

❖ INSTRUCTIONS ❖

—FOR USING THE—

PEOPLE'S H. S. KNITTING MACHINE.



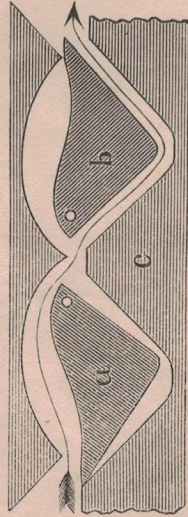
PATENTED APRIL 1, 1890. IMPROVED JULY 26, 1892.

MANUFACTURED BY

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CONSTRUCTION OF CAMS.



Before knitting, note the construction of the Cams and the following:

When turning the machine forward the needles must run up over the LEFT cam and out under the RIGHT in the direction of the arrow. When knitting backward the needles must run up over the RIGHT cam and out under the LEFT.

Before reversing the machine either way, raise about 20 needles and turn the empty grooves to the front, allowing all active needles to pass through the cams.

The machine will not knit if you reverse with the needles in the cams.

If you wish to take the cams off, take out 30 needles and turn empty grooves to the front.

Oil the cams frequently; also, the needles in the grooves. Before knitting, the machine should be run forward and backward—it will make it run smooth and you will get familiar with its operations.

The cylinder must run sufficiently free of the cams to allow them to operate freely.

These points and the BOOK give all needed information. Read first; then read and work together, observing every sentence.

☞ See bottom of first page.

INSTRUCTIONS

—FOR USING THE—

PEOPLE'S H. S. 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 yarn guide post (see cut) in the hole at the back of the machine, place the wooden bobbin having some yarn on it on the post at the back of the machine, pass the end of the yarn through the loop of take-up spring at C, then through the hole in the guide at B, and tie it to the end of the yarn that passes through the hole of the yarn-carrier at E.

Leave the end of take-up spring free, as it is only used or hooked under the yarn at A when knitting the heel. Wind all the slack yarn on the bobbin, then hang the weight on the hook of the set-up ring inside the cylinder which draws the work down. See that the latches of the needles are all down.

Put the crank in position and tighten the screw at L, turn the crank forward slowly and if all parts are in proper position the machine will begin to knit. If the stitches should rise with the needles it is an indication that the yarn is too heavy, the stitch too tight or the weight is not sufficient; or perhaps the screw at H is loose and the cam has slipped up which must be pushed down and tightened. However, for the present, with the left hand press down gently on the weight until the stitches are drawn down and lie on the top of the cylinder. After you have knit a few rounds 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 the work up on the machine and knit according to instructions.

THESE POINTS MUST BE OBSERVED.

Be sure the carrier E runs the Thread under the Points of the Needles; That the Cam F is not too high or too low; That the Machine does not tip down in front. If the needles stick in the cam, raise the cam up. The cam must be kept close up to the cylinder, it is adjusted by the screw in the cam post, under. Take the cam off frequently to oil it. Avoid running the machine rapidly without work.

When reversing the machine without work pull up twelve needles just as they enter the cam, so they pass over the cam instead of under.

TO SET UP THE WORK.

Wind the yarn on the bobbin loosely until it is full, place it on the post. Pass the end of the yarn through the loop of take-up spring at C through the hole downward at B and through the hole in the carrier toward the needles at E. Draw about 5 ft. of the yarn through or enough to set up the first round of stitches. Place the set-up ring inside cylinder and begin to set up the work close to the carrier on the left hand side of the machine by placing the yarn around under the end of the wire turning to the right then around the needle turning to the left, then under the wire to the right, and the needle to the left, and so on until you get to the back of the machine. It will then appear like fig. 1. Now

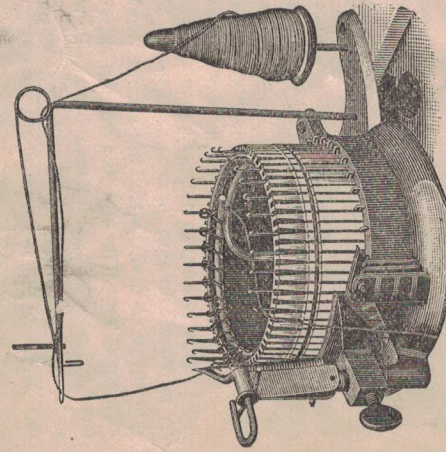


Fig. 1.

hook: the weight on the set-up ring and turn the crank slowly to the right. This will form stitches on the needles, just set up and run the empty needles out of the cam, then continue to set up the work on the balance of the needles running over two or three of those first set up, so as to fasten the end of the yarn. While thus setting up the work the set-up ring must be turned so the end follows along with the needles as the loops are thrown on.

TO KNIT STOCKINGS.

You will notice by setting up this way, turning to the right on the wire, and to the left on the needles, that the loop is crossed between the needles and the wire thus preventing the top from raveling out.

Set up the work as directed, or if desired to rib the top, take every third needle from the cylinder, and after having knit as much ribbed for the top of stockings as you wish, replace the needles in the cylinder again and continue to knit until the leg of the stocking is the desired length.

TO KNIT THE HEEL.

Lift up half of the needles in the back part of the cylinder, place the hook of the take-up spring at A under the yarn and the yarn under the hook on the guide. Remove the weight and set-up ring by turning it around and out of the loops; attach the heel hook K to the work well up inside the cylinder directly under the needles that are in operation, hang the weight on the heel hook.

You are now ready to begin forming the heel. The work and ma-

chine will appear as in fig. 2. Turn forward until the needles in operation all pass through the cam to the right and the needles just lifted will be in front. Lift up one needle on right hand side of carrier next to the ones already lifted where the yarn lies outside the needles.

Turn the machine backward until the needles in operation again all pass through the cam to the left. Now lift another needle to the left of the carrier and next to those lifted, and turn the machine forward again until the needles in operation all pass through the cam to the right. Continue to knit backward and forward each time lifting a needle until only twelve needles remain in operation, then push a needle down on the back part of the machine next to the ones that are down, knit across, push another needle down on opposite side on back part, knit back and continue so to knit backward and forward each time pushing a needle down until all needles that were pulled up in narrowing are pushed down in operation. You will notice that the heel is now complete, with the needles still up on the back part of machine just as you put them when you began to knit heel. During this operation the heel hook should be frequently moved higher up on the web so as to pull the work down. It may be found necessary sometimes during this operation to press the work down with the fingers inside the needles that are in operation. Each time the machine is reversed the slack yarn must be taken up by the take-up spring or drawn up with the fingers. Turn the machine forward and at the same time push down all the needles that were pulled up when you began to knit heel. You are now ready to knit the foot. Then with the heel hook also catch the opposite side of the web together with the heel, so it draws the work down evenly, then proceed to knit the foot. The toe is knit on the same side as the heel, and like the heel in every particular.

Fig. 2.

When complete knit two rounds with needles all down. Break the yarn and run the work out of machine.

After the sock or stocking is run out of the machine, take a flat or sad-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 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 the opposite stitch from the under side, as seen by Fig. 4; draw the yarn through the stitches; now pass the needle down through the first stitch and up through the next one to it, as you see in Fig. 4; then on the opposite side take the stitch through which the yarn has

CLOSING THE TOE.

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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 back easily.

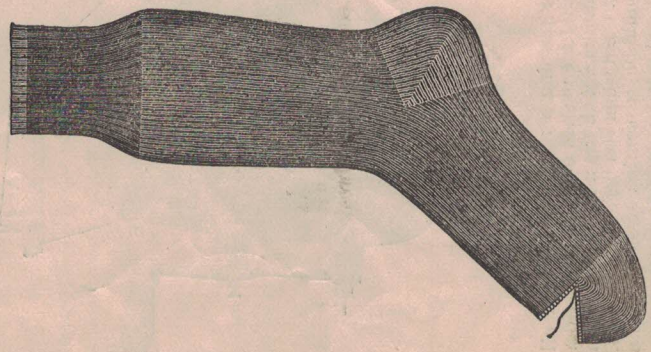


Fig. 3.

he stitch and 6 or 7 for ankle after tightening.

ANOTHER WAY.

Knit 60 or 100 rounds; take out one needle in the centre of the cylinder at the back; knit two or three rounds; take out the fourth needle on each side of the one first taken out; knit two rounds and take out the fourth needle on each side the last 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 rib only in the 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 needle out of the machine. After narrowing 8 stitches, knit 20 times across for the ankle, leaving the YARN-CARRIER at the right hand side of the

work. Lift up all the needles except 9 next the YARN-CARRIER. On these 9 knit one-half the heel thus: Turn the machine backwards 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 just 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 YARN-CARRIER is at the middle of the work; lift up 9 needles on each edge; knit back and forth, lifting up a needle on each side, just as in knitting toe or heel of a 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 overseaming. 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 the needles; so where the heel is knit one-half on one side and one-half on the other, only one-fourth 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.

DIFFERENT SIZES.

There are three things that change the size of a sock or 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 are used. With every other needle out, you may knit a small web.

CHILDREN'S STOCKINGS.

Children's Stockings and Leggings can be knit circular web by taking every other needle out, either the coarse or fine cylinder, knit around, following the same principle as for large stockings and leggings.

DOUBLE HEEL.

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

SUSPENDERS.

Knit with flat web the required width, or with every other needle out, and a long stitch, 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 of the web.

When reversing the machine with work on always lift up at least twenty needles at the back and turn the machine until the raised needles are over the cam in front of 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 pull up twelve needles just as they enter the cam, so they pass over the cam instead of under.

The stitch can be lengthened and the work made open by loosening the screw at H and pushing the cam F down. Or if the cam is raised the work will be tighter. For coarse yarn put the cam down. For fine yarn raise the cam.

THE TAKE-UP SPRING A should never be used except when knitting backward and forward, such as knitting the heel and thumb or similar work.

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 12 stitches from each selvedge edge of the thumb, beginning close down to the hand. When those 24 stitches (12 from 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.

CHILDREN'S MITTS are knit flat web, same as small stocking. Use enough needles to make the mitt the size you want. Rib 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 darned 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 a 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, and finish just the same as a stocking. This is for a mitt of 48 stitches.

The only difficulty in knitting the thumb is to hold it down, which is done by catching the work close up to the needles with the heel-hook.

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 ribbed 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 fig. 5. 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. 5.

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 each 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 one 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, &c.

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 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, by reading the instructions and having a machine before them can 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.

IMPORTANT NOTES TO BE OBSERVED.

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

WHEN KNITTING, if it is desired to make a loop instead of a stitch, draw the needle up and the needle will not be operated.

RIBBED work is knit 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 at J which hold the cog-gear to the cylinder.

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 needle goes down.

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

Use light weight for knitting ribbed, 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 at 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 cams 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 pair of small pinchers. The latches should always work freely.

WHEN knitting flat web at least 16 needles must be taken out to reverse the machine.

The coarse 72-needle cylinders will knit coarse cotton well. If a single thread is too fine, knit two threads off two bobbins at the same time.

For \$1.25, I furnish a coarse cylinder for 56 needles, suitable for knitting small hosiery from fine yarn; or heavy hosiery from very coarse yarn. The same needles from the other cylinder can be used in this.

For \$2.50, I furnish a cylinder and 88 fine needles, suitable for knitting saxony, fine cotton and silk.

Price of Parts Needed for Repairs:

Needles per dozen,	\$.25
Set-up ring,	.10
Extra weights,	.20
Wire band,	.10
Heel hook,	.06
Cams, all complete,	.30
Inside Cams, right or left, each,	.10
Yarn guide and spring,	.20
Crank,	.30
Screws, each,	.05
Gear wheel, each,	.60
Frame,	2.50
Cylinder, either size,	1.25
Bobbin,	.8

These prices all include postage except weights, gear wheel, frame and cylinder, which are sent by express.

J. E. GEARHART, Clearfield, Pa.

SPIRIT PRINT, CLEARFIELD, PA.