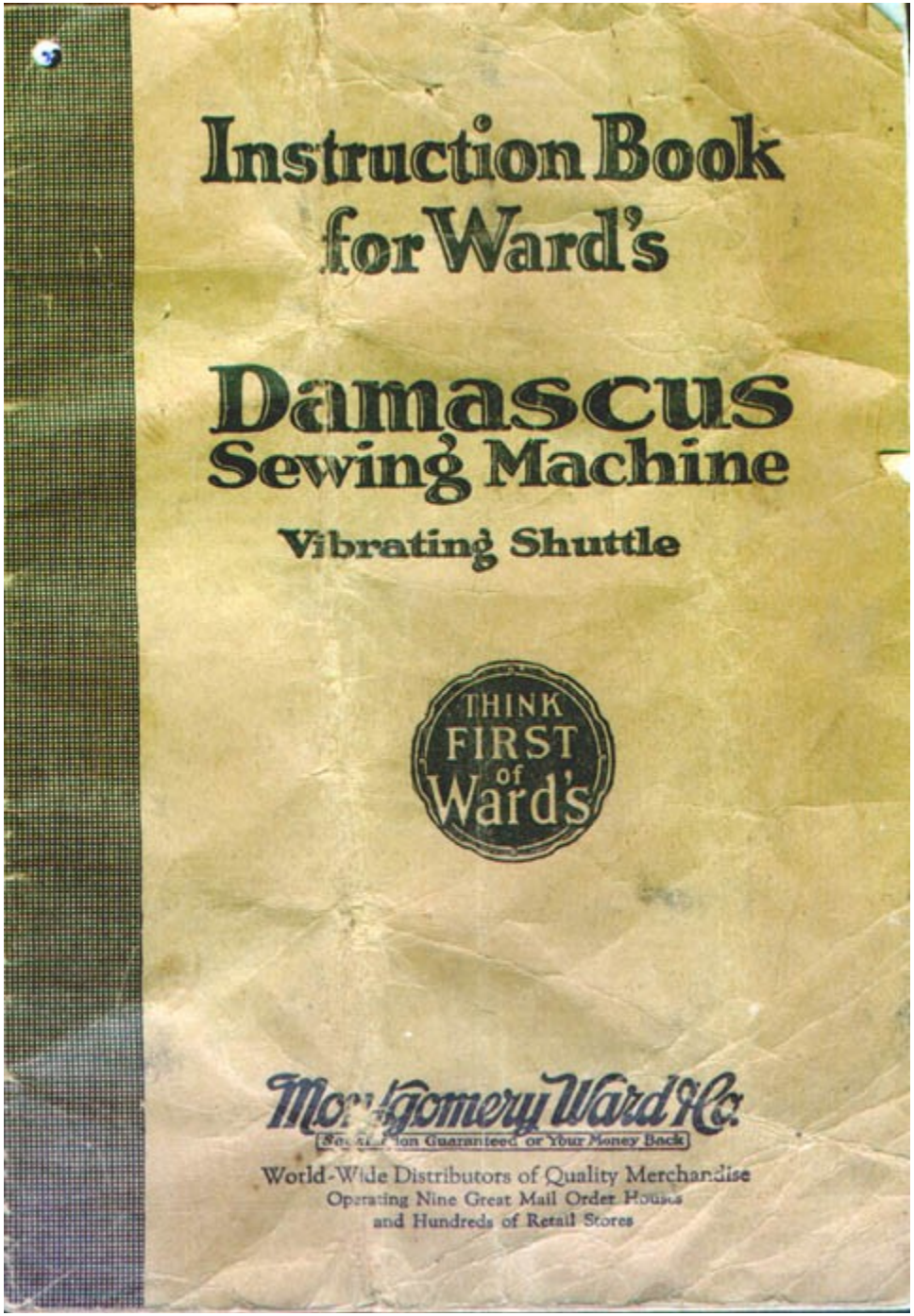

Instruction Book
for Ward's
Damascus
Sewing Machine
Vibrating Shuttle
THINK
FIRST
of
Ward's
Montgomery Ward & Co.
Satisfaction Guaranteed or Your Money Back
World-Wide Distributors of Quality Merchandise
Operating Nine Great Mail Order Houses
and Hundreds of Retail Stores

Tested and Guaranteed

Every Damascus Sewing Machine is inspected and tested by sewing machine experts before it leaves the factory. It is accurately adjusted and its sewing qualities are demonstrated on all kinds of work. No machine is sent out until we are sure it is perfect in every respect. The serial number is then placed on the Gold Bond Guarantee which is packed with each machine. Keep the guarantee for future reference.

Please Read Instructions

You do not need a teacher to learn to operate your Damascus. The instructions in this book are written so the beginner can understand them and operate the machine successfully. Even if you have used many machines before, it is a good plan to read this book and become familiar with the different parts of the Damascus. Keep the book and refer to it from time to time to be sure that you are giving the machine the care it deserves.

Below Is A Copy Of The Guarantee You Receive With Your Damascus

Certificate of Guarantee

Special Twenty-Year Sewing Machine Guarantee

WE guarantee the material and workmanship of this Sewing Machine, and that the mechanism will operate perfectly when the printed instructions packed with the machine are followed. This machine has been accurately adjusted, carefully inspected and thoroughly tested with both silk and cotton thread.

We will make good any defects in material or workmanship, which develop within a period of twenty years. If at any time during the life of this guarantee it becomes necessary to send the machine to us for repairs on account of defects in material or workmanship, we will put the machine in perfect running order without cost to the owner and will pay freight charges both ways.

Natural wear and tear of the parts are not considered defects in material or workmanship, nor does this guarantee apply to attachments, or to the breaking of needles, shuttles, bobbins or belts.

Montgomery Ward & Co.

Machine No.....

KEEP THIS BOOK FOR FUTURE REFERENCE

It Is Easy to Operate the Damascus

Turn to pages 10 and 11 for a large illustration showing the different parts plainly indicated and identified by name.

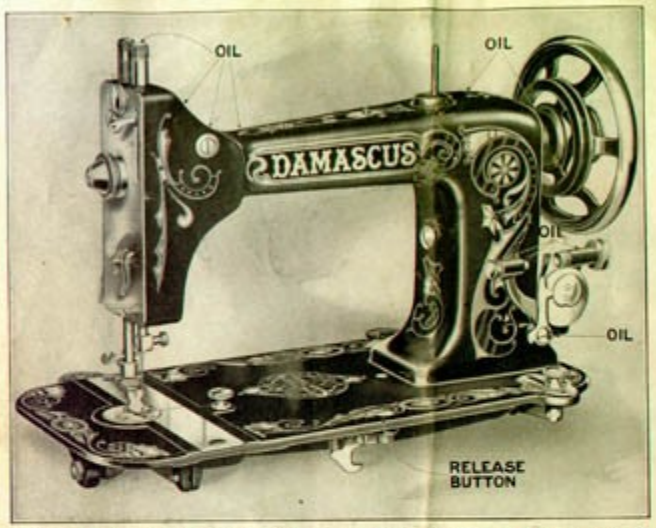


Figure 2. The arrows show the location of the oil holes where a drop of oil is needed. There is an oil hole in the top of the needle bar cap and three oil holes which distribute the oil to the sewing head. There are two oil holes on the arm near the balance wheel and one on the automatic bobbin winder.

Oil Your Damascus Before Sewing

In order to run smoothly and easily a sewing machine must be oiled. If the machine is used continuously, it should be oiled every day, but if it is used only once in a while for a few hours' sewing, an occasional oiling is all that is necessary. **Use only good sewing machine oil** (see General Catalogue) and do not put on more than is needed.

The arrows marked "Oil" in Fig. 2 show just where the oil should be applied. Put **one drop of oil** at each point and wipe away any surplus oil with a soft cloth so it will not soil the work you are doing.

There is an oil reservoir under the shuttle cover which has been packed with oil at the factory. Refill this reservoir occasionally.

Oil a Little and Often

Make it a habit to oil your machine as often as it is needed and you will be surprised at how easily and smoothly it will run, even after years of use.

Be sure that you oil the small oil hole in the hand wheel; then it will be easier to release the brake button when you want to wind the bobbin.

If the Machine Runs Hard

The Damascus is an easy running machine and if it requires any extra effort to turn it, you may be sure that some bearing has not been oiled properly or the machine is gummed from poor oil or from long standing.

To Remove Gummed Oil

To remove gummed oil, apply a little kerosene (coal oil) on the bearings and run the machine rapidly for a few moments with the shuttle removed, then wipe clean with a soft cloth. The kerosene will wash away the gummed oil and leave the bearings clean. The machine should then be thoroughly oiled with **good sewing machine oil.**

Oil the Under Parts of the Sewing Head

There are certain points on the underside of the sewing head where oil is needed and it is fully as important that these parts receive oil as any of the other points on the sewing head.

To oil the under parts of the machine, throw the belt off the hand wheel, press down on the "Release Button" (see Fig. 2) and turn the sewing head back upon its hinges. Now refer to Fig. 3 and put a drop of oil at the points marked with the arrows. Be sure to put a drop of oil on the shuttle race against which the face of the shuttle rubs.

When oiling the under parts of the sewing head, wipe away any lint and broken threads that have collected around the shuttle and shuttle race. Do not use any more oil than is necessary to properly lubricate the different parts of the machine.

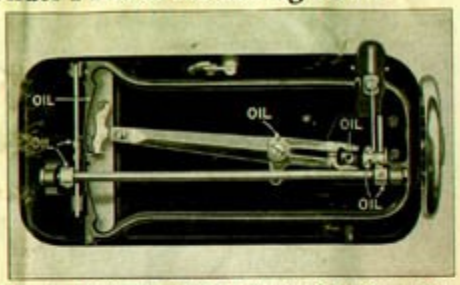


Figure 3. This shows the sewing head turned back on its hinges and the arrows indicate the points where oil is needed. A drop of oil at each point is sufficient and any surplus should be wiped away.

How to Oil and Adjust the Stand

Figure 4. There are only five points on the stand where oil is needed. There is an oil hole at each end of the treadle to lubricate the treadle bearings and an oil hole in the belt wheel for the wheel stud bearing. Also put a drop of oil at each end of the pitman which connects the treadle and wheel.

The only attention the stand will need is an occasional drop of oil at the five points marked "Oil" in Fig. 4. Neglecting to oil the stand will cause the machine to run hard.

After several years' use, it may be necessary to take up the lost motion in the belt wheel. To do this, remove the belt and loosen the lock nut on the wheel stud on the outer side of the leg. With a large screwdriver, turn the wheel stud to the left until the lost motion is taken up, then tighten the lock nut.

To adjust the treadle, loosen the lock nut on the outer side of the leg, and with a large screwdriver turn the center screw to the right until the lost motion is taken up, then re-tighten the lock nut.

The ball bearings at both ends of the metal pitman can be adjusted if necessary. Loosen the lock nut and turn the cone bearing to the left until the lost motion is taken up, then tighten the lock nut again.

In most cases these adjustments will not be needed until after the machine has been in use for many years.

When the stand does need adjusting, be sure that you have this book for ready reference.

Uniform Treadle Motion Is Needed

Figure 5. To release the sewing mechanism, hold the hand wheel with your left hand and turn the friction out with your right hand. The picture at the right shows the direction to turn the brake button to tighten or loosen it. It is only necessary to turn the brake button about one half turn.

To obtain satisfactory results with any sewing machine, it should be run with a constant, uniform motion. If you are not accustomed to operating a machine, it is a good plan to practice using the treadle (without the machine being threaded) until you are able to produce a steady, even motion.

The Brake Button

The Damascus Head is supplied with a brake button so the treadle belt wheel and hand wheel can be operated without running the sewing mechanism. This feature makes it possible for you to wind bobbins without unthreading the machine or without removing partly finished work that you may be sewing on.

Release the Hand Wheel

To release the brake button, hold the hand wheel with the left hand, and with the right hand turn the brake button to the left as far as it will go (see Fig. 5). You will now be able to run the treadle and hand wheel without moving the sewing mechanism of the machine.

You will find it easier to produce a steady, even motion if only one foot is placed on the treadle to operate the machine. Place the foot on the treadle so the instep is about over the center of the treadle. Now turn the hand wheel with your right hand so the **top of the wheel runs toward you.** This will start the hand wheel and treadle motion and it should be continued by an alternate pressure of the heel and toe upon the treadle.

Practice the Treadle Motion

After a little practice you will be able to produce a steady, even motion of the balance wheel and you will be able to stop and re-start the machine without causing it to run backward.

When you are thoroughly familiar with the treadle motion, hold the hand wheel with your left hand and tighten the brake button by turning it to the right (see Fig. 5). Now raise the presser foot by means of the presser foot lifter, place a piece of cloth in position on the machine and let the presser foot down upon it. Now operate the machine and guide the work as though you were sewing.

Do not try to help the machine by pulling or pushing the work. The machine feeds the work without assistance.

Do not run the machine with the presser foot down unless there is cloth under it, as this may injure the feed or the presser foot.

How to Wind the Bobbin

Figure 6. This shows how the automatic bobbin winder is turned into position with the small pulley in line with the belt pulley of the machine. Notice how the end of the thread is caught between the brass end of the bobbin and the socket (3) to hold the thread as the bobbin starts winding.

Turn the automatic bobbin winder to the right until the same pulley is in line with the belt pulley of the machine and then put the belt over the small pulley as shown in Fig. 6. Now hold the hand wheel with your left hand and release the sewing mechanism by turning the brake button to the left as explained on Page 4. Now operate the treadle of the machine until the distributer arm of the bobbin winder is as far to the right as it will go.

Place Bobbin in Holder

Pull the spring knob (1) of the bobbin winder to the left and place an empty bobbin between the sockets (2) and (3). Place a spool of thread on the spool pin of the machine and lead the thread down and through the groove at the base of the distributer arm and then up and through the groove at the top of the arm. Pull the bobbin lightly to the left and catch the end of the thread between the right end of the bobbin and the socket (3). This will hold the thread as the bobbin starts to wind.

Now operate the treadle of the machine as you would for sewing and the thread will be automatically wound on the bobbin. Do not wind the bobbin too full as this will prevent it from revolving freely when it is placed in the shuttle. The thread should not be wound higher than the brass ends of the bobbin.

When Finished Winding Bobbins

After you have finished winding bobbins, remove the belt from the small pulley of the bobbin winder and turn it to the left out of the way. Hold the hand wheel of the machine with your left hand and turn the brake button to the right to connect the sewing mechanism.

To Oil the Bobbin Winder

The bobbin winder should receive an occasional drop of oil at the points marked "Oil" in Fig. 6. A very little oil should be placed on the left end of the bobbin (2), in the oil hole near the belt pulley and at the lower end of the distributer arm. Oil should never be put on the right end of the bobbin or in the socket (3) as this is the friction drive which turns the bobbin. Be sure to wipe away any surplus oil so it will not soil the thread or the work you are doing.

How to Thread the Shuttle

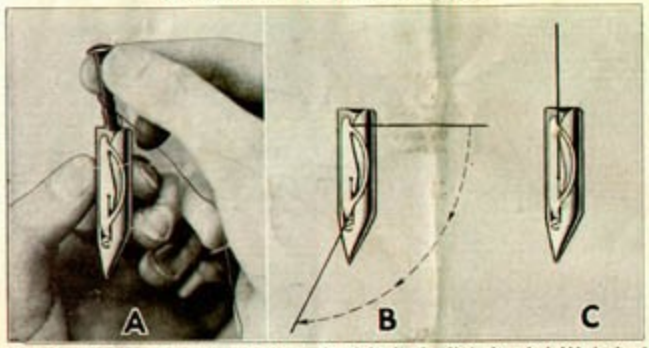


Figure 7. These three pictures show just how to thread the shuttle. Notice how the bobbin is placed in the shuttle with the thread leading from left to right on the side of the bobbin nearest you. Be careful not to wind the bobbin too full as it would not revolve easily inside the shuttle when sewing.

Hold the shuttle in your left hand with the point downward and the tension spring toward you as shown at A Fig. 7. Place the wound bobbin in the shuttle with the thread drawing from left to right on the side nearest to you.

Place the left forefinger on the end of the bobbin in the shuttle and draw the thread down outside the tension spring as shown at B Fig. 7.

Now draw the thread straight toward you and then straight upward. The thread will automatically guide itself under the tension spring and to the opening in the side of the shuttle as shown at C Fig. 7. Pull out a little of the thread to be sure that the bobbin revolves freely inside the shuttle. If the bobbin has been wound too full it will not revolve freely and will cause difficulties when sewing. Do not let lint or broken threads collect under the tension spring.

Figure 8. Turn the machine until the shuttle carrier is in the forward position, place the point of the shuttle between the shuttle race and the carrier and drop the shuttle into place.

Place the Shuttle in the Shuttle Carrier

Open the front slide on the bed of the machine and turn the balance wheel until the shuttle carrier is in its forward position. Take the shuttle in your right hand with the point toward you and the tension spring upward. Put the point of the shuttle in the forward end of the shuttle carrier and drop the shuttle into place.

Leave about two or three inches of the loose end of the thread coming from the shuttle outside of the slide opening. Do not close the slide tight but leave space enough so the end of the thread can pass through.

When the attachments are being used, you may find it more convenient to place the shuttle in the carrier by opening the rear slide on the bed of the machine. In this case the balance wheel is turned until the shuttle carrier is at the back of its stroke. If front slide should slip out of place spread tongue at slot.

How to Insert the Needle in the Needle Clamp

Figure 9. Insert the needle in the needle clamp with the flat side of the shank to the right as you sit facing the machine.

Use only good needles and the proper size to suit the material upon which you are sewing. Consult the table at the bottom of Page 9 and choose the proper size thread for the work you are doing; then select the right size needle for the thread you will use. Never attempt to use a bent needle or one with a blunt or hooked point.

To insert the needle, turn the hand wheel until the needle bar is raised to its highest position. Loosen the thumb screw on the right side near the bottom of the needle bar. Take the needle between the thumb and first finger of your left hand and turn it until the **flat side of the shank is to the right.** Now place the shank of the needle as far as it will go up into the needle, clamp and tighten the thumb screw. Turn the hand wheel over slowly and see that the point of the needle passes a little to the right of the center of the hole in the needle plate. The needle should pass midway between the prongs of the presser foot. The presser foot can be adjusted to the right or left if necessary.

You cannot expect to do fine sewing with uneven, rough thread or with poorly made needles that do not fit the machine properly. We carry only the best grade needles. When ordering be sure to state size wanted and give the full name, number and date of guarantee of your machine.

How to Thread the Machine

At first you will find it easier to thread the machine with the presser foot in the lowered position as this will give more room near the eye of the needle. As you become more familiar with your machine, you will be able to thread it with the presser foot in either the raised or lowered position.

Put the spool of thread on the spool pin and pull the end of the thread to the left in front of the needle bar.

Pass the thread down and toward you between the thread discs and once around the tension pulley.

The thread should pass down on the near side of the pulley, then back under the bottom of the pulley, up at the back and then down again on the near side of the pulley and under auxiliary spring.

Pass the thread up on the near side of the auxiliary and thread it from front to back through the take-up.

Pass the thread through the guides on the face plate of the machine and on the needle clamp. These guides are self-threading and it is only necessary to pull the thread toward you from back to front of the guides in order to thread them.

Now turn the hand wheel of the machine until the needle is at its highest point and pass the end of the thread from left to right through the eye of the needle.

If the end of the thread is frayed, wet it with your thumb and forefinger.

Figure 10. This shows the Damascus properly threaded. Be sure to follow the instructions step by step.

How to Pick Up the Bobbin Thread

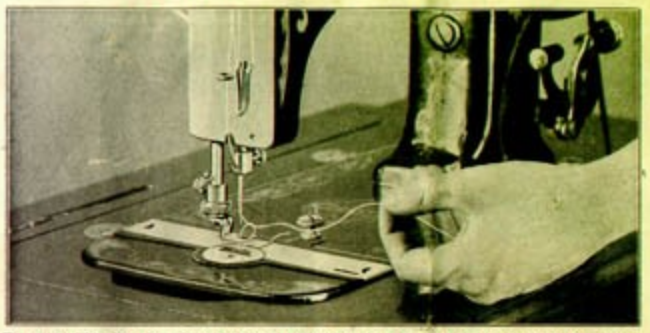


Figure 11. This shows how the upper thread will pick up the lower thread in the form of a loop as you turn the machine over slowly until the needle goes down to its lowest point and up again to the highest point of its stroke. Lay both threads back under the presser foot and close the front slide of the machine.

Pull about two or three inches of thread through the eye of the needle and hold the end of the thread with your left hand leaving plenty of slack between your hand and the needle. With your right hand, turn the hand wheel of the machine toward you until the needle goes down to its lowest point and up again to the highest point of its stroke. In making this one stroke the upper thread will pick up the lower thread and bring it up in the form of a loop through the hole in the needle plate (see Fig. 11).

Now lay both threads back under the presser foot of the machine and close the front slide which was left partly open when you replaced the shuttle in the shuttle carrier. You are now ready to commence sewing.

To Commence Sewing

By means of the presser foot lifter at the back of the sewing head, raise the presser foot and put a piece of cloth under it. Lower the presser foot and commence sewing, being sure to remember that **the top of the balance wheel runs toward you.** Practice sewing on strips of cloth until you are thoroughly familiar with the action of the machine and can stop and restart it without causing it to run backward. Practice guiding the material until you can make straight, true seams and do not try to help the material by pushing or pulling it. The machine will feed the material at just the right speed and if you push or pull it, you may cause the needle to strike the presser foot or the needle plate and break the needle or thread or both.

When the machine is threaded, do not run it without material under the presser foot as this will cause the threads to snarl and may bend the needle.

Never let the presser foot down on the feed when the machine is running unless there is cloth between, as this would injure the feed or the bottom of the presser foot.

To Turn a Corner

Stop the machine with just the end of the needle inserted in the work, raise the presser foot and turn the work as desired, using the point of the needle as a pivot. Lower the presser foot and continue sewing.

The Length of Stitch

With the Damascus, the length of the stitch is easily changed by moving the stitch regulator on the bed of the machine at the right below the automatic bobbin winder. The figures at the left of the slot indicate the number of stitches the machine will sew to each inch of material. To alter the length of stitch, loosen the thumb screw by turning it slightly to the left and then slide to or from you. Moving the thumb screw toward you will cause the machine to sew shorter stitches, moving it from you will cause the machine to sew longer stitches. When you have the exact length of stitch wanted, tighten the thumb screw by turning it to the right.

Regulating Tensions and Pressure

The Damascus is equipped with an automatic tension which is adjusted at the factory and tested on both light and heavy material and with different sizes of cotton and silk thread.

With the tensions properly adjusted, the Damascus will produce a perfect stitch with the bobbin thread and the needle thread locked in the center of the fabric as shown at "A", Fig. 12. If, for any reason, a perfect stitch is not produced, examine it from both sides of the material. If the thread on the top side of the material lies straight as illustrated at "B," Fig. 12, it shows that the needle tension is too tight or the bobbin thread tension is too loose.

If the thread on the under side of the material lies straight as illustrated at "C," Fig. 12, it shows that the needle thread tension is too loose or the bobbin thread tension is too tight.

The Upper Thread Tension

The upper thread tension should be adjusted with the presser foot in the lowered position. To **increase** the upper thread tension, turn the top of the tension pulley on the face plate of the machine **toward** you.

To **decrease** the upper thread tension, turn the top of the tension pulley **away from** you. Do not turn the tension pulley more than ¼ of a turn at a time and test the stitch after each adjustment. No screw driver is needed for adjusting the tension pulley.

The Lower Thread Tension

Usually a perfect stitch can be obtained by adjusting only the upper tension. However, if necessary, the lower thread tension can be easily adjusted by means of the small screw which holds the tension spring on the bobbin case. Simply turn this screw, the first one from the end of the spring, slightly to the right to tighten the tension or to the left to loosen the tension. Do not turn the screw more than a ¼ of a turn at a time and test the stitch after each adjustment. When regulating the lower thread tension, be sure that there is **no lint or broken threads under the shuttle spring.**

If you wish to sew with a stitch that will ravel easily, adjust the upper thread tension until it is so light that the thread will not be drawn into the goods but will lie in a straight line as shown at "C" Fig. 12.

For sewing on flannel or bias seams, use a fine stitch and a very light tension. This will leave the thread loose enough in the seam to allow for the necessary stretching of the goods.

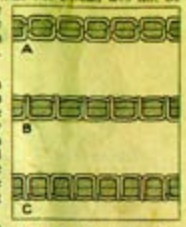


Figure 12. The upper picture A shows a perfect stitch. B and C show stitches when the tensions are improperly adjusted.

Thread tensions will be easier to understand after you have used machine.

To Regulate the Pressure

The presser foot is adjusted at the factory to the proper pressure for all ordinary sewing. If you desire a lighter pressure for sewing on fine silk or very light material, turn the top of the presser bar up or to the left. If a heavier pressure is required for sewing heavy or thick material, turn the top of the presser bar down or to the right.

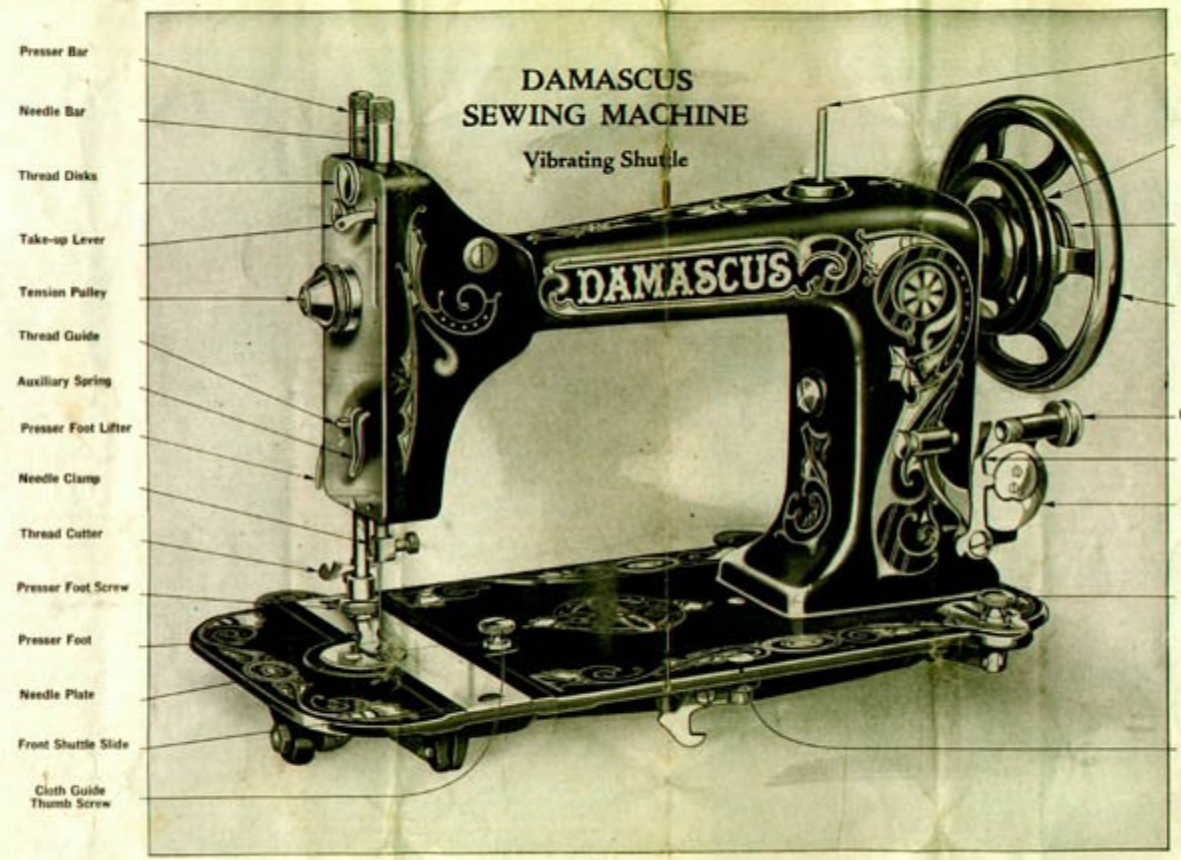
The proper pressure to use on the presser foot is just enough to prevent the material from rising with the needle and to enable the feed to move the material along evenly.

To Remove the Work

Stop the machine with the needle at the highest point of its stroke and raise the presser foot by means of the presser bar lifter. Now draw the work from the left side backward and away from the presser foot. Cut both threads on the thread cutter which is attached near the bottom of the presser bar. Do not break the threads by pulling, as this may bend the needle.

The Proper Size Needle and Thread to Use

Size of Needle	Size of Cotton Thread	Size of Silk Thread	Kind of Material Being Sewed
1	300 to 500	0000 Silk Twist	The very finest sewing.
2	120 to 200	000 Silk Twist	Very fine linens, thin muslins, etc.
3	90 to 110	00 Silk Twist	Very fine calicoes, shirtings, etc.
4	70 to 80	A or 0 Silk Twist	General domestic goods, sheetings, muslins, silks and general sewing.
5	40 to 60	B Silk Twist	Unbleached cotton or linen.
6	12 to 36	C Silk Twist	Heavy calicoes and silks. Light woolen goods.
7	0 to 10	D Silk Twist	Ticking, woolen goods and clothing.
8	0 to 10	E Silk Twist	Heavy woolens. Very coarse, soft goods.



You will find it helpful to refer to this picture and identify the sewing parts as they are explained in [illegible]structions

How to Use the Attachments

The Damascus is supplied with a complete assortment of attachments which can be used for a great variety of work after you have become accustomed to plain sewing.

Figure 13. Feed the material into the hemmer so the mouth is kept just full. The hemmer will turn the cloth and produce a smooth, even hem.

Hemming and Felling

Use the hemmer for making a fell. Place the two pieces of goods to be felled with the face sides together and the edge of the lower piece of goods a little to the right of the upper piece. Stitch them together using the hemmer as a presser foot, keeping the seam just inside the edge of the upper piece of goods. Now open out the goods with the face side flat down on the machine with the edges standing straight up. Now guide the edges into the mouth of the hemmer which will stitch down the raw edges making what appears like a hem. The amount of goods required to make a fell depends upon the size of the hemmer and the thickness of the goods.

To use the attachments, raise the presser bar, loosen the milled nut just above the presser foot and remove the presser foot by pulling it toward you.

Narrow Hemming

Attach the hemmer in place of the presser foot and screw the milled nut down until the hemmer is held securely. Clip off the right corner of the goods to be hemmed and turn up the edge for about ¼-inch. Insert the cloth in the hemmer and push it along until it is under the needle. Now let down the presser foot and commence to sew, keeping the edge of the cloth turned as it feeds into the scroll or mouth of the hemmer. To produce a smooth, even hem, the mouth of the hemmer must be kept just full. The stitch may be laid close to the edge of the hem or away from it by adjusting the hemmer to the right or left.

Figure 14. After the two pieces of goods are stitched together, open them out, face down on the machine and guide the raw edges through the hemmer.

Hemming and Sewing on Lace

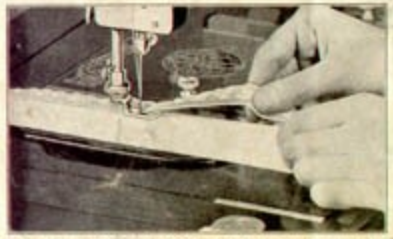


Figure 15. Guide the cloth with the left hand as the mouth of the hemmer is kept just full. The right hand guides the lace into the slot of the hemmer as the needle will pierce it.

Hemming and sewing on lace may be done at one operation by using the foot hemmer. Start the hem as described at the top of this page, and when well started, stop the machine with the needle at the highest point of its stroke. Now raise the presser bar and insert the lace in the slot in the right side of the hemmer and pull it back under the needle. Lower the presser bar and continue to sew, guiding the cloth with the left hand and the lace with the right hand. Be careful to keep the mouth of the hemmer full and guide the lace far enough into the slot of the hemmer so it will be pierced by the needle.

Lace insertion may be sewed in by following this same method.

Wide Hemming

Four hemmers of different widths are furnished with the Damascus. Select the one you wish to use and attach it to the presser bar in place of the presser foot. Raise the presser bar and guide the cloth into the scroll of the hemmer by placing the left hand behind the hemmer and the right hand in front. Draw the goods back and forth a few times, feeding them into the hemmer until the scroll is filled completely. Draw the goods toward you to start the hem, lower the presser bar and proceed to sew the same as for narrow hemming.

Figure 16. Start the hem and then feed the goods so the scroll of the hemmer is kept completely full.

Binding

Figure 17. The binding fills the scrolls of the binder and the cloth is inserted between the scrolls.

The foot binder is similar to the hemmers but has two scrolls instead of one. It is attached to the presser bar in the same manner as the hemmers. For best results, use binding cut on the bias and seven-eighths inch wide. Pass the binding into the binder until the scrolls are completely full the same as for wide hemming. Insert the edge of the cloth to be bound into the opening of the binder, lower the presser bar and proceed to sew, guiding the cloth with the left hand and the binding with the right hand.

The binder can be used for making French folds in the same manner as sewing on binding except that the fold is stitched on the face of the material instead of on the edge.

Tucking

Attach the tucker on the presser bar in place of the presser foot, being sure that the thumb screw is tightened securely and the needle passes through the needle hole in the foot of the tucker.

The scale D (Fig. 18) indicates the width of the tuck (the distance from the edge of the fold to the line of stitching). The scale E on the front spring of the tucker indicates the distance between tucks. To adjust the tucker, loosen the set screw C and move the two scales as desired. For making blind tucks (tucks which just meet) set the two scales to the same figure.

When you have the tucker adjusted for tuck and space, fold the cloth where the first tuck is to be made and crease it by hand for the full length. Insert the cloth in the tucker under the spring E with the folded edge against the guide F and pass it back under the foot of the tucker. Lower the presser bar and proceed to sew. As the cloth passes through the tucker, the needle clamp will strike the lever B and operate the tuck marker A which automatically marks the position of the next tuck. When the first tuck is completed, raise the presser bar and fold the cloth along the mark just made by the lever A. Pass the cloth into the tucker with the folded edge against the guide F and the edge of the first tuck against the small guide just under the lever A. Lower the presser bar and proceed to sew the second tuck. The tucker will guide the cloth without assistance. Each tuck must be folded and creased by hand before stitching.

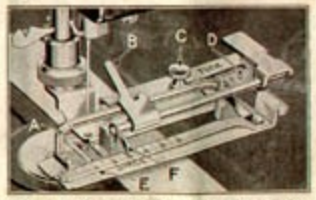


Figure 18. By loosening the set screw C the scales of the tucker can be adjusted for tuck and space.

How to Attach and Use the Ruffler

The ruffler is attached to the presser bar in place of the presser foot with the forked lever A astride the stem of the needle clamp screw. Be sure the thumb screw of the presser bar is tightened securely and the needle passes through the center of the needle hole.

The fullness of the ruffle is controlled by the adjusting wheel B. Turning it to the left will make large ruffles; turning to the right will make small ruffles. The length of the stitch on the machine should be adjusted to suit the kind of ruffle being made. When sewing small ruffles, always adjust the machine for a short stitch.

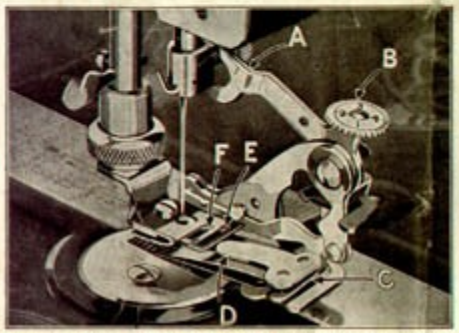


Figure 19. Attach the ruffler to the presser bar in place of the presser foot with the forked lever A astride the screw of the needle clamp.

For plain ruffling, insert the cloth to be ruffled between the two blued springs of the ruffler and pass it back under the needle, lower the presser bar and sew in the usual manner. If desired, the edge guide C may be used for guiding the cloth.

Ruffling on a Band

For sewing ruffling on a band, insert the band through the guide opening C and pass it back under the lower spring of the ruffler and next to the feed of the machine. Insert the cloth to be ruffled in the same manner as for plain ruffling, lower the presser bar and sew in the usual manner.

Ruffling Between Bands

For ruffling between two bands, place the lower band and the cloth to be ruffled as instructed for ruffling on a band. Insert the upper band in the Guide F and pass it back under the foot of the ruffler. Lower the presser bar and proceed to sew.

Piping or Edge Stitching

For piping or edge stitching, the cloth to be ruffled must be run through from the right of the sewing head under the sewing arm. The guide C of the ruffler must be removed by loosening the screw on the right side of the ruffler, pushing the guide down slightly and pulling it toward you. Now remove the front slide of the machine and replace it with the shirring plate (see Fig. 20).

The ruffle to be piped is inserted from the right in guide G and over the front spring of the shirring plate. If a lower band is to be sewed on at the same time, it is inserted in guide H, then under the spring of the shirring plate and next to the feed of the machine. The edge to be piped is creased for its full length and inserted in guide F of the ruffler. The piping is inserted through guide E of the ruffler. With all four pieces of material in place, lower the presser bar and proceed to sew.

Shirring

Replace the front slide of the machine with the shirring Plate (Fig. 20) and remove the guide C of the ruffler as described above. Insert the work to be shirred between the forward spring of the shirring plate and the ruffler, lower the presser bar and proceed to sew. It will greatly strengthen the goods if a small tape is sewed underneath the goods. The tape should be inserted in guide H of shirring plate and then under the forward spring and next to feed of machine.

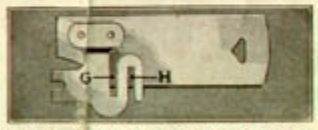


Figure 20. Where work is to be shirred, this shirring plate replaces the front slide of the machine.

Sewing on Braid

Remove the presser foot and replace it with the braider foot having the two short prongs. Remove the front slide of the machine and put in its place the under-braider slide with the small tube on the left side.

The design to be braided on the cloth must be stamped or marked on the wrong side of the material. Insert the braid in the tube of the under-braider and pass it back under the needle. Place the material, face down, on the machine with the design uppermost, lower the presser bar and proceed to sew. Follow the design with the needle and hold the braid with the left hand to keep it from twisting. The braid will be stitched on the cloth from the underside.

Figure 21. Sew on the wrong side of the cloth and feed the braid through the under-braider slide.

Figure 22. Feed the goods so the curved part of the quilting guide follows the previous line of stitching.

Adjustable Seam Guide

When very neat, accurate stitching is to be done, the adjustable seam guide will be found of great help. The guide is placed on the bed of the machine and fastened with the thumb screw furnished. When adjusting the guide, be careful to have the guide edge parallel to the line of stitching.

Use the Attachments

The set of attachments furnished with the Damascus are complete and can be used for a great variety of work. It will take only a little time to learn to use each attachment and with a little practice you will be surprised at the many different kinds of sewing you can do on your machine. The time you save, as compared to hand sewing, will more than repay you for the time spent in learning to use the attachments.

As soon as you have become familiar with your machine for plain sewing, practice using the attachments. It takes only a moment to remove the presser foot and substitute the attachment you wish to use. By using the attachments for different kinds of sewing, you increase the usefulness of your machine and you have the satisfaction of being able to do the many kinds of sewing that are usually left for the professional seamstress.

It is not necessary to have a teacher to learn to use the attachments. Simply follow the instructions that are given in this book and you will be surprised at the results you will be able to accomplish.

Quilting

Loosen the small screw at the back of the presser bar and remove the thread cutter. Insert the round part of the quilting guide from the right in the hole in the presser bar. Adjust the guide to give the right space between the guide and the needle and with the curved end of the guide high enough above the bed of the machine to allow the goods to pass under it freely. Now tighten the small screw in the back of the presser bar. Make a crease or use the edge of the cloth as a guide for the first line of stitching. After the first line of stitching is run, place it directly under the guide and follow this for the next line of stitching and so on.

Figure 23. The adjustable cloth guide thumb screw is fastened to the bed plate of the machine before it is shipped. This attachment enables you to sew straight seams.

Damascus Sewing Machine

Repair Parts

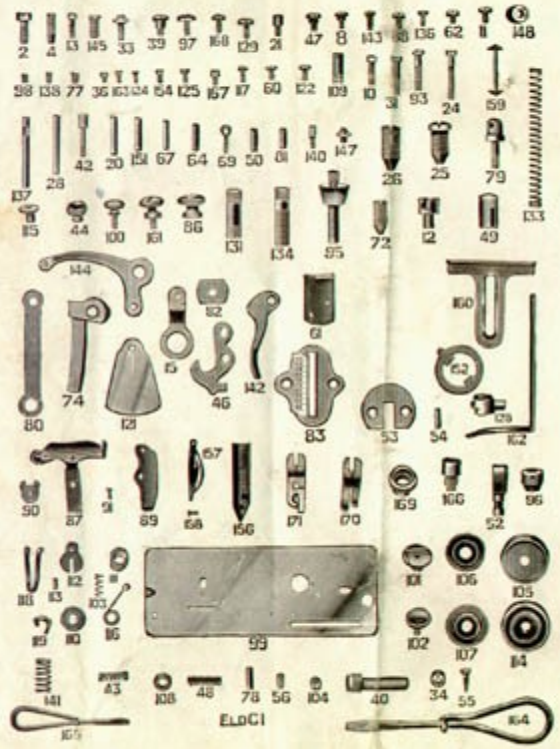


Figure 24. This picture and the one on the opposite page show the different parts of the Damascus Sewing Machine. When ordering repair parts, notice the number under the picture of the part, and then find this same number with a figure 86 in front of it on Page 18 or 19. Here you will find the name and price of the part. Write to the house where you purchased your machine, giving the full name and serial number of your machine and number of the repair part you want.

Damascus Sewing Machine

Repair Parts

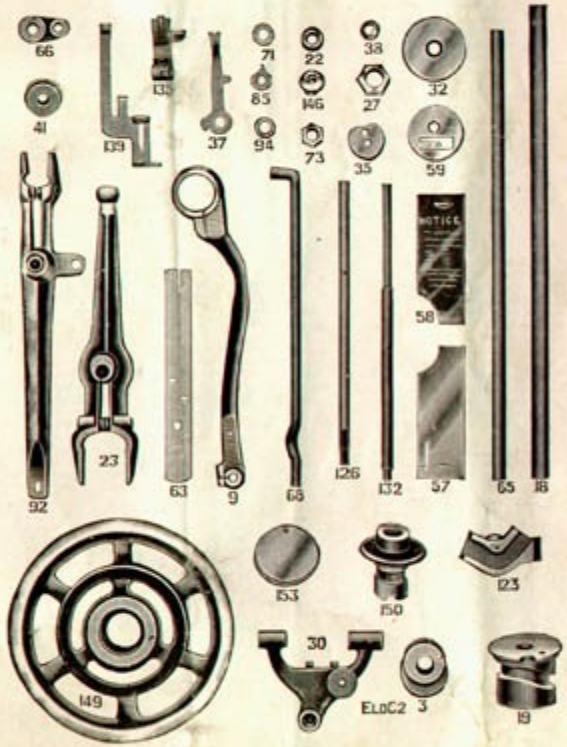


Figure 25. This picture and the one on the opposite page show the different parts of the Damascus Sewing Machine. When ordering repair parts, notice the number under the picture of the part, and then find this same number with a figure 86 in front of it on Page 18 or 19. Here you will find the name and price of the part, with the price and postage. Write to the house where you purchased your machine, giving the full name and serial number of your machine and the name and number of the repair part you want. Do not buy repair parts for your Damascus from sewing machine agencies.

How to Order Repair Parts for Stand

When ordering repair parts for the stand, refer to Page 19 for the name, number, price and postage of the part wanted. Send us the old part or an exact drawing of the part you want, and give us the full name, serial number and date of guarantee of your machine. The information should be sent to our house where you purchased your machine.

If the old part is sent to us when ordering repairs, consult our General Catalogue for directions how to send merchandise to us. By sending us the old part you are sure to receive exactly the part you require and you know it will fit your machine properly. You will receive the same quick service on repair parts that you do on other merchandise ordered from Ward's.

The Care of Your Damascus Sewing Machine

The most important thing to remember in the care of your machine is **good oil, properly applied.** A little oil on the bearings each time the machine is used will keep it running smoothly and easily for years to come.

Use Only Good Needles

Use only needles that are suited to the Damascus Sewing Machine. Be sure that the needle is properly seated in the needle clamp and that it does not strike or rub against the presser foot or needle plate. The point of the needle should enter the needle hole just a little to the right of the center. Do not attempt to use bent or blunt needles.

Imperfect Stitching

Skipped or long stitches at intervals are usually caused by using the wrong size needle or thread. Consult the table on Page 9 for the proper size needle and thread to use. Skipped stitches sometimes result if the needle is not properly seated in the needle clamp or if it is bent or blunt, or if lint or dirt has collected in the groove cut for the needle in the face of the shuttle race.

Breaking Upper Thread

Breaking of the upper thread may result if the machine is improperly threaded (see the instructions on Page 7). If the upper tension is too tight it may pull the needle to one side and cause it to strike the presser foot or needle plate, breaking the needle or thread. A soft, easy tension is required (see Page 9 for instructions on adjusting the tensions).

Breaking Lower Thread

Breaking of the lower thread is sometimes caused by too much tension on the shuttle tension spring or by lint or broken threads gathering under the tension spring. If the bobbin is wound too full it will not revolve freely and may cause the lower thread to break.

When a machine has been used for many years, the shuttle becomes worn and very sharp at the heel end, and this may cut the lower thread. We carry new shuttles in stock and can supply you promptly. When ordering new shuttles, give us the full name and serial number of your machine. If possible, send us your old shuttle as a sample. It will be returned with the new shuttle.

To Adjust the Feed

If because of wear it becomes necessary to adjust the height of the feed, tip back the sewing machine head and loosen the screws that hold the feed to the feed bar. Adjust the feed so it is about one-sixteenth of an inch above the level of the needle plate when the feed is at the highest point. Now carefully re-tighten the feed bar screws.

The Shuttle Carrier

The carrier should hold the shuttle in a level position and at such a height that when the shuttle is moving toward you the point of the shuttle will pass the needle just at the top of the little groove around the eye of the needle. There should be just a little play between the carrier and the shuttle race (enough to allow the upper thread to pass freely between them without catching). This clearance can be adjusted by loosening the screw that holds the shuttle carrier on the horizontal shuttle lever and moving the carrier to the proper place.

The height of the shuttle carrier can be adjusted by bending it with the thumb and finger or with a small screw driver. It is made of malleable iron and it does not require very much pressure to bend it as desired.

To Adjust the Belt

The machine will work best if the belt is kept just tight enough to run the automatic bobbin winder. If it is too loose it will slip and cause the machine to sew unevenly. If it is too tight, the machine will run hard. To tighten the belt, remove the coupling and cut about 1/4-inch off one end of the belt and refasten the coupling. Keep the belt pulley of the balance wheel free of oil and dirt.

A Machine to Be Proud of

We know that you will be pleased with your new sewing machine and that you will be proud to show it to your friends and neighbors. You will be delighted with its easy running qualities and with the neat, attractive sewing which you can do with it. As you become more familiar with its operation you will find that you are able to do much of the sewing that was formerly left for the professional seamstress. In many cases a sewing machine is made a source of profit by doing sewing for friends and neighbors who have no machine.

Our Service Department

We have told you in this book just how to operate and care for your machine so it will give you the best possible service for years to come. If there is anything which is not quite clear to you, or if we can be of any help to you, we want you to consult our Service Department freely. Do not let unknown repair men tamper with your machine. If you need any advice, write to our Service Department at the house where you bought your machine. We have here a group of trained men who are able to give you reliable information. These men know all about your machine and are qualified to give you expert advice.

If You Need Advice

If, at any time, you should feel that your machine is in need of repairs, write and tell us the full name, serial number and date of guarantee of your machine. Tell us just how your machine acts and just what you have done to try to make the machine work as you think it should. If possible, send us a small sample of your work. We can often suggest some simple adjustment that you can make yourself and save you the bother of sending the machine to us to be repaired. If we are not able to help you get perfect results, we will send you shipping instructions telling you just how to send the machine to us to be repaired and put in perfect working order.