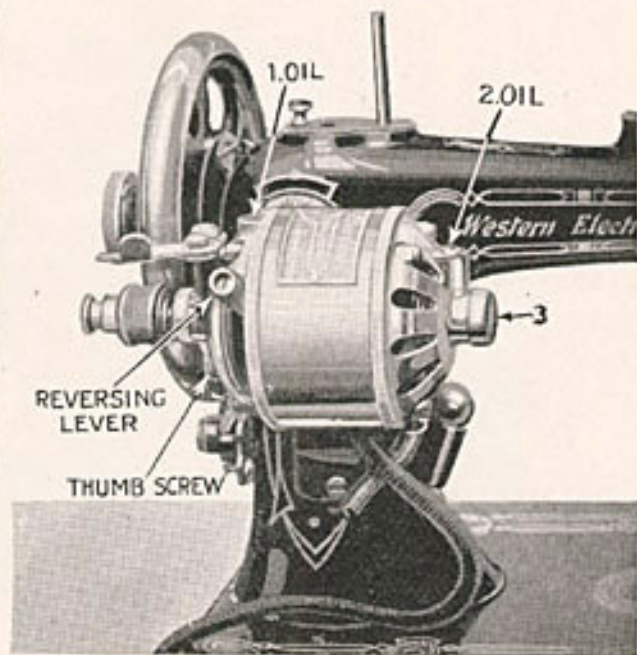


Fig. 2.—The machine with motor in position.



Fig. 3.—The foot control.

Motor Lesson

To place the motor in working position, grasp the body part and swing it around so that the cork-bound pulley is against the machine hand wheel. Fig. 2.

When the motor is not in use it is swung back into position under the arm, as shown in Fig. 1.

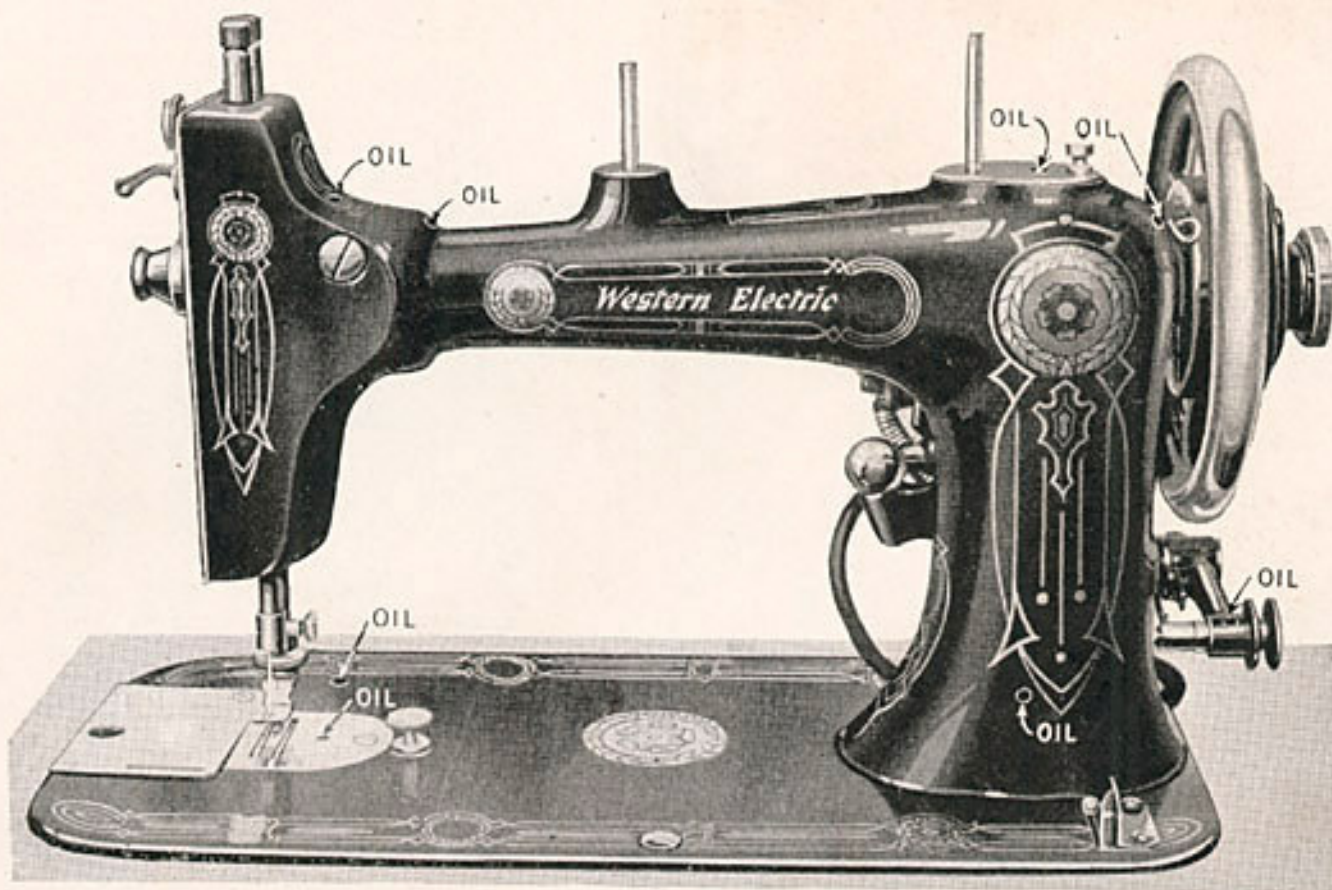
Attach the screw plug at the end of the long cord, as seen in Fig. 3, to any electric light socket and the

smaller plug on the shorter cord to the two prongs protruding from the wood base of the machine. Place the foot control on the floor and press lightly; this will start the wheel running slowly. Pressing a little harder will make it go faster. To reverse the direction in which the motor is to run, remove the thumb screw (Fig. 2) and raise or lower the reversing lever as far as it will go. Then replace the thumb screw.

Points 1 and 2 on the diagram are the only places where the motor requires oiling. A drop of good sewing machine oil once a day where the machine is used constantly by dressmakers, seamstresses, etc., or once a week where it is used occasionally, as in the home, will assure perfect running and satisfactory results.

Right above the cork pulley will be found a nickel safety plate, which, when locked on the wheel of the machine, prevents the machine from running. This is a good safety precaution.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.



The arrows show the oil holes.

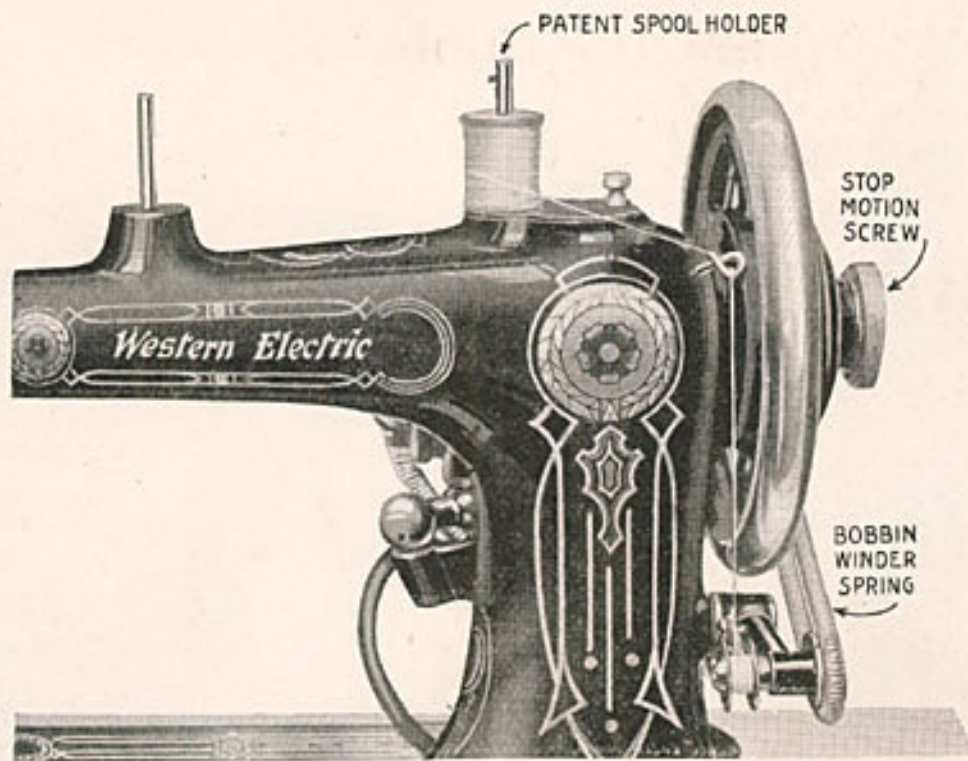
To Oil the Machine

To run your sewing machine properly, and to have it wear well, you must thoroughly oil it occasionally. If the machine is in continuous use, it should be oiled every day. With moderate use, only occasional oiling is necessary. The above figure shows you all the places you must oil. One drop at each point is sufficient.

If the machine seems to run heavily or if it makes undue noise after standing for some time, use a little kerosene in all oiling places, run the machine rapidly for a few minutes, wipe clean and then oil with best sewing machine oil.

Never use cheap oil. It will gum your machine and injure rather than lubricate the parts. It is safer to purchase your oil at a sewing machine store or sewing machine department. Occasionally, when thoroughly cleaning your machine, loosen it from the bed by pressing on the base releasing screw, shown in the figure above. Then turn the machine over back and oil all working parts.

After oiling the machine, stitch a yard or so on a piece of waste material before starting to sew on a garment. This will prevent an oily thread from being worked in.



The bobbin winder attached.

Winding Bobbins

Throw brake of motor over against the hand wheel, thus raising the small pulley off the wheel. Place the circular spring over the motor pulley and also over the bobbin winder pulley. Put the spool of thread on the special peg for winding bobbins, which has the small device at the top for holding the spool while bobbin is being wound. Run thread through the guide at lower right, insert thread in hole in bobbin—threading from inside—push bobbin on spindle until it is firm, and then start the motor. Do not fill the bobbin too full, as this prevents free turning within the bobbin case and causes uneven tension. When through winding bobbins, place the circular spring around the outside groove on the hand wheel, where it is out of the way and yet attached to the machine. This way it will not be misplaced.

Removing Bobbin Case

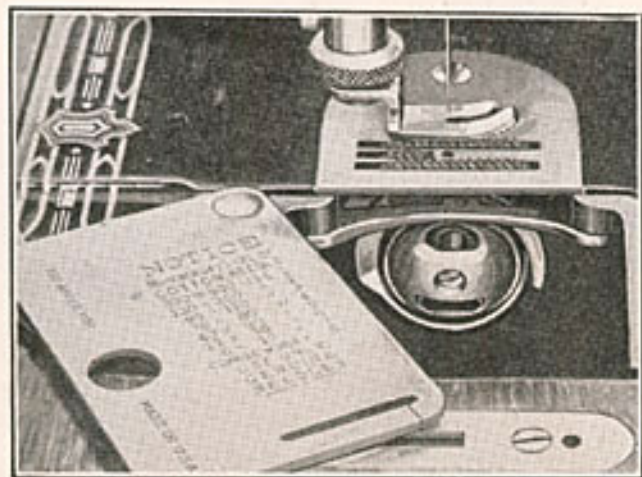


Fig. 1—Machine with bobbin case cover open.

With the left hand swing back the bobbin case cover, as shown in Fig. 1. This will allow you to insert your hand in order to remove the case.

Grasp the bobbin case with the thumb and finger of the left hand, as shown in Fig. 2, to remove it from the case.

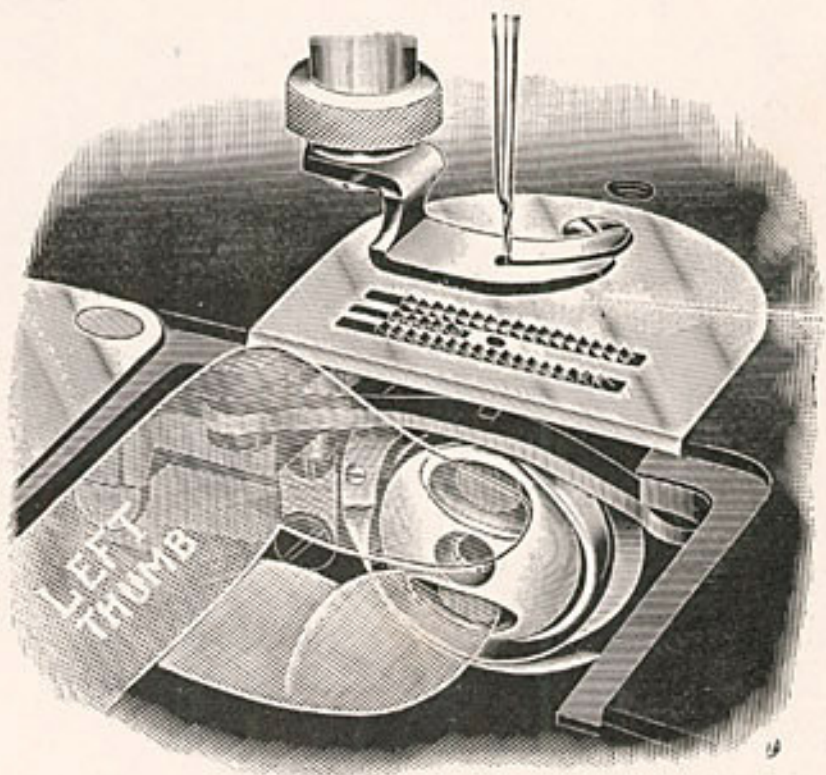


Fig. 2—Removing the bobbin case.

Threading the Bobbin Case

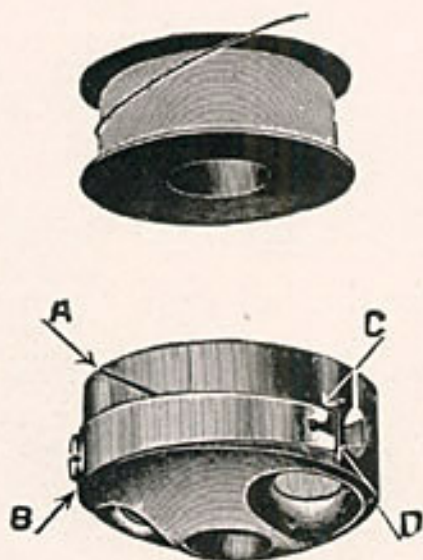


Fig. 1—The bobbin and bobbin case.

Place the bobbin in the case, making sure that the thread runs in the same direction as that shown in the accompanying figure. Hold the bobbin case in the left hand, and with the right draw the thread through slot *A*, under the spring and up through the forked ends of the spring, between *C* and *D*. *B* shows tension regulating screw.

Replacing Bobbin Case

Grasp the bobbin case with the thumb and finger, as shown in Fig. 2. The hole *G* will then be directly under the needle. Push the bobbin case as far as it will go, so you can see that the bobbin at point marked *L* fits close to the inner wall of the bobbin case.

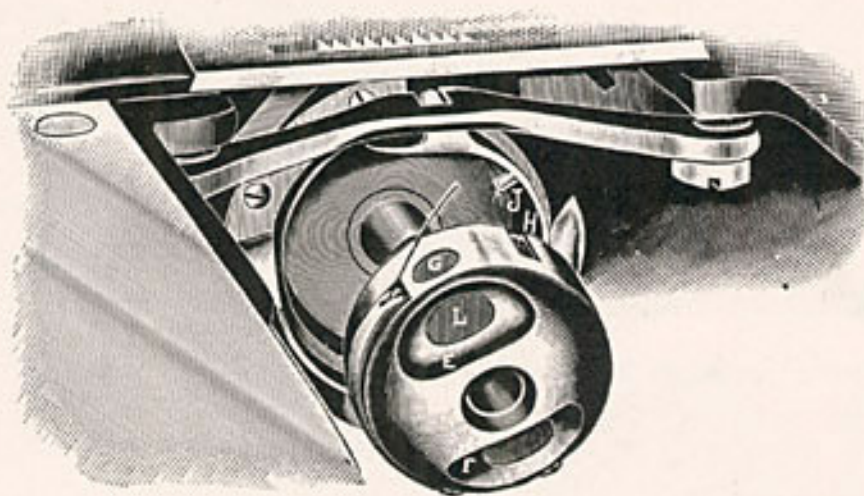
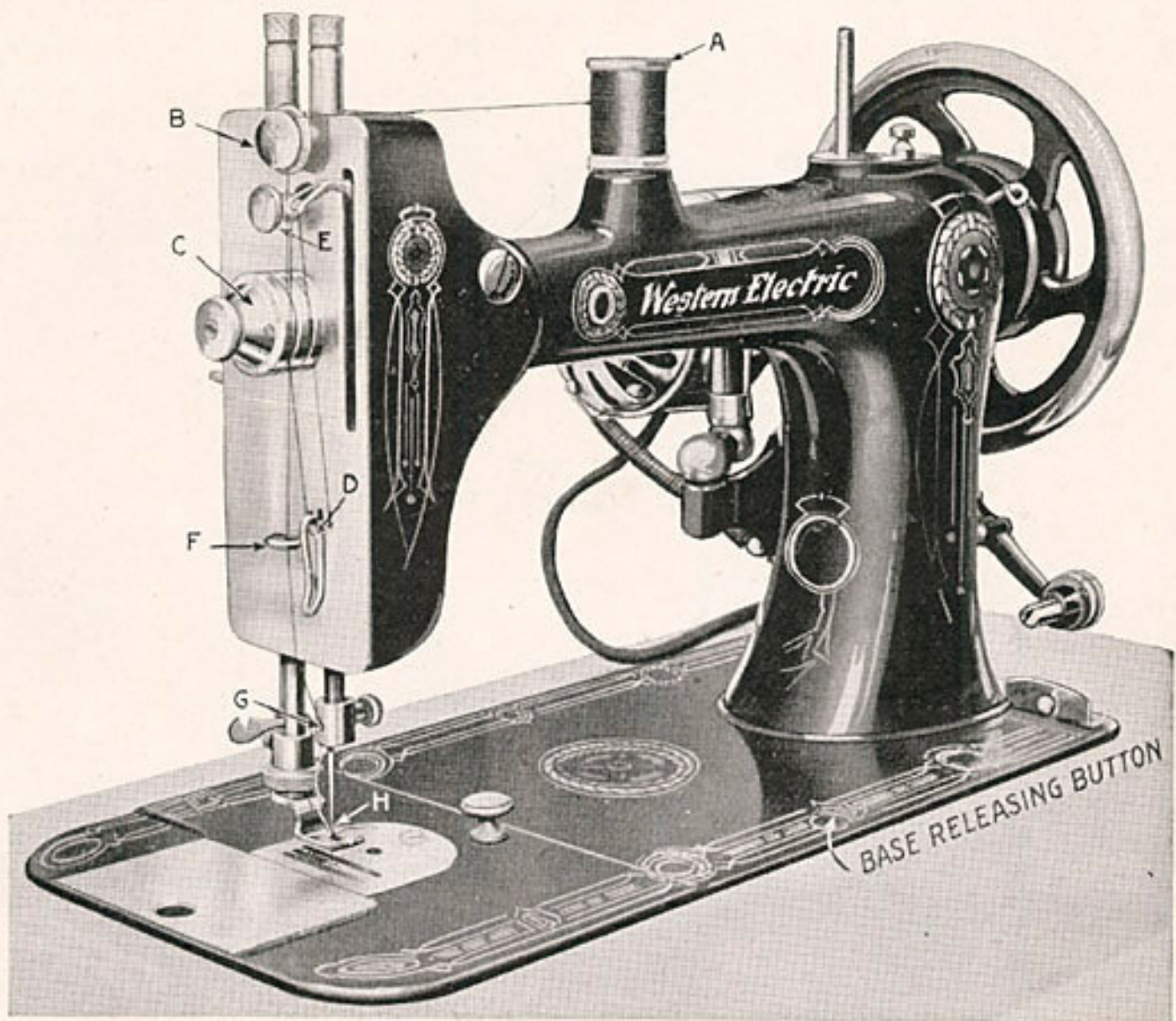


Fig. 2—Inserting bobbin in case.

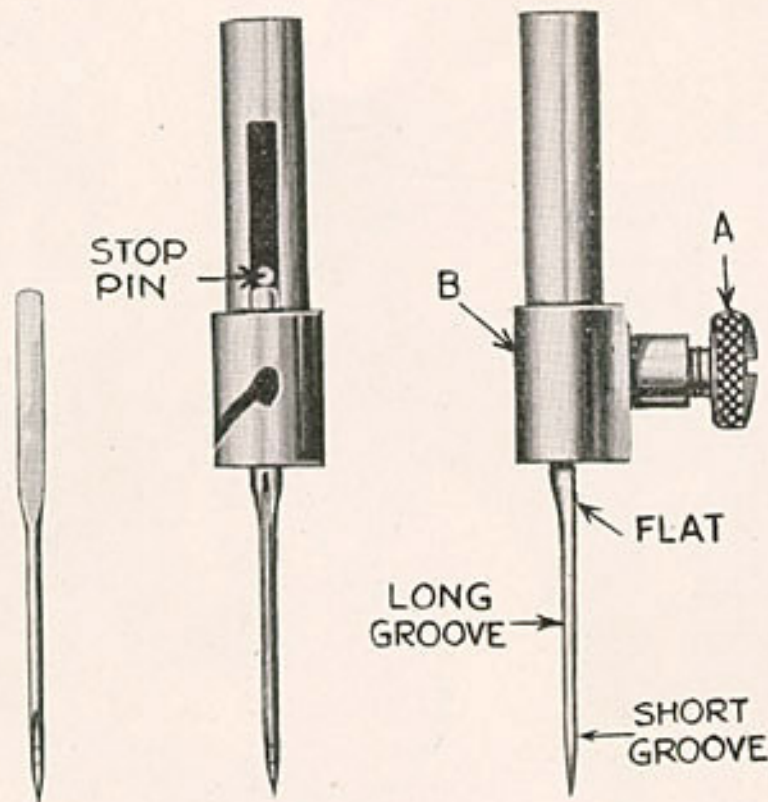
Threading the Machine



The machine threaded, showing the different thread guides.

Place thread on spool pin *A*, carry it through guide *B* and entirely around the tension *C*. Bring the thread down, then under guide *D*, making sure that the thread passes through the little spring. Carry the thread up, through take-up *E*, threading from the right to the left. Then bring it down and through guide *F* and *G* into needle *H*.

Setting the Needle



Needle; needle bar and needle; needle clamp screw.

Raise the needle bar to its highest point, then loosen the needle clamp screw *A* with the large screw driver which comes in the box of attachments. Take the needle between the thumb and forefinger of the left hand, pass the shank up into the slot of the needle bar *B*, with the *flat side of the shank* toward or against the needle bar, until the end of the shank sets firmly against the stop pin. Then turn the *needle clamp screw* tight with the screw driver.

When purchasing new needles measure them with the above figure to make sure they are the proper length. Select the proper size needle by using the table on the next page. The thread should match the texture of the material you are sewing with as nearly as possible. There is a table of sizes on next page. If the store which sold you your sewing machine cannot furnish you with new needles, write to the Western Electric house nearest you.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Sizes of Needles and Thread

Sizes of Needles	Class of Materials	Sizes of Silk and Cotton
2	Very fine silk or chiffon	120-200 cotton 00 silk
3	Fine cotton goods, organdie lawn and silk	90-110 cotton 0 silk
4	Shirting, sheeting, muslin, all classes of household linen and underwear	70- 80 cotton A-B silk
5	Heavy muslin. Woolen goods	40- 60 cotton C silk
6	Ticking, woolen goods, boys' clothing, coats, etc.	30- 36 cotton
7-8	Coarse work. Heavy stitching only	0- 10 cotton

Needles for Western Electric No. 2 Portable Sewing Machine

Any of the following will fit:

Acme	Comus	Eudora	Household Queen
Albaugh Dover	Cottage	Excelsior B B	Housewife
Aloha	Cresecent	Expert	Howard
Always Ready	Courier Journal	Falcon	Hudson
Alma	Crown	Family Friend	
Alva		Famous	I X L
Amazon	Damascus	Farm & Ranch	Idalia
American No. 9	Dauntless	Faultless	Imperial
American Union	Decorah Posten	Favorite	Improved Belvi-
Arlington	Defender	Field	dere
Ashland	Defiance	Fireside	Improved El-
Atchison	De-Soto		dredge B
Austin Special	Detroit	Galloway	Improved Fault-
	Dixon	Gayoso	less
Banner	Druid	Germania	Improved Melville
Bartlett	Duplex	Golden Eagle	Improved Seam-
Beauty		Goldsmith	stress
Belvidere	E & B Ball Bear-	Gold Medal	Invader
Blade	ing	Goodrich	Invincible
Bonita	Edgemere	Grand	Iowa
Brunswick	Eldorado		
Burdick	Eldredge B.	Hackett	Jewell
	Eldredge Rotary	Harris	
Century	N. S.	Happy Home	Kautauk
Challenge	Electric City	Hazel	Kenwood
Champion	Elgin	Helping Hand	Keystone
Clayton	Elmira	Hibbard	Kirkwood
Climax	Elmo	Hickory	
Clover Leaf	Elvia	Home Comfort	La Belle
Co-Lee	Empress	House & Farm	La Belle Special
Columbia	Enterprise	Home Pride	Leader
Columbus	Envoy	Homestead	

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Manchester
Majestic
Mars
Marshall-Wells
Marvel
Maryland
Mason
Matchless
Merrill
Meteor
Midland B
Milwaukee
Minneapolis
Momus
Monarch
Montgomery Ward
& Co.

New Age
New Century
New Champion
New Crown
New Empire
New England
Queen
New Era
New Fireside
New Florence
New Goodrich
New Ideal
New Improved
New Jewett
New Model
New National
New Royal

New South
New Sterling
New Treasure
New Victor
Niobe
Nonpareil
Northern Queen
Noxall

Ohio
Old Homestead
Olympia
Oregon
Oriole
Oritania
Our Leader
Oxford

Pan-American
Paveway
Peerless
Pelham
Perfection
Pilgrims
Pioneer
Perfect
Plymouth
Popular
Prairie Queen
Premier
Princess
Princeton
Pritzlaff
Progress

Proteus
Quaker
Queen
Queen of the West

Ranier
Regal
Regina
Reliable
Reliance
Republic
Rev-O-Noc
Rich-Con
Rival
Riverside
Royal St. John
Ruby
Run Easy

Scandinavian
Schuneman &
Evans
Seamstress
Secera
Service
Silent Princess
Singer High Arm
Singer V S No. 1
Sinoloo
So Easy
Southwell
Spear Edge
Spiegel's
Stanley

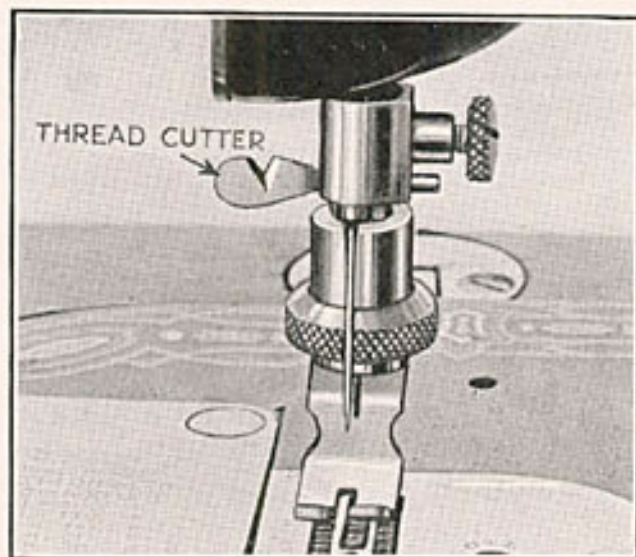
Star
Stauffer
Sterling
Strange
St. John
St. Paul
Sunflower
Superior

Temple
Triumph
Tidende
Tuxedo
Twentieth Century

Velox
Victoria
Vindex B
Vindex Special
Volo
Vulcan

Wabash
Waltham
Waverly
Wear Well
Western Electric
Whitehill B
Winchester
Windsor
World's Fair
Wright
Wyeth
Zenith

The Thread Cutter



Thread Cutter.

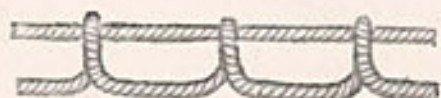
Loosen the smaller screw at the back of the presser bar, so it will allow the thread cutter to be slipped into position through the hole in the bar. The thread cutter will be found in the small envelope in the box of attachments.

To Regulate the Tensions

An important feature of this machine is that it has an automatic upper tension. It requires little or no regulating. Before the machine is sent out it is tested at the factory. This test covers a wide range of thread and fabric and includes all the ordinary conditions that the machine will be called on to meet.



No matter what kind of material you are using, the thread should lock in the center, as shown in figure at left.



If the under tension is too loose or the upper tension too tight, the thread will lie straight along the surface of the material, as shown in figure at left.



If the under tension is too tight or the upper thread too loose, the thread will lie straight along the under side of the material, as shown in figure at left.

It is better to try and regulate your tension from the shuttle whenever it is necessary, as the upper tension is automatic and is properly adjusted. However, if you find it necessary to adjust the upper tension, loosen the tension regulating screw (see page 3) by turning it to the right to tighten, and to the left to loosen.

The under tension is governed by the spring. (See Fig. 1, page 8.) To adjust, loosen or tighten the screw.

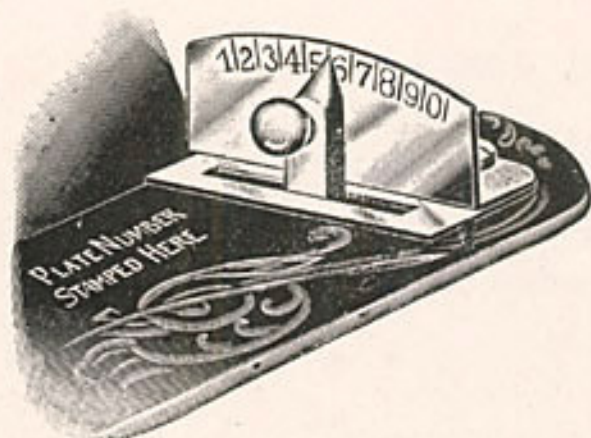
To Remove Knots of Thread from Upper or Lower Tensions

Many times when you are unable to make a perfect stitch you will find that a knot of thread is caught either in the upper or lower tension. To remove a knot from the upper tension, force the disc plates, where the thread is inserted, far enough apart to release or remove the knot. To remove a knot of thread from the lower tension, loosen the spring screw (see Fig. 1, page 8) and slightly raise the spring.

The upper tension can only be regulated when the presser bar is down, as the tension is released when the bar is thrown up. This allows you to remove your work easily and with no danger of breaking the thread.

To Regulate the Length of Stitch

The numbers of the index plate from 1 to 0 indicate long and short stitches. By moving the indicator from you to No. 1, the machine will



Stitch Indicator.

sew 6 stitches to the inch; while if you move it towards you to No. 0, it will sew 34 stitches to the inch. You may sew any desired length stitch by moving indicator to the point on the scale to suit the length of stitch wanted. The indicator automatically locks itself at all points, doing away with fastening screws and levers.

To Regulate the Pressure on the Material

In ordinary sewing it is seldom necessary to change the pressure of the presser foot on the material. In sewing fine silks, chiffon or other delicate fabrics, lighten the pressure by turning the presser bar screw up. (See figure on page 3.) This releases the feed from the material and prevents prints or roughness to appear on fine materials.

To increase the pressure when sewing heavy materials or over heavy seams, turn this regulating screw down.

To Sew on the Bias on Fine Materials

Use a short stitch and a light tension on the upper thread, so the thread is left loose enough in the seam to allow the goods to stretch, if necessary.

A Basting Stitch

Use the longest stitch the machine will make and a loose upper tension. This stitch can easily be pulled out.

To Commence Sewing

After the machine is threaded up, pull up the under thread by turning the hand wheel over with the right hand, while holding the thread with the left hand. Allow the needle to enter the needle hole to pick up the under thread. Both threads should then be pulled to the back of the presser foot. Lower the presser bar after the cloth is inserted, and begin to sew, regulating the speed with the pressure of the foot on the motor foot control.

To Remove the Work

Stop the machine with the thread take-up at the highest point, raise the presser bar and draw the fabric back. Pass the threads over the

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

thread cutter and pull down gently to break them. Leave the end of the threads about three inches long, so the upper thread will not pull through the eye of the needle when you start to sew again.

To Avoid Breaking Needles

See that the presser foot or attachments are securely fastened to the presser bar by means of the thumb screw and that the needle passes through the center of the hole or slot. Do not sew heavy seams or thick goods with too fine a needle. Use the diagram on page 11 for the correct size of needle and thread to correspond to materials. Avoid pulling the work while stitching, merely guide the cloth and the feed will carry it along.

Causes of Upper Thread Breaking

When the upper thread breaks it may be caused by—

- Incorrect threading of machine;
- Tension too tight;
- Thread too coarse for needle;
- Needle bent, blunt-pointed, or set incorrectly.

Causes of Shuttle Thread Breaking

This may be caused by incorrect threading of the shuttle case or too tight a tension. Or it may be because the bobbin is wound too full to revolve freely in the shuttle.

Skipping Stitches

The needle may not be properly set; it may be blunt or bent. The thread may be too heavy for the size of needle. Needle may be too short.

Importance of Learning to Operate the Attachments

To make dainty trimmings, you will find you must know a little more than plain stitching. You must know how to use the attachments which are a part of your machine. Innumerable dainty dress trimmings can be made entirely by the use of these attachments.

If you learn to operate your sewing machine, taking advantage of all the labor-saving devices which are provided for you, you will be rewarded by being able to do beautiful work. You will find you can make many of the exquisitely finished articles which you may feel are too expensive to buy in the stores—things for either you or your children to wear; things for the home—and at a saving of from 40 to 70 cents a dollar on the store prices.

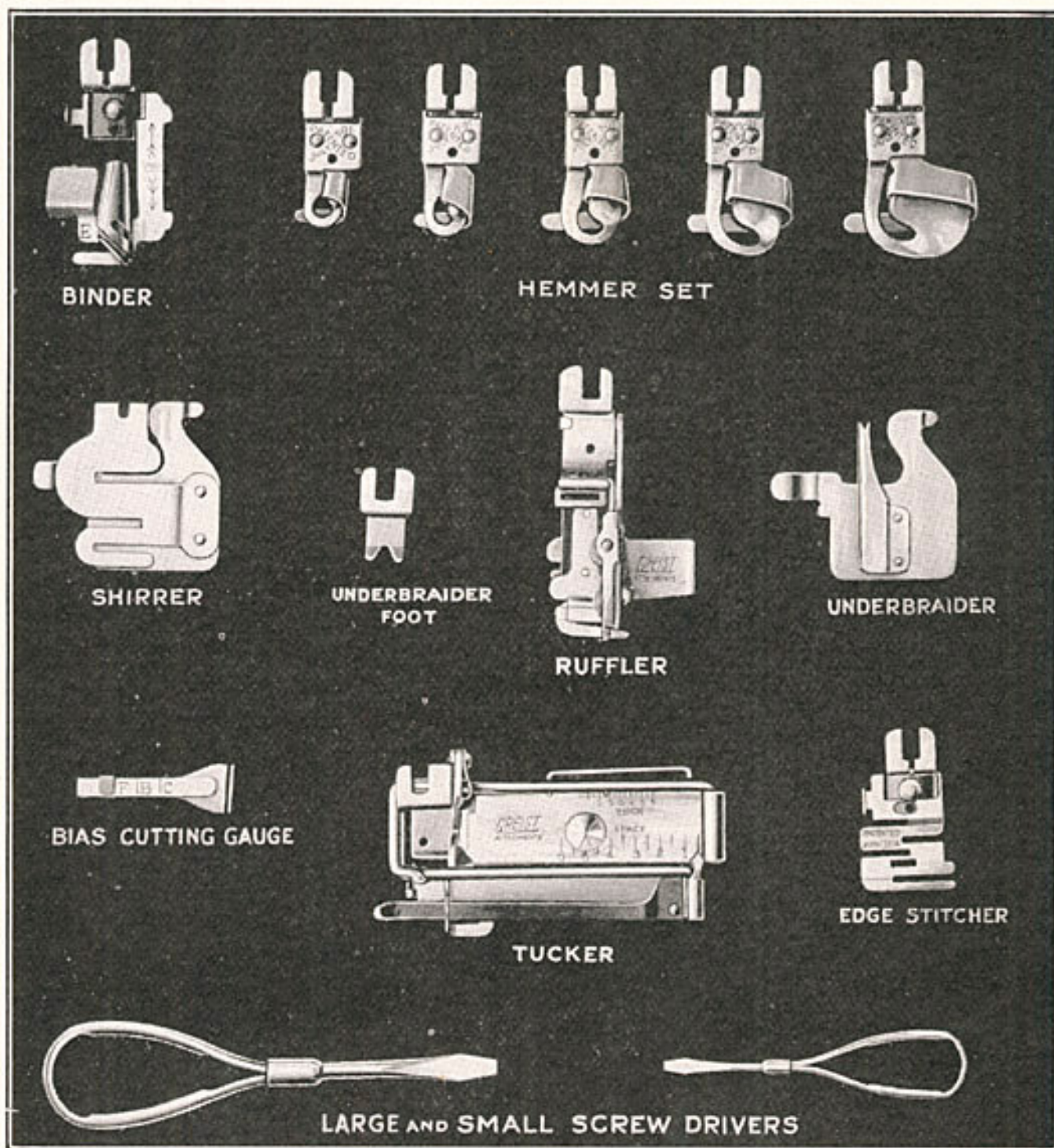
The Set of Attachments

Do not make the mistake of neglecting to use the attachments which are supplied with this machine. If you do, you will miss much of the fun of your machine. You will find them so simple to operate that with a little practice you will be able to use them all efficiently.

You will be surprised with the amount of work you can accomplish and the amount of time you can save through their use. You will be justified in taking all the time necessary to learn to operate them.

When you have mastered the Ruffler, Tucker, Binder, Hemmers, etc., you will feel less inclined to buy so many ready-made garments. You will be far more apt to do more home sewing—so many hours of hand sewing will be saved.

The Attachments



The Foot Hemmer

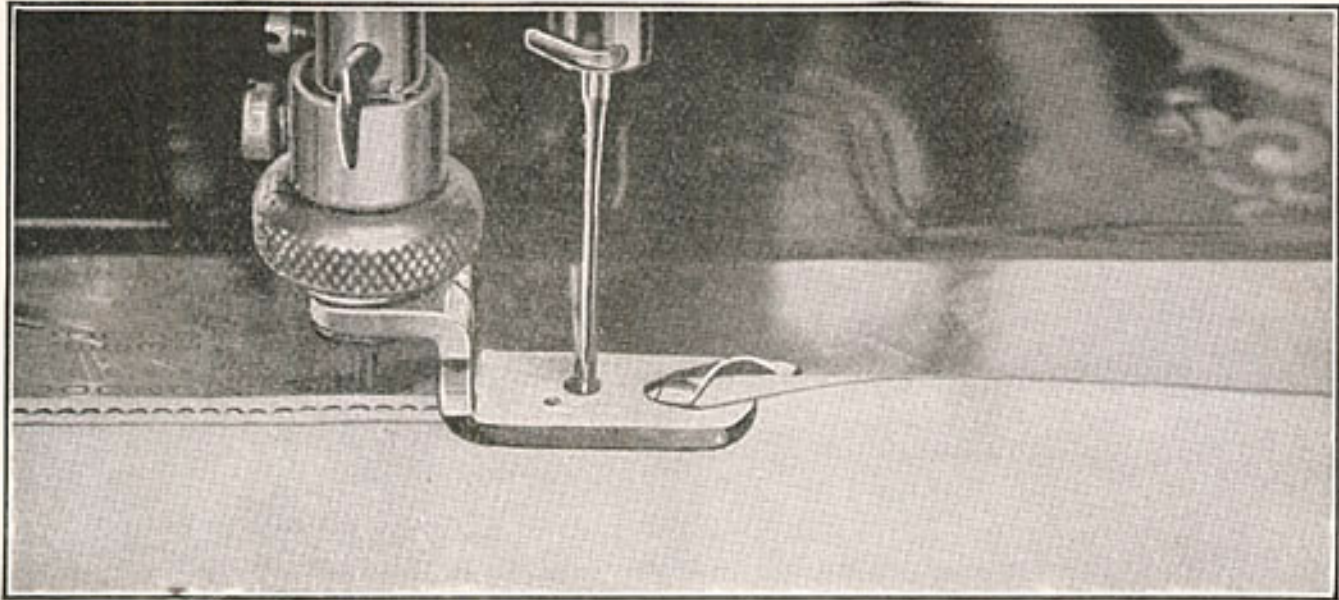


Fig. 1—Foot hemmer hemming.

With the presser bar raised, turn the hand wheel until the needle is at the highest point. Remove the presser foot by loosening screw ring in the above figure. Then draw the foot forward. Substitute the foot hemmer, pushing it as far on the bar as it will go. Then tighten the screw firmly.

Beginning at the corner of the material where the hem is to start, fold over about one-eighth inch for a distance of two inches. Insert the cloth in the hemmer with the fold uppermost and gently push it back under the needle. Lower the presser bar, and after taking two or three stitches, draw gently on the ends of the thread until the goods is well under the feed. Guide the cloth with the right hand, as shown in Fig. 2, keeping the hemmer scroll filled at all times. If too little cloth feeds in, hold the material to the right. If too much, guide the cloth to the left.

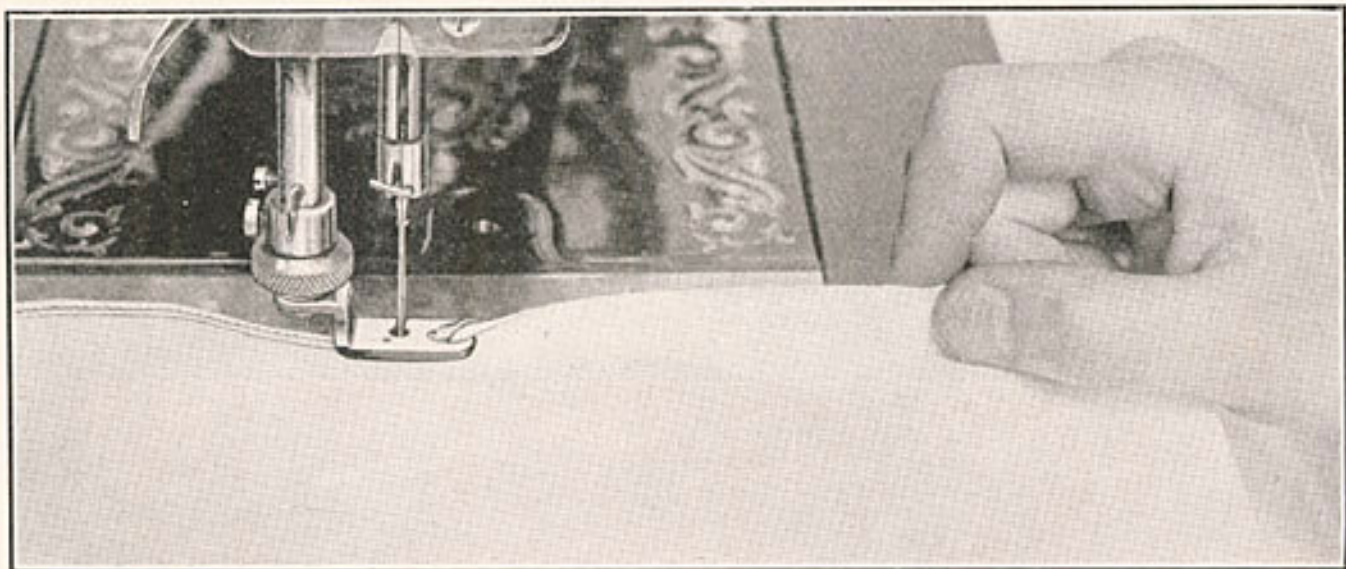
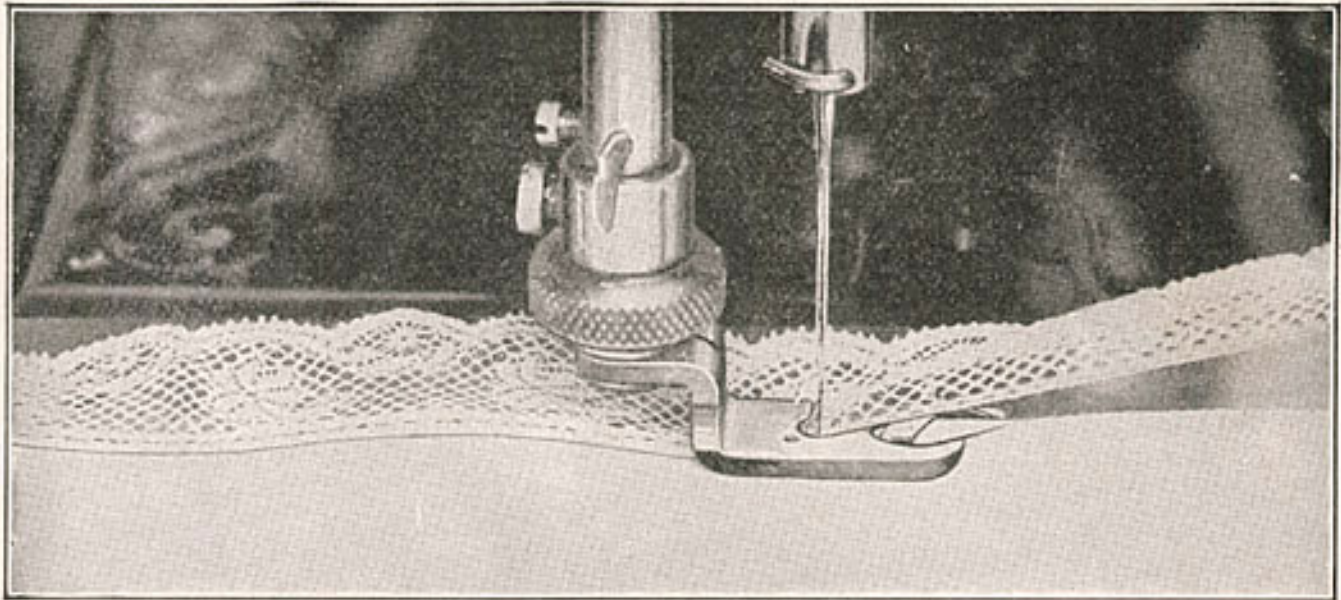


Fig. 2—A nice hem.

“Sewing Efficiency” gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Hemming and Sewing on Lace



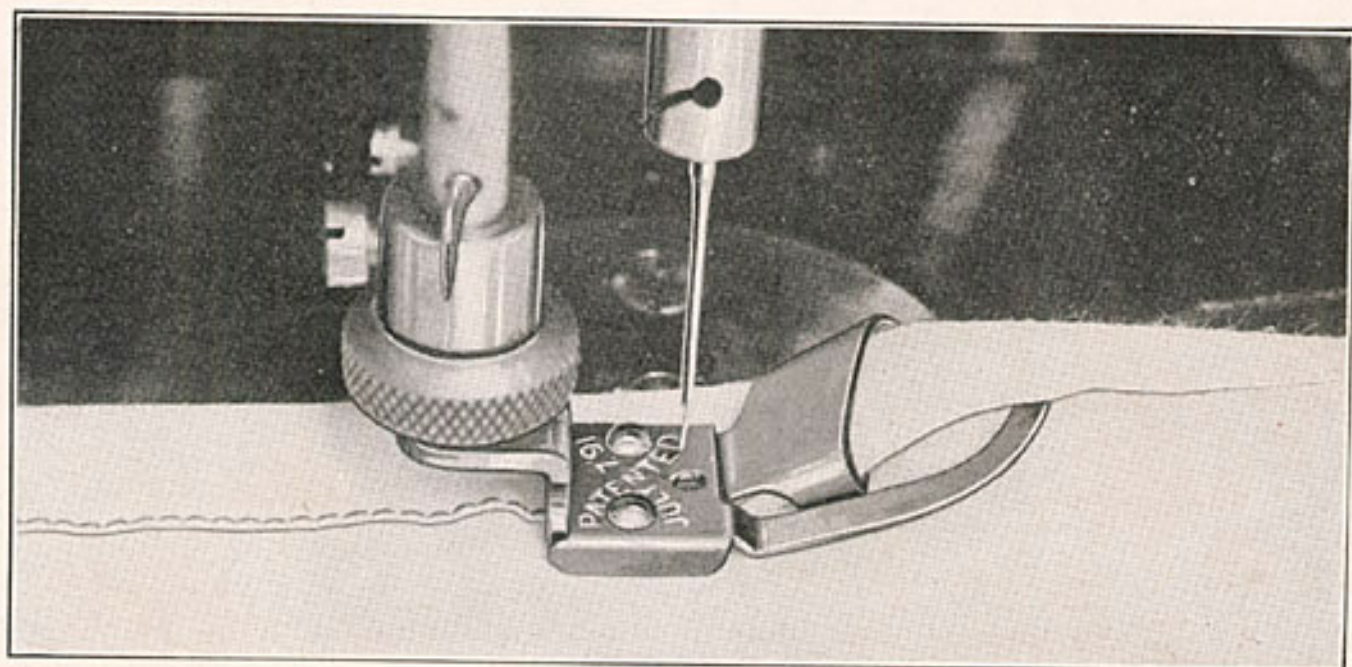
Foot hemmer sewing on lace.

Start the hem as described on page 18. When the hem is running well, stop the machine with the needle at the highest point and raise the presser bar just enough to insert the lace in the slot at the right of the hemmer, see figure above. Hold the lace with the right hand and the hem with the left.

If sewing on very fine material, it is better to insert a slip of paper under the foot hemmer to prevent puckering.

The hemmer is also a feller. Sew two pieces of cloth together with the under edge projecting one-eighth to one-quarter inch beyond the upper edge. Trim the edges, if necessary, to make them even. Open the work out flat and fold the wider edge toward the left over the narrow edge, then pass the edge into the hemmer. The material is guided as for ordinary hemming. This will be found a most satisfactory way to finish a seam.

The Hemmer Set



Hemmer at work.

This machine is equipped with a hemmer set consisting of five different sizes. Hems can be made seven-eighths, five-eighths, one-half, one-quarter or three-sixteenths of an inch in width. You will find the hemmers on the rack of the attachment box.

Substitute the hemmer for the presser foot. Fold over about one-eighth inch of material for a distance of about two inches. Insert the edge of the folded edge in the hemmer, bringing it up and over the spoon, as shown in figure above. Draw the cloth back until the end of the crease is well in the hemmer, then draw it forward with the right hand, so that the hem may be started directly on the edge. Hold the cloth as nearly as possible in a straight line when operating the hemmer. However, if too little cloth feeds in, guide to the right; if too much, guide to the left.

To Hem Bias

To hem a bias or a slightly curved edge, it is better to insert a piece of paper under the hemmer next to the feed, as this assists the cloth to feed through without stretching.

To Hem Table Linen

It is always desirable to have nice table linen hemmed by hand. But the hemmer may be used to turn the edge of the linen to make it ready for the hand work. Take the thread from the needle and run the linen through the hemmer as you would for ordinary hemming. The hem will then be perfectly turned and a great amount of time saved.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

The Cutting Gauge and How to Use It



Fig. 1—The cutting gauge.

The cutting gauge is an important part of the attachments. You should know it thoroughly. In order to use the binder conveniently you must know how to use the cutting gauge. You will then be able to cut binding from any desired material and have it the proper width.

The three letters on the cutting gauge stand for the following:

- C for cording or piping,
- B for binding to use with the binder attachment,
- F for facing.

The binder is adjustable for cutting different widths by moving the blue spring until it is at the desired letter.

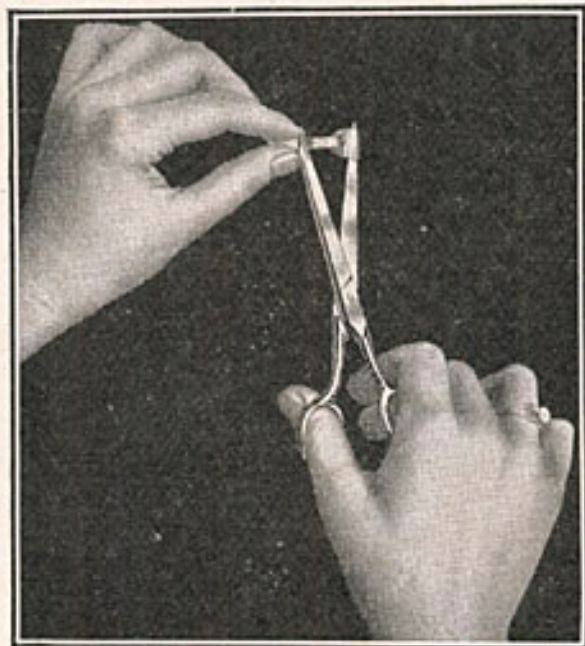


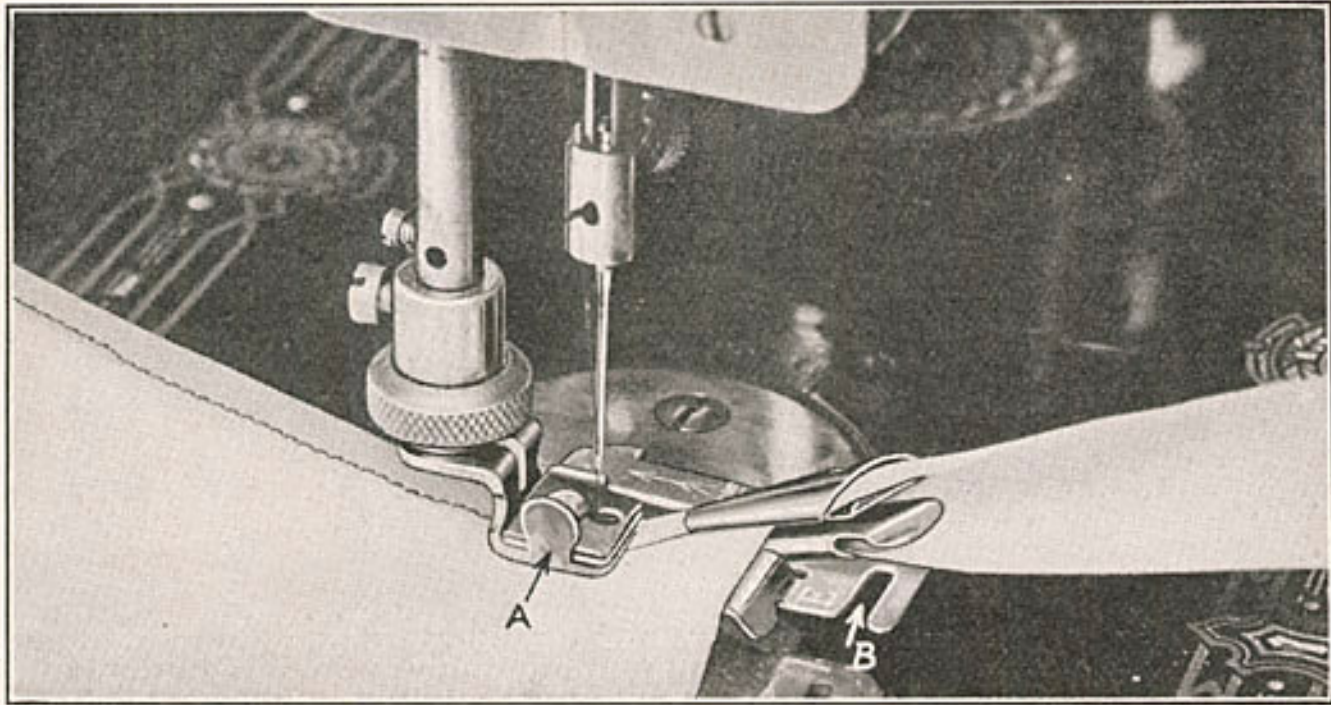
Fig. 2—Cutting gauge attached to scissors.



Fig. 3—Cutting gauge in operation.

The cutting gauge is fitted to the scissors, as shown in Fig. 2. The cloth is inserted in the gauge, as shown in Fig. 3. Keep the cloth close to the blue spring at all times and the strip will be perfectly cut.

The Binder



The binder at work.

To Cut the Binding

Adjust the cutting gauge at *B*. Cut a square of material in the center on the true bias and insert the end in the cutting gauge. The strip will measure seven-eighths inch or fifteen-sixteenths inch in width. If soft material, such as silk or batiste is used, it will be necessary to cut the strips a trifle wider. In this case, adjust the gauge slightly past the *B*. The binding for soft materials should measure about one inch in width.

To Operate the Binder

Substitute the binder for the presser foot. Cut the binding to a point and insert it in the scroll at the back of the binder, as shown in figure above. Pull the binding through the scroll and in under the presser foot before starting to sew.

Notice that this binder may be adjusted to bring the stitching close to the edge, regardless of the kind of material used. To stitch closer to the edge, move the lug, *B*, to the right; to stitch farther from the edge, move to the left.

A narrow adjustment should be used for all thin, delicate materials where binding is used as a trimming or finish. It is especially necessary that wash materials should have the stitching close to the edge, in order that the edges will not curl up when laundered. For heavy work, such as binding the inside seams of woolen dresses, the wider adjustment may be used. The illustration above shows how the work appears when using either adjustment.

Seams should be stitched with the presser foot, then trimmed close to the line of stitching before binding.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

On the right side of the frame of the binder is a gauge for measuring the width of the binding after cutting it. This gauge is fifteen-sixteenths of an inch wide, which is the average width for satisfactory binding.

The gauge indicated by the letter C is used for edge stitching when using the binder for piping. This work is shown below.

Piping with the Binder

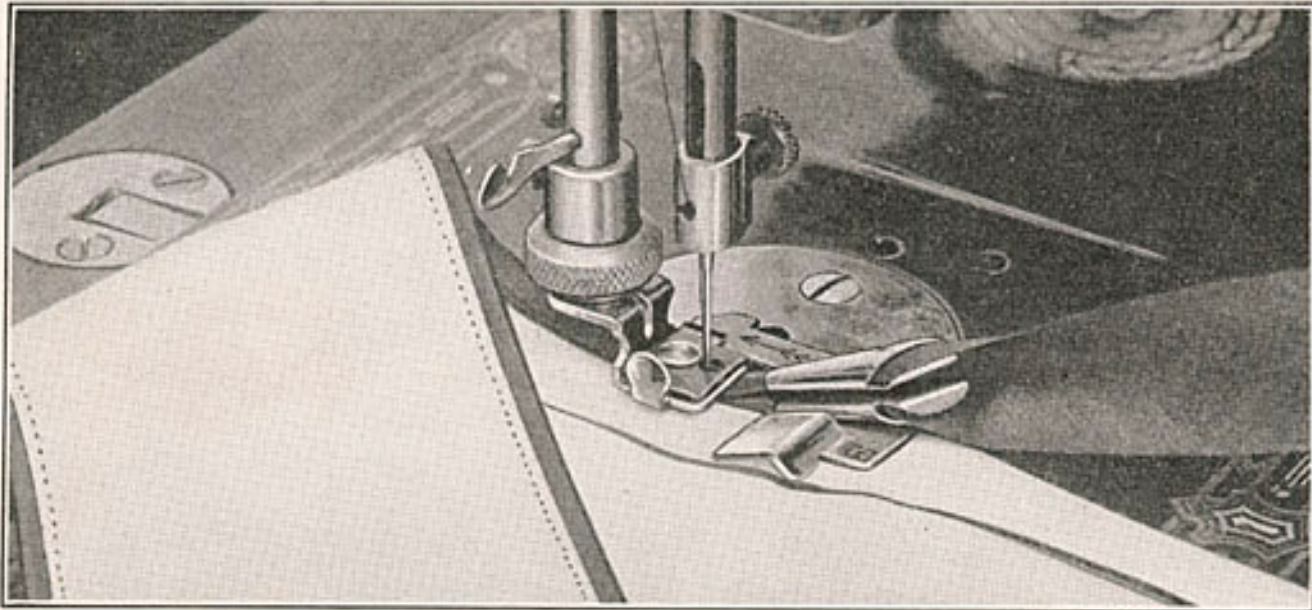


Fig. 1—Piping with the binder.

The figure above shows a method of piping which is especially useful for children's clothes. The binding is inserted in the binder in the usual manner. The edge to be piped is placed in the guide wrong side up, as shown in the figure.

To Use No. 6 Folded Tape with Binder

The No. 6 folded tape (no other width) may be used with the binder by cutting the tape to a point and threading it through the outside slot in the scroll. The seam or edge to be bound is then inserted in the binder in the regular way. The edge to be bound must be held well in the scroll to insure a safe seam.

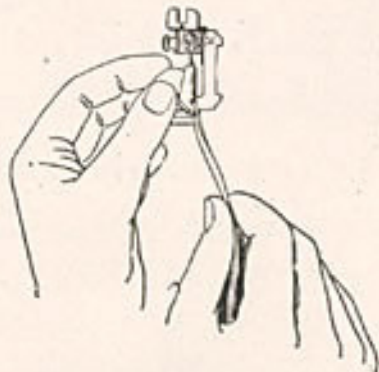
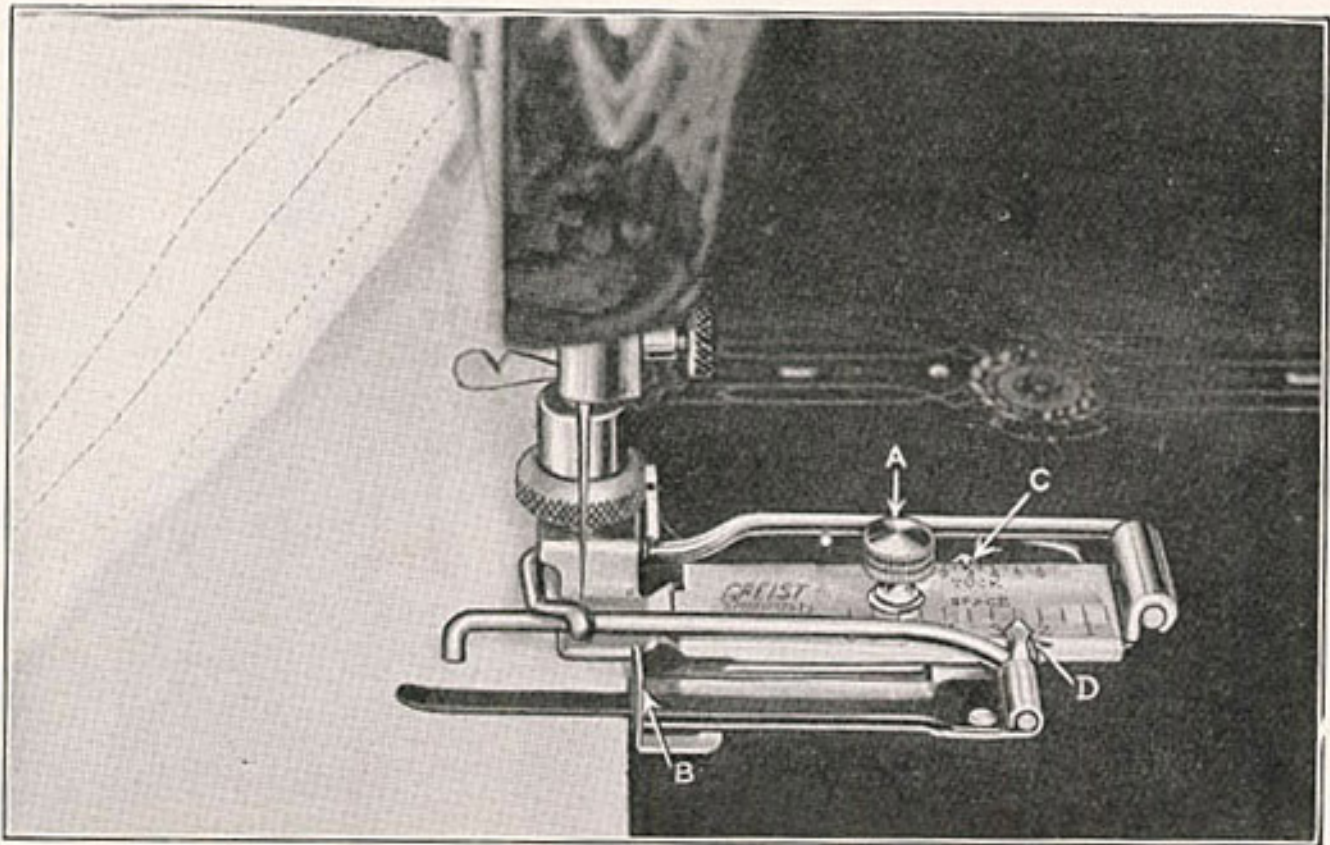


Fig. 2—How to use No. 6 folded tape.

The Tucker



Tucker working.

Remove the presser foot and substitute the tucker in its place. Before operating, turn the hand wheel over to make sure the needle passes through the needle hole. If it does not, it probably is not pushed far enough on the bar.

The scale on the tucker cap marked "Tuck" regulates the width of the tuck. To adjust, loosen screw *A* and with the right hand push guide *B* until the pointer *C* is at the desired figure.

The scale on the tucker cap marked "Space" regulates the distance between the tucks. To adjust, loosen screw *A* and with the right hand push the pointer *D* until it is over the desired figure.

To Insert the Cloth in the Tucker

The cloth is inserted between the blue blade and the bottom blade and is carried back under the foot before you start to sew.

The first tuck must be creased by hand the entire length. Subsequent tucks are marked by the tucker. When inserting the second tuck, make sure that the first tuck is caught in the hook, just under the marker. It is unnecessary then to guide the cloth, as the tucker does it unaided.

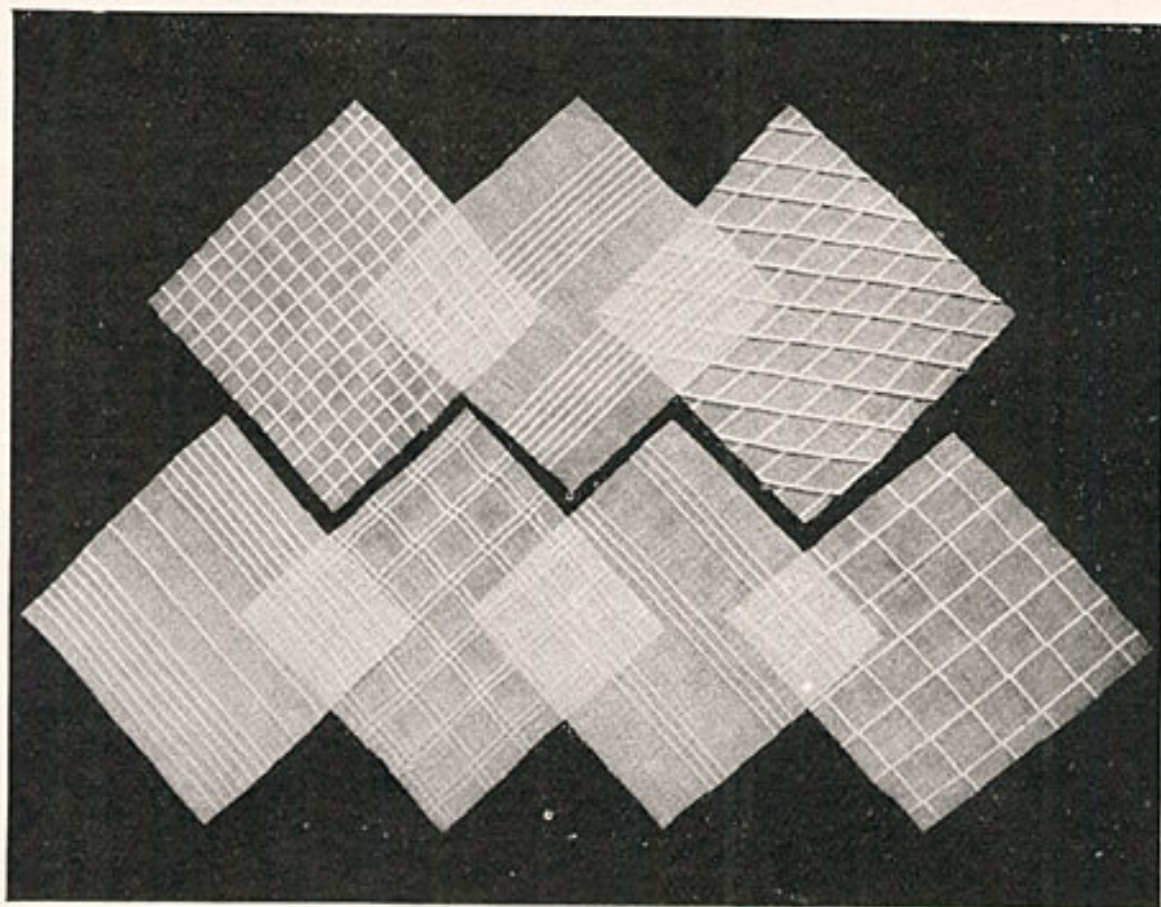
"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Table for Setting Tucker

For	Set Tuck Guide at	Set Marker so Pointer Points at
1/16-inch tucks with 1/8-inch space.....	1/2	1
1/8-inch tucks with no space.....	1	1
1/8-inch tucks with 1/8-inch space.....	1	1 1/2
1/8-inch tucks with 1/4-inch space.....	1	2
1/4-inch tucks with no space.....	2	2
1/4-inch tucks with 1/4-inch space.....	2	3
1/4-inch tucks with 1/2-inch space.....	2	4
1/2-inch tucks with no space.....	4	4
1/2-inch tucks with 1/2-inch space.....	4	6
3/4-inch tucks with no space.....	6	6

How to Do Cross-Tucking

First tuck the cloth lengthwise, then tuck crosswise across the tucks. Cross-tucking is extremely ornamental and may be made in many different ways. For example, you can tuck bias across the first tucks, which gives a totally different effect from plain cross-tucking.



Some combinations of tucks.

Before attempting to make tucks for dress or apron, try out your tucker with a square of cloth. Use fine thread, from 100 to 150, with a needle to match. Have your tension adjusted to give a perfect stitch. Always be sure to fasten the adjusting screw firmly, so the tucker guides will not shift.

The Ruffler

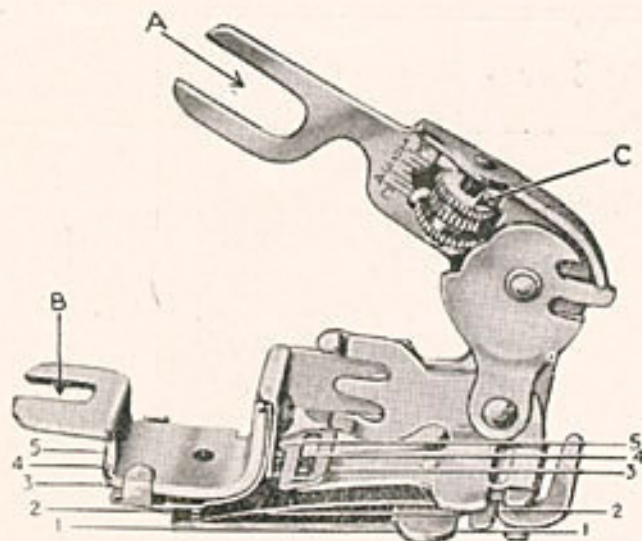


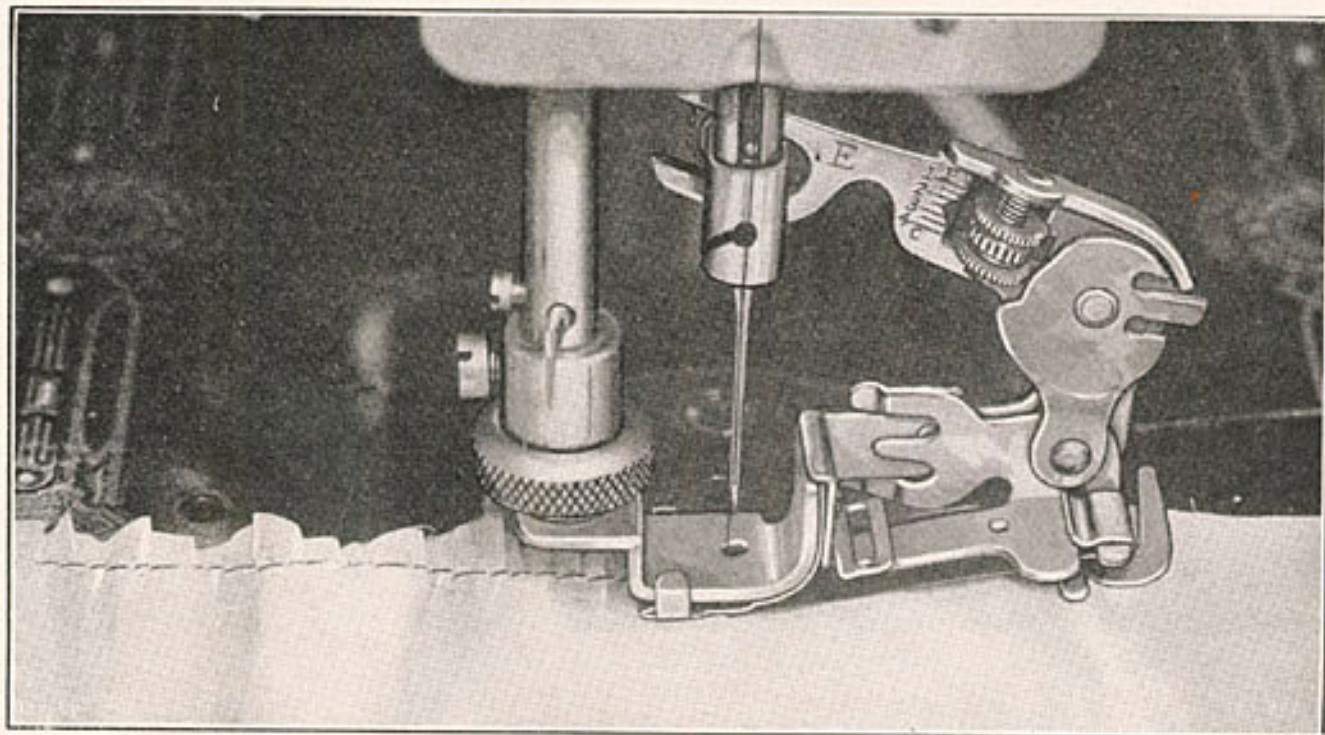
Fig. 1—The ruffler.

Directions for Using

Remove the presser foot from the machine and attach the ruffler in its place. Do this by placing the fork arm *A* astride the needle clamp, and the foot *B* in position on the presser bar. Push it on as far as it will go. Tighten the screw firmly before starting to sew.

The fullness of the gather is regulated by means of the adjusting screw *C*. To increase the amount of the fullness, turn the screw down; to decrease the amount of fullness, turn the adjusting screw up.

The lines 1, 2, 3, 4 and 5 show how to place the different pieces of cloth in the ruffler. Line 1 shows where to place the lower piece or band to which the ruffle is sewed. Line 2, the piece to be gathered. Line 3, the upper piece or facing, when ruffling between two pieces. Line 4, guide for piping. Line 5, guide for edge-stitching.



"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Ruffling

Place the goods to be gathered between the blue blades following line 2. Push forward until under the foot, lower the presser bar and proceed to sew.

To make a scant ruffle, shorten the stitch and turn the adjusting screw up until the ruffle looks all right.

To make a full gather, turn the adjusting screw down until the desired effect is obtained.

By regulating the adjusting screw and the length of stitch, you can make all the kinds, from the scant to the very full gather.

When using the ruffler do not attempt to hold the cloth back. The ruffle will be perfectly even if you allow the cloth to feed freely into the attachment.

The figures below show you the effect the different adjustments of ruffler and stitch have on the ruffle.



Fig. 1—This is a full gather with a short stitch.



Fig. 2—By lengthening the stitch the gathers are made scant.



Fig. 3—This is plaiting with a long stitch.



Fig. 4—By shortening the stitch the fullness is increased.

To Make a Ruffle and Sew to Garment at One Operation

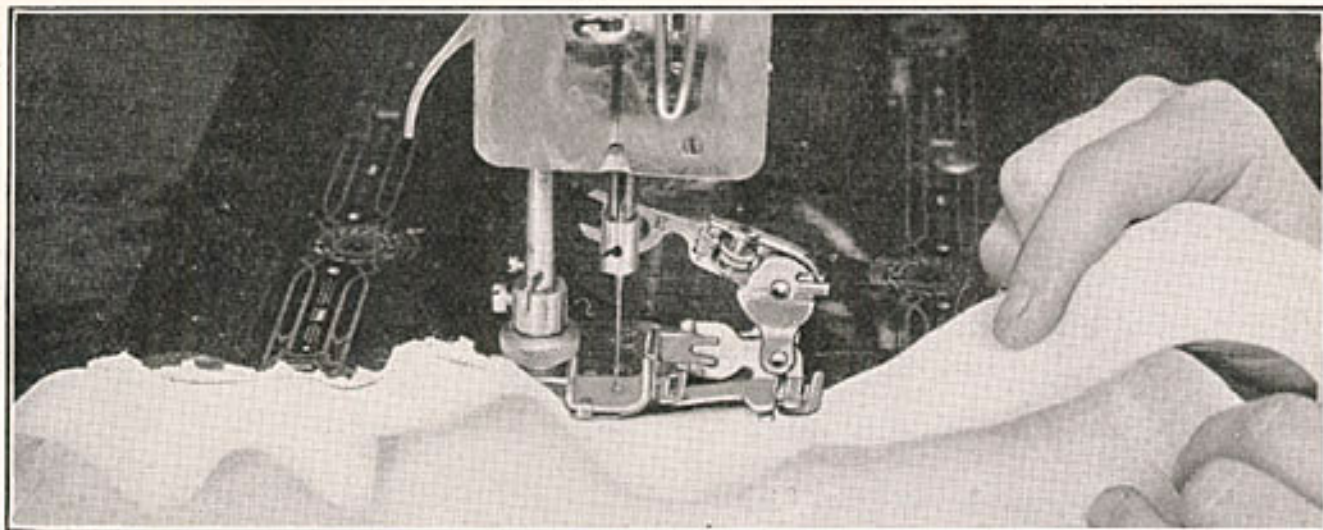


Fig. 1—Ruffling and sewing to garment at one stitching.

To ruffle and sew to a band or garment at one stitching, first adjust the ruffler to take up the proper amount of fullness (see page 26 for directions). Place the goods for the ruffle between the blades as usual and the garment under the ruffle, following line 1. (A facing can be added at the same time by placing this strip, either straight or bias may be used, in the ruffler, following line 3.) This way of finishing will save an endless amount of time.

To Pipe or Edgestitch with the Ruffler

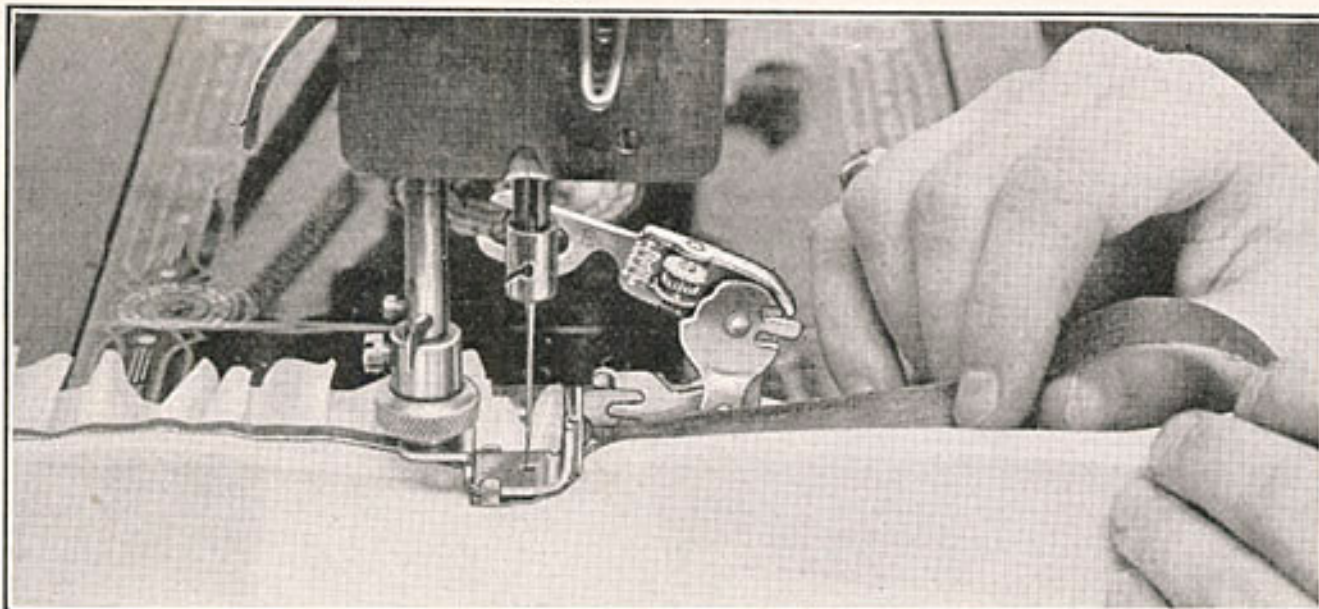


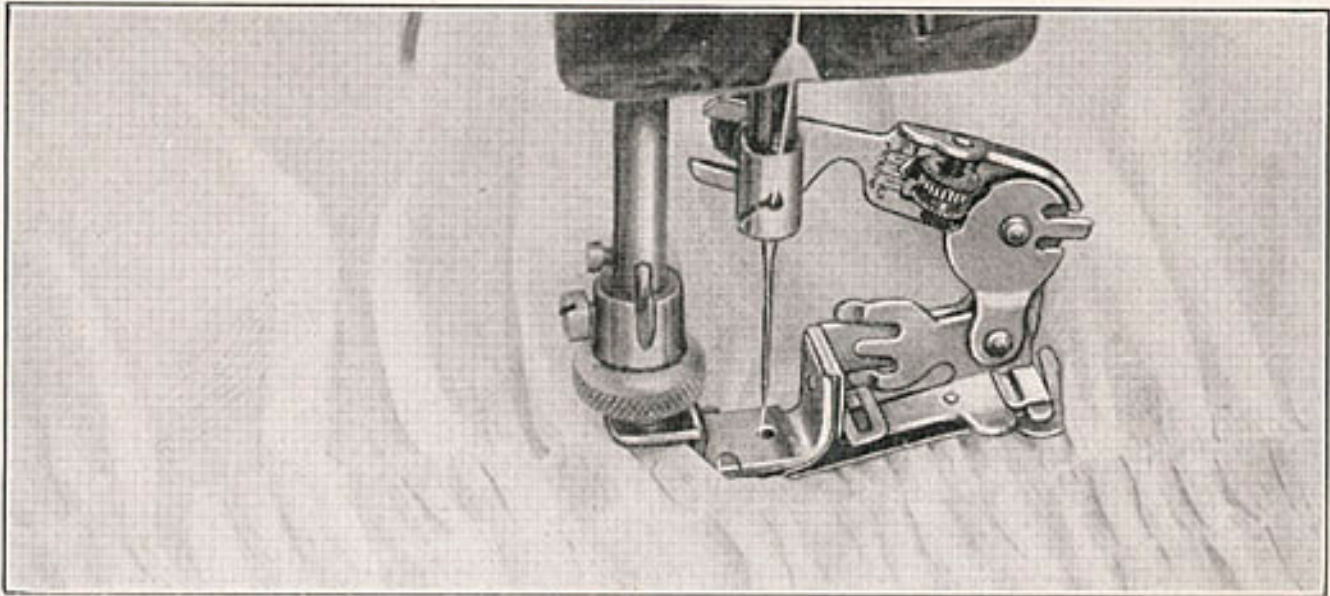
Fig. 2—The ruffler piping.

The piping is placed in the ruffler, following line 4, and the edge to be piped is first folded, then placed, following line 5. The cutting gauge may be used to cut the piping.

If the stitching is not close to the edge, the screw at the top of the piping guide may be loosened and the guide adjusted in the proper direction. Always tighten the screw before starting to sew.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Shirring



The shirrer at work.

Release the bobbin case cover and attach the shirrer in position to the bed of the machine. Do this by inserting the projection in the hole on the bed of the machine. Swing the bobbin case cover back in position and the shirrer will be firmly attached.

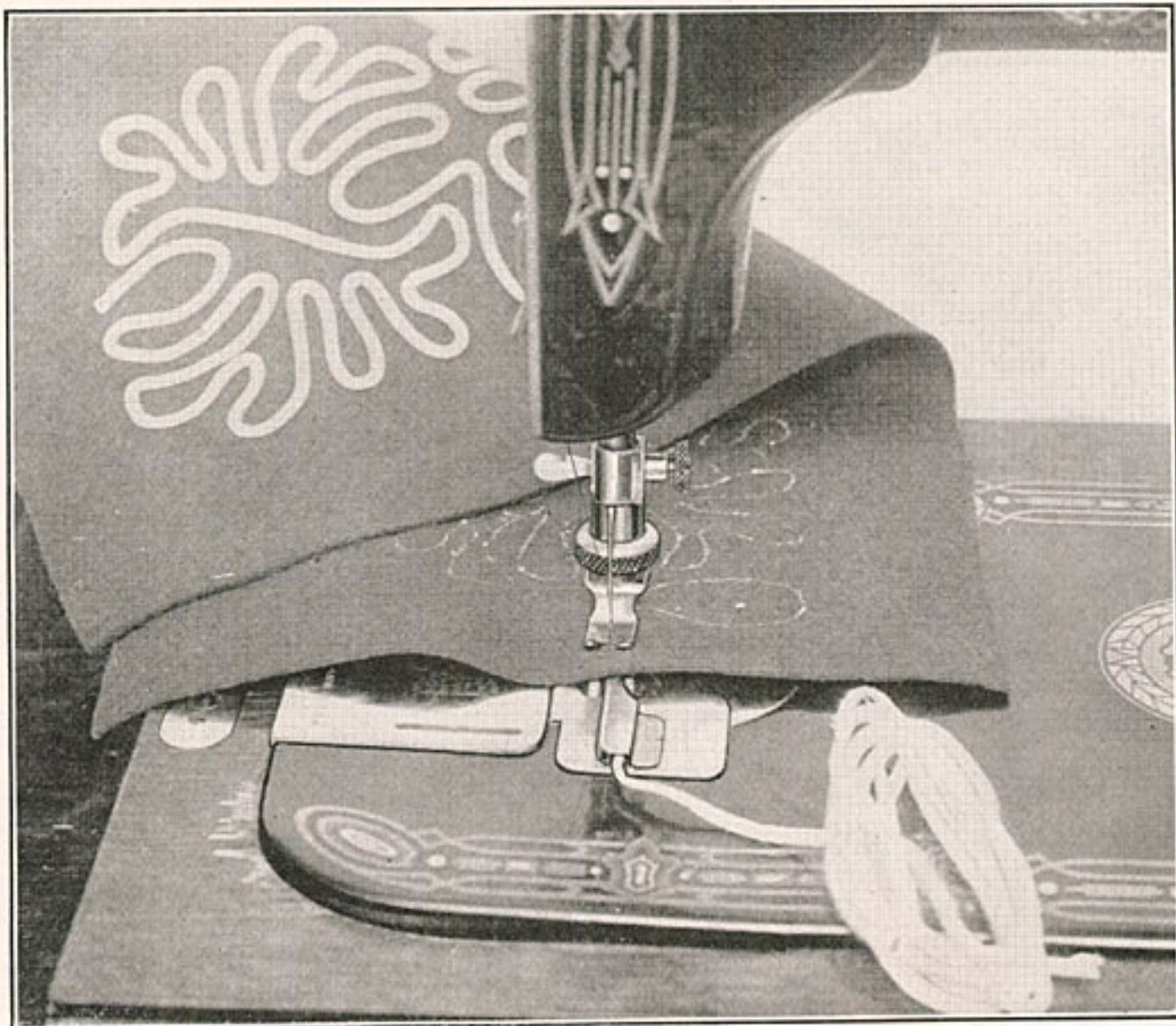
Remove the separator from the ruffler by loosening the small blue screw at the side of the attachment. Attach the ruffler as described on page 26. Insert the cloth to be shirred between the ruffler blade and the shirring plate, as shown in the above figure.

Adjust the ruffler and stitch for the desired fullness. The quilter may be used for shirring in straight rows, or the cloth may be folded and the creases pressed in with a warm iron before you start to shirr. A tape may be placed under the shirring slide and through the guide to keep it in position. The material is then inserted in the usual manner. It will be stitched to the tape to keep the gathers in position.

Shirring with a loose upper tension will allow the gathers to be adjusted to fit a certain space. This kind of shirring is used when fitting a garment to a lining.

If the shirring is to be used where there is strain on the garment, a row of plain machine stitching may be added after it is made.

The Underbraider



The underbraider at work.

Substitute the underbraider foot for the presser foot. Insert the braid in the braider tube until the end of the braid comes through the pronged end of the attachment.

Attach the underbraider in position, following the directions given for the shirrer. Turn the hand wheel until the needle pierces the braid. If it does not sew exactly in the center, shove the point of the braider over with the screw driver.

Braiding designs should always be stamped on the wrong side of the material and should be continuous as nearly as possible.

To Turn a Square Corner

With the needle piercing the braid, raise the presser bar and turn the cloth in the proper direction. Lower the bar and proceed to sew.

When the design is finished, punch a small hole with the point of the scissors, push the braid through to the under side and fasten by hand.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

The Quilter

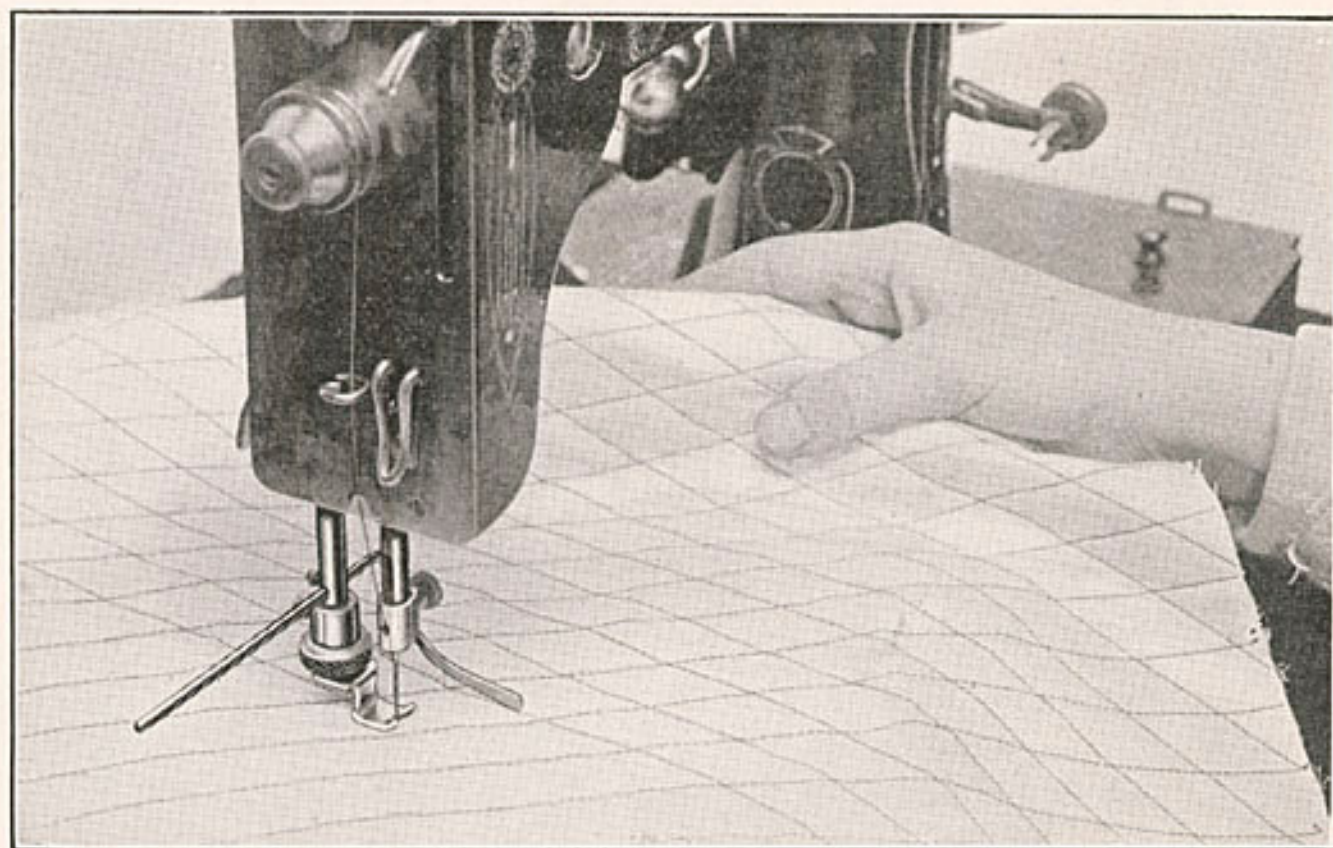


Fig. 1—The quilter at work.

Attach the quilter to the presser bar by removing the thread cutter and inserting the quilter in its place. Adjust for the desired width from the needle and fasten the screw.

The quilter is simply used as a guide for straight stitching. Hold the cloth, guiding by the quilter, as shown in the figure above.

Attach the underbraider foot in place of the presser foot, as it is easier to stitch over a heavy thickness with it. With it, your material is less likely to fold over than with the regular sewing foot.

This sewing guide, Fig. 2, is attached to the bed of the machine by means of the thumb screw and is used as a guide for straight stitching.

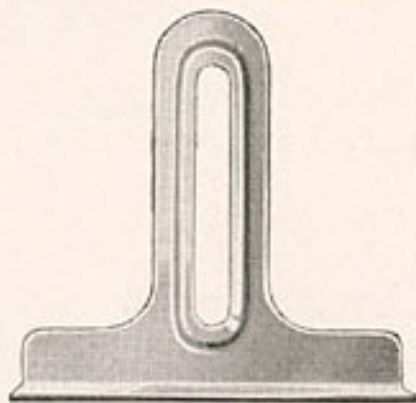


Fig. 2—The sewing guide.

The Edge-Stitcher

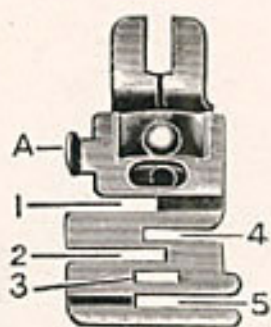


Fig. 1
The edge stitcher

The edge-stitcher 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 figure serve as guides for sewing together laces, insertions, embroideries, sewing in position folded or hemmed edges, piping, etc.

How to Adjust the Edge-Stitcher

To adjust, move lug *A* (see Fig. 1) at the left of the attachment to the right or to the left until the desired adjustment is obtained. When sewing two edges together, one edge is inserted in the slot at the right, while the other edge is inserted in the slot from the left. You will note that the slots are so placed that the edges slightly overlap.

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

Slots 1 and 4 are used for sewing together two pieces of lace, a strip of lace and material, or similar stitching. Slots 2 and 3 are used when a narrow, piped edge is desired. Slots 3 and 4 are used when a wide piped edge is desired. The piping is inserted in slot 3. Slot 5 is used when making a French seam. The turned seam is inserted in the slot to keep the stitching the same distance from the edge. This slot is also used when sewing a bias strip to a garment, the bias strip being inserted in slot 1 and the garment in slot 5.

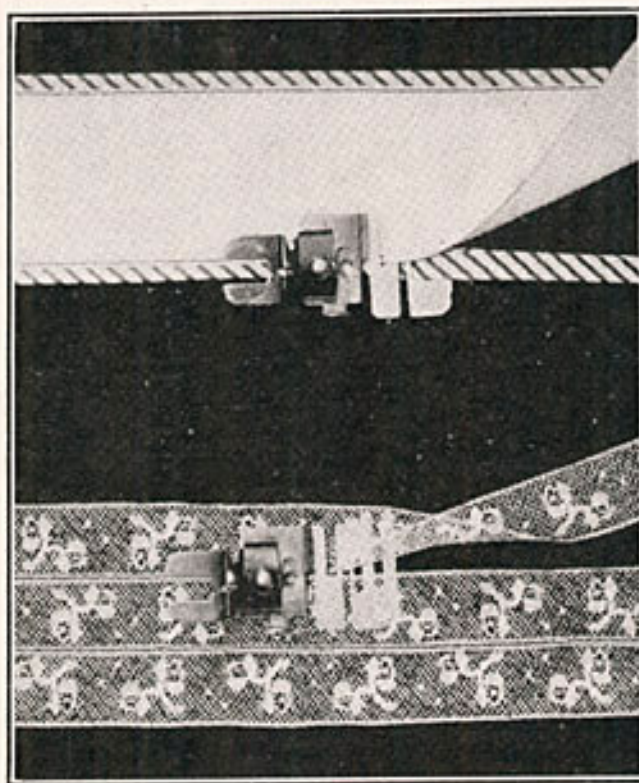


Fig. 2—The edge-stitcher at work.

This attachment will be found useful in trimming many articles of wearing apparel, such as children's dresses, underwear, etc.

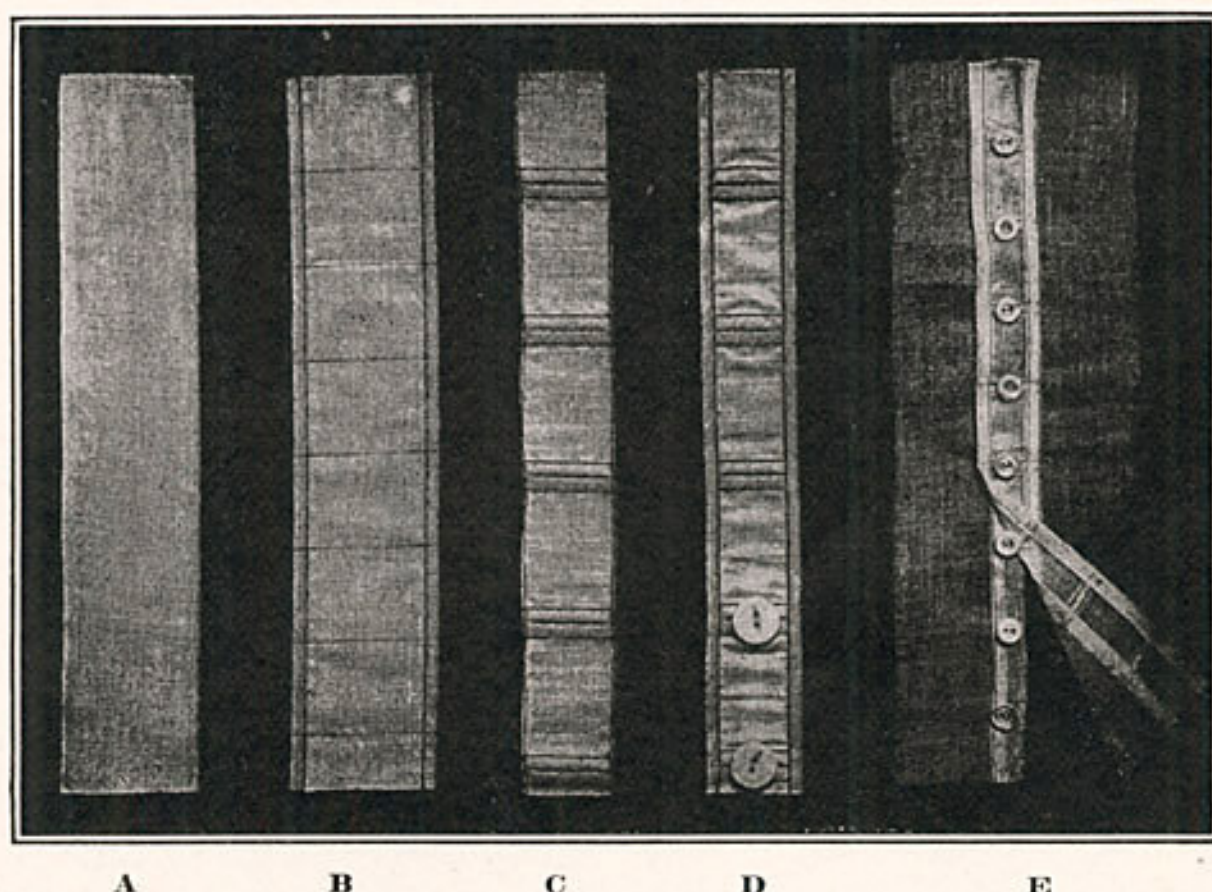
When the attachment is properly adjusted the most inexperienced operator may sew yards of lace together with no difficulty.

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Practical Buttonholes Made with the Binder

It is the wish of every woman to be able to make good buttonholes. But many women do not have the time, even if they have the skill.

Many do not know that good, practical buttonholes can be made with the sewing machine by using the Hemmer or Binder. These buttonholes are strong and durable and are suitable for such garments as children's clothes, house dresses, aprons, etc.



A

B

C

D

E

Directions for Making

If the buttonholes are to be two inches apart, take a two-inch strip of material and bind it as shown in B. The marks show this strip divided into sections. Each section is one-half inch wider than the diameter of the button.

After cutting the strip into the proper sized pieces, sew them together with the presser foot as shown in C. Bind the edge by using the Binder, as shown in D. This makes a finished strip of buttonholes which are strong and practical.

The binding for buttonholes should be cut on the cross of the material.

E shows the same idea worked out with finer materials. The foot hemmer, instead of the Binder, is used to finish the first strip, in order to get an effect dainty enough to use with batiste or dimity.

E also shows the buttonholes sewn to another piece of material.

Sewing Apron with Tucked Pocket

This practical apron is easily made at home, and in a very short time, when you use your Western Electric Sewing Machine and its attachments. It is also excellent practice, as it includes the use of so many of the attachments.

The material for the pocket is first tucked and then cut by the pattern. Any apron pattern can be used for this apron, and by simple alterations it can be made exactly as the illustration. The front gores are bound, using the binder, and lace insertion is used to join the gores. This makes a very neat finish, as well as a practical one, for this apron.

The small ruffle at the bottom of the apron is gathered, using the Ruffler, and the seam is bound, using the Binder. The outside is also bound and edged with lace. The strings are hemmed using the Foot Hemmer.

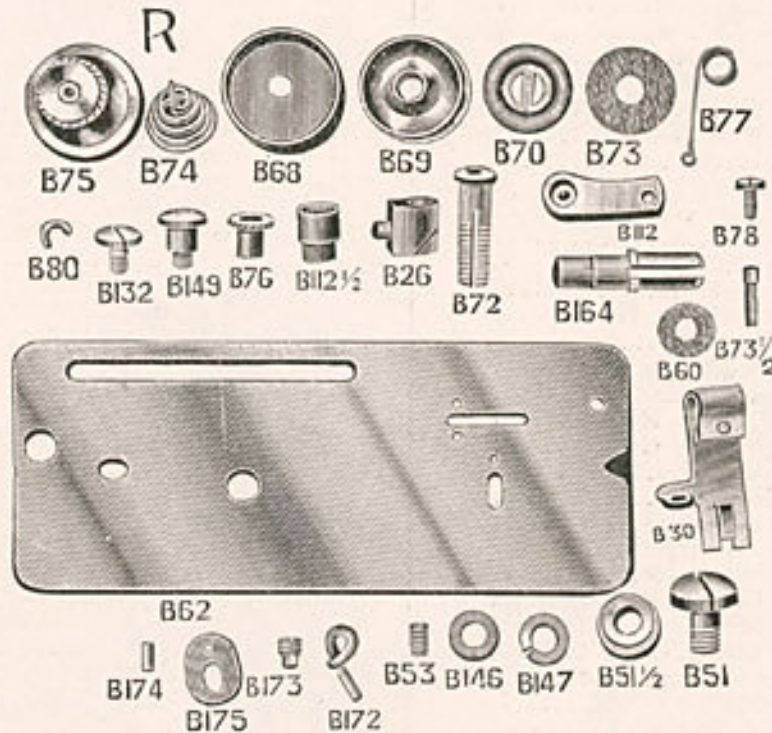


Made with the help of the Binder, Ruffler, Tucker and Hemmer

"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Illustrated List of Parts for the ROTARY MACHINE

If you need any new parts, order by the part number and part name.
Send your order to your local electrical Dealer or Electric Light Company.



No.	Name	Prices on Application
1	Arm (Not illustrated).....	
2	Arm Screw	
3	Bed (Not illustrated)	
6	Main Shaft	
7	Wheel	
8	Wheel Time Screw	
9	Wheel Set Screw	
10	Loose Pulley	
11	Loose Pulley Spring Wash... ..	
12	Loose Pulley Lock Washer... ..	
13	Wheel Brake Button.....	
14	Wheel Brake Button Screw....	
17	Main Shaft Head.....	
18	Main Shaft Head Pin.....	
19	Main Shaft Head Stud.....	
20	Needle Bar Link.....	
21	Needle Bar Link Clamp.....	
22	Needle Bar Link Clamp Scr... ..	
23	Needle Bar	
24	Needle Bar Stop Pin.....	
25	Needle Bar Cap.....	
26	See B 26.....	
B 26	Needle Clamp	
27	Needle Clamp Screw	
28	Presser Bar	
29	Quilter Screw	
30	See B 30	
B 30	Presser Bar Gib.....	
31	Presser Bar Gib Staple.....	
32	Presser Bar Gib Screw.....	
33	Presser Bar Gib Stud.....	
34	Presser Bar Gib Stud Set Scr	
35	Tension Release Screw.....	
36	Tension Release	
36½	Tension Release Spring.....	

No.	Name	Prices on Application
37	Presser Bar Spring.....	
38	Presser Bar Thumb Screw...	
40	Presser Bar Lifter.....	
41	Presser Bar Lifter Screw.....	
42	Attachment Holder Comp.....	
43	Attachment Holder Hub.....	
44	Attachment Holder Hub Scr..	
45	Attachment Holder Hub Ft. Screw	
46	Attachment Holder Hub Nut..	
47	Presser Foot	
48	Take-up Lever	
49	Take-up Lever Stud.....	
50	Take-up Lever Stud Roll.....	
51	See B 51.....	
B 51	Take-up Lever Screw.....	
51½	See B 51½.....	
B 51½	Take-up Lever Bushing.....	
52	Spool Pin Base.....	
B 53	Take-up Lever Screw Set Screw	
55	Spool Pin Base Screw.....	
56	Spool Pin (rear) with pawl...	
57	Rear Spool Pin Pawl.....	
57½	Rear Spool Pin Pawl Pin.....	
58	Spool Pin (Front).....	
60	See B 60.....	
B 60	Tension Disc Cloth Washer..	
61	Face Plate Comp. Assembled..	
62	See B 62.....	
B 62	Face Plate	
63	Face Plate Screw.....	
64	Top Tension Base.....	
65	Top Tension Release Disc....	

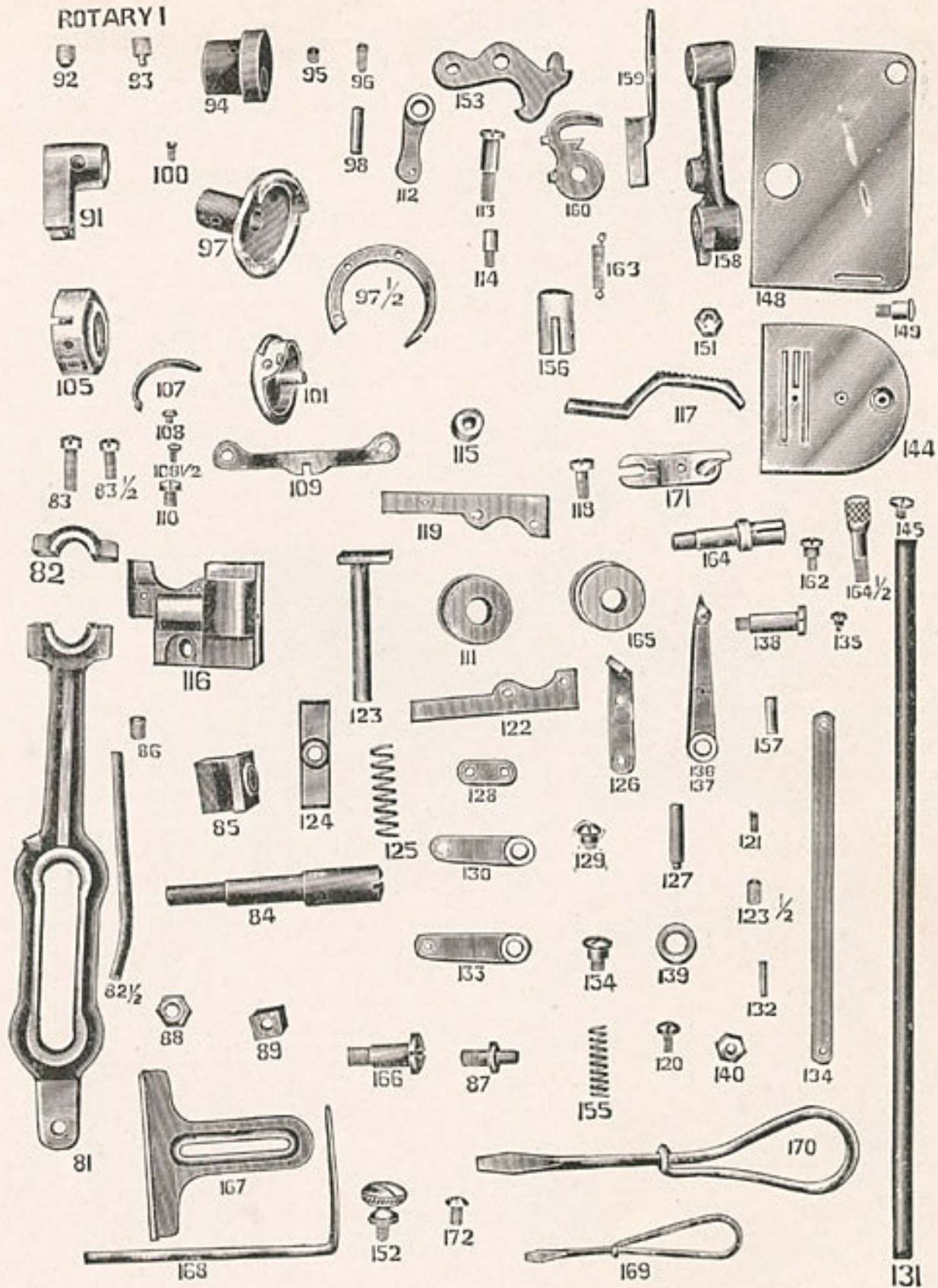
“Sewing Efficiency” gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

No.	Name	Prices on Application	No.	Name	Prices on Application
66	Top Tension Release Disc Spring		116	Feed Bar	
67	Top Tension Release Disc Nut		117	Feed Point	
68	See B 68.....		118	Feed Point Screw	
B 68	Tension Base		119	Eccentric Lever	
69	See B 69.....		120	Eccentric Lever Screw	
B 69	Tension Disc Wheel.....		121	Eccentric Lever Adj. Screw...	
70	See B 70.....		122	Eccentric Lever Spring	
B 70	Tension Release Washer.....		122½	Feed Bar Stud Head.....	
71	Tension Disc Hub.....		123	Feed Bar Stud	
72	See B 72.....		123½	Feed Bar Stud Set Screw.....	
B 72	Tension Sleeve		124	Feed Bar Stud Sleeve.....	
73	See B 73.....		125	Feed Bar Spring	
B 73	Tension Disc Cloth Washer..		126	Feed Bar Link	
73½	See B 73½.....		127	Feed Bar Link Stud.....	
B 73½	Tension Release Pin.....		128	Feed Bar Adj. Link.....	
74	See B 74.....		129	Feed Bar Adj. Link Screw....	
B 74	Tension Spring		130	Stitch Reg. Front Lever.....	
74½	Tension Spring Screw.....		131	Stitch Reg. Lever Rod.....	
75	See B 75.....		132	See B 132.....	
B 75	Tension Cap		B 132	Stitch Regulator Rear Lever	
76	See B 76			Screw	
B 76	Auxiliary Tension Head.....		133	Stitch Reg. Gear Lever.....	
77	See B 77		134	Stitch Reg. Lever Connection.	
B 77	Auxiliary Tension Spring.....		135	Stitch Reg. Lever Con. Screw.	
78	See B 78		136	Stitch Reg. Lever	
B 78	Auxiliary Tension Head Screw		137	Stitch Reg. Lever Handle....	
79	Auxiliary Thread Guide.....		138	Stitch Reg. Lever Stud.....	
80	See B 80		139	Stitch Reg. Frict. Washer....	
B 80	Thread Guide		140	Stitch Reg. Lever Con. Stud	
81	Main Shaft Connection.....			Nut	
83	Main Shaft Connection Screw		141	Stitch Reg. Index Base Plate.	
83½	Oil Tube Cap Screw.....		142	Stitch Reg. Index Plate.....	
84	Main Shaft Con. Fulcrum Stud		143	Stitch Reg. Index Plate Scr..	
85	Main Shaft Con. Ful. Stud Blk.		144	Needle Plate	
86	Main Shft. Con. Ful. Std. Set		145	Needle Plate Screw	
	Screw		146	See B 146	
87	Main Shaft Con. Stud.....		B 146	Stitch Reg. Rear Lever Washer	
88	Main Shaft Con. Stud Nut....		147	See B 147	
89	Main Shaft Con. Stud Block..		B 147	Stitch Reg. Rear Lev. Spg.	
90	Hook Shaft			Washer	
91	Hook Shaft Block.....		148	Hook Cover	
92	Hook Shaft Block Set Screw..		149	See B 149	
93	Hook Shaft Block Time Screw		B 149	Hook Cover Screw	
94	Hook Shaft Feed Cam.....		150	Hook Cover Stud Washer.....	
95	Hook Shaft Feed Cam Set		151	Hook Cover Stud Nut.....	
	Screw		152	Cloth Guide Screw	
96	Hook Shaft Feed Cam Time		153	Bed Latch	
	Screw		154	Bed Latch Screw	
97	Hook		155	Bed Latch Spring	
97½	Hook Guard		156	Bed Latch Plunger	
98	Hook Pin		157	Bed Latch Plunger Pin.....	
100	Hook Guard Screw.....		157½	Spooler Complete	
101	Bobbin Race Comp.....		158	Spooler Frame	
102	Bobbin Race Stud.....		159	Spooler Release Lever	
103	Bobbin Holder Spring.....		160	Spooler Release Lever Wash..	
104	Bobbin Case Stop Pin.....		162	Spooler Release Lever Scr....	
105	Bobbin Case		163	Spooler Release Lever Spring	
107	Bobbin Case Tension Spring..		164	See B 164	
108	Bobbin Case Tension Spring		B 164	Spool Spindle	
	Screw		164½	Spool Spindle Expan. Screw..	
108½	Bobbin Case Ten. Spr. Adj.		165	Spooler Spindle Pulley	
	Screw		166	Spooler Frame Screw	
109	Bobbin Race Stop.....		167	Cloth Guide	
110	Bobbin Race Stop Screw.....		168	Quilter	
111	Bobbin Complete		169	Shuttle Screw Driver	
112	See B 112		170	Screw Driver	
B 112	Feed Rocker		171	Hemmer Foot	
B 112½	Feed Rocker Hub		B 172	Spooler Thread Guide.....	
113	Feed Rocker Screw		B 173	Needle Bar Timer Screw.....	
114	Feed Rocker Stud		B 174	Con. Stud Washer Pin.....	
115	Feed Rocker Stud Roll		B 175	Con. Stud Washer	

PRICES ON APPLICATION

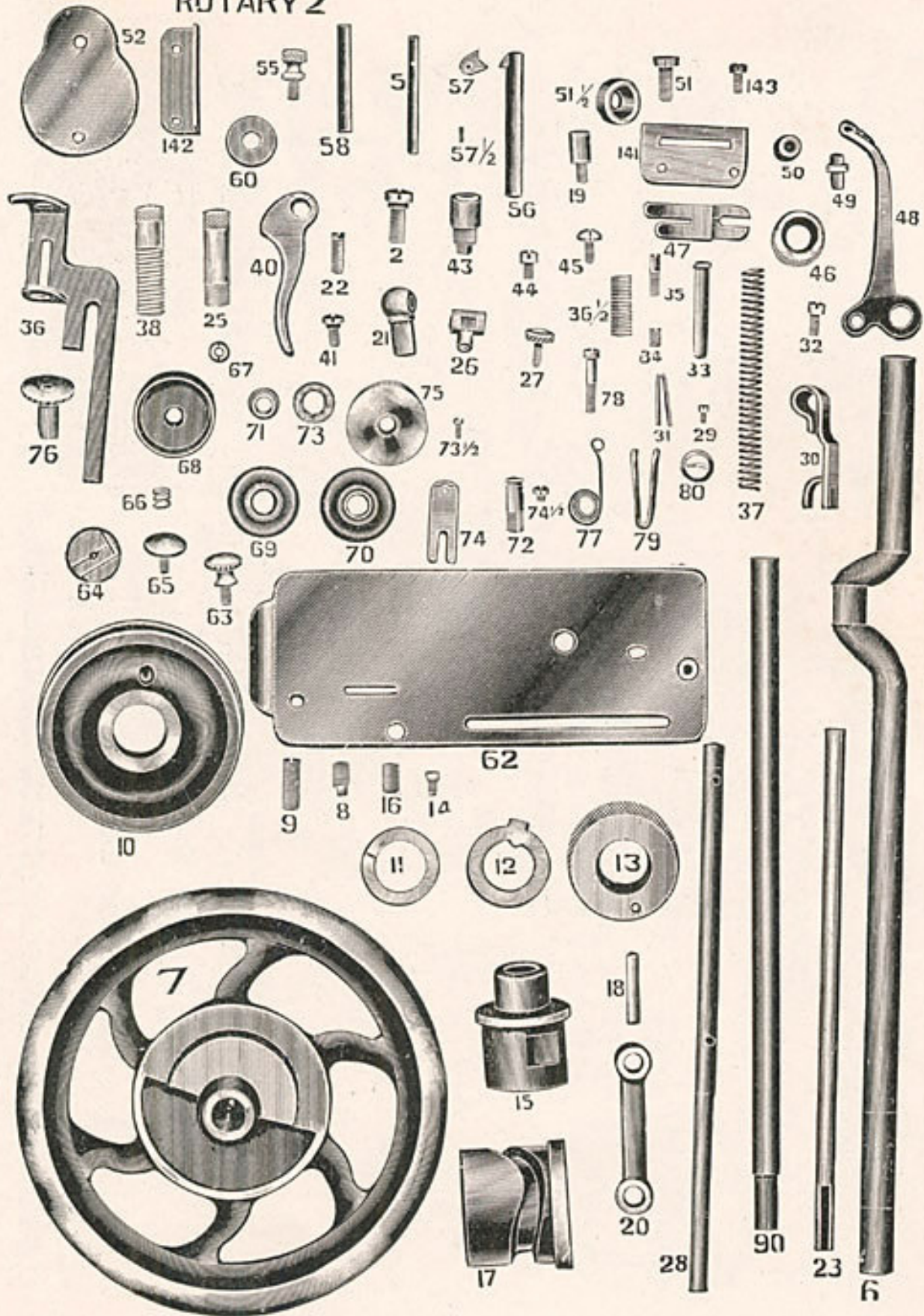
"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

ROTARY I



"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

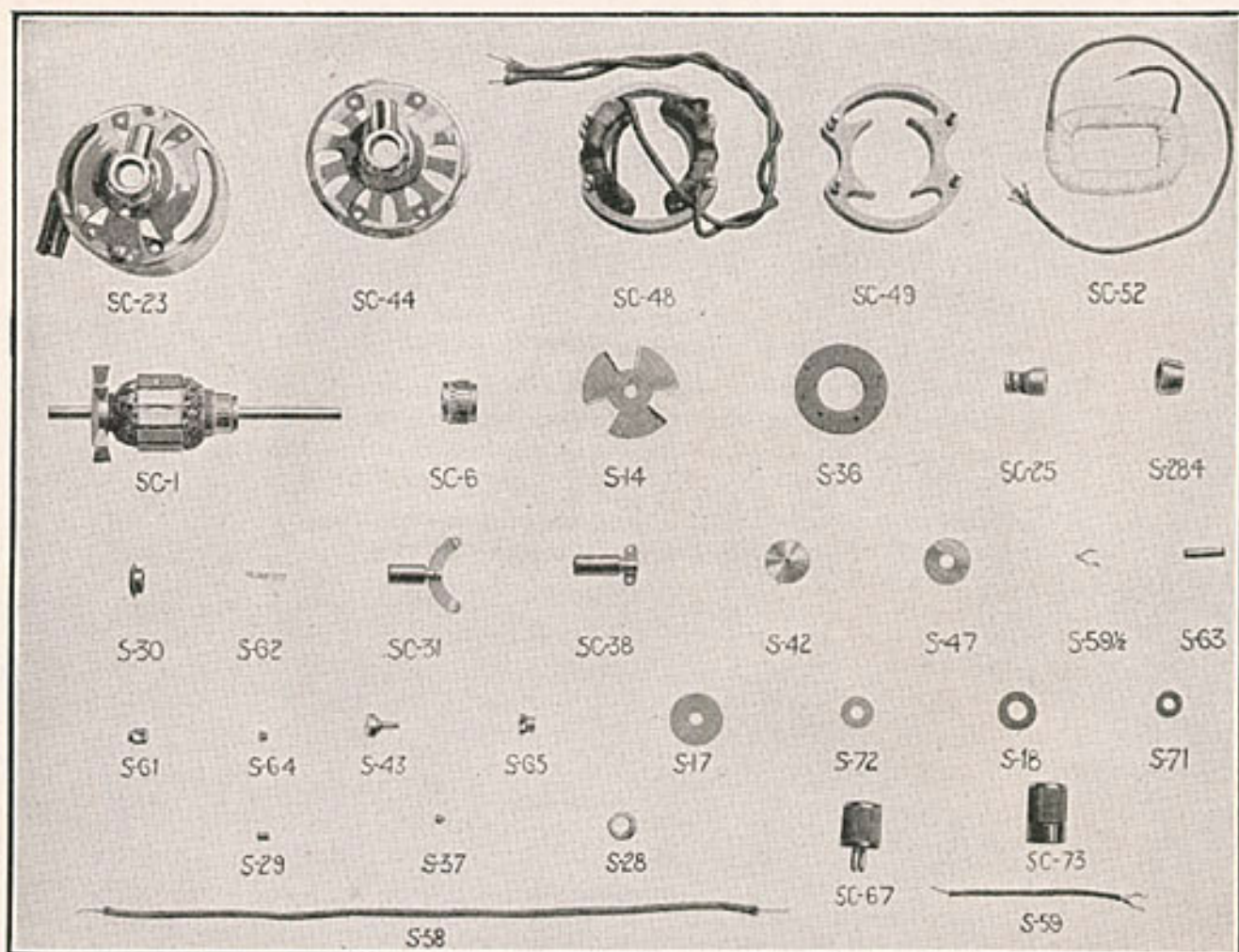
ROTARY 2

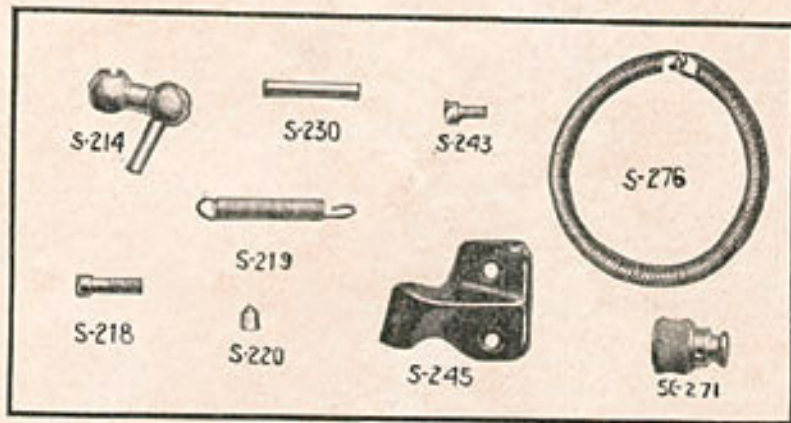


"Sewing Efficiency" gives you the practical hints that make your clothes unusual. Notice the enclosed Folder.

Illustrated List of Parts for the Rotary Machine Motor

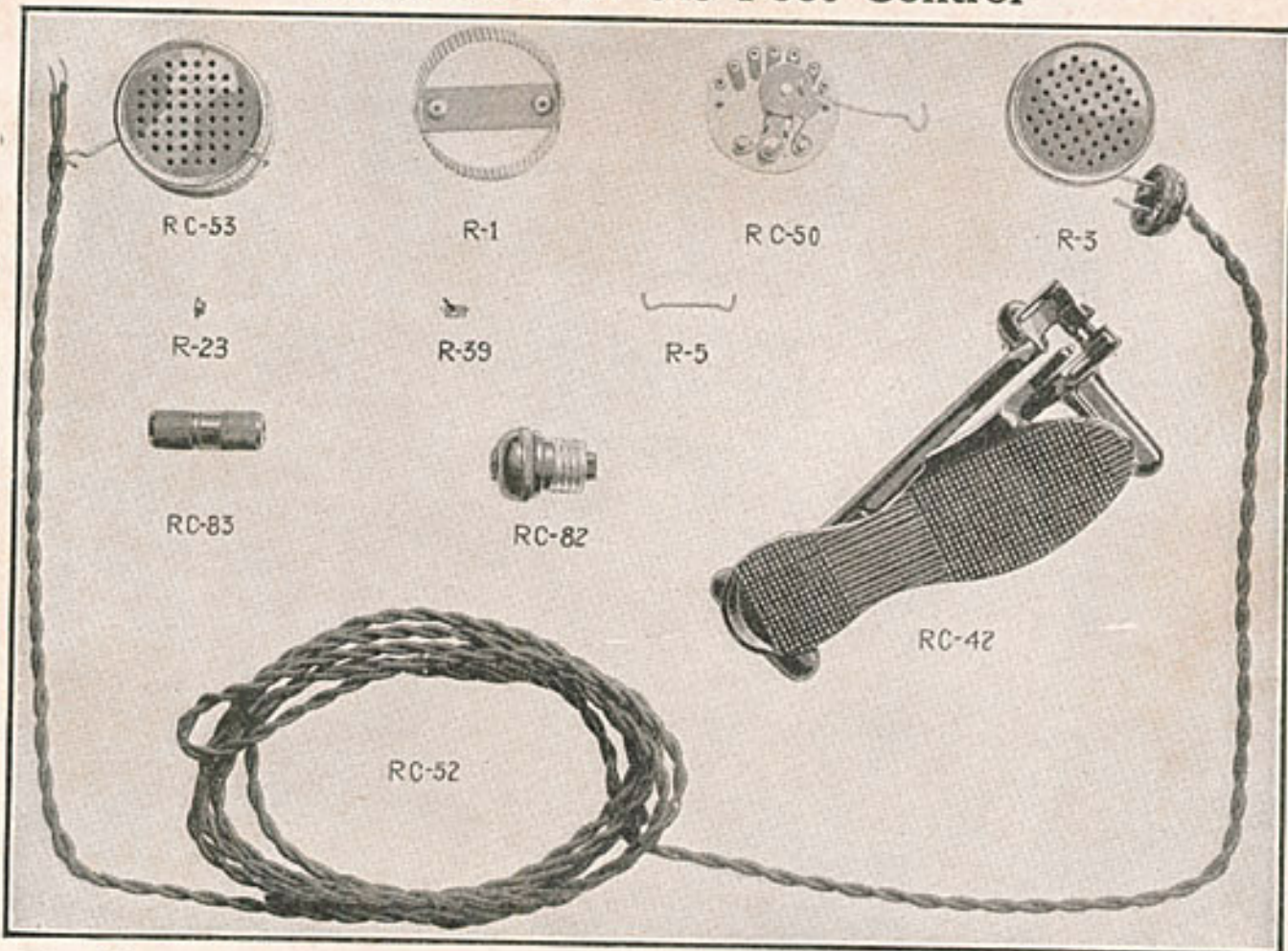
Part No.	Repair Part Name	Prices on Application
SC 1	Armature Complete. Each	
SC 6	Commutator Complete. Each	
S 14	Ventilating Fan. For SC-1. Each	
S 17	1" x 17/64" x 1/64" Fibre Washer. Fits on SC-1. Dozen.....	
S 18	5/8" x 3/8" x 1/32" Felt Washer. Fits on SC-1. Dozen.....	
SC 23	Large Motor Case Complete with SC-25. Each	
SC 25	Bearing Complete. Each	
S 28	Spring for SC-25. Each	
S 29	1/4 8-32 Headless Set Screw, Attaches SC-31 to SC-23. Dozen.....	
S 30	Fibre Bushing for Cord in SC-23. Each.....	
SC 31	Contact Circle Complete. Each	
S 36	Fibre Regulator Ring. Each	
S 37	1/8 4-36 Round Head I. M. Screw, Attaches SC-38 to S-36. Dozen.....	
SC 38	Brush-Holder Complete. Each	
S 42	Bearing Cap for SC-45. Each	
S 43	Adjusting Thumb Screw. Fits in SC-23. Each	
SC 44	Small Motor Case Complete with SC-25. Each	
S 47	Bearing Cap, Pulley End. Each	
SC 48	Field Complete. Each	
SC 49	Field Steel Stampings with Studs. Each	
SC 52	Field Coil Complete. Each	
S 58	12" Connection. Fits on SC-52. Each	
S 59	3" Connection. Fits on SC-52. Each	
S 59 1/2	Brush Clip. Fits on S-59. Each	
S 61	Field Stud Nut. Each	
S 62	Brush Spring. Each	
S 63	Carbon Brush. Each	
S 64	Headless Brush Screw. Each	
S 65	3/8" Hexagon Oil Cup. Each	
SC 67	Male Section of Attachment Plug. Each	
S 71	1/2 x 1/4 Felt Washer. Fits on SC-1. Dozen	
S 72	5/8 x 1/4 Fibre Washer. Fits on SC-1. Dozen.....	
SC 73	Female Section of Attachment Plug. Each	
S 284	Ferrule. Fits on SC-23. Each	





Part No.	Repair Part Name	Prices on Application
S 214	Ball Connection with Pin. Each	.....
S 218	Motor Screw. Each	.....
S 219	$\frac{3}{8}$ " Diameter x $1\frac{3}{4}$ " Long Tension Spring. Each	.....
S 220	$\frac{1}{4}$ " Hexagon Field Stud Nut. Each	.....
S 230	$1\frac{1}{2}$ " Long Taper Pin. For S-214. Each	.....
S 243	$\frac{7}{16}$ 14-20 Filister Head Bracket Screw. For S-242. Each	.....
S 245	Bracket for Sewing Machine. Each	.....
SC 271	$\frac{3}{8}$ " Grooved Pulley Complete. Each	.....
S 276	Spring Belt for Bobbin Winder. Each	.....

Piece Parts of the Foot Control



Part No.	Repair Part Name	Prices on Application
R 1	Frame with Bridge. Each	.....
R 3	End Screen. Each	.....
R 5	Plain Hook for RC-53. Each	.....
R 23	Large Eyelet for RC-53. Each	.....
R 39	Cord Grip. Each	.....
RC 42	Foot Control only. Each	.....
RC 50	Porcelain Disc with Contacts and Brush Complete. Each	.....
RC 52	Cord Complete with RC-82 and RC-83. Each	.....
RC 53	Rheostat Complete with RC-50. Each	.....
RC 82	Attachment Plug. Each	.....
RC 83	Midget Plug. Each	.....

When ordering parts for Rheostat be sure to specify the type of machine for which it is wanted.

