Legare No. 47 Instruction Manual

INSTRUCTIONS FOR LEARNING TO KNIT

The "Legare No.47" knitting machine, perfected for family use is the simplest, quickest and the most practical for all major knitting projects in the home.

We teach you in this pamphlet to use the machine to knit stockinette stitch and ribbing, to make stockings and other knitting with practice, study, and careful attention, you will soon learn to make a great variety of knitted articles. The most important point is to understand your machine and to learn to take care of it, so that it will always work well.

General comments:

DIAGRAM- start by studying the diagram on page 3, learn the names and numbers of the pieces, so that while reading the following pages you will understand more easily the adjustments to make. You will greatly simplify your work by exercising your memory first to learn the diagram on page 3. Also study the replacement parts at the end of this booklet.

CYLINDER- Two cylinders are furnished with the machine, one for 54 needles and the other for 72 needles. The biggest and the most tightly knit items are made on the 72 needle cylinder and if you are using thick or rough yarn, it is better to use the 54 needle cylinder.

OPERATION- Always turn the machine in the same direction, from left to right, going from B to C, see diagram on page 3, the machine should only be turned in reverse direction for knitting the heel and the toe.

MEASURING- To assure matching size of socks or other articles, count the number of revolutions you make for each distinct part of the item; by repeating the same number of revolutions for the second piece you will obtain the same size as the first piece.

YARNS- The quality of your knit items will depend on the quality of the yarn. Well spun yarn of a medium diameter is always easier to use. Rough, bad or dyed yarn should be washed or rolled in a piece of sheeting or saturated in wax, while you wind them onto bobbins.

NEEDLES- Before starting an article, one must first check to make sure that all the needles on the cylinder and the dial are in good condition, that the latches are down and that they work well, and that the points are not broken.

OIL- Use good sewing machine oil. Oil all the parts where there is friction or wear regularly, especially the cams, the crank, the base of the gear ring and the cog ring, the cogs and the base of the needles.

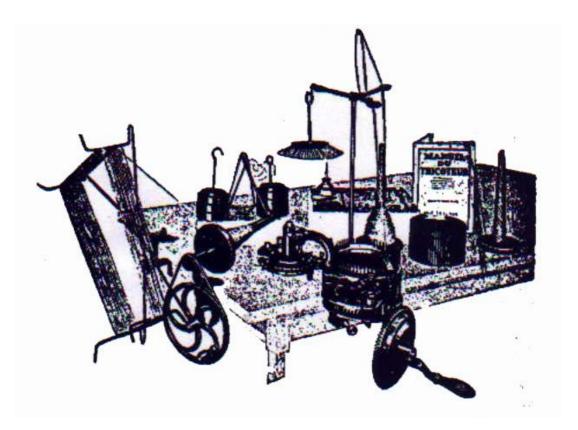
CLEANING- Keep your machine clean, using carbon oil or gasoline to clean it often. Clean off all the old oil, bits of threads, and dust which will harden and clog up the machine.

SETTING UP THE KNITTING MACHINE

Unpack the machine and set up the various accessories on a table. The complete apparatus includes:

weight holder
weights
bobbin winder
bobbins

1 heel hook 1 screwdriver 1 swift 1 oil can 1 single hook 1 instruction manual 1 setup basket 12 extra needles

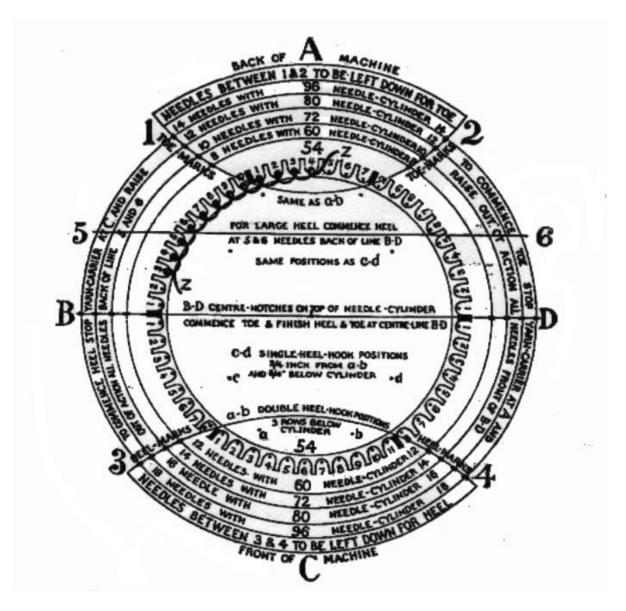


PREPARATIONS BEFORE KNITTING

After attaching the machine, the reel and the bobbin winder securely to the table, and having placed all the accessories close at hand, choose good yarn for your first try and proceed as follows.

The engraving on page 3 shows your machine seen from above. The letters A, B, C, and D indicate the four sides of the machine. A is the back of the machine or the part where it is attached to the table, facing side A, B will be the left side, C the front and D the right side. Remember these four points carefully; they will guide you from the beginning to the end.

STUDY CAREFULLY THE PARAGRAPH 1, page 3 before beginning the work. Before threading the machine, one must fill the bobbins with yarn using the reel and the bobbin winder, as shown above. Attach the yarn to the bobbin with a half knot only, start filling it at the fat end and in the form of a cone as shown on the table. The best bobbins are obtained by playing out the yarn on a width of about 3 inches with the left hand; this movement, which creates a crossing of the yarn, ought to be done rapidly.



IMPORTANT- This drawing shows the "Legare No. 47" seen from above, take note of the positions:

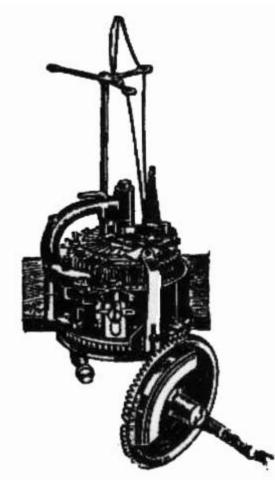
A.- Back of the machine C.- Front of the machine

B.- Left side D.- Right side

The line B-D represents the center of the needle cylinder, you will notice the notches at these places on the top of the cylinder. The line 1-2 indicates the part for knitting the toe with the seam underneath.

The inside circle with the U shaped curves represents the top of the 54 needle cylinder, the numbers inside these curves indicate the number of needles you must lift or lower when knitting the heel or the toe. The black line in the inside circle from Z to Z shows how the yarn is threaded onto the needles.

The lines a-b, c-d inside the inside circle, show where to place the weight and the heel hook in making the heel.

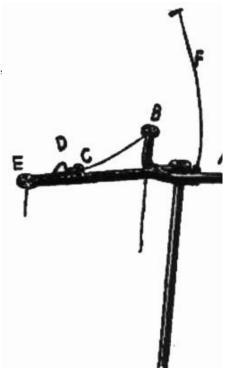


KNITTING MACHINE LEGARE No 47 with the apparatus for knitting ribbing.

This apparatus with the "Legare No 47" makes all desired ribbings perfectly. It is always furnished free with our knitting machine "Legare No 47"; its dial can contain 36 needles to work both with the cylinders of 54 and 72 needles, with all or some of the needles in the dial. With this apparatus you can make ribbing 1x1, that is to say one stitch on the top and one inside (k1, p1), or ribbing 2x1, 3x1, 4x1, etc. as thick and as tight as you wish, it allows you to make stockinette or ribbing.

THREADING THE MACHINE-Put a well filled bobbin under the back eye or one or the other of the short arms A or B. Pass the yarn through the eye C on the long arm then over the needle latch D and down, passing through the eye E and finally into the yarn carrier No.7408 passing from outside to inside. Pull a length of yarn, about a yard or more, through the eye of the yarn carrier and use this to set up the knitting.

SETTING UP THE WORK- Open all the latches of the needles lowering them, turn the crank and stop the yarn carrier No.7048 at point A or back of the machine, put the set up basket No.7144 into the cylinder, hold it there from underneath by the left hand, so that the ends of the hooks are about 1/8 inch below the top of the needle cylinder, hold the basket as level as possible. Begin casting on at point A going toward B-C-D, passing the yarn around each hook of the basket and of each corresponding needle on the cylinder. Be sure that each latch of the needles is open, or lowered. Carefully study the figure on page 5 and cross the yarn in the same way on the basket hooks and on the needles. When the knitting is set up to D, turn the crank and stop the yarn carrier at C, finish setting up to A and wrap the yarn a second time around the first needles which you had threaded at the beginning. After threading all the needles, wrap the yarn around the nut at the center of the bottom of the basket in order to hold the knit work down.



KNITTING A SOCK IN STOCKINETTE- You can now start knitting by turning the crank, being careful to hold the set up basket down with the left hand, to assure that the yarn goes on to the needles and that the stitches don't skip, the stitches must always be kept at the bottom of the needles on the top of the cylinder. Continue to knit the leg in stockinette stitch counting the number of rounds in order to reproduce exactly the same length for the second sock.

FIRST PART OF HEEL- Stop the yarn carrier at point C, lift the needles at the back of the line B-C, that is, the needles between B-A-D by bringing the heel of the needles up to the spring band. Pass the yarn into the heel spring F in order that the spring will take up all the slack in the yarn and will maintain the tension when you will have to turn the machine in reverse. Carefully hold the stitches down on the line B-C-D by pulling down on the set up basket during the whole process.



Turn the crank and stop the yarn carrier at point A. Lift the first needle on the right side at D, turn backwards in the direction D-C-B and stop the yarn carrier at A; lift the first needle on the left side at B, and return in the direction B-C-D again stopping the yarn carrier at A. Continue thus lifting the needles on the S side and on the B side one at each row, stopping the yarn carrier each time at A, until there are only 12 or 10 lowered needles left on the cylinder according to the size of the heel which you wish to knit. (The more needles you leave lowered in the cylinder, the larger the heel will be.)

HOOK FOR HOLDING THE HEEL

KNITTING- In the second part of the heel, the "heel hook" No.7423 must be used in order to hold down the work at the bottom. Attach the double

hooks at equal distance from the center of the heel three rows below the rim of the cylinder. Next attach a single hook No7422 3/4 inch to the left of the double hook about 3/4 inch below the top of the cylinder. See the point a-b, c-d on the inside of the inner circle of the diagram on page 3, indicating the position of these hooks. Put the weights on the weight holder and pull down by hand if the weight is not sufficient to hold the work all the way to the bottom, that is hold the stitches on the top of the cylinder well into the needles.

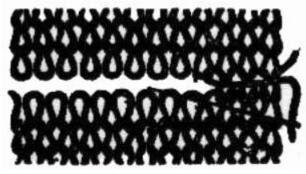
SECOND PART OF THE HEEL- Your yarn carrier No.7048 is stopped at point A, lower the last needle lifted on the right and knit (in front) in the direction B-C-D stopping the yarn carrier again at point A, lower the last needle lifted on the left side, turn in the direction D-C-B. Continue thus, lowering a needle first on the left side then on the right, always on the side opposite the yarn after each row, hold the work pulled down, especially the corners at points 3&4, until all the needles on the line B-C-D have been lowered into the cylinder, at the last row stop the yarn carrier at point C.

Now lower all the needles that are up between B-A-D, being careful to open all the latches, and continue to knit the foot in the same manner as the leg, counting the number of rounds, so as to have the same length on the second sock. When you wish to have the foot knitted more tightly than the leg, thread the yarn through the heel spring F.

MAKING THE TOE-The toe is knit exactly as was the heel with the exception that you leave 2 needles more for the first part, that is, if you have left 10 needles lowered in the cylinder for the first part of the toe and so forth according to the size of the heel and of the toe.

SECOND PART OF THE TOE- The second part of the toe is knitted in the same way as the second part of the heel, by lowering the needles into the cylinder, one at each row, alternating left and right sides. When the toe is finished, knit two complete rounds before breaking the yarn, in order to have sufficient yarn with which to sew up the toes. Break the yarn, turn the crank, holding the work with your hand, the sock will come off the cylinder.

SEWING THE TOE- By knitting the toe on the same part of the cylinder as for the heel, that is to the front of the machine C, on line 3-4 the seam will be on the top of the sock; to get the seam on the bottom of the sock, you must knit the toe at the back of the machine A, on the line 1-2.



TO CLOSE THE TOE- After taking the sock off the machine, iron the toe under a damp cloth with a hot iron which will keep the stitches from unraveling and makes the sewing easier. To learn to close the toe well, we advise you to start by practicing on an old piece of knitting where the stitches are still intact, studying the path the yarn must take to close the knitting. See fig. 3.

Hold the work with you left hand, the toe up and ravel the two rounds you knitted as well as the last half round, until the yarn reaches the corner at the

right side of the opening. Break the yarn at $\frac{3}{4}$ yard from the work and thread it into a darning needle, pass two times in each stitch, see fig. 3, the first from out to in and the second from in to out.

Begin to close the toe, on the side at the right corner, threading the stitches as shown in fig.3, hold the stitches with the index finger and the thumb of the left hand. By carefully following this method you will succeed in sewing the end of the toe, closing it up as well as if it had been entirely machine knit.

TENSION OR LENGTH OF STITCHES- The tension or length of the stitches on the needles of the cylinder is regulated by the regulating screw No.7321, which is near the part of the base by which the machine is attached to the table. Turn this screw and the indicator point will go up or down. You will have the longest stitches with the indicator pointing down. This screw allows you to regulate the tension, as you need.

TO REMOVE OR TO CHANGE THE CYLINDER- The cylinder is attached to the base of the machine, underneath, by two screws. First take out all of the needles from the cylinder, remove the spring band No.7171, remove the two screws from the base, as well as the cylinder lever No.7448 in the inside of the cylinder and remove the cylinder.

INSTRUCTIONS FOR USE FOR THE RIBBING ATTACHMENT

Do not start using the ribbing attachment until you know how to do the stockinette stitch perfectly. Study the following instructions for using the ribbing attachment and practice the same operations several times so as to understand them well. The ribbing attachment or needle dial, on the "Legare No. 47" machine is supported by and arm No.7418 and run by the cylinder with cams. The drive rod, No.7419 ought to be placed in the arm that holds the dial, to put the ribbing attachment into operation; this drive rod must be removed when you are knitting the heel and the toes. First start by putting the ribbing attachment on the machine, without the needles in the dial and turn the crank, in order to see how the cam cylinder works the ribbing attachment.

BEFORE PLACING THE RIBBING ATTACHMENT ON THE MACHINE-Be sure there is an open space between the hooks of the set up basket No.7144 to let the cylinder lever No.7448 pass easily and on the left side of which the fin under the dial ought to rest, to keep the dial from turning, when the control cam is engaged and the machine is operating. The dial stays in place when you knit.

HOW TO INSTALL THE RIBBING ATTACHMENT-Stop the yarn carrier No.7405 at 2 ½ inches at the right of point 6 and carefully put the ribbing attachment in the center of the machine, lowering it in such a way that the fin under the dial rests on the left side of the cylinder lever No.7448. The grooves of the ribbing dial ought to be centered between the cylinder needles using the regulator screw No.7244 (on the dial adjuster, No.7421) found under the base of the machine, on side B. Hold the dial so that the fin is resting firmly on the left side of the cylinder lever No.7448, turn the regulating screw No.7244 until the grooves in the dial are exactly in the center of the empty spaces between the cylinder needles. It is very important that this adjustment be exact to keep the needles of the dial and those of the cylinder from rubbing and breaking when the machine is in use. Take the drive pin No.7419 from the arm No.7418 of the apparatus; disengage the ribbing attachment pulling toward the outside latch No.7231 on the top of the control cam (tappet plate). It is necessary to disengage the apparatus, so that the control cam can turn freely, without touching the needles, when you put them into the dial.

HEIGHT OF THE DIAL-The height of the ribbing attachment for knitting ordinary yarn ought to be between 1/8 and 3/16 inch, measuring from the top of the needle cylinder to the bottom of the grooves in the dial; to knit thick yarn, the height ought to be between 3/16 and ³/₄ inch. The height of the dial is regulated by means of the adjusting screw on the arm of the ribber, at the point where it rests on the cam cylinder, between 4-D, see diagram on page 3.

HOW TO PUT THE NEEDLES INTO THE RIBBING DIAL- Begin putting the ribbing needles into the grooves of the dial at point B and continue from left to right; put needles into all the grooves, open the latches of the needles as you put them into the dial, using your hand or a needle to put the latch at the back, in the groove of the dial. When you have filled the grooves which are visible, push with your hand, the control cam, which you will have disengaged, and thus finish installing the needles. Lightly oil the base of the needles before starting to knit.

STARTING THE RIBBING ATTACHMENT- Bring the control cam on the dial back to point A, put the drive rod No.7419 into the arm of the ribbing attachment, position the fin under the dial on the left side of the cylinder lever No.7448, engage the control cam by pushing the latch No.7234 toward the center of the machine. Now, just turn the crank to start knitting.

DIAL NEEDLE ACTION- For the machine to work well, it is necessary for the needles of the dial to work in time with those of the cylinder, that is that they come out of the dial neither too soon nor too late. Your machine is regulated correctly when you receive it. Do not change the adjustment unless it becomes necessary to repair a disorder which could be caused by the operation of the machine.

The action or the coming out of the needles is regulated by a screw in horizontal position, on the control cam behind the stitch regulator No.7221. The drive rod No.7429 which puts the ribbing attachment into action rests on the head of this screw. Its adjustment delays or advances the action of the dial needles when the machine turns.

TOP OF THE RIBBED SOCKS- Before beginning to set up the work, take out every third needle from the needle cylinder so as to have two needles and an empty groove all the day around the needle cylinder, and begin to set up the work. When the work is set up, do two rounds so that the cylinder needles form stitches, and stop the yarn carrier No.7408 at point A; put the ribbing attachment on the machine and follow the proceeding instructions and put the ribbing needles into the dial in every other groove. Regulate the dial using the regulating screw No.7244, so that the ribbing needles come out exactly opposite the empty grooves in the cylinder. Engage the control cam of the ribbing attachment by pushing toward the center of the machine the latch No.7231, put

the drive rod No.7419 into the arm No.7418, and do the number of rounds required according to the length of ribbing desired. Either change the ribbing to 3x1 for the leg of the sock, or take out the ribbing attachment and continue the stockinette stitch for the leg length desired.

TO CHANGE FROM RIBBING TO STOCKINETTE-Stop the yarn guide No.7408 at point A and put a needle in the empty groove of the cylinder at point B, take the dial needle which is across from it and transfer the stitch from this ribbing needle onto the one you have just put in the cylinder, continue this operation all the way around the cylinder. When you get to the dial needles which are under the control cam, turn the crank and stop the yarn carrier No.7408 at point C, finish transferring the stitches in the same way. Work the number of rounds so that the second sock will be like the first.

HOW TO TRANSFER A STITCH- The transfer of the stitch from the ribbing dial needle to the cylinder needle, is made by taking the end of the ribbing dial needle in one hand, and the heel in the other hand while hooking the stitch or the dial needle onto that of the cylinder.

TO MAKE THE HEEL AND THE TOE OF A SOCK KNIT ENTIRELY IN RIBBING-When the ribbed leg is knitted to the correct length, stop the yarn carrier No.7408 at point A and take out all the ribbing needles from the dial, between points B-C-D, transferring their stitches to the cylinder needles, turn the crank to bring the yarn carrier to point C. Take the drive rod No.7419 out of the arm of the ribbing attachment, lift the cylinder needles by raising the heels of the needles up to the spring band on the needle cylinder behind the line B-D and knit the heel in the same way as for a stockinette sock. After finishing the heel, stop the yarn carrier at point C, put the drive rod No.7419 back in the arm No.7418 of the ribbing attachment and knit the foot to the desired length, you will have the top of the foot in ribbing and the bottom in stockinette. With the foot finished, stop the yarn carrier at pint C and transfer the stitches from the ribbing needles which are still in the dial onto those of the cylinder, and take the ribbing attachment out of the machine. The toe is made in the same way as that of a stockinette sock.

TYPES OF RIBBING- Different types of ribbing can be knit on the "Legare No 47", according to the number of needles kept in the dial and in the cylinder. The dial in the knitting machine "Legare" can hold 36 ribbing needles and works with both 54 needles and the 72 needle cylinders. Here are the different kinds of ribbing which you can knit:

Ribbing 1 and 1, with all the needles in the dial and every other needle taken out of the cylinder, One stitch on top and one inside.

Ribbing 2 and 1, with all the needles in the dial and in the cylinder, that is 72 needles in the cylinder and 36 needles in the dial. Two stitches on top and one inside.

Ribbing 3 and 1, with every fourth needle taken out of the cylinder and every other needle taken out of the dial. Three stitches on the top and one inside.

Ribbing 4 and 1, with all the needles in the cylinder and every other needle take out of the dial. Four stitches on top and one inside.

Do a trial first of these different types of ribbing on your machine and you will be able to decide the type most suitable for the knit work which you have to do.

Knitting Machine Parts of the "LEGARE No. 47"

PRESERVE THIS BOOKLET WELL



PIECES OF THE KNITTING MACHINE

"Legare No 47"

<u>70</u>	Buckle	7317	– Needle cylinder-screw
7108	Cam Screw	7321	Tension screw
7123	Left up-throw cam	<u>7324</u>	Tension screw nut
<u>7124</u>	Right up-throw cam	<u>7325</u>	Tension pointer
<u>7133</u>	Yarn-carrier screw	<u>7328</u>	V cam, medium draw
<u>7139</u>	Weight-holder	<u>7330</u>	Left lower-cam
<u>7140</u>	Large weight	<u>7331</u>	Right lower-cam
<u>7142</u>	Screw-driver	<u>7400</u>	Bed-plate
<u>7143</u>	Oil-can	<u>7401</u>	Cam-cylinder
<u>7144</u>	Set-up	<u>7402</u>	Needle-cylinder 54 & 72 needles
<u>7148</u>	Pick-up	<u>7403</u>	Crank wheel
<u>7152</u>	Yarn-stand rod	<u>7404</u>	Crank wheel stud
<u>7170</u>	Machine needle	<u>7404</u> <u>1/2</u>	Bolt washer/disc
<u>7171</u>	Cylinder-spring-band	<u>7405</u>	Cog-ring
<u>7212</u>	Rib cam-plate-pointer	<u>7406</u>	Bed-plate-clamp-screw
<u>7216</u>	Rib switch-cam	<u>7407</u>	Ribber Needle
<u>7217</u>	Screw for Rib switch-cam-lever	<u>7408</u>	Yarn-carrier
<u>7220</u>	Cam screw	<u>7411</u>	Bobbin-winder-pulley
<u>7221</u>	Rib tension-thumb-screw	<u>7412</u>	Bobbin-winder-rivet
<u>7222</u>	Rib needle-dial	<u>7414</u>	Bobbin-winder-spindle
<u>7224</u>	Rib dial-post	<u>7418</u>	Ribber arm
<u>7225</u>	Rib dial-post set-screw	<u>7419</u>	Ribber driving-arm-pin
<u>7231</u>	Rib switch-cam-lever	<u>7420</u>	Ribber height-regulating screw
<u>7232</u>	Rib switch-cam-plunger	<u>7421</u>	Ribber cylinder-lever regulating screw
<u>7233</u>	Rib switch-cam-plunger spring	<u>7422</u>	Single heel-hooks
<u>7234</u>	Rib timing screw	<u>7423</u>	Double heel-hooks
<u>7235</u>	Rib timing bolt	<u>7424</u>	Ribber cam-plate
<u>7240</u>	Rib tension-cam	<u>7430</u>	Yarn-stand top
<u>7244</u>	Rib regulating-screw-head	<u>7431</u>	Take-up-spring
<u>7294</u>	Bed-plate-clamp-screw	<u>7432</u>	Take-up-lock
<u>7299</u>	Bobbin-winder wheel	<u>7433</u>	Yarn stand-top screw
<u>7301</u>	Bobbin-winder belt	<u>7441</u>	Bobbin winder clamp
<u>7304</u>	Swift-clamp-shaft	<u>7443</u>	Swift-clamp
<u>7306</u>	Swift-arm-holder	<u>7448</u>	Needle-cylinder-lever
<u>7307</u>	Swift clamp wing nut	<u>7449</u>	Lever screw of No. 7448
<u>7308</u>	Swift arm	<u>7450</u>	Bobbin

