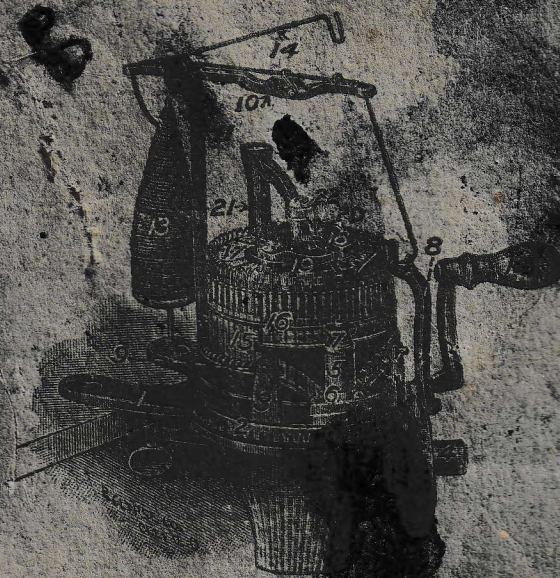


INSTRUCTIONS
FOR OPERATING
Gearhart's Improved
Family Knitting Machine.



Patented April 1, 1890 Improved July 1, 1900 Later Improved July, 1904

Gearhart Knitting Machine Co.,

CLAREMONT, PA.

I

INSTRUCTIONS FOR USING
GEARHART'S
IMPROVED FAMILY KNITTING MACHINE.

Consult this Page before removing the Machine from the Box.

Remove the machine 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. Screw the upright standard for yarn guide into the back part of the machine, with yarn guide 10 on the top of the standard. (See cut of machine on first page of cover.) Place the wooden bobbin having some yarn on it on the post at the back part of the machine. The yarn should not be any coarser than that on the machine when you receive it. Pass the end of the yarn through the hole in the guide at A, under the check B and C, down through the hole at D, through the loop E and the hole in carrier G. Leave the end of the take-up spring at F free as it is only used when knitting heel and toe. Wind all the slack yarn on bobbin, then hang the weight on the hook of the set-up inside the cylinder which draws the work down. See that the latches of the needles are all down.

Put the crank wheel on with the crank up directly in front of the cam. The crank wheel is held in position by the washer and screw H.

Put the left hand on the weight and press down gently. With the right hand turn the crank forward slowly, and if the parts are 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 stitches are drawn down and lie on top of the cylinder. After you have knit some and become familiar with the operation of the machine, break the yarn and turn the handle slowly and hold your left hand under the weight while the work is run off the needles. This latter should not be done, however, until you have time to read the instructions, set up the work on the machine and knit according to instructions on the following pages. Before you knit any more, read the next page, and without any work on the machine, learn how to lift needles and reverse the machine by running it backward and forward. (See page 15.)

THE FOLLOWING POINTS SHOULD BE 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 15 and under the left hand 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 7. 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.

TO SET UP THE WORK.

Wind the yarn on the bobbin loosely until it is full, filling the large end first, place it on the post. Pass the end through the holes in the guide and carry as described on first page. See cut.

Draw about six feet of the yarn through or enough to set up the first round of stitches. Place the set-up inside cylinder and begin to set up the work close to the carrier G and to the right, wind the thread around the hook of the set-up opposite the highest needle to the right of the carrier, then around said needle, then around the same hook, then the next needle, and the next hook, and so on until you get around to the left of the carrier with all the needles threaded that are up. Now hang the weight on the set-up; see that the latches of the needles are all down, turn the machine forward allowing the needles to knit until the balance of the needles pass out and up from under the cam, then set the work on these needles as on the others until all are set up.

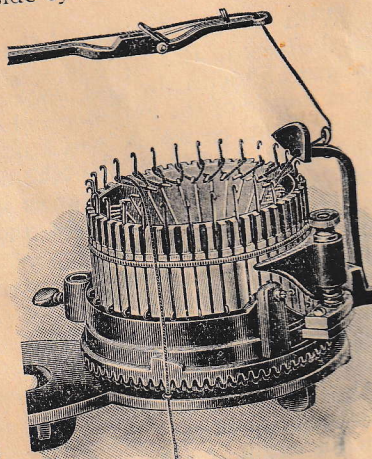


Figure 1

In setting up be sure to cross the yarn between the needle and the set-up hook as shown in figure 1; this leaves a selvage on the work and prevents it from raveling.

There are thirty-six hooks on the set-up; with the 72 cylinder, by putting the yarn once around each needle and twice around the hook, the work of setting up comes out even. When setting up the work 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 turn the crank forward and with your left hand press down gently on the weight. For coarse yarn more weight will be required, and for fine yarn less weight. For all work the cam must be adjusted to suit, forcing the needles low enough to make the stitch.

If ribber is used follow instructions on page 8. If ribber is not used, then proceed as follows:

TO KNIT STOCKINGS WITH SEAMED TOP OR MOCK RIB.

Take every third needle out of the machine and set up the work. When setting up put the yarn two and three times around each hook, of set-up, this brings it out even.

Knit about four inches, with the cam raised a little so as to make the top as close as possible. Then put in the needles that were taken out and with the work hook take the stitch below the adjoining needle

and put it on the needle just put in to form the new stitch; then knit about 100 rounds for the leg, having the cam a little lower then when knitting top. The ankle may be narrowed by lowering the cam and thus tightening the stitch.

TO KNIT THE HEEL.

With the cam in front of the machine raise up one-half the needles on the back of the machine opposite the cam. Take out the set-up and weight and with the heel hook (bent wire with two hooks) catch the work inside of the cylinder and outside the work close up to the needles in front, on which you knit the heel. Attach the weight to the heel hook, and place the take-up spring F under the yarn between C and D. It will now appear as in figure No. 2. Now turn forward, passing all the needles down and in action through the cam and out

under the switch to the left; now raise one more needle on right, same side that yarn-carrier is and knit backward to opposite side of machine and raise up one needle on that side, then knit forward again and raise a needle, and so on, back and forth, raising a needle every time until you have raised up 12 needles on each side of the half that is working, always allowing the yarn to pass around the outside of the needle just raised up to prevent any open places in the heel. Now put down one needle on the opposite side of the machine from the yarn carrier, and knit across; then put one down on the other side

and knit back again, and so on putting down one needle every time you knit across, until eleven needles have been replaced in action on each side, leaving one needle out of action on each side of half that is in use. Then place back in action the half that were up, also the two (one on each side) just mentioned, and proceed to knit foot. This will prevent a hole showing at the heel in the finished sock.

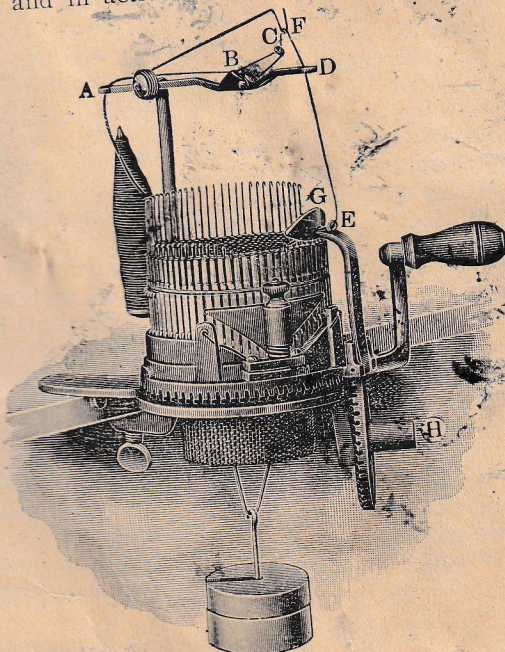


Fig. 2.

Always raise the needles on the 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 FOOT.

Now put all the needles down, then continue to knit around to form the foot (as in knitting the leg.) When you have knit the foot eight inches, proceed to knit the toe. (This will make a ten-inch sock.)

TO KNIT TOE.

This is done the same as in knitting the heel, and on the same side of the machine that you made the heel. Instead of raising up twelve needles on each side as you knit back and forth, you must raise up all but ten needles. Then put them down again as in making the heel, and 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 outside 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 heels. 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 one

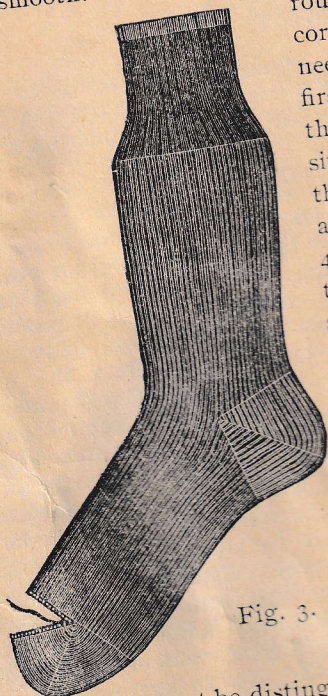


Fig. 3.

round until the yarn is brought to the corner; thread the yarn in a darning needle; pass the needle through the first stitch from the UPPER SIDE, and through opposite stitch from the UNDER SIDE as seen by figure 4; draw the yarn through the stitches; now pass the needle down through the first stitch and up through the next

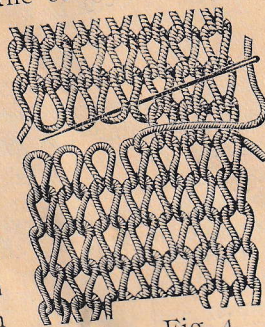


Fig. 4.

one to it as you see it in Fig. 4; then on the opposite side take the stitch through which the yarn has already passed and the next in front of it, and so on each alternate side; take the last stitch in which the yarn was drawn and the next in front until the toe is closed; this can be done very rapidly and neatly, so that it cannot be distinguished from the other knitting. The damp cloth and hot iron will prevent the stitches raveling easily.

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 15 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 preferred, 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 2 or 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. Con-

tinue 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 CAMS. 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 the 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 of 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 a 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 the 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 principal 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 the 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 selvage is a short stitch, and is always referred to as the selvage stitch.

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.

TO ADJUST AND USE THE RIBBING ATTACHMENT.

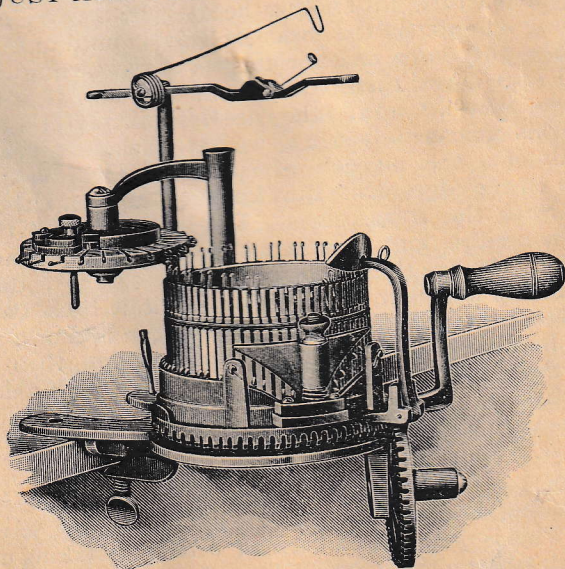


Figure 5.

Having all the needles in the 72 cylinder, and all the needles out of the ribber, place the ribber dial and post in position by putting the ribber post in the hole in the cam ring, drop the ribber down exactly in the

centre of the cylinder and needles, just so the ribber needles when in pass under the thread carrier. In this position fasten the ribber post in 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 centre. 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. With the ribber thus in position, turn the machine forward that you may better understand action. To remove the ribber, loosen the screw that holds the ribber fast, spring the carrier back from the cylinder sufficient to lift the ribber, dial, needles and all out of the machine. Figure 5 shows the ribber lifted up and swung around but not taken out. Remember when replacing the ribber it must go on exactly where taken off the pin, against the lug and each needle in a space.

TO RIB WORK AND CHANGE INTO PLAIN.

Set up the work on the machine the same as for seamed top, page 3 knit six rounds then replace the ribber, just as it was before taken off. See that the latches of the ribber needles are all lying back, turn forward and with the left hand press down the weight. The ribber needles will now take the yarn and with the second round begin to knit—see figure 6. The ribbed work can be changed into plain by putting the other needles in the cylinder just as the grooves pass through the cam and drawing the needles out of the ribber and transferring the stitch from the ribber needle to the needles just put in the cylinder, each ribber needle is taken out as the stitch is transferred. Turn forward two or three needles at a time until all pass through the cam and are transferred. Remove the ribber and proceed to knit plain. Hosiery knit with ribbed top this way is just like factory hosiery.

The cam of the ribber is adjusted before leaving the factory. When all is in place and work begun it will appear as in Fig. 6. When desired to make work part ribbed and part plain, as tops for stockings, wrists for mittens, stocking legs, etc., the ribbed work can be made first and transferred to the needles and the plain knit to it, as described on the next page. Use fine 2-ply yarn for all ribbed work, heavy yarn will not work well.

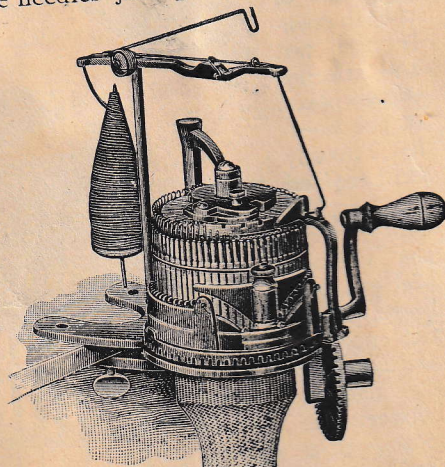


Fig. 6.

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 and plain work knit to it. That you may know where to cut the

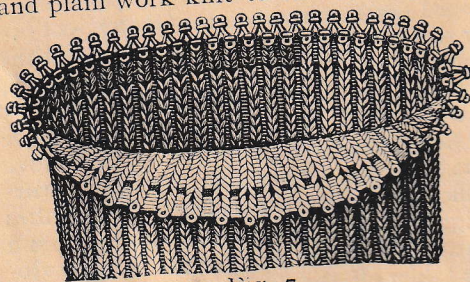


Fig. 7

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 outside of the needles. These

with the thread in them just on the three or four rounds gives 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 to the 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,

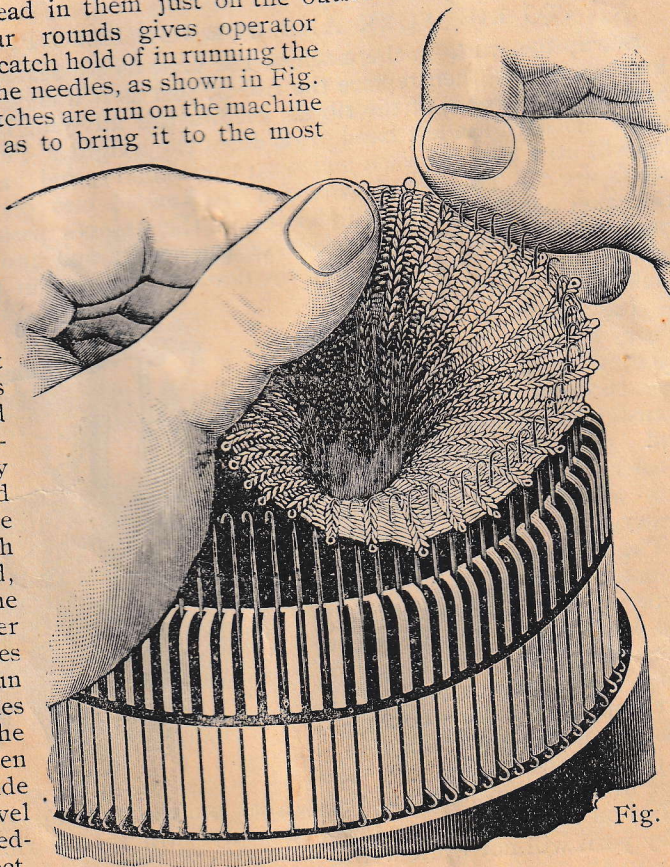
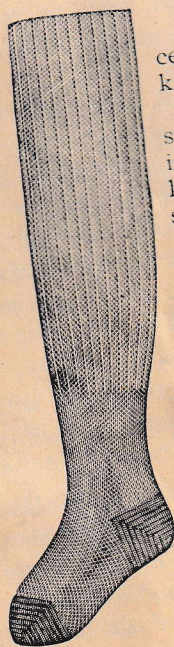


Fig. 8

and when you start to knit the plain there is no imperfect stitches but a continuous web. In ribbed work always put the end on the needles that came from the machine last. The other end of the ribbed will not ravel out.

CHILDREN'S STOCKINGS, PLAIN AND RIBBED.



With the 56 cylinder and ribber, beautiful and excellent 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 leggins 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 leggins.

BABY STOCKINGS.

Baby stockings can be knit on the 88 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 button-hole 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 in front 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, push up twelve needles just as they enter the cam, so they pass over the cam instead of under.

TO KNIT MITTENS.



Fig. 10

Large size: Set up the work and knit the wrist seamed, 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 12 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.

For knitting mittens it is very desirable to have the Ribber; with it the wrist can be made with genuine rib, and are equal to factory work.

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 a 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. 11. 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.

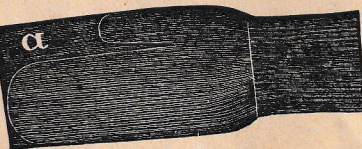


Fig. 11

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 stitch or 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 needle 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 leg-gins, 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 56 cylinder knits children's sizes from fine yarn, and medium sizes from coarse yarn. The same needles are used in both the 56 and 72-cylinder.

The 64-cylinder with No. 10 needles knits large size from heavy or home-spun yarn. Price \$3.00.

The 88-cylinder, with No. 18 needles, knits Saxony or course cotton, adults size. Price \$3.00.

IMPORTANT NOTES TO BE OBSERVED.

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 the 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. If desired you can knit off a ball.

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.

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

The cam must not bind against the cylinder.

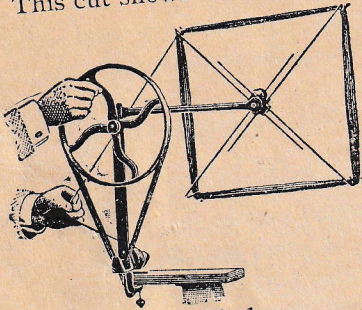
When adjusting the Ribber put the ribber on as directed; and run it slowly without work. In this way you will better understand its adjustment.

You cannot use the 72 Ribber on the 56, 64 or 88 Cylinder. Bear this in mind and use the Ribber for the Cylinder it is intended for.

The 72 Ribber has 24 needles, while the 56 has 28 needles.

COMBINATION BOBBIN WINDER AND SWIFT.

This cut shows our Combination Bobbin Winder and Swift.



need of a good winder.

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 all made of iron and is very convenient to those in

Price, complete, boxed, \$2.00

PRICES OF PARTS NEEDED FOR REPAIRS. REFER TO COVER PAGE

No.	Frame	\$2.00
1	Crown wheel	.75
2	Cam ring	1.00
3	Gear wheel with crank	.30
4	Cam	.06
5	Cam spring, under cam	.15
6	Cam nut	.40
7	Cam carrier	.06
8	Latches, right or left	.30
9	Yarn guide and Spring	.10
10	Yarn guide Post	.10
11	Handle	.10
12	Bobbin	2.00
13	Take-up Spring	.10
14	Cylinder, either size	1.25
15	Wire band	1.25
16	Ribber dial	.50
17	Ribber plate	.25
18	Ribber cam	.40
19	Extension cam with brass nut	.06
20	Ribber post	.06
21	Screws. Name what they are to be used for	.06
22	Heel hook	.20
23	Work hook	.30
24	Weight	.25
25	Set up	.10
26	Needles, per dozen	
	Thumb screws. Name for what part of the machine	

To avoid mistakes and save time, always order parts by number.
These prices include postage, except weights, gear wheels, frame, cylinder, ribber dial, which are sent by Express.
Always mention Improved Machine, model 1904.

Gearhart Knitting Machine Co.,
CLEARFIELD, PENNA.