### INSTRUCTIONS FOR USING

### **GEARHART'S**

### 1908 FAMILY KNITTING MACHINE.

Consult this Page before removing the Machine from the Box

Remove the machine from the box by taking out the cross piece and loosening the thumb screw which holds the machine to the bottom of the box. Fasten the machine to a table, window sill or any firm support. Put the crank wheel on with the crank up, and the carrier directly in front of machine. Always put it on this way, so the crank will not strike the carrier. The crank wheel is held in position by the washer and screw H. See page 4. Screw the upright standard for yarn guide into the back part of the frame. Screw yarn guide J on top the standard. See page 19. Place the wooden bobbin with yarn on the post at the back of machine. The yarn should be the same grade as sent with the machine. Pass the end of the yarn through the hole in the guide at A. See page 4. Through the hole at B, under the loop at C, down through the hole at D. Leave the take-up-spring F free, it is only used when knitting backward and forward, for heel and toe. Tie the end of the yarn to the yarn that is

on the machine. Wind all the slack yarn on the bobbin, then hang the weight on the hook of the set-up inside the cylinder, which draws the work down. See that the little latches of the needles are all down. With the right hand, turn the crank forward slowly and if the parts

are all in proper position, the machine will begin to knit. If the stitches should rise with the needles, with the left hand press down gently on the weight until the stitche are drawn down and lie on top of cylinder. Proceed to knit, this is plain solid work. After you have knit some and become familiar with the operation of machine, break the yarn from the bobbin and turn the crank slowly, holding your left hand under the weight, while the work is run off the needles.

Before you knit any more, read the next page. Learn how to raise the needles and reverse the machine by running it backward and forward.

### THE FOLLOWING POINTS SHOULD OBSERVED.

Before you can expect to knit you must learn the construction of the machine, how to reverse, put in and take out needles, adjust cams, etc.

When turning the machine forward the needles must run UP OVER the right hand switch or latch I and under the left land switch.

When turning backward, the needles must run UP OVER the left hand switch and under the right.

When reversing the machine without work, should a needle, strike the switch the needle must be lifted up or pressed down so as to allow the switch to adjust itself and the needle to pass.

The switches, needles and cam all being in full view it is very easy to adjust them so as, to run free either way. The cam is adjusted by turning the nut G,. When turned up it makes the work close, or suitable for fine yarn; when turned down it makes the work more open or suitable for coarse yarn.

The needles are all thrown out of action by raising them up as far as they will come, the shanks then pass over the cam. The needles are taken out by raising them up and pushing the tops out from the cylinder and raising the shank from under the wire band. The needles are put in by a reverse operation.

If the work raises with the needles, either the yarn is too heavy, the cam is too high, or the weight is insufficient. It is always best to use fine yarn until you learn to operate the machine. The needles, switches and cam should be oiled.

The take up spring F must not be used only when knitting heel and toe, or knitting backward and forward.

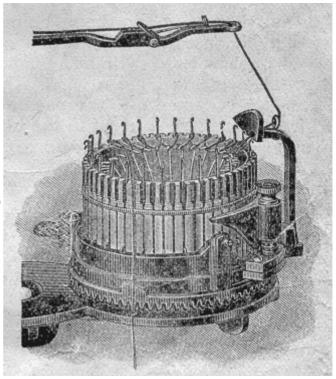
Avoid running the machine rapidly without work. Always read before working the machine, then read and work together.

The machine when attached to table should be level, so the weight holds down even all around.

If the work raises up with the needle when knitting, hold down on the weight.

### TO SET UP WORK ON MACHINE.

Wind the yarn on the bobbin loosely until it is full, filling the large end first, place it on the post. See Fig. 2, Page 4. Pass the end of yarn up through the hole in the yarn guide at A, through the hole at B, under the loop C, down through the hole at D, through the evelet I, and through the 1 hole in carrier G. Draw about six feet of varn through, or enough to set up the first round of stitches. Place the set-up inside the cylinder and begin to set up the work to the right of carrier. See Fig. I. Wind the thread to the right, around the setup hook and around the needle, then around another hook and the next needle towards the back part of the machine; continue to set up in



this way winding to the right and crossing the thread as you see in Fig.I. Should there be less hooks on the set-up than there are needles you can put the yarn from two needles on one hook. After you have set up around the back part of the machine and well forward on the left, hang the weight on the set-up and turn forward slowly. (See that latches are down). This will knit and at the same time bring the empty needles up, then proceed to finish setting up the work on these needles the same as the others. In setting up the work, be sure to cross the yarn between the needles and the hook, this makes a selvedge and prevents it from raveling.

Leave the work a little slack between the needles and the hooks, so as to allow the needles to make the first round of stitches. With the work thus set up you are ready to knit, turn the crank forward and if the stitches rise with the needles, press down on the weight. This will knit plain solid work. The work must never raise with the needles. For coarse work more weight is required, and the cam must be adjusted so as to force the needles down low enough to shed the stitches.

### TO KNIT STOCKINGS WITH SEAMED TOP OR RIB.

Take every third or fourth needle out of the machine, and set up work same as with all the needles.

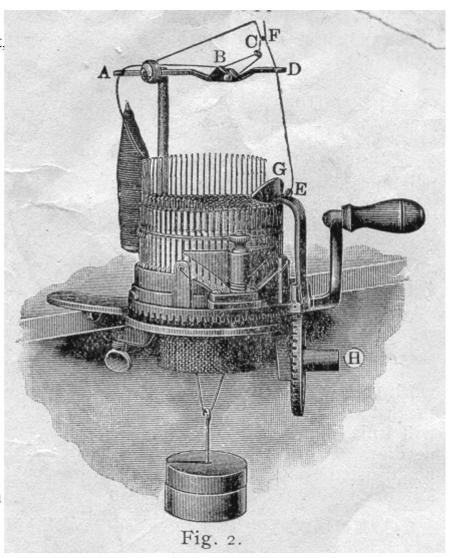
Knit about four stitches with the cam raised a little so as to make the work as close as possible. Then put in the needles that were taken out and with the work hook take the stitch below one of the adjoining needles and put it on the needles just put in, they will form their own stitches if you begin to knit, but if the stitches are not lifted from adjoining needles, there will be a little opening between the rib and the solid work. Lower the cam a little and knit about 100 rounds for the leg. The ankle may be narrowed by raising the cam a little as you did for the rib top. This will tighten the stitch.

### TO KNIT THE HEEL

FIRST PART. Turn the machine until the cam is in front; raise up one-half the needles out of action on the back part of machine. See marks on inside of cylinder. Take out the set-up and weight, and with the heel hook, (bent wire with two hooks) catch the work inside the cylinder close up to the needles in front, on which you knit the heel. Attach the weight to the heel hook, place the take-up spring F under the yarn between C and

D. It will now appear as in Fig. 2.

Knit one course to the right. passing all the needles in action through the cam and out under the switch to the left. The carrier will now be on the back part of the machine. Now raise one needle on the right side of machine next to the carrier, the last needle to pass under the switch, then knit another course backward until all the needles in action have passed through the cam and out under the switch to the right. Then raise one needle on the left side of machine next to carrier, the last needle to pass under the switch. Then knit forward and backward each time raising one needle until you have raised all the needles except ten in front which are in action. Always



allow the yarn to pass around on the outside of the needles just raised to prevent any open places in the heel, and be sure the slack thread is taken up when reversing, either by the take-up spring or your fingers, and also to hold the work well down as the needles are making stitches.

SECOND PART. Continue knitting backward and forward as before, but instead of raising a needle up, push a needle down each course, on the opposite side from which you raised the needles while knitting first part. Continue this backward and forward, each time pushing a needle down until all the needles are down that were raised in the first part, except one on each side, which prevents a hole in the finished work.

When finishing heel, the machine must be in forward action with the cam in front. The heel is now finished and the needles will be in the same position as when you began to knit the heel, except the two needles just mentioned will be up. Now push all the needles down on the back part of machine, and see that the latches of the needles are down, and you are ready to knit the foot. When knitting heel or toe always raise the needles on same side of the machine that the yarn carrier stands, and put them down on the opposite side of machine from the yarn carrier, otherwise you will have small holes where the heel joins.

### TO KNIT THE FOOT.

With the needles all down, put the other heel hook on the opposite side of the work so the weight will hang even on both hooks. Press down on the weight and continue to knit around to form the foot (as in knitting the leg). When you have knit the foot eight inches long, or any desired length, proceed to knit the toe. This will make a ten inch sock.

### TO KNIT THE TOE.

This is done the same as knitting heel, using one hook, and on the same side of the stocking as the heel. Raise the needles on the back half of machine, knit back and forward, each time raising a needle until there are only ten in action, and continue to knit back and forward pushing down a needle on the opposite side each time and finish just as heel. When you get them all down to where you commence to make the toe, pull three-fourths or a yard of thread from the machine (measuring from sock) out of yarn carrier and place down inside the sock; then put all the needles down and turn the machine once around and the work will drop out, leaving only to bring raw edges together and close them with the knit stitch with the three-fourths of a yard of yarn, as explained, see next page, when the sock is complete.

As the heel and toe are being formed, the weight applied with left hand to the set up device is not sufficient to hold down the work. The heel hook is intended for this purpose. The hook is to be hooked on the inside of the work about one inch from the last needles raised up. Pull down sufficiently and commence narrowing for the heel (as described in making the heel). Before commencing to widen back, the hook must be hooked up near the needles again. When the heel is completed the hook can remain while knitting the foot. When the foot is completed the hook can be removed and used in making the toe. In knitting the heel and toe, care must be taken that the work is properly held down, so that all the needles complete their stitch. If the last needle, in knitting across, fails to make its stitch when you reverse the machine to knit back, you will be liable to drop a stitch or leave an open place where the heel joins. But if the work is evenly held down with the heel hook or by hand, you will avoid that difficulty. You will find that about twelve rounds are required to make one inch in length, but in no case rely on this entirely, as the measurement must be exact, namely, five inch rib, nine inch leg, (fourteen inches from top to bottom) and foot ten inches, unless otherwise instructed.

Before knitting a stocking complete, it might be well to practice on turning a heel. This you can do on one piece by knitting straight and turning a heel every three inches.

### CLOSING THE TOE.

After the sock or stocking is run out of the machine take a sad or flat iron and damp cloth and press the toe so the stitches will lay out smooth. The sock will then appear like Fig. 3.



Ravel out one round until the yarn is brought to the corner, thread the yarn in a darning needle. Each stitch has the needle passed through it twice, thus, pass the needle IN

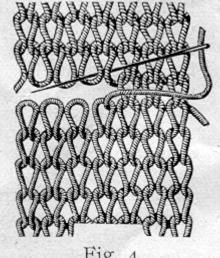


Fig. 4.

through the first stitch and OUT through the next stitch on the same side, then put the needle IN through the first stitch and OUT through the next stitch on the other side, then put the needle IN through the same stitch you brought it OUT of on the first side, and OUT through the next stitch on the same side, so by alternating stitches from side to side, putting the needle IN the stitch from

which you brought it OUT, or opposite sides. The toe will be looped together just the same as if knit.

The toe should be pressed before looping together, so as not to ravel, and after it is looped, to make it look neat.

### LONG STOCKINGS.

You do not take out any of the needles in knitting stockings, but set up with the full set of needles. Knit the top a little loose so as to give the required size. Knit from 60 to 100 rounds and then shorten the stitch a very little, knit 10 to i5 rounds and again shorten; knit the length required, say 130 or 140 rounds. Knit Heel and complete same as for

sock. If a measure is prefered, it takes about 24 inches before shortening the stitch, and 6 or 7 for ankle after tightening.

### ANOTHER WAY

Knit 60 to 100 rounds, take out one needle in the center of the cylinder at the back; knit 2or 3 rounds; take out the fourth needle on each side of the first one taken out; knit two rounds and take out the fourth needle on each side of the first one taken out. Continue to knit two rounds, removing the fourth needle on each side until every fourth needle is removed. Knit 30 to 50 rounds and put in the needles taken out in front where the heel is knit; knit the heel; knit the length required for the foot; put in the rest of the needles taken out; knit three rounds, and knit toe as in other cases. If taking out every fourth needle makes the ankle too small only remove them from -the back half of the CYLINDER; this makes the seam only in front of the stocking.

### INFANTS' STOCKINGS.

Any number of needles may be used, less 16 required to be taken out for reversing the machine. In a 72-NEEDLE CYLINDER take out 16, leaving 56. Set up as directed. Knit from 30 to 40 times across, then narrow two stitches, one on each side, third time across, until you have narrowed 8 stitches. In narrowing, lift the stitch from the last needle at the edge and put it over the next needle, then take the empty needles out of the machine. After narrowing 8 stitches knit 20 times across for the ankle, leaving the machine ready to turn backward. Lift up all the needles except 9 next to YARN-CARRIER.

On these 9 knit one-half of the heel thus: turn the machine backward until the needles have all formed stitches, lift up one needle; run back to the edge and return; lift another needle, continue to knit back and forth, lifting a needle on the inside as before, until only four needles remain, then put down one needle, just as in knitting the heel of a sock, until 8 are down; then put all down and knit clear across to the opposite side; then lift up all but 9 needles and perform the same operation on this opposite selvedge as we have thus described, thus forming one-half a heel on each selvedge. You will have to hold the work down on the edges while thus knitting the heel, either with your fingers or with the HEEL HOOK. Having completed the heel put down all the needles, knit 18 or 20 times across and you are ready for the toe. Knit the toe thus: Turn until the CAM is at the middle of the work; lift up nine needles on each edge, knit back and forth, lifting up a needle on each side just as knitting a heel or toe of sock until only four needles are left down in operation, then push them down as in the toe of a sock until only one is left with a double stitch on it on each side, then push all down, knit to the edge and back, break off the yarn and run out the work.

### TO CLOSE THE SELVEDGE.

Your stocking is now complete, except closing the selvedge down the back. This is done with a darning needle, by taking up a short stitch on each edge on the wrong side,

and sewing over and over as in over seaming. Close the toe as in a sock. Use double yarn in closing the edge.

The general principle in knitting a child's stocking, flat web is to set up the number of stitches required; knit the top of the leg the length required; narrow for the ankle just alike on each edge; knit half the heel on one edge and half on the other. Knit the proper length for the foot. Knit the toe in the middle of the needles and not on the edge as the heel. The heel and toe are always knit with not less than one half of the needles; so where the heel is knit one-half on one side and one-half on the other, only one-fourth of the needles are used on each edge. Do not forget that every other stitch on the selvedge is a short stitch, and is always referred to as the selvedge stitch.

### HOW TO ADJUST AND USE THE RIBBING ATTACHMENT.

Do Not Undertake to Use the Ribber Until You Have First Learned to Knit Plain and Understand the Machine.

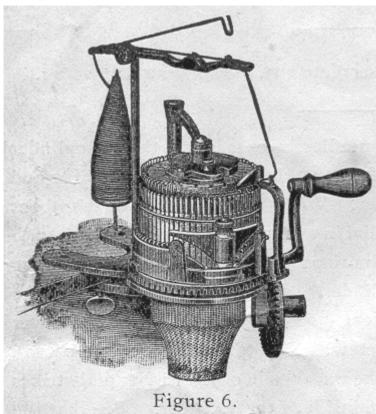
Read These Instructions all over Carefully Before Using the Ribber.

The Ribber dial carringy 24 needles, works with the 72 cylinder only. To adjust the Ribber, have all the work off the Machine and all the needles in the 72 cylinder. With the needles out of the ribber dial, place the ribber post and dial in position by putting the post with the slot over the lug on the cam-ring. Now drop the ribber down exactly in the center of the cylinder, just so the ribber needles when in, pass under the thread carrier. In this position fasten the ribber post to the cam-ring with the screw. Now turn the Machine forward until the pin extending from the under side of the ribber dial strikes and rests against the lug on the inside of the cylinder. See that the ribber is in the center. Now take every third needle out of the cylinder just opposite the grooves in the ribber dial, and put the short needles in the ribber. This will fill all the spaces - 48 needles in the cylinder and 24 in the ribber, then turn forward and see that the shanks of the ribber needles enter the cam and pass under the thread carrier No. 8. With the ribber thus in position, turn the Machine forward a few rounds to see that the adjustment is all right, - stopping with the cam on the back part of the Machine.

If the needles in the ribber should not come exactly between those in the cylinder, the pin in the ribber dial can be bent a little.

Should the carrier be too low or too high, either in ribbing or plain knitting; it can be adjusted by the screw that fastens it to the cam-ring.

Now remove the ribber, by taking out the screw that fastens the post to the cam-ring, lift the ribber, out with the needles in the ribber dial and lay aside until you set work up on the Machine. Now set the work up on the Machine in the ordinary way, knit about ten rounds and stop with the cam on back of the Machine. Then put the ribber in the



Machine again just as it was before vou lifted it out.

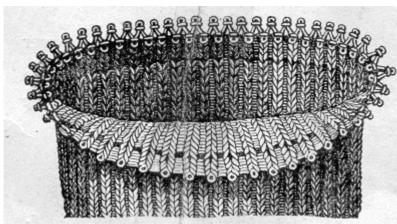
Be sure in replacing the ribber to have the pin on the under side of the dial, against the lug on the inside of the cylinder just so the red mark on dial and cylinder come together. This will bring the needles in the dial in the vacant space in the cylinder. Fasten the ribber post securely to the camring with the screw. Before knitting

see that the latches of the ribber needles are all laid back, now press down on the weight, turn slowly, and with the second round the ribber needles should take the stitches. The work will then appear as in Figure 6.

If you should fail in the first

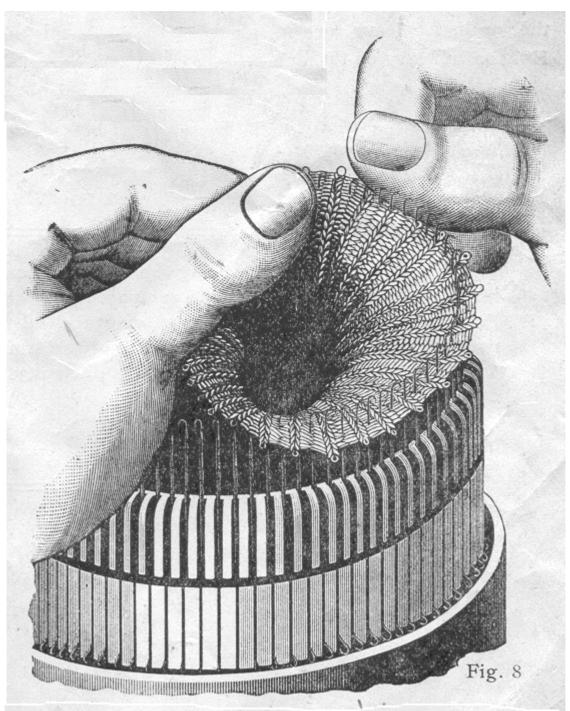
operation, repeat until you succeed. The ribber post is made of soft iron and should it be necessary, it can be bent.

We send out each ribber adjusted so the needles take the thread at the right time, but should the dial move or be displaced on the cam, it can be turned to its place and fastened again by the screw having a washer under it.



## TRANSFER OF RIB TOP TO KNITTER

Rib work is knit in a continuous web and cut in pieces whatever length you desire. These pieces are then put in the needles axd plain work knit to it. That you may know where to cut the rib and place on the needles, there should be a white or black thread run in one round with the yarn. When the rib is cut off for tops of stockings or other articles, it should be cut three or four rounds above the thread, See Fig. 7. When putting the rib on the needles leave the stitches with the thread in them just on the outside of the needles. These



three or four rounds gives the operator something to catch hold of in running the course over the needles, as shown in Fig. 8. As the stitches are run on the machine is turned so as to bring it tothe most convenient position for the operator. Or you can ravel out 2 or 3 rounds of the rib evenly and put the stitches thus exposed on the needles. The only skill required is to keep the course with the thread, and get the loops over the needles and not

run the needles between the loops, then the outside rounds ravel to the needles perfect. In ribbed work always put the end on the needles that came from the machine last.

The other end of the ribbed work will not ravel out.

Very heavy yarn will not work well on the ribber.

The weight for ordinary knitting is not sufficient for the ribber. You must increase the weight by holding down very heavy on it so the stitches all form on the ribber needles free, and the work passes down through the cylinder. If the work clogs on the needles, either the yarn is too heavy for the ribber, or the weight is not sufficient. Hold down heavy on the weight.

When you begin operating the Machine read the instructions carefully observing each point and change.

We think these instructions embrace all that is necessary for the successful operation of the Machine.

Should you however find any difficulty refer especially to page 2 and 18.

Make yourself thoroughly familiar with the machine before you begin to use the Ribber.

### DIFFERENT SIZES.

There are three things that change the size of a stocking.

1. The number of needles in a cylinder. 2. The length of the stitch. 3. The size of the yarn.

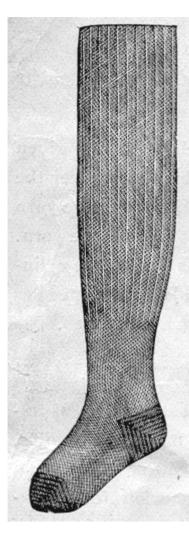
The coarser the yarn the larger will be the web with any given number of needles, and of course, the finer the yarn the smaller the web. The coarse cylinder, will make a small stocking with fine yarn knit with a short stitch. The fine cylinder will not knit coarse yarn. Experience will teach you how to grade yarn in relation to the cylinders. Seamed work is always smaller than where a full set of needles is used. With every other needle out you may knit a small web.

# Fig. 5.

### HEM TOP STOCKINGS.

A hem top stocking can be knit as follows:
Set up the work on all the needles, knit two rounds with cotton thread and then use the yarn you wish for stocking. Knit about twenty rounds, with medium tight tension. Remove the set-up and turn the work up on the inside and place the first round of stitches, those knit with cotton on the needles.
Attach the weight with heel hooks and proceed to knit the leg as for other stockings. Bicycle hose with hem are made in the same way. Different colors can be used for top if desired. Mittens can be knit with hem top. Also ladies long stockings.

### CHILDREN'S STOCKINGS, PLAIN AND RIBBED.



With the 54 cylinder and fine yarn, beautiful children's stockings can be made with the leg knit ribbed, and the ankle and the foot plain. No work is so fine as ribbed work, yet children's stockings and leggings can be knit circular web by taking every other needle out either the 72 or 88 cylinder; knit around; follow the same principle as for large stockings and leggings.

### BABY STOCKINGS.

Baby stockings can be knit on the 100 cylinder by taking out every other needle and using fine yarn.

### DOUBLE HEEL.

To knit the double heel and toe, use coarse yarn and a slightly longer stitch; or add fine cotton to the knitting yarn.

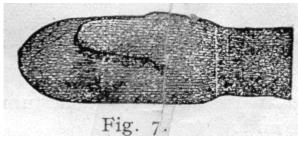
### SUSPENDERS.

Knit flat web with the required width, or with Zephyr or Shetland yarns. Bind the ends and add the necessary buttonhole strips at the ends.

### MENDING BROKEN STITCHES.

This is done with one of the needles of the machine, either in the machine or after the work is out. The needle is used as a crochet needle. You hook it in the dropped stitch and push it far enough through to bring the stitch, below the latch; then draw it back catching the next cross-thread above in the hook above the latch; continue to draw the needle back until a new stitch is formed; proceed in this way until all the dropped stitches are knit in. If the mending is done out of the machine, you will tie the dropped stitch with a short piece, of yarn and draw the ends inside the web. When reversing the machine with the work on, always lift up at least 20 needles at the back and turn the machine until the raised needles are over the cam on back of the machine. After reversing, if you wish to continue to knit, the raised needles must all be put down again. When reversing the machine without work, lift up a few needles just as they enter the cam, so they pass either over or under the switch.

### TO KNIT MITTENS.



Large size: Set up the work and knit the wrist ribbed, same as stocking. Put in all the needles and knit about 14 rounds plain. When you are ready for the thumb, knit backward and forward on 24 needles about 40 times for the thumb. This forms a strip. Close off the point the same as a small stocking and run the needles out.

Now, on those 24 needles just run out, place 2 stitches from each selvedge edge of the thumb; beginning close down to the hand. When those 24 stitches (12 on each side) are on, then proceed to knit around about 45 times for the hand. Close off the same as toe of socks. Close the point of thumb with a needle.

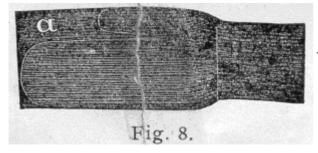
Mittens can be made hem top from fine yarn

CHILDREN'S MITTS are knit flat web, same as small stocking. Use enough needles to make the mitt the size you want. Seam the wrist, knit the hand and form the thumb in the middle of the web by knitting a strip backward and forward,say on 16 needles. Knit backward and forward 30 times, then narrow off the end of the thumb down to two stitches by throwing the selvedge stitch on the next needle, but do not widen again. Run the needles all out of the thumb and close the point with a darning needle. Now take the selvedge stitches (8 from each side of the thumb thus knit) beginning close down at the bottom and put them on the 16 empty needles. Loop the yarn over the needle and proceed to knit round and round for the hand. When the hand is long enough, narrow from 24 stitches to 8, and widen again to 24, finish just the same as a stocking. This is for a mitt of 48 stitches.

The only difficulty in knitting a thumb is to hold it down, which is done by catching the work close up to the needles, with the heel hook, or by using the heel attachment. Children's mitts look very nice with the wrist knit CHEVRON OR BAR and DIAMOND stitch until within few rounds of the thumb.

### CHILDREN'S MITTS.

Children's mitts of various sizes can be knit either circular or flat web by knitting



seamed wrist; then knit straight, solid web long enough for hand.; Turn inside out and with a sewing machine run a seam around the thumb and hand as indicated by the shaded lines in Figure 8. Cut away the cloth a from the thumb and hand close to the seam, turn right side out and you have a very nice mitt.

### FANCY STITCHES.

TIDY STITCHES.-Set up flat web of required width; knit once across, change the stitch from the second needle to the third, the fourth to the fifth, and so on across; moving to the left knit across forming loops on the empty needles, knit back again forming stitches with these loops; put the stitch from the second needle over the first that of the fourth over the third, moving the stitches to the right, knit across and back as before, change the stitches to the left and continue.

CHEVRON STITCH.-Set up flat web on every needle for the desired width; knit once across, put the stitch from the alternate needle upon the next needle to the right, knit once across and change the loops one needle to the right; work thus twelve times across, and change the loops to the left twelve times, knitting across each time as before. For wider work, knit more than twelve times across, before changing, for narrower, less. This makes a suitable trimming for children's garments, etc.

LATTICE STITCH.-Commence as before by taking the stitch from every other needle and putting them over the next to the left, knit once across forming loops, move the loops to the next needle to the right, knit across, and carry the loops to the left, knit across and carry the loops to the right, and so on to the length desired.

RIBBED STITCH.-Set up and knit once across, change the stitches on every third needle one place to the left, knit across, carry each loop both to the right and left, over two needles, knit across, take the loop formed on the same idle needles and carry them both right and left as before, continue thus.

BAR AND DIAMOND STITCH.-Set up, knit across, change every alternate stitch to the left, knit across, forming loops, and back forming stitches on the empty needles; change the stitches formed with the loops to the right. Knit twice across as before and change to the

left and so continue. When knitting fancy stitches the tension should be loose.

Chevron Bar and Diamond stitch are suitable for scarfs.

To KNIT CORD.-Take out of the machine all but four needles. Set up and attach the heel hook and the light weight. Knit across, pull the needles up as high as they will go; place the thread inside the needles and run back; put the needles down so they will knit, and knit across as before; then run back again and so continue knitting one way and running back with the needles up and the yarn inside the needles.

A great variety of work can be done on the machine such as leggings, hoods, wristlets, suspenders, limited only by the taste and ingenuity of the operator. Any one with ordinary intelligence, can, by reading the instructions and having a machine before them learn to knit.

Every machine is put in good working order when it leaves the factory, and we think cannot fail to give satisfaction. The machine will run smoother and do better work after it is run awhile. After you get some practice you will be able to knit much better and faster than at first.

### EXTRA CYLINDERS.

The 72 needle cylinder knits common yarns and will also knit coarse cotton well. If a single thread is too fine, knit two threads off two bobbins at the same time.

The price of extra cylinders, any size, without needles, is \$2.00.

The 54 cylinder knits children's size from fine yarn, and medium size from coarse yarn. The same needles are used in both the 54 and 72-cylinder.

The 60 cylinder with No. 10 needles knits large size from heavy or home-spun yarn. Price \$2.50, including needles.

The 100-cylinder, with No. 18 needles, knits Saxony or coarse cotton, adults size, price, \$3.00. including needles.

### IMPORTANT NOTES TO BE OBSERVED.

If the needles drop stitches or do not catch the thread properly, loosen screw at bottom of carrier H and lower same about 1/4 inch. When you use Ribber raise this carrier again to the original position so the Ribber needles will run under it.

By drawing the needles up as far as they will go, so the bend strikes the band, the machine can be turned free, the shanks of the needles will all pass over the top of the cam.

Seamed work is made by taking every, third or fourth needle out of the cylinder.

The cylinder can be taken out and a new one replaced by removing screws which hold the frame to the upper part of the cylinder. The take-up spring F, should never be used except for knitting backward and forward, such as heel and toe, and similar work.

Be sure the thread carrier runs the thread close to the points of the needles. This will prevent dropping stitches, but should it still drop a stitch bend the carrier a little so the thread is caught by the hook every time the needles go down.

The slot in the small weight can be used as a wrench to tighten the thumb screws.

Use light weight for knitting seamed, fine yarn or cotton.

The heavier the weight the larger and more open the work will be.

Wind the yarn on the bobbin loose, filling it first on the large end and finish winding at the point or small end. The yarn should run off the bobbin free.

Oil the needles in the grooves and the cam frequently with sewing machine oil. When the machine has been out of use, oil well, and turn until the machine runs freely.

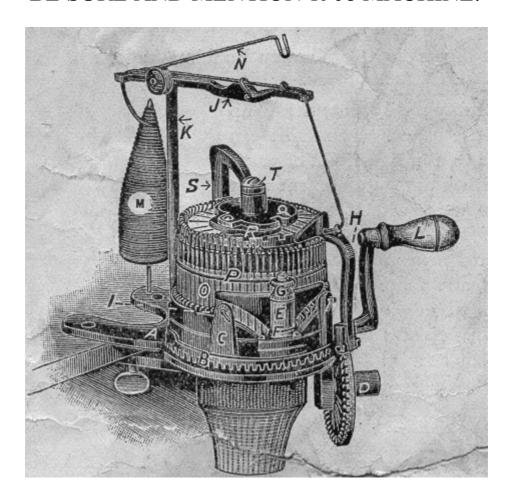
Should you by accident, bend the latches of the needles you can straighten them with

the fingers or a small pair of pincers. The latches should always work freely.

The needles will not knit if they become rusty.

When knitting flat web at least sixteen needles must be taken out to reverse the machine.

# When Ordering Parts of Machine, Observe the Letters BE SURE AND MENTION 1908 MACHINE.



### PRICES OF PARTS NEED FOR REPAIRS

ALWAYS REFER TO THE LETTER AND NAME THE PART	T WANTED
A Frame	-\$2.00
B Crown wheel	75
C Cam ring	1.00
D Gear wheel with crank	1.00
E Cam	
F Spring, under cam	.06
G Brass cam nut	15
H Thread carrier	25
I Latch, right or left	06
J Yarn guide and Spring	.30

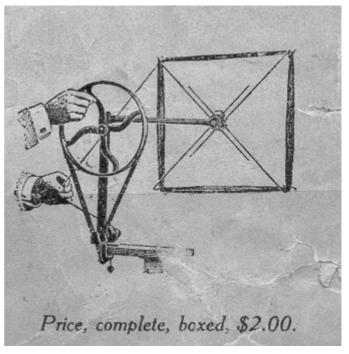
K Yarn guide standard	.10
L Handle	.10
M Bobbin	10
N Take-up string	.10
O Cylinder mention number, 72, 54, 60, or 100	2.00
P Wire band	
Q Ribber plate and cam	
R Ribber dial for needles	1.25
S post	40
T Needles - mention for what part of machine	.06

Always mention 1908 machine.

### COMBINATION BOBBIN WINDER AND SWIFT

# This cut shows our Combination Bobbin Winder and Swift

This is a very rapid winder and as you will readily see by cut, takes up but very little space. The swift can be adjusted to any size skein of yarn, is made with clamp attachment so it can be fastened to a table in a few seconds, and when not in use can be put away without being taken apart, so it is always ready for use on short notice. This winder is well made and is very convenient to those in need of a good winder.



# Gearhart Knitting Machine Co., CLEARFIELD, PENNA.