# DIRECTIONS

FOR USING THE

# WHEELER & WILSON

"No. 9"

# Family Sewing Machine.

PRICE, FIVE CENTS.

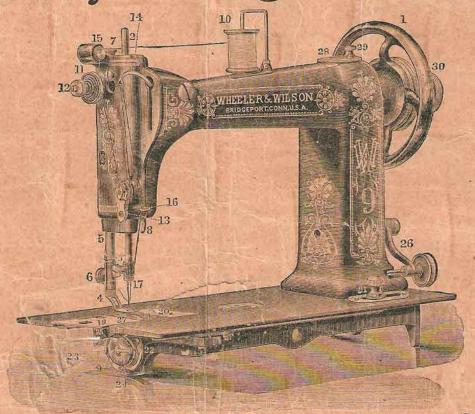
Follow these Directions and the Machine will Arways
Do Perfect Work.

MANUFACTURED BY THE

WHEELER & WILSON MFG. CO.,

BRIDGEPORT, CONN., U.S. A.

# THE WHEELER & WILSON No. 9 Family Sewing Machine.



#### The Name and Number of each Part as shown in the above Cut, are given below:

- Hand Wheel. Needle Bar. Needle Set Screw. 4. Presser-Foot. Presser-Bar. 6. Presser-Foot Thumb Screw. \* Presser-Thumb Screw. Presser-Thumb
   Presser-Lifter. 9. Bobbin. 10. Spool Wire.
  11. Tension Pulley. Tension Nut.
  Thread Guide and Controller. 13. Thread. 14. Take-up. 15. Thread Check.
- Thread Leader. 16.
- Needle Bar Thimble and Thread Guide.
- 18. Throat Plate. 19.
- Plate Slide. Back Plate Slide. 20.
- Stitch Regulating Knob. 21.
- 22. Rotating Hook. 23. Bobbin Case.
- 24. Bobbin Latch.
- 25. Bobbin Case Stop. 26. Bobbin Winder.
- 27. Feed Points. 28. Arm Cap.
- 29. Arm Cap Screw.
- Loose Pulley Knob. 30.

Size of Needles and Thread to be Used on Different Materials.

сьотн.	SIZE NUMBERS OF NEEDLES.	THREADS.		
		COTTON.	SILK.	LINEN.
Finest Linens and Silks, Lawns and Nansooks.	No. 2	100 to 200	000	
Handkerchiefs, Collars, Fine Shirts, Underclothing.	No. 3	80 to 100	0 to 00	
Common Muslins, Light Dressmaking and Quilting.	No. 4	60 10 70	A to O	
Tailoring, Light Clothing and Boys' Clothing.	No. <b>5</b>	40 to 60	A and B	90 to 100
Heavy Dressmaking, Cloakmaking and Heavy Tailoring.	No. <b>6</b>	30 10 36	B and C	70 to 80
Extra Heavy Work.	No. 7	20 to 24	Dand C	50 to 60

For ordinary work use the SAME SIZE of thread in the bobbin as in the needle.

The number of the needle is marked upon its shank.

In ordering Needles specify for No. 9 Machine and the size numbers.

Use the fine throat plate with needles from No. 2 to No. 5; for larger needles the coarse throat plate must be substituted, as the fine one would chafe off the thread.

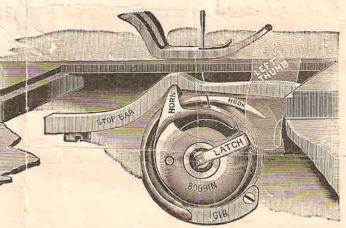
SPECIAL NEEDLES are made for manufacturers of various kinds of work, such as corsets, overalls, rubber-webbing, etc.

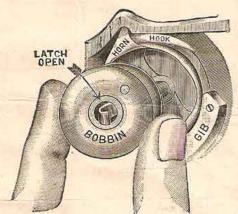
To Set the Needle. Loosen the needle set screw, insert the needle with its flat side to the left; be sure to PUSH THE NEEDLE AS FAR UP as it will go, and secure it firmly by turning the set screw with the screw driver.

#### To Take Out the Bobbin.

Remove the left plate slide.

To open the latch easily with the left thumb, have the point of the hook towards you, as shown in the cut. The LATCH may be reached with the hand EITHER ABOVE OR BELOW the table, the latter being convenient when attachments are in use.





With the ball of the thumb (not necessary to use the finger or thumb nail), open the latch until it stands out straight, then brush the bobbin outward, until it hangs on the latch, for removal.

For Hand Machine Directions, See page 13.

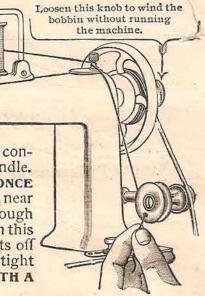
#### To Wind the Bobbin Automatically.

Hold the hand-wheel with the left hand and with the right turn toward you the top of the knob to loosen the pulley so that the bobbin can be wound without running the machine.

Oil the loose pulley through a hole in the hub.
Oil the bobbin winder occasionally.

Swing the bobbin winder until its pulley comes in contact with the belt, and place the bobbin on the spindle.

WIND THE THREAD from the spool on the machine ONCE AROUND THE ARM CAP SCREW on top of the arm, near the hand-wheel, and pass the end from the inside through the hole in the bobbin and hold it firmly, as shown in this view, while operating the treadle until a few turns cuts off the thread at the bobbin. The bobbin will be wound tight and even. If necessary, GUIDE THE THREAD WITH A TOUCH of the finger.



After winding the Bobbin, push down the winder and tighten the pulley securely by turning the knob over from you. DO NOT FORGET THIS.

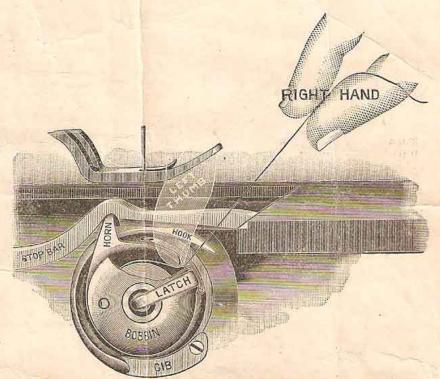
The inside of the bobbin case should be occasionally wiped out with an oiled rag, to remove lint or dirt.

If the bobbin does not revolve with the spindle spread the spindle a little with the screw driver.

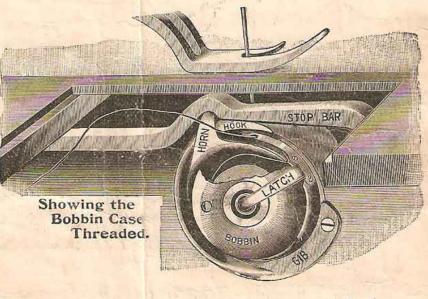
# To Place the Bobbin and Thread the Bobbin Case.

Hold the bobbin in the left hand with the thread leading from the top towards you. Hold the end of the thread with the right hand, place the bobbin in its case and close the latch, then, still holding the thread above the latch with the right hand, push the thread with the left thumb down towards you on the edge of the bobbin case until the thread slips into the notch which is just above the latch, and then pull the thread from you until it is drawn up under the notch at the end of the tension spring.

Or, you may place the Bobbin and Thread the Bobbin Case with the Hand under the Machine.



The Bobbin is shown, partly cut away, giving a view of the direction in which the thread should unwind.



#### To Replace the Slide.

Lay the slide about a half inch on its track in the machine; press on that portion as you push it in. The edge of the slide is filed off so that it can be replaced in this way with ease, as shown in the cut.

a halfinch machine; on as you alge of the that it can way with

If the slide does not stay in position, spring the variety.

# The Tension Pulley. Turn the top of the nut toward you to tighten and from you to loosen the Tension. THREAD FROM THE RIGHT TO THE

# To Thread the Machine.

Place the spool on the spool wire, which tips back for the purpose, pass the thread under the wire through the thread check (1), down IN FRONT, and once around the tension pulley (2), thence under the thread guide (3), through the take-up (4), the thread leader (5), and the needle bar thread guide (6) to the needle. Then thread the needle from right to left, all as seen in the cut, and draw two or three inches of thread through the eye of the needle when the take-up is at its highest point.



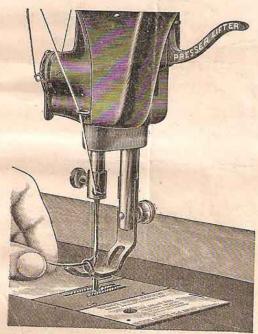
Showing Spool Holder Turned Sideways to Hold a Large Spool.

TO USE LARGER SPOOLS than will go on the spool holder, loosen the screw and turn the base across the arm of the machine. Then by turning back the wire, it will hold extra large spools.

IF THE THREAD KINKS or curls before it reaches the "thread check 1," pass it from the spool, back of the upright wire, thence to the "thread check 1." Silk thread and cheap cotton thread may need this precaution.

Do not and check, or the groove in the tension pulley become clogged with lint, dirt, or

it slip around the tension pulley without turning it, wind it twice around



Draw up the under thread before putting the cloth under the presser, as shown in this view, to make the stitches perfect from the start.

# Start Right. Have the threads and cloth in position as shown in this view.

#### To Draw Up the Under Thread.

Let the thread extend through the needle two or three inches when the take-up is fully up. Now hold the end of the upper thread SLACK and turn the hand-wheel carefully from you while the NEEDLE GOES DOWN, AND UP, AND DOWN AGAIN TO THE PRESSER-FOOT, WHEN THE TAKE-UP WILL BE AT ITS HIGHEST POINT; then draw the upper thread, and with it the under thread up through the hole in the throat plate, as shown, and pass them both back under the presser. BE SURE THAT THE TAKE-UP REMAINS at its highest point.

#### To Commence Sewing.

Have both threads passed back, as shown, place the cloth under the presser foot, and let down the presser lifter. Start the machine by turning the handwheel over from you.

Do not Pull or Push the work; the machine moves it.

If it does not, the stitch regulating knob is too far to the left, or the feed is too low, or the pressure on the foot is either too heavy or too light.

The pressure of the presser foot is increased by turning down, or decreased by turning up the presser thumb-screw around the top of the presser bar.

The Length of Stitch is regulated by the knob, at the base of the arm. Loosen the knob by turning it and push it to the right to lengthen, or to the left to shorten the stitch, then tighten the knob firmly.

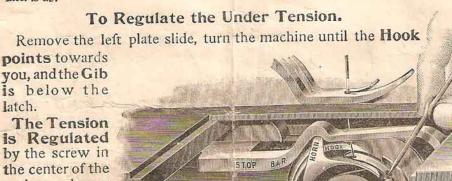
To Remove the Work. Raise the presser foot. Turn the machine by the hand-wheel until the point of the needle in going down has reached the presser foot. This will leave the take-up at its highest point. Draw out the work from you until you can draw the threads into the thread cutter. (If the threads do not draw out easily, the needle is not in the right position, as directed). If the machine is stopped, as directed, the needle will not be unthreaded in starting to sew, even if only a short end is left through the needle.

Regulate the Tension of the upper thread by turning the top of the nut toward you to tighten the tension, the other way to loosen it. (See cut on page 4).

WHEN THE PRESSER LIFTER IS DOWN THE TENSION CAN BE TESTED BY HAND.

When making a very long stitch, the best tension is obtained by using the coarse throat plate instead of the fine one which is usually in the machine.

For convenience, in taking out the work, the tension of the upper thread is released by raising the presser lifter but is not released by the raising of the presser foot when the lifter is not up as by thick goods or seams passing under the foot. Do not try to adjust the upper tension when the presser lifter is up.



is Regulated by the screw in the center of the spring, above the latch. With the small screwdriver turn this screw one quarter or one-half around to the

right to tighten, or to the left to 'oosen the tension, as shown in this view.

The Under Tension, when once regulated, will RARELY REQUIRE ANY CHANGE. Thereafter the proper relation of upper and under tension should be produced by changes of the upper tension only.

In sewing seams where strength is required, the tension should be alike on both threads, in order that the lock may be in the center of the goods,

thus: 199999

If the lower thread lies straight on the underside of the goods, the under tension is too tight or the upper tension too loose.

If the upper thread lies straight, thus: the upper tention is too tight, or the lower tension too loose.

In sewing where special elasticity is required, as on bias seams or very elastic material, hold the work back slightly, to keep the cloth stretched while being sewed.

To Turn a Corner. Stop the machine with the needle in the cloth, after it has been down and come partly up. Then lift the presser foot, and turn the work in the manner desired, using the needle as a pivot.

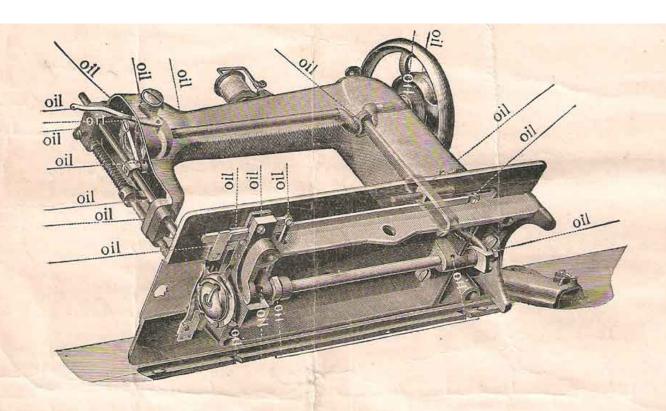
The Belt should be only tight enough to move the machine without slipping. If it is too tight it will make the machine run hard. Should it become too loose, a piece must be cut out near the belt hook, and another hole made, and hooked again.

Causes of the Machine not Working Properly will usually be found in the tension not being properly adjusted, the thread being too coarse or too fine for the needle, the needle and thread too coarse or too fine for the throat plate, or the needle being bent, or blunted. See that the needle is pushed up as far as it will go into the needle-bar, and that it goes perfectly true through the hole in the needle-plate. If it does not, spring the point in the requisite direction till it goes all the way alike.

If the machine misses stitches in running off from a thick seam, hold the cloth back slightly to keep it straight and prevent its rising up with the needle.

In using slack-twist or uneven silk, should it be frayed or roughened, the needle is too fine, or has a hook upon its point, made by striking the throat plate.

If by operating the machine without cloth when threaded a bunch of thread collects around the bobbin case, IT MAY EASILY BE REMOVED by lifting the presser foot and turning the hand-wheel back and forth with the right hand while the thread is drawn out with the left hand.

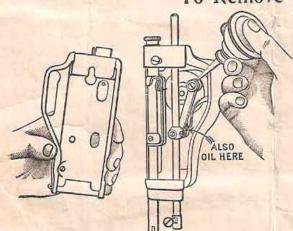


TRANSPARENT VIEW SHOWING PLACES FOR OILING.

#### To Oil the Machine.

Use the best Sewing Machine Oil, to be had of our agents and at our offices. Oil at all places indicated by the dotted lines shown on the cut above, or wherever there is friction. The parts on the under side of the machine may best be cleaned and oiled by removing the belt and turning the machine back as shown in the cut.

To Remove the Face Plate.

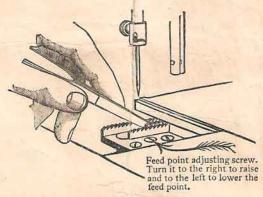


Loosen the large screw near the tension pulley and slide the face plate upward, until the large hole will pass over the head of the screw. Wipe off the presser bar, needle bar, and other parts. Any one can remove this plate to clean and oil the working parts, as shown in this cut. After replacing the face plate, tighten the screw firmly.

(Never run the machine with the presser-foot down, except when sewing, as it will scratch the foot and dull the feed points).

If the machine has been neglected and has become gummed, use kerosene oil or turpentine, and wipe thoroughly to remove all old oil and dirt, after which use good sewing machine oil as usual.

In cleaning and oiling the machine, OR IF THE BOBBIN CASE MAKES A CLICKING SOUND, wipe the edge of the bobbin case with an oiled cloth.



#### To Clean the Feed.

Take out the needle and presser foot.

Remove the screw and lift out the throat plate. Clean all of the parts about the feed bar, rotary hook and bobbin case and oil all of the parts where there is friction.

To Adjust the Feed Points. Should the feed points or feed bar be worn by long use, they may be raised by turning the middle screw to the right, or turning it to the left will lower them. The points should rise about one thirty-second of an inch above the plate, or enough to raise the hemmer slightly when it is in the machine.

To Replace the Throat Plate. Place the back end down into the groove and SEE THAT THE SMALL PIN COMES through level with the top of the plate. It is important to REPLACE THIS PLATE FLAT DOWN into its proper position.

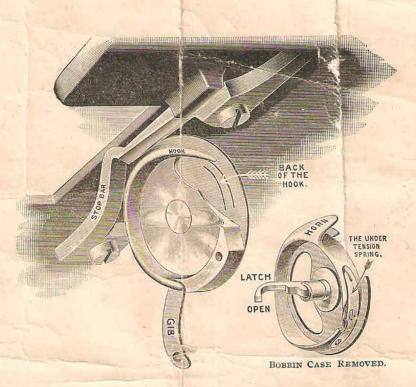
After oiling, raise the presser-foot, and run the machine rapidly a minute; then wipe off all superfluous oil, to prevent soiling the goods. If the machine runs hard at any time, it is certain that some part needs oiling.

#### To Replace the Belt.

Place the belt in the groove of the hand-wheel, operate the treadle and the balance wheel will take on the belt.

#### To Oil the Stand.

Oil the bearings at both ends of the treadle, the pitman at upper and lower ends, and the shaft, which passes through the hub of the leg, at each end of the hub.



This Cut Shows the Gib Open and the Bobbin Case Removed.

To Remove the Bobbin Case from the Rotary Hook, which is UNNECESSARY EXCEPT AT LONG INTERVALS to thoroughly clean the hook or show its simplicity of construction. Remove the screw at the end of the gib and open the gib, as shown above. Turn the hand-wheel until the point of the hook is toward you, then you can lift out the bobbin case.

In returning the bobbin case to the hook, have the position the same as in removing the case, being sure to have the horn up into the notch in the stop-bar.

Close the gib and turn THE SCREW IN FIRMLY, being careful not to damage

the head of the screw.

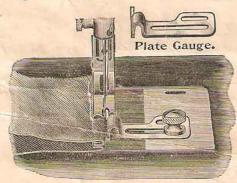
BACK OF THE HOOK between the point of the hook and the gib should be kept clean to prevent soiling the thread or obstructing the loop.

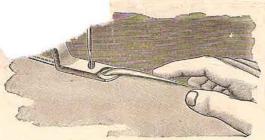
THE PLATE GAUGE is attached to the plate by means of the extra thumb-screw, and is used for stitching at a regular distance from the edge.

#### To Edge Stitch with Close Gauge.

Set the gauge between the prongs of the presser-foot, as shown in the cut, illowing the foot to work freely up and down with the feed.

Keep the presser-foot screw tightly turned in, to hold the presser-foot firmly in position.





#### The Hemmer Hemming.

#### To Hem.

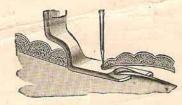
Put the Hemmer in the place of the presser foot and have the two threads passed back under the Hemmer ready to sew. Turn up the right hand edge of the cloth about ¼ of an inch in width and crease it for about an ineh or more.

Clip off slightly the turned up corner, pass the turned up edge of the cloth into the opening in the Hemmer to the needle. Lower the presser bar, see that the cloth is not folded under the right hand side of the Hemmer, take hold of the ends of the two threads, start the machine and pull gently on the threads. If the cloth been passed far enough into the Hemmer as directed, the threads can be released after two or three stitches are taken, and the hem will be started properly. Guide the cloth so that the edge, as turned over by the scroll, will about reach the left side of the opening in the hemmer. If too much or two little is guided into the hemmer, it will leave a raw edge.

When the presser-bar thumb screw is loose the hemmer can be MOVED
TE RIGHT OR TO THE LEFT, so that the needle will stitch the proper disease edge of the hem or fell.

#### The Hemmer Felling.

pieces of cloth together as follows: Have the under piece with its edge ten with the right hand side of the hemmer, and our preparation of the long point in front our real Hemmer or far enough to the to hold the same. This will heave the edges when sewed about art. Then open and spread the cloth so that the seam will lay will stand upright; then fell them down by passing the raw edges and mer which will turn them the fer as in hemming. Guide the onder the left hand edge of the ing point in front of the hemmer.



# The Hemmer hemming and Lace,—One Operation

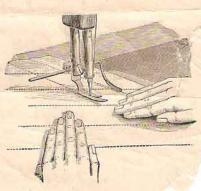
GUIDE THE BACK EDGE of the lace into a ing at the right side of the hemmer, under the needle, and hold the cloth for the hem, as directed

#### To Attach the Quilting Gauge.

Let down the presser-foot, turn out the presser-foot screw far enough to admit the quilting gauge wire into the notch under the head of the screw, and tighten the screw firmly.

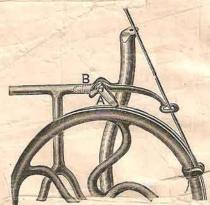
TO QUILT. Let the finger of the gauge rest upon the cloth-plate for a guide, while stitching the first seam, then raise the finger enough to let the quilt pass under without touching, and keep the seam last stitched directly under the finger to insure the seams being equal distances apart.

TO STITCH SHIRT BOSOMS. Set the quilting gauge as far from the needle as you wish to have the stitching from the edge of the fold or



QUILTING OR BOSOM GA

plait, and guide the work so that the edge of the plait will follow

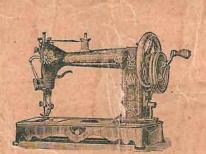


This cut shows the brake A the machine from turning in the and the guard that guides the become of the wheel automatic tidle is operated to replace the can be put out of action by turners upon the pin B.

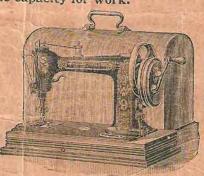
If the machine is to be sent to repairs take it off the table, enclose it, with the and have the name and address of the owner written plainly and tied to it.

#### No. 9 HAND MACHINE.

This light and portable hand machine has all the superior qualities of the No. 9
Trea lie Machine, and the same capacity for work.



IRON BASE.



WITH COVER.

Special Directions for Winding the Bobbin on the No. 9 Hand Machine.

Press the wire which projects near the handle and slide the cap a little to the right, then release the wire and a spring will catch in a groove thus holding the cap so that it may be operated without running the machine—Press the bobbin on the spindle of the winder and raise it until the rubber band operates on the rim of the cap.

Wind the thread from the spool on the machine once around the arm cap screw on top of the arm, near the hand wheel and pass the end from the inside through the hole in the bobbin and hold it firmly, as shown in the cut on page 2, turn the handle as in running the machine, and a few turns will cut off the thread at the bobbin. If necessary guide the thread with a touch of the finger. After winding the bobbin, restore the cap to its position.

#### To Remove the Cap.

OCCASIONALLY REMOVE THE CAP to which the handie is attached and clean and oil the interior parts of the cap and the stud on which it turns.

After sliding the cap to its bobbin winding position, press the p ojecting wire with considerable torce and continue to slide the cap until off the stud.

www.ise....

# THE WHEELER & WILSON Sewing Machine Needles.

Every genuine Wheeler & Wilson needle is stamped on the shank,

"W. & W. MFG. CO."

BEWARE OF IMITATIONS.

A machine cannot be expected to do perfect work with imperfect needles.

To do the best work use the best thread. We recommend WILLIMANTIC SIX CORD SPOOL COTTON.

# Wheeler & Wilson Mfg. Co.,

Manufacturers of

## Sewing Machines

for Family and Factory use. Sizes and construction adapted to all grades of Cloth and Leather; for Hand, Foot, or Engine Power; Two, Three d Four Needle Machines; Lock-stitch and Chain-stitch Machines; Button-w, Walking-foot, Homestitch, Variety-stitch, and many other times. Power tables, power transmitters, shotting, pulleys, ces for machines in factories. Special apphances on hand is of sewing nachine work.

Family or Factory Machine.

Speed and Durability, story and Head Office, ct. Connecticut, U. S. A. Directions for Using Attachments for the

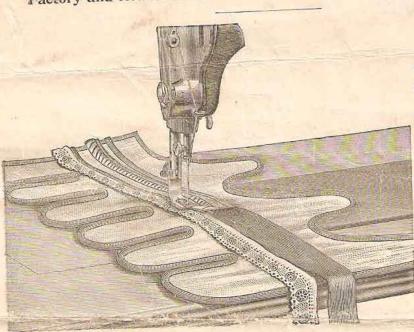
# Wheeler & Wilson No. 9 Family Sewing Machine.

Binder, Ruffler, Tuck Marker and Adjustable Hemmer and Feller, Adjustable for different widths of hem or fell.

Manufactured by the Wheeler & Wilson Mig. Co.

Factory and Head Office:

Bridgeport, Connecticut, U. S. A.



#### The Binder.

Insert the binder in place of the presser foot.

If bias binding is to be used it must be cut % of an inch wide.

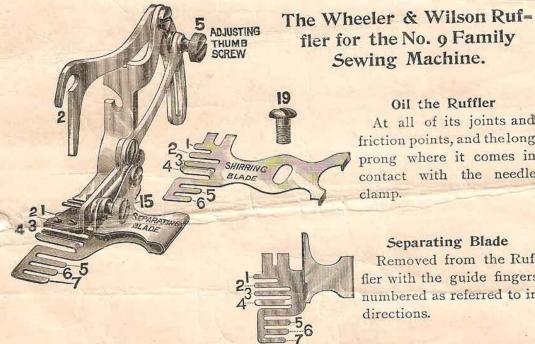
Insert the binding through the scroll and pass the edge of the material to be bound between the folded edges of the binding.

If the needle does

er distance from the edge of the binding, loosen the screw, move the scroll to right or left and re-tighten the screw.

To use the binding for trimming, insert the binding as usual, but let the cloth pass beneath the presser feet so as to stitch the binding at any distance from the edge, or where you desire to lay the trimming. Lace edging or other trimming may be passed through the folds of the binding at the same time and both be stitched upon the garment. The quilting gauge may be used to lay the rows of trimming equal distances apart.

To use the binder for dress braid, pass the braid through the slot on the back side of the scroll and proceed as usual.



#### fler for the No. 9 Family Sewing Machine.

#### Oil the Ruffler

At all of its joints and friction points, and the long prong where it comes in contact with the needle clamp.

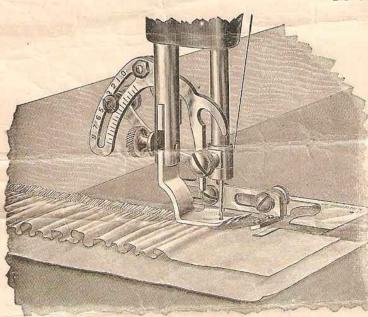
#### Separating Blade

Removed from the Ruffler with the guide fingers numbered as referred to in directions.

The ruffler is easily attached or removed, if the directions are followed.

#### To Attach the Ruffler.

Remove the presser foot from the machine. Raise the needle to its highest point. Take the ruffler in the right hand by the adjusting thumbscrew, pass it under the arm of the machine, and pass the forked end of the lever, between the presser-bar and the needle bar and over the neck of the needle set screw, and swing the upright part of the ruffler to the left into the slot in the presser-bar. Let down the lifter. See that the



The Ruffler Ruffling, as described in Fig. B.

needle will pass down through the center of the needle hole in the foot as shown in this cut, then tighten the presser-bar screw firmly with the screw driver,

#### To Remove the Ruffler.

Stop the machine with the needle down through the foot, raise the presser lifter, loosen the thumb-screw, push the ruffler downward to the right and it will fall out; raise the needle to remove it.

#### In Operating the Ruffler,

Either the separating or the shirring blade should always be used to prevent the feed points from damaging the ruffling blade. Both blades cannot be used at the same time.

#### The Separating Blade

Can be removed by loosening the thumb-nut (15) at the front of the ruffler and drawing the blade forward.

#### The Shirring Blade,

Is attached to the bed of the machine by the screw (19) which has a low, flat head that allows cloth to pass over it freely.

#### In Edge Stitching,

If the needle does not enter the goods at the desired point, loosen the presser bar thumb-screw and move the ruffler a little to the right or left as may be necessary and re-tighten the screw.

#### The Fullness of the Ruffle

May be increased by moving the adjusting thumb-screw (5) downward on the graduating scale, or by setting the stitch regulator of the machine for a shorter stitch. It may be decreased by the opposite movements.

#### It is often necessary

To tighten the upper tension when the ruffler is used in order to draw up the thread and make a good stitch.

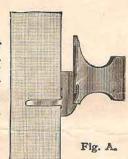
#### Directions

For placing the clotu in the guides of the ruffler for doing different kinds of work.

#### A.

#### To Place the Cloth to Make a Plain Ruffle.

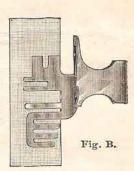
Pass the strip of cloth which is to form the ruffle under finger No. 4, over the others and back under the ruffling blade, which is the blade having the sharp points, and operate the machine. If a strip of paper is guided between the feed points and the ruffler, it will prevent damage to both by rubbing together and a more regular ruffle can be produced. The paper is easily torn off after stitching it on.



B.

#### To Place a Band to which a Ruffle Is to be Stitched.

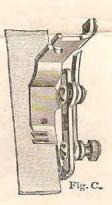
Pass the band over finger No. 3 and under the others, then place the strip of cloth which is to form the ruffle as shown in Fig. A. This operation is illustrated in the cut showing "The Ruffler Ruffling."



C.

### To Place the Upper Band when a Ruffle is to be Stitched Between two Bands that are Blind Stitched.

Pass this upper band under the foot and over the blade having the sharp points. The lower band is to be placed as in Fig. B. and the strip of cloth to form the ruffle is to be placed as in Fig. A.



D.

## To Place the Cloth to Form a Narrow Ruffle when the Band is to be Edge Stitched to it.

The strip of cloth to form the ruffle is to be passed through the ruffler as shown, under finger No. 5 and over the others and under the blade having the sharp points.

N. B. To edge stitch a wide ruffle remove the separating blade and attach the shirring blade, guide the cloth for the ruffle under finger No. 5 of the shirring blade.

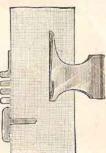
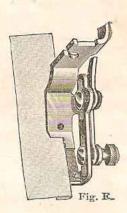


Fig. D.

E.

# To Place the Upper Band in the Ruffler when it is to be Edge Stitched to the Ruffle.

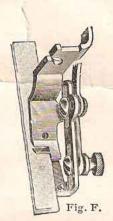
Fold under 1/4 inch of the edge of the band, pass the folded edge into the guide slot in the foot which is nearest to the needle and back under the foot; also pass in the strips to be ruffled as shown in Fig. D.



#### F

# To Place Piping in the Ruffler to be Stitched Between the Band and the Ruffle.

Fold double a ½ inch strip and pass the folded edge into that guide slot in the foot which is second from the needle and out under the band. Place the strip to be ruffled as in Fig. D. and the band as in Fig. E.



#### G.

## To Place the Lower Band which is to be Edge Stitched to a Ruffle.

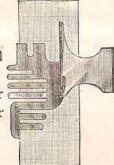
Fold over 1/4 inch of the band, pass the folded edge over guide finger No. 2 under all the others and have guide finger No. 7 within the fold. Place the strip to be ruffled as in Fig D. and the upper band as in Fig. E. using piping as in Fig. F., if wanted, producing a ruffle between two edge stitched bands.



#### H.

# To Place the Lower Band when it is to be Blind-Stitched and the Upper Band is to be Edge-Stitched.

Place the strip to be ruffled as shown in Fig. D., the upper band as in Fig. E., and pass the lower band over guide finger No. 7 and under all of the others.



#### Fig. H.

#### I.

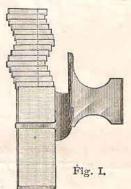
#### To Place the Cloth to make Narrow Plaits.

Take an inch strip of Lonsdale cambric and fold it double. Pass the folded edge under guide finger No. 4, over the others and move the adjusting thumb screw down to the lowest position; place the band as in Fig. E. for edge stitching. Scallops are made by guiding the cambric from right to left alternately.

#### For Full Ruffles or Small Plaits.

Set the stitch regulating knob so that figure 2 shows at the washer.

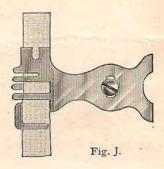
Some thicknesses of cloth will work well with a shorter stitch and some require that the separating blade be moved and set out, leaving a larger opening between the foot of the ruffler and the blade.



J.

To Place a Tape in Order to Shirr or Ruffle to it.

Remove the separating blade, attach the shirring biade with the flat-headed screw (19) which allows cloth to pass over it, then pass the tape under guide fingers Nos. 7. 4. 2 and 1 and over the others; crease the cloth to be shirred every three inches or the distance apart that shirrs are wanted, and guide the crease to the needle.



To Ruffle with a Heading.

Fold the cloth to be ruffled down one inch and guide it into the ruffler between the blades one-half inch from the folded edge. A skirt or waist can be placed under the ruffler and the heading stitched to it.

L.

To sew a Ruffle with a Finished Heading to a Single Band.

Used for silk curtains, lace work and common cloth. Fold 1/8 of an inch of the band down. Place the band, with the folded edge on the feed, over finger No. 3 and under all others, as shown in Fig. B. Fold 1/8 of an inch of the ruffle down. Place the ruffle with the folded edge next to the band, under finger No. 4 and over the others, passing it out between the blades, as shown in Fig. A. After ruffling fold back the seam and stitch the folded edge of the ruffle down to the band.

The Tuck Marker.

Fasten the tuck marker to the machine by inserting the foot (1) into the presser bar in place of the regular presser foot, let down the lifter and see that the needle passes down through the middle of the needle hole in the presser foot. Then fasten the thumb screw in the presser bar firmly with the screw driver. Each

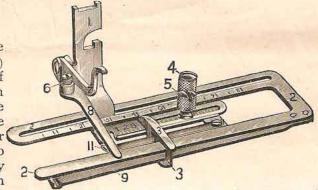


figure on the presser foot scale represents just how many eighths of an inch it is from the needle. The guide (3) can be fastened with thumb screw 5 in line with any one of them and so limit the width of the tuck, or the distance from the edge of the fabric that stitching can be done. The figures on the frame scale (2) represent the distance from the needle, to the left, that the marker can be set to make marks or creases for the next tuck, and is secured by thumb screw (4). Ordinarily, when a figure on the frame scale is set in line with the same figure on the foot scale and guide (3) is secured in line with them, the tuck will be as many eighths of an inch wide as the figure on the foot scale represents and the mark or crease for the next tuck will be the distance from the needle which will leave that space between the tucks most frequently desired for the size of the tuck being made. Example: Secure the guide (3) in line with figure (2) of the foot scale; and bring figure (2) of the frame scale in line with the guide and figure. This combination will produce a 1/4 inch tuck and a mark or crease for the next

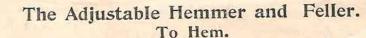
tuck at the space most frequently used for this sized tuck. If more space is wanted between the tucks, move the frame to the left until 2½ or 3 on the frame scale is in line with the guide. If less space is desired, move the frame to the right and the mark will be made nearer to the needle. If a tuck 3% of an inch wide is wanted, set the guide (3) in line with figure (3) on the foot scale and

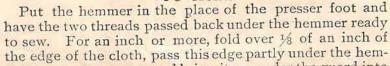
bring figure (3) on the frame scale in line with them.

#### To Tuck.

Have the guide (3) set for the desired width of tuck, and the frame (2) set for the proper space between the tucks. Fold the cloth for the first tuck by hand. Place the folded edge under the front of the frame (2) and over the marker (9), under the spring (11), up to the guide (3), back under the presser foot and needle, and let down the presser lifter. In sewing keep

the folded edge to the right against the guide (3). For following tucks, fold the goods at the marks or creases made by the tuck marker and repeat the operation. If the mark or crease is not distinct, more pressure can be made (on the marking frame) by turning down (to the right) screw No. 6, or if too heavy for some fabrics it can be decreased by turning it up (to the left).





mer and bring it up under the guard into the scroll, up to the indicator as shown in this cut, in order that the stitches will commence at the end of the hem. For a wide hem, if the material is very soft, pass it through the hemmer some distance and draw it back to the proper position. Let down the presser foot and proceed as in ordinary sewing, guiding

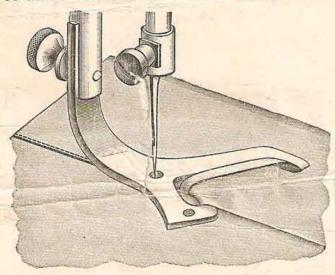
the cloth so that its edge will keep up to the indicator.

To Adjust

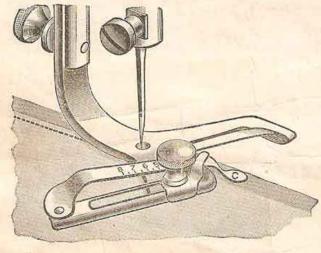
For different widths of hem or fell, loosen the thumb-screw and move the guide to the right or left to give the desired width and re-tighten the screw.

#### When the Presser Bar

Thumb-screw is loose the hemmer can be moved to the right or to the left so that the needle will stitch the proper distance from the edge of the hem or fell.

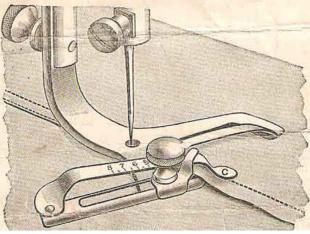


For an extra wide hem remove the thumb-screw and indicator, fold over the cloth for the desired width of hem—turn under the edge for a start and sew as shown in this cut.



#### To Fell.

Sew the two pieces of cloth together with the edge of the lower piece even with the outer edge of the guide C., and with the upper piece so placed that the seam will be about 1/8 inch from its edge, as shown in this cut.



Then spread out the cloth and hem down the wide edge over the narrow one, guide the stitched seam under the inside corner of the guide C. as shown in this cut.

(Thick goods require a wider seam than thin, as more room is needed for the cloth to turn in.)