

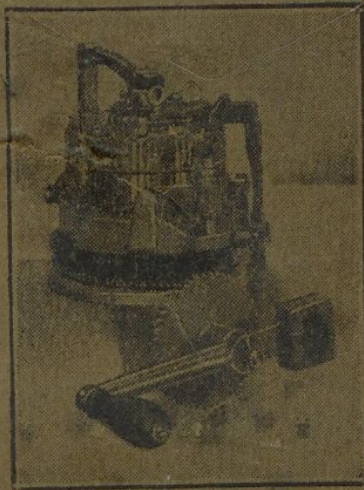
Mrs. Carrie Weegt. Oct. 31. 1923.

Instructions for Operating

THE STEBER

Family Knitting Machine

SECOND EDITION



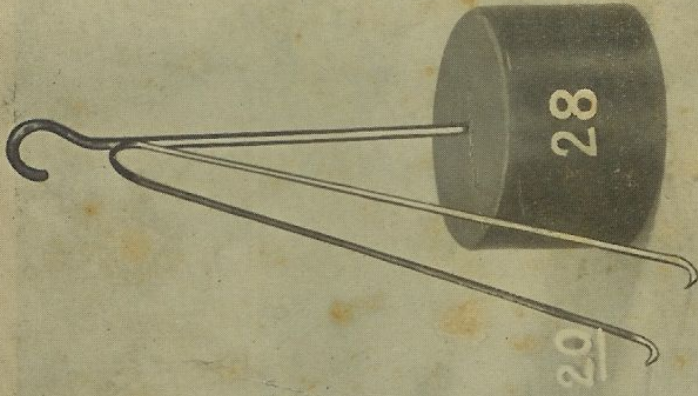
Price of Instruction Book by Mail, - 50c.

The Steber Machine Co.

Utica, N. Y., U. S. A.

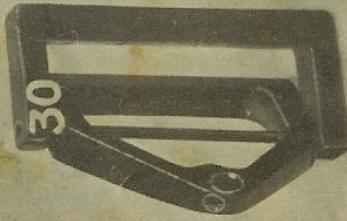
big 50
cup 50
book 65

m^w. Craft. 63. 77. 1
Leg 80. Rounds
Foot 60. 77

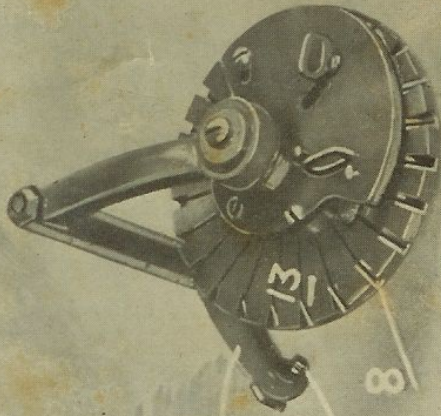


WEIGHT

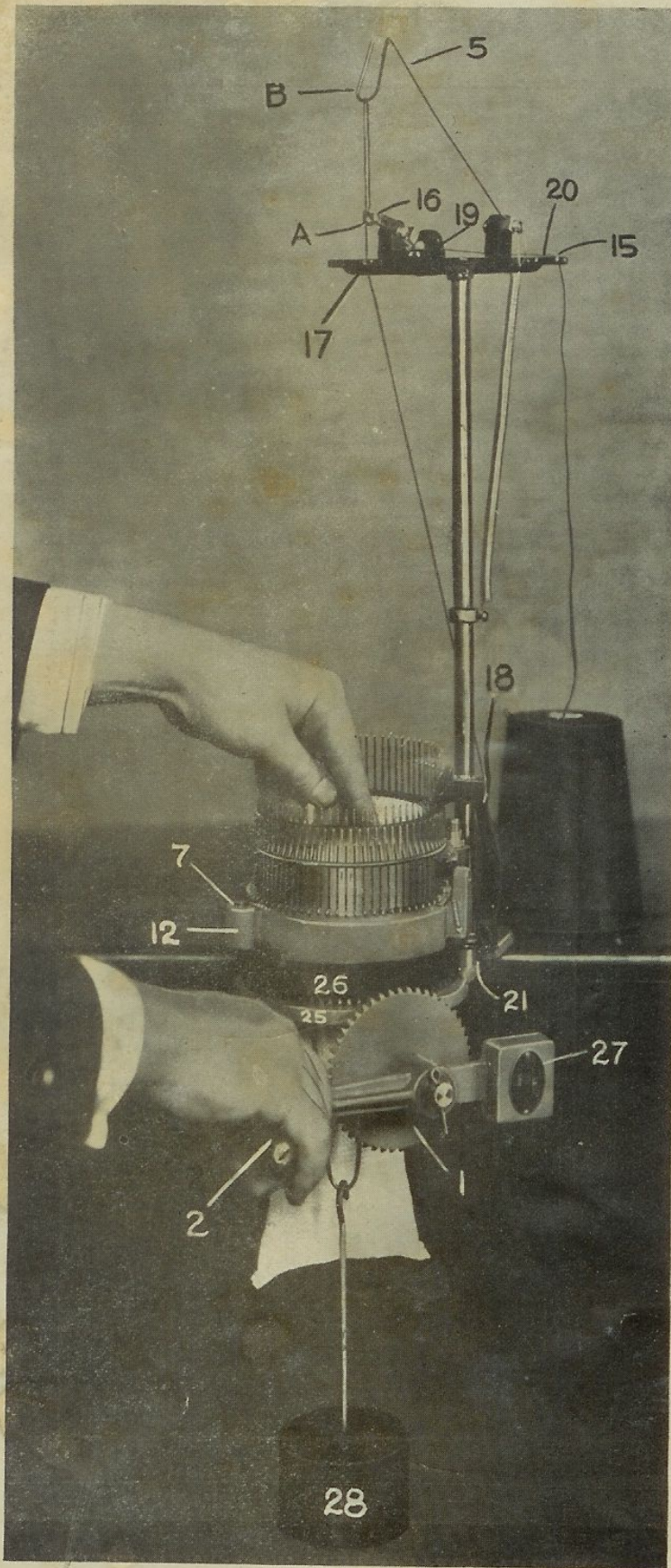
HEEL
HOOK



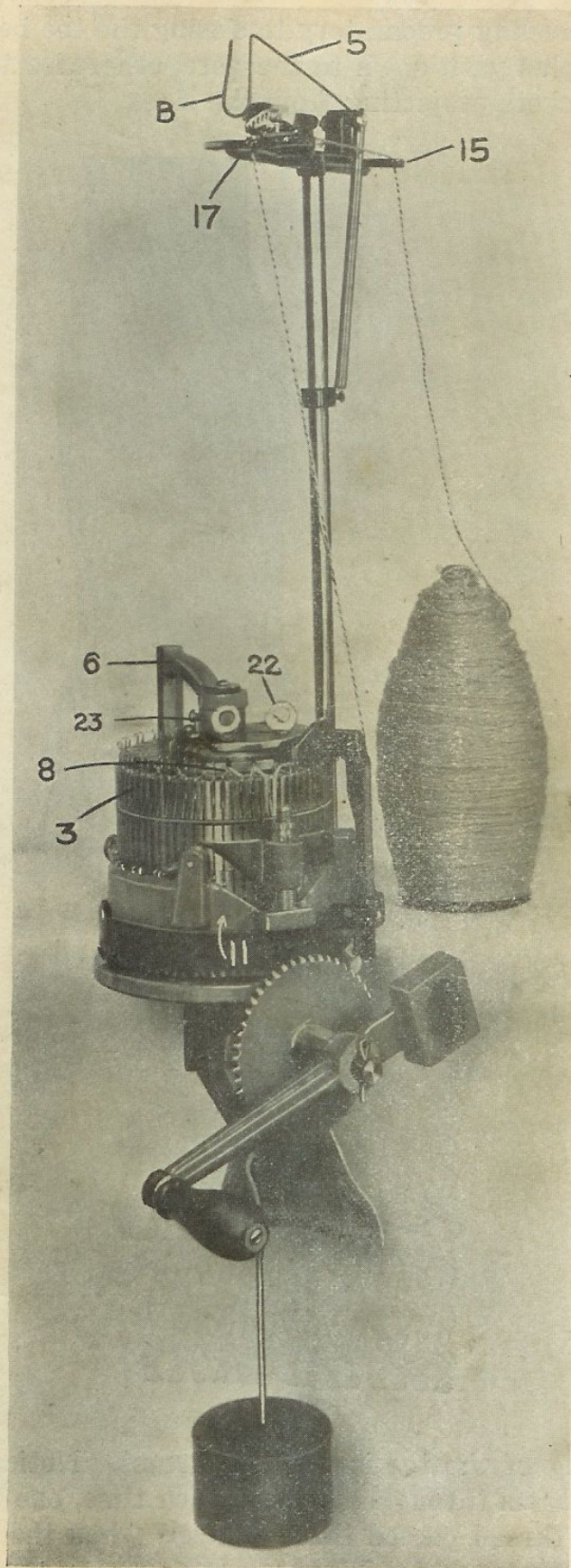
CLAMP



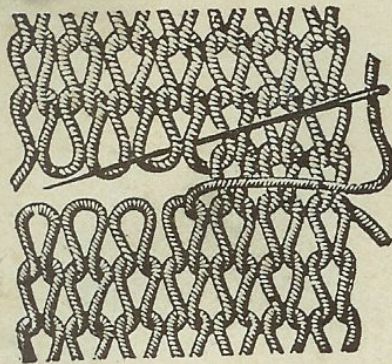
RIBBER COMPLETE



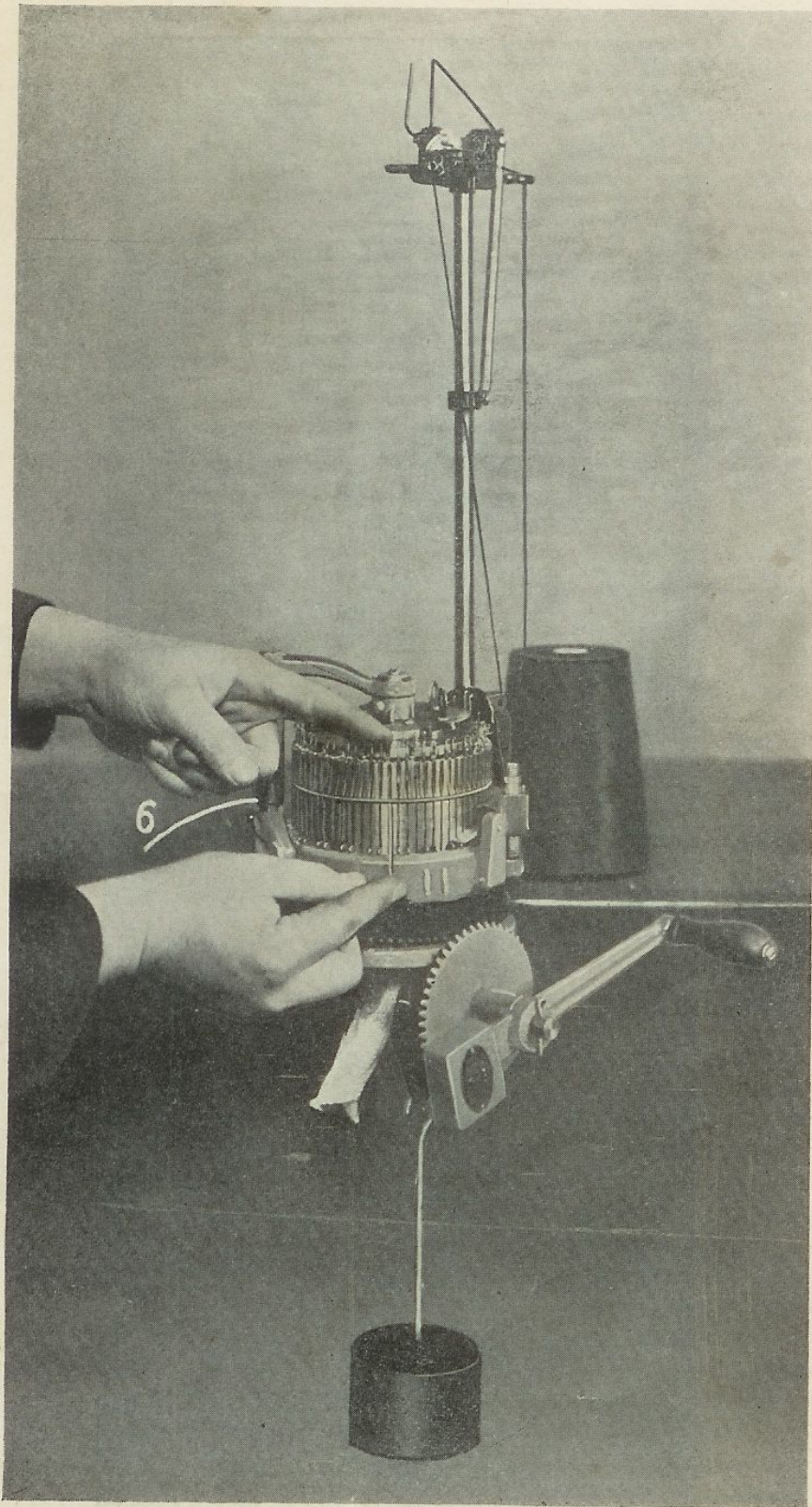
ILLUSTRATING HOW HEEL AND TOE ARE KNIT

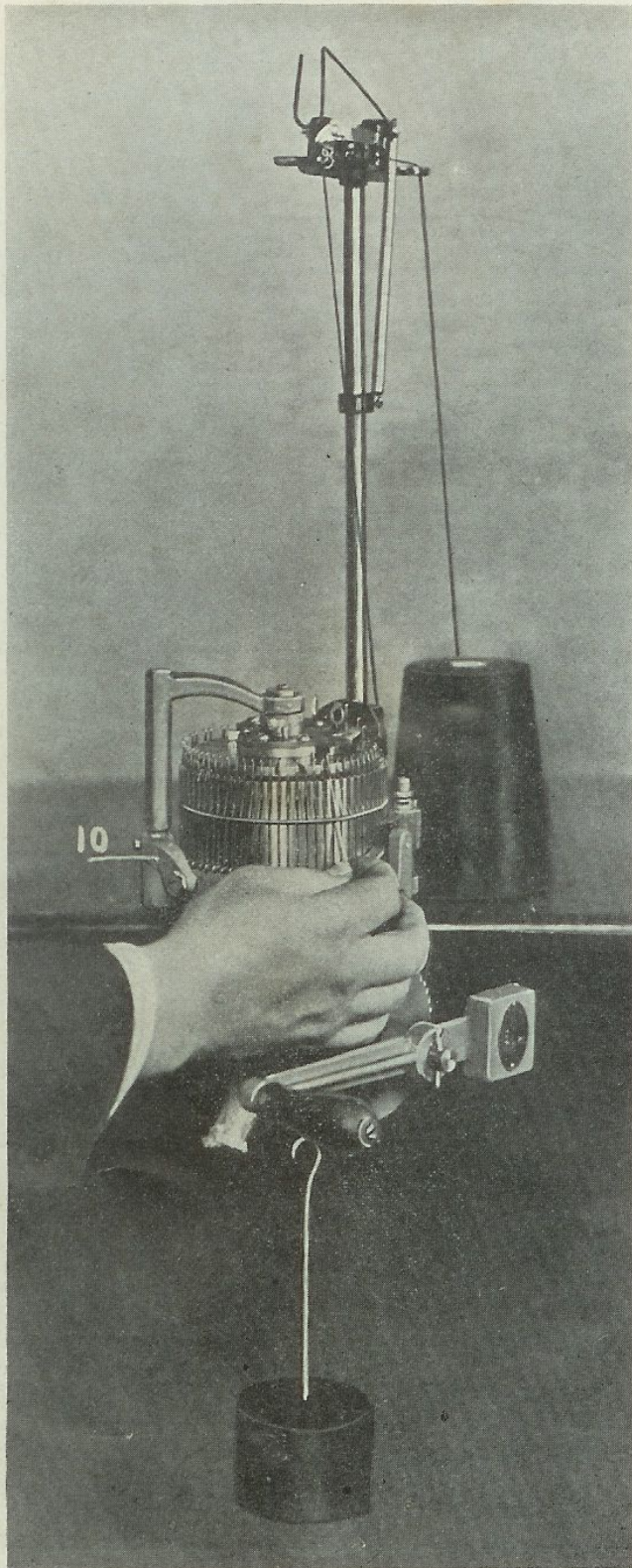


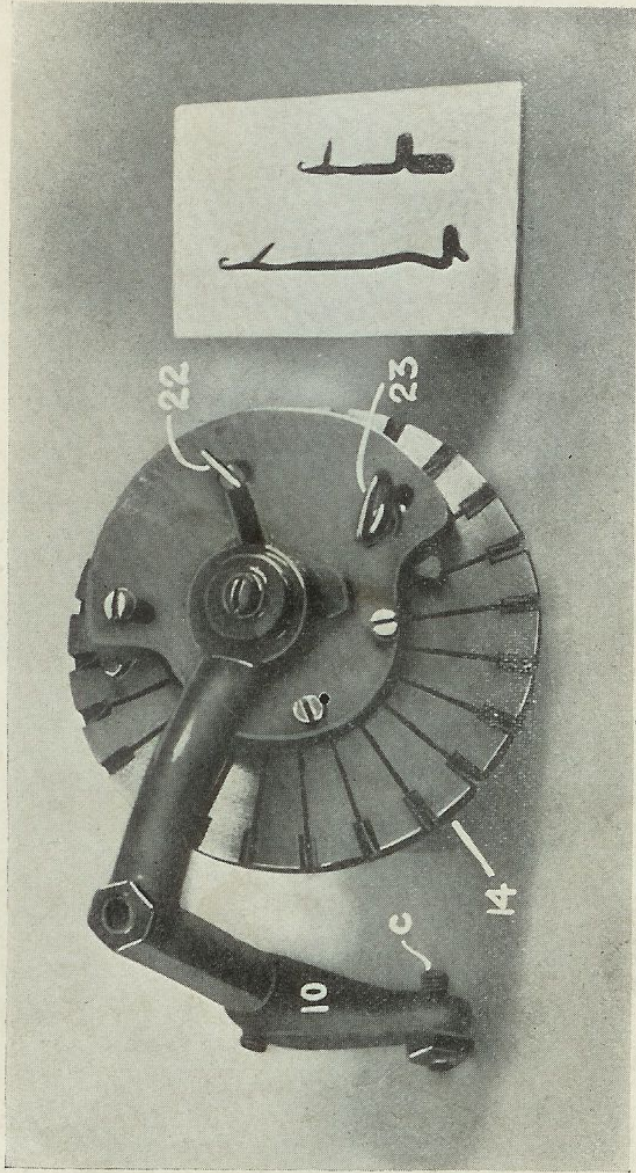
When unraveling preparatory to closing the toe be sure to unravel all surplus yarn down to the gore, otherwise there will be unsightly pockets projecting from the sides.



The closing of the toe is very important. Notice that while the needle passes through two loops each time, one of these two loops had a thread passed through itself when the needle went through before, as shown in cut.

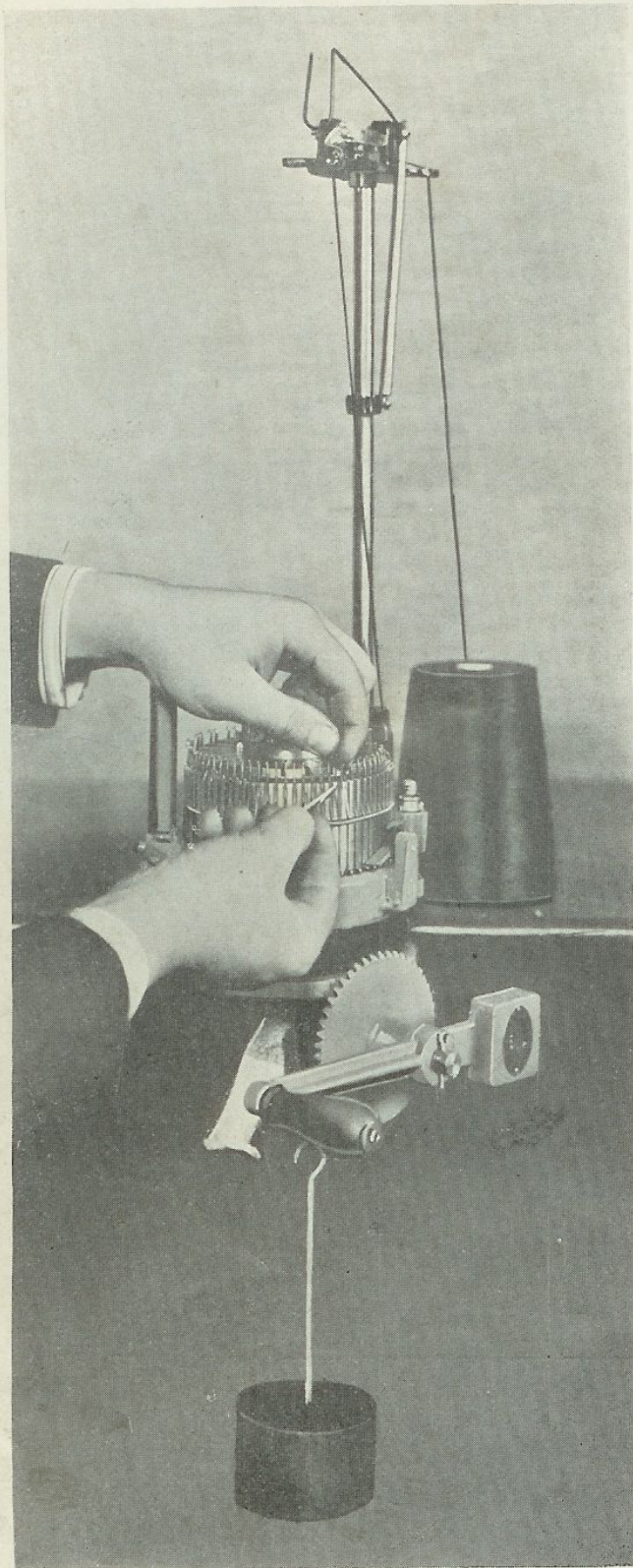


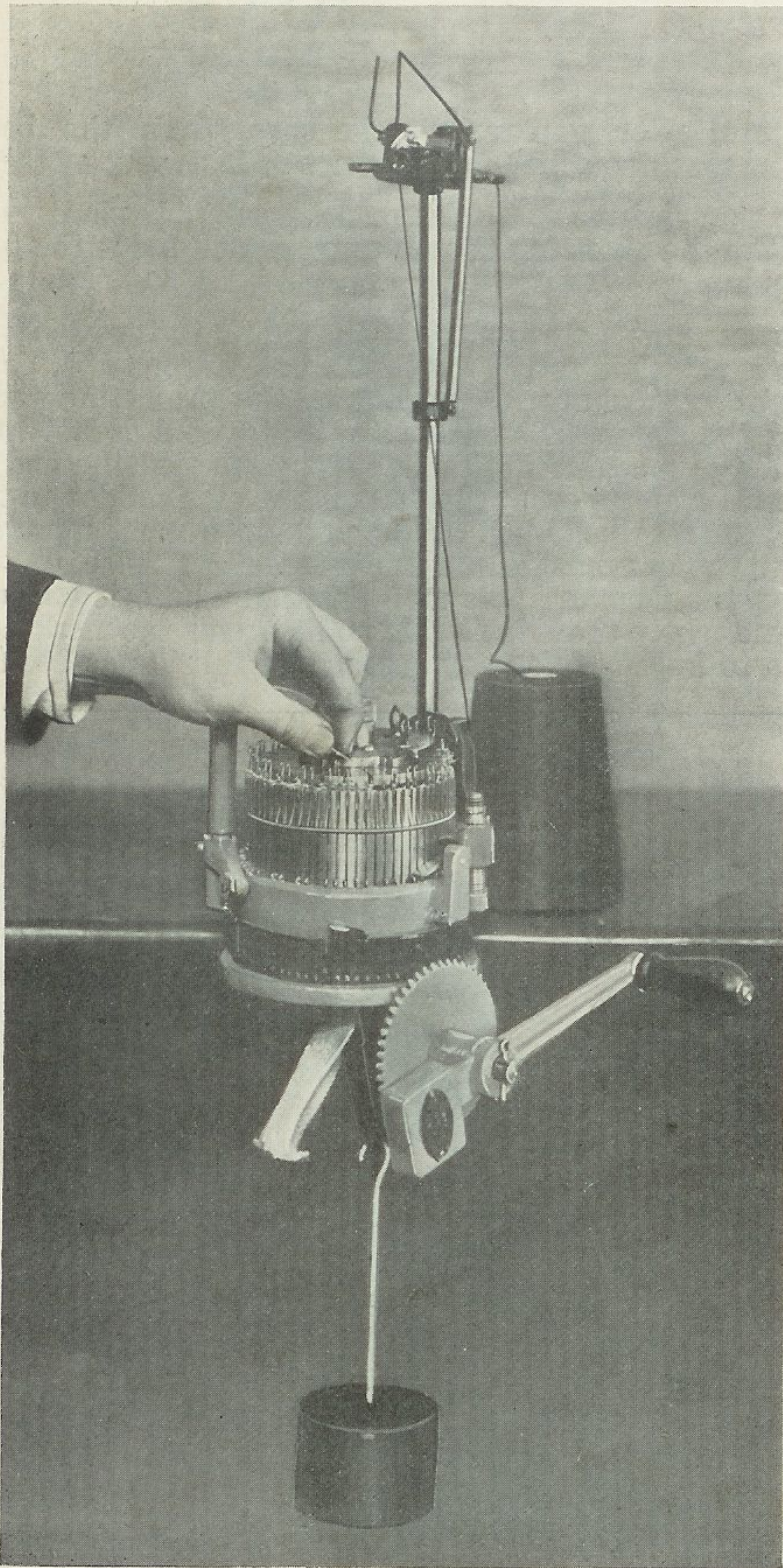




RIBBER COMPLETE

CYLINDER
NEEDLE
DIAL
NEEDLE





DIRECTIONS

Be careful after you remove the cover from the box, and handle the machine carefully so as not to bend any of the parts.

Clamp the machine on a table or other suitable place. Be sure and tighten the clamping thumb screw which holds the machine to the table.

We always knit a small piece of the fabric to try each machine and this is attached to the machine when you get it. You hang the weight (28) shown on page 1 to the projecting fabric by means of the clamp (30) shown on page 1, and do not turn the handle of the machine until after you have tied the end of the yarn which projects from the end of the yarn guides to the end of the yarn from your ball or bobbin, which must unravel very easy from the ball or bobbin. See to it that you place the ball or bobbin on the floor or table at a position where it will unwind evenly, and where there is no side pull towards the machine when it begins to knit. If for any reason the fabric has been disen-

Fig. 10



Cut showing a piece of fabric having top rolled over and how loops are pulled out to start the machine

gaged from the needles roll the top edge over as shown in Fig. 10, and pull a loop over every alternate needle as described on page 15. You may now turn the handle of the machine forward slowly and watch the operation of the needles while they are knitting. This will knit a tube like the straight part of a ladies' stocking. You must practice this for a while until you become familiar with the machine, and you can unravel it and use it over again afterwards. When the time comes when you are sure that you understand this operation you may make several heels to get familiar with how they are made, which is as follows: See also question No. 8, page 18: Without disturbing the knitting which you have been doing, stop the machine in a manner leaving the needles in the rear half of the machine unobstructed by cams, you then draw or push up all the needles which are in the back half of the cylinder, as shown on page 2, until their needle butts strike the band spring which you will see reaches around the cylinder about $\frac{5}{8}$ inch from the top. You will find two small marks cut into the cylinder on each side and start pushing up the needle that is between two of these marks on one side and then the needle that is between the marks on the other side, and then all which are between these two on the back side. Your needle cylinder now has the needles which are located in the back of the cylinder up where they will stay until you are done knitting the heel and until you push them down again. Take notice that the needles in the back of the cylinder will knit the front of the sock and those in the front of the cylinder will knit the back of the sock. After you have the back needles up and before you turn the crank you must pull slack yarn from the bobbin or ball by pulling the yarn above the top guide hole through the take-up arm (B) shown on page 3 and this take-up arm, on account of its spring, can take up slack yarn, and you will now see why. You are now ready to start knitting the heel so you will now take the heel hook and push it up so it will hold on the fabric directly in front of the machine and will pull down the cloth as the heel is being knitted at the front of the machine. You will probably be obliged to change the location of the heel hook several times to have it pull right. You will now move the handle forward slowly until the yarn guide (18) shown on page 2 is about central behind the up needles, and after the front needles have stopped knitting. Next you lift up high one needle (until the butt strikes the band spring) on the right hand side and next to the ones which are already up, this makes one more needle that cannot knit. It is well to follow along where the needles are knitting to hold down the fabric with the left hand, especially where the up needles begin.

Left to right referred to herein means the left or right side of the operator.

You now look down where the needle butts are, which are down, and see if the little trip has passed over all the down needle butts, which you have seen dancing over the needle butts while

you were knitting the round, if it has not passed over all of them you turn the handle a little farther forward until it does, and then you turn the handle backwards slowly (you will notice how the top take-up arm keeps the yarn tight, which was around the up needles of the back of the cylinder. Be sure that the yarn carrier (18) shown on page 2 does not strike the needles. See question 6, page 18). You keep moving the handle backwards until all of the down needles have knit and until the right hand trip has passed over all of the down needle butts. Next you lift up one of the active needles on the left hand side. The needles are always lifted one at a time on the same side where you see the slack yarn spanning across the up needles, way up until the needle butt strikes the band spring and can go no farther. This makes one more inactive needle, and now you may turn the handle forward until all of the active needles have knit, and until the trip has passed over all of the down needle butts as before. You now raise the first active needle next to the raised needles on the right side to be a companion of the other raised needles, and knit backwards again, and after the trip has passed over all of the down butts you raise another needle on the left side and again turn the crank forward, and so you continue knitting backwards and forwards until all but about 12 needles have been put up (see marks on the cylinder). This is what is called narrowing the fabric for a heel. You must now begin to widen in order to make the other part of the heel, and this is done as follows: Put the heel hook way up. We suppose that the last stroke of your handle was from right to left, and that the yarn carrier is on the left hand side of the cylinder and the slack yarn is spanning across the left up needles. "The Yarn Carrier is the part through which the yarn goes directly in front of the needles and the needles take it directly from the Yarn Carrier" (18) page 2. You now lift one more needle on the left side and before starting to knit, lower the first needle on the right side, which is the side **opposite** to where the yarn is spanned across the up needles (this will be the last needle that you raised on the right side) and then knit from left to right, moving the handle at least far enough forward to have the trip pass well over the last down needle butt on the right hand side. Now you push down the first up needle on the left side (this will be the last needle that you raised on the left side), and **DO NOT RAISE ANY MORE NEEDLES**. Now turn the handle forward until the trip has well passed the last down needle butt, and this you continue, lowering the needles one at a time always on the side **OPPOSITE** to where the yarn spans across the up needles until the raised needles have been lowered, one at a time until there are only 3 on a side of the needles which you raised one at a time still up when your handle is stopped on the left side. By 3 on a side still up is meant that 3 more needles on each side are up than the original half of all the needles that you raised at first, but when you knit the toe you may keep on lowering one at a time until you lower the needle next to the two marks, making exactly half of the needles lowered. This is done to avoid pockets on the

sides of the toe after closing it. Next you push down as many as you can of the up needles on the right side, then move the handle slowly forward and push down more of the up needles until all are down. Remember, that when you push down needles which were raised some of the needle latches might close and if they do you must open them before you let such needles try to knit, for if one of the latches is closed the needle cannot take yarn from the yarn carrier, and there will be a drop stitch. Practice this until you are perfectly familiar with heel making. Be sure to push them down one at a time, and to push them up one at a time, as above told. Always push down one at a time when widening on the opposite side from the direction you are knitting, and when narrowing push up one at a time before the yarn carrier comes towards them to knit, and on the side towards which the yarn carrier is coming as stated above. If you raise or lower a needle on the wrong side there will be a small hole in the edge of the Gore.

Keep on practicing making heels until this come natural, after this you are able to knit a ladies' stocking or any stocking which has no rib, make a few, use yarn fine enough for your cylinder, say Saxony Yarn to practice with. If the yarn is too coarse or if something holds back on the yarn, or if the weight is too light the goods will climb up the needles, while if the yarn is too fine you will knit too open. You can knit a closer fabric by turning to the right on the small nut on top of the stitch cam so that it will pull a short loop, and a more open fabric by turning down the nut so that it will pull a longer loop. This is the manner in which ladies' stockings are knit larger on top by drawing a long loop, but there is a limit as to how long you may draw the loop. This will be noticed by the way the machine acts when too long a loop is being drawn. If the fabric climbs the needles when you are pulling down as far as possible with the stitch cam, and if by adding more weight this is not overcome then the yarn is too coarse for the cylinder that you are using. When you raise the stitch cam to knit tighter and have enough weight to pull down the fabric, if the cloth climbs the needles turn the nut forward, thus lowering the stitch cam until the cloth does not climb the needles. Remember that the spring take-up arm which is up on top and which you use when making heels of stockings as above described, should not be used when knitting anything other than heels or toes, and the yarn must not pass over it excepting for heels or toes.

After you know how to make heels you can easily make the toes of stockings, as they are made exactly like the heels and are closed with a darning needle after the fabric is removed from the machine, as shown in cut page 4. After the toe is knit you knit like when making the foot by turning the handle forward round and round four or five turns then you go on with the beginning of the next stocking, first knitting two rounds of about No. 10 white cotton yarn. You cut

off the first stocking right at the white cotton part which you knit before you started the second stocking (you do this after the second stocking is down far enough to enable you to attach the weight, page 1, to it). This (the toe) should be pressed with a flatiron between two pieces of damp cloth and unraveled down to where the toe was finished. Be careful and stop unraveling just where the gore begins, and the end of the unraveled yarn is used with a darning needle which is passed through the loops and the toe is closed as shown in the cut, page 4. If this is done according to the directions the closed portion will be exactly like any part thereof and will not show a mark running across at the toe as do the factory stockings which are closed on a looping machine, and they must be so otherwise the stores will not take them. See also page 21.

HOW TO MAKE RIBBED GOODS AND HOW TO MAKE RIBBED TOP STOCKINGS OR SOCKS. See also page 21. Having thoroughly mastered the knitting of plain stitch goods you may now practice on ribbed goods. This you do by attaching the ribbing attachment to the machine, as shown in the picture on pages 3, 5 and 6. You will notice that the end of the ribber stem "6," page 5, is pushed into socket "7," page 2. You push the standard part (6) into the socket (7) until the bottom of the dial needle groove, page 8, is about $\frac{1}{8}$ -inch above the top of the needle cylinder, page 3, and the lug 14, which extends downward from dial at 14, page 7, touches the back lug inside of the cylinder and is between it and the next lug to the right, the fabric being between the two lugs. Be sure that it does and that the dial (13) page 1, cannot possibly revolve forward.

Now being careful that the end of C of the locating stop (10) page 1 is touching the camring (11) you tighten the tightening screw (12) shown on page 2 with a screwdriver. You are now ready to put in the needles into the dial (13). Let us suppose that you wish to knit the cuff portion of gents' socks, you proceed as follows: You are having a broad rib outside and a narrow rib inside you use a dial having 24 grooves as comes with the machine. Each of these 24 grooves will align with one of the cylinder needles when the dial is turned forward as far as it will go, and if you would put a ribber needle into one of the grooves of the dial it would strike against one of the cylinder needles unless the cylinder needle was removed. You now take one of the small dial needles, as follows: Holding the cylinder needle which would be in your way, outward, see page 8, stretching the band spring a little you catch up its loop in the hook of the dial needle, you then put the dial needle into its groove in the dial, being certain that the loop from the cylinder needle is within its hook and that the loop does not pass beyond the end of the open latch of the dial needle while you are putting said dial needle into its groove in the dial, you now lift up the cylinder needle to be sure its latch is closed and released, then you draw it **DOWNWARD** out of the

machine at the same time pushing outward on the neighboring cylinder needles and put it on the table for future use, this is shown by picture, page 6. Now turn the handle of the machine forward a few times until you are perfectly familiar with the working of the dial needle which is now knitting a single rib inside the fabric, then put in all the dial needles, as you did the first one, being sure that none of the loops which you take from the cylinder needles get over the end of the dial latch, and the loops are within the hooks turn the handle forward slowly, seeing that everything works right, and you are making the ribbed cuff of a sock. Practice this until you are familiar, and then put back into the cylinder one at a time the needles which you had laid on the table, shown on page 5, and draw out the dial needle which was in its way, and be sure to put its loop over and into the hook of the cylinder needle which you have just put into the cylinder, shown on page 9, and continue thus until all of the dial needle loops have been transferred to the empty needles just put into the cylinder one at a time. Now loosen the screw (12, page 2) and pull up and remove the ribbing attachment, turn the machine slow to be sure all is right then proceed with the leg portion of the sock until you reach the heel and proceed as you did with ladies' stockings. Remember the top of the sock is knit first.

HOW TO START AN EMPTY MACHINE. Take a piece of knit goods made on your machine to start from. First hang the knit goods into the machine, roll the edge over outward for about $\frac{1}{2}$ -inch and with an extra needle reach inside of the top of cylinder to A, Fig. 10, then pull a loop over one of the needles, then one about half round the cylinder, then one half way between these two on one side, then one on the opposite side from the last one, and then on every alternate needle between these four, after this you clamp the weight on the bottom of the knit goods and push the end of the yarn through the yarn carrier, drawing it between two of the needles and turn the handle slowly. If any of the needles do not knit pull loop over them from the knit goods as before. The object of rolling the edge of the knit goods outward is to prevent it from unraveling when you pull up the loops, which can be caught up from the fabric.

HOW TO THREAD THE MACHINE. After having loops on the needles and weight attached, set the bobbin or ball of yarn on the floor about under the hole in the top arm marked 15, see page 3. Take the end of yarn from the bobbin and push it upwards through hole (15, page 2) then through hole (19) and under the rocker arm, then through the hole (16) in the front end of rocker, then draw through the hole (17), then (18), through the yarn carrier to the needles drawing the end of yarn well into the center of the needle cylinder, and let it lay there. When knitting backwards and forwards for making either a flat web or the heel or toe of a stocking you pass the yarn over the hook B of the take-

up (5) after it leaves the rocker hole (16) and before it enters the hole (17). See cut on page 2.

See that there is no obstruction to yarn leaving the bobbin or ball, as this must be perfectly free.

KNITTING FLAT WEB. By Flat Web is meant a knitted band having a selvage on each side. Flat Web may be either a band having two straight parallel sides, or it may have projecting portions on its sides. We will first begin by knitting a straight band like a suspender.

Take out all of the needles from the back of the needle cylinder, leaving, say a dozen, more or less, according to the width of band wanted in the front of the cylinder. Next take a piece of knit goods and put one loop over each needle, just as you did for the circular web. Put the yarn through the tension arm above just like for heels. Next take and hang on the light weight and knit forward until the trip has passed the last right hand needle butt, then knit backwards until the trip has passed the last left hand needle butt, then to the right, then to the left and continue right and left until the band is as long as you want it. You can make a narrow or a wide band according to the number of needles you put into the cylinder to knit, but you must leave enough of the needles out on the back of the cylinder to allow both trips to be down and away from the needles, making 22 needles out on a 72 needle cylinder.

Seamed stockings and other FASHIONED GOODS can be knit in this manner. Beautiful seamed infants' stockings are made as follows: Using the 72 needle cylinder (this is the standard), take out 22 needles from the back end of the cylinder, this will leave 50 needles with which to knit the stocking web. Set up the same as for knitting a band, knit 40 times across then take out one needle from each side, putting their loops on the neighboring needles, then knit 3 times across and again take one needle from each side, putting their loops on the next needles. After you have 8 needles out now knit 18 times across for the ankle, stopping at the end of the stroke from left to right. Lift up all of the needles excepting 9 on the right hand side. On these 9 you knit $\frac{1}{2}$ the heel as follows: Knit from right to left then lift up the left hand needle of those which are knitting, knit to the right and then to the left and lift up another left hand needle. Knit left and right again until only 4 needles remain knitting. Then put down one needle before each left hand stroke until 8 are down. Your machine is now at the end of the right hand stroke. You now push down all of the needles and knit clear across from right to left. Now lift up all but 9 needles on the left hand side and knit the other half of the heel with these 9 left side needles just as you did with the ones on the right side. Of course the work must be held down with the heel hook, or your fingers, or both, while you are knitting the sides. After

completing the left side of the heel put down all needles and knit back and forward 20 times across for the foot.

The Toe Is Made As Follows: Your machine being stopped after knitting from right to left, lift up 10 needles on the right hand side and knit from left to right. Now lift up 10 needles on the left hand side and you are now ready to knit the toe just exactly as on a seamless stocking. Lift up one needle on the right side and knit towards the left, then one on the left side and knit towards the right, continue until six needles only remain knitting, then you push down one on each side before you take each stroke just exactly as in knitting a toe for a seamless stocking until all but 9 on a side are down, then with the machine at the end of the stroke to the left you push down all the needles and knit forward then backwards. Continue preferably with cheaper yarn until about $1\frac{1}{2}$ inch of fabric has been knit when you can put in one needle on each side, drawing some kind of a loop from near the edge of this extra $1\frac{1}{2}$ inch near the top knit a few strokes and put in another pair of needles and continue until the 8 needles are back again when you can start another stocking.

If desirable to make the toe more pointy you knit until fewer needles remain knitting, while you are narrowing and vice versa.

Turn the web inside out and OVERSEAM through the short loops of the selvage with a darning needle.

QUESTIONS THAT WILL COME UP DURING ANY KIND OF KNITTING

(1) Q. Why do my stockings look different than those sold in the stores? A. Because in the mills where they make stockings for the stores they wet the goods and draw them over formed Hosiery Boards and then allow them to dry after which they are boxed and sent to the stores. We can furnish Hosiery Boards at a low cost if you wish to knit for the stores.

(2) Q. What shall I do if one or more of the needles begin knitting a drop stitch? A. Reach in and engage the straight strand which spans across the drop stitch and draw it up over the needles, but be certain that the needle latch is open when you do this. After the goods are cut off machine you can pick up loops with a knitting needle.

(3) Q. How can I knit drop sticth hosiery? A. By taking out one of the needles at each place where you want a drop stitch to extend down your goods. Sometimes this is done for the cuff of a woolen sock instead of making a ribbed cuff.

(4) Q. How can I put in a needle cylinder which is either finer or coarser than 72 needles? A. Take out the two screws from underneath the cylinder and you can lift it out, but first

lift up the back half of the needles as if to knit a heel, then use the two screws to fasten down the other cylinder. Extra cylinders of any cut can be furnished by us at six cents per needle groove.

(5) Q. How should I take care of the Knitter? A. Oil the machine and ribbing attachment frequently with a high grade sewing machine oil. We can furnish this at a low cost.

(6) Q. Can I adjust the Yarn Carrier closer to, or farther away from the cylinder? A. Yes, with the little screw (21) underneath the Yarn Carrier. See page 2.

(7) Q. How shall I wind the bobbin when using the bobbin winder to wind from a skein? A. Move your hand that is guiding the yarn quite quickly from right to left and left to right to cross the yarn on the bobbin, and to wind it quite tightly.

(8) Q. If the tension arm fails to pull up the slack when knitting a heel or toe or flat web, what shall I do? A. Loosen the screw which fastens the tension spring collar to the stand rod and slip the collar downwards a little and tighten the screw. This stretches the spring downwards and makes it pull harder, it should not pull any harder than actually required or it will make the machine knit too tight and the fabric will climb the needles. It is well for beginners to watch this slack yarn and draw it up from the yarn carrier with the fingers at the beginning of each stroke.

(9) Q. How can I make ribs run down on the top side of the foot, continuing from the front of the leg and extending to the toe. A. You leave the ribbing attachment in the machine after the leg portion has been knit, and, after you have raised the back needles preparatory to knit the heel, you take out such dial needles as are in the front part of the machine, transferring their loops to the adjoining cylinder needles, making sure that there are no dial needles in front of the cylinder, then you knit the heel as usual, first unscrewing the thumb screw (22) on top of the dial a little and push it back so it will not actuate any of the dial needles when it passes to the rear of the machine. The thumb screw (22) may be fastened in the center counter bore on this operation. After your heel has been knit you stop at the end of the left hand stroke, put (22) into normal position, and fasten it by tightening, push down the rear needles as usual and proceed knitting the foot wherein the Ribber Needles will operate to knit as many rib wales on top of the foot as you have Ribber Needles in the rear of the dial. Very pretty baby stockings down to No. 6 and smaller can be made by using the 88 cylinder and 44 dial, taking out every alternate cylinder needle, knit the leg one and one rib then remove the dial needles on the front side, putting their loops onto the cylinder needles, release the thumb screw (22) and place it as above directed knit the heel, and proceed with foot and toe without replacing the dial needles until you are ready to begin the next stocking.

Some prefer to remove the entire ribber when knitting heels and to replace it and put back the required number of dial needles for knitting the ribs on top of the foot in this case be sure and get the same loops back again.

(10) Q. How is a welt produced near the top edge of the cuff of a sock? A. Very simple. After the machine has knitted a few courses with the ribber you stop the machine, taking notice where the ribber post is situated when you stop the machine, then loosen the thumb screw (22) and push it back towards the center of the machine as far as it will go, then make one complete turn of the machine, bringing the ribber past just where it was when you first stopped the machine, then loosen and draw the thumb screw (22) outward as far as it will go, tighten it and go on with your knitting.

(11) Q. Can I make the welt more pronounced than the one which I made as above? A. Yes, after you have made one turn of the machine as above, you pull the thumb screw outward one notch only, that is to the middle counterbore, and make one more complete revolution, and after this pull it outward from the center as far as it will go, fasten it and proceed with the knitting. You can put several welts about $\frac{1}{2}$ inch apart around the cuff if you wish. Instead of stopping at the middle notch you can knit two rounds when the thumb screw (22) is way in if you wish to do so.

(12) Q. How do I measure the length of the cuff, the leg and the foot while the weight is attached? A. The end of the cuff should be approximately even with the center of the crank axle. The leg even with the bottom of the crank when the handle is up, and the foot can be measured on the crank when the handle is down. All with the weight attached. Try one and measure it. See dimensions, Page 20.

(13) Q. How do I know where on the handle to find the number of the sock when the handle is down? A. A No. 11 sock would reach within about $1\frac{1}{2}$ inch upward from the bottom end of the crank (the weight being attached) when you begin knitting the toe. Finish one up and try it after cutting it off, then put a mark on the crank handle. Of course; a No. 10 would not reach so far down as a No. 11.

FANCY OPEN WORK STITCH. Put enough needles into the front of the cylinder to knit the required width, then start a common flat web. After knitting a few times across stop the machine with the cams in the back of the cylinder, then with a hook take the loop from the second needle and put it on the third. The fourth, to the fifth. The sixth, to the seventh, and so across the entire width, then across and back again so the straight wales of yarn which span across the empty needles after the first time across will have loops on them, then stop the machine again as before and transfer the loop from the second needle to the first, the fourth to the third, and continue thus across the entire

width, then knit back and forward again and proceed as at first, continue until you have the desired length.

To Knit "Cord." Take out all of the needles excepting 4 which may be located at any part of the cylinder, but they must be together. Pick up a fabric on these 4 needles, put the yarn over the upper take-up same as for heel or toe, and knit by turning the machine round until the cord is the desired length.

A great many variety of fancy stitches can be made by various manipulations of the loops from needle to needle. And a great variety of work can be done on the machine according to the skill and taste of the operator.

The Machine is regularly equipped with a cylinder having 72 needles. This will knit common yarns either wool or cotton. Two strands of yarn from two separate bobbins may be used if the yarn is too fine to knit a proper fabrics, but each should be entered through its own hole 15 and 20 in the rear of the upper arm, thence together through the hole 19, 16 and 17, from whence they will feed downward and through the yarn carrier 18 as though there were but one strand.

We supply extra cylinders 52, 56, 64, 88, 100, 112, 120 or 140 grooves at \$.06 per groove. Our cylinders are all made of a fine grade of iron, the same as automobile cylinders, and should last a lifetime.

We recommend the use of the coarser cylinders as they are casier to operate and will knit goods which bring a better profit.

Because the market fluctuates, the price on needles and replacement parts will be quoted on application.

Our Yarn Winder and Reel which fastens to either a chair or table is a convenient accessory and will be sent for \$10.00. Do not confuse this instrument with cheaper devices.

The following are the dimensions which must be used on all socks knit for us taken after the socks are cut off and not stretched:

Cuff, 5 inches long.

Leg, 8½ inches long, exclusive of cuff.

Foot measured from extreme end of toe to end of heel shall be as many inches as is designated by the number of the sock required, that is to say, if No. 10 socks are required they must measure 10 inches, No. 11 must measure 11 inches, and so forth.

Special Instructions for Homeknit Socks

If you wish to knit for us the following additional instructions will help you, as they are written exclusively for facilitating the production of men's socks marketable to the first class wholesale trade who demand absolutely first class work.

Besides the pure wool yarn on cones you should have a cone or ball of about No. 10 white cotton yarn to be used for knitting a short section between each pair of stockings where they are to be cut apart. Assuming now that your machine has plain fabric hanging therein, without the ribber attached thereto, and that the weights are clamped to the fabric and you are ready to knit with woolen yarn which is connected to a cone so that the machine will begin knitting plain fabric with the cylinder needles only, upon the turning of the crank. First you must break the woolen yarn, tie a piece of white cotton yarn to the machine end of the woolen yarn so when you knit you will knit with the white cotton.

Knit about two turns down with the white cotton. Stop the machine with the yarn carrier and cams facing you, put up the rear half of the needles as when knitting the heel, then turn the machine forward until the yarn carrier is in rear and the cams are all under the raised needles, then push up all of the remaining needles so the butts will touch the band spring, then break the cotton yarn about one foot above the yarn carrier and draw this yarn inward through the yarn carrier and let it hang down into the center of the machine from between the needles where it had last been knitted. Next cut off from your cone of pure wool yarn a piece about 1 yard long, tie a slip knot at one end and attach it to one of the cylinder needles; push this end loop down to the needle cylinder, then pass the yarn behind the next needle and around it as shown in Fig. 1, and continue thus keeping the loops down to the needle cylinder with the fingers of the left hand until

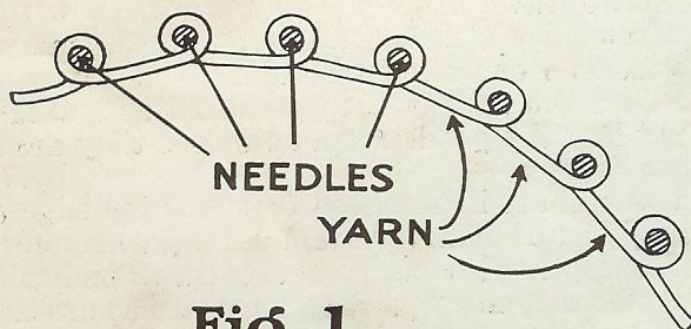


Fig. 1

you have put it around every needle in the cylinder, not too tight nor too loose as shown clearly in the drawing. Do not wind the yarn around the needles the wrong way; be sure the loops are on the outside like the drawing. After this you can tie the two free ends of yarn together, letting the surplus hang down inside the cylinder or you can cut the surplus yarn off if it is tied right or let the free end hang down into the cylinder without tying. Now push down the needles ahead of your cams, connect the woolen yarn as explained in the book of instructions, page 13, and turn the machine forward slowly, first being certain that all latches are open and down. Make one revolution, that is, there should be one loop knitted by every needle in addition to the yarn which you looped around by hand. Put the ribber attachment onto the machine, push the dial around until you feel that the lug is stopping it.

This will show you which needles in the cylinder align with the needle grooves in the dial. Now begin taking the loops from the cylinder needles which needles are to be removed so soon as the corresponding dial needles have their loops as explained on page 14 after all the dial needles are in the dial you may knit about 6 rounds, then push in the cam by thumb screw (23) page 7, make two turns, keeping the fabric down tightly, then draw said cam outward again and tighten the thumb screw and proceed to knit the required length of cuff. If you are to make a plain leg you may now put in the cylinder needles, transfer the loops from the dial needles thereto, take off the ribber attachment and knit the leg, heel, foot and toe. After you have knit the toe and a few rounds of the wool yarn round and round to be unraveled afterward, run in enough white cotton yarn to knit two turns. This is the parting yarn, and after this you begin the cuff for the next stocking and proceed exactly as you did on this one, the knitting of which is now completed.

After your weight gets too near the floor open the clamp and move it upward. Do this often and do not let the weight touch the floor. When you have several socks hanging below your clamp cut them off through the parting strip which is formed of white cotton yarn, then press the toe between two pieces of damp cloth with a hot flatiron, then unravel until you reach the gore when you may close the toe as shown on page 4.

If you do not unravel enough your toe will show pockets projecting from the sides and will not be fit for the market. After the toe is closed no one should be able to detect where it was joined, otherwise the sock is not passable and unsalable, as the stores will not buy the goods from us unless they are right.

All cotton yarn must be removed from the top edge of the cuff just as basting yarn is removed from other garments. The socks are next wet, excepting the cuff, and are drawn on hosiery boards and dried. After they are "paired," such two as are exactly alike are a pair. They are now ready for the wholesale dealers.

It would be well for you to send us a sample after you think you have it right and let us put it through our inspecting department before you send on large quantities, as it is our desire to help and guide you. The speed will come with practice, and first class work must be your aim. To make our standard Homeknit sock you start and knit the cuff exactly the same as above described and after the cuff is finished, you proceed with the leg as follows: Take out every alternate dial needle, transferring the loops to the cylinder needles which you put in at these places. Knit the leg down to the heel with the co-operation of 12 dial needles making 4 and one ribbed leg. This being the proper length you take out the ribber needles remaining in the front half of the dial, the half facing you putting their loops on the cylinder needles which you now put in the front half of the cylinder.

Now loosen thumb screw (22) page 7, and push it in toward the center to the center connection. See also question 9, Page 18.

Lift up the rear half of the cylinder needles, put the yarn over the take up hook B, page 2, and knit your heel with the dial in the machine. The dial will stand still in its place until the heel is done, then after you push down the up needles you pull the thumb screw outward as far as it will go, you are ready to knit the foot, which will have a 4 and 1 ribbed portion on top of the foot with the bottom of the foot plain. Just before you get ready for the toe you put in the remaining cylinder needles, transferring the stitches from the remaining dial needles to said cylinder needles. Remove the ribber entirely, knit your toe, run in your parting yarn and start your next sock same as you did this one. Remember that we want you to do well and that our socks must be sold in the cities and they must be right. People buying from you direct might not be exacting, but to sell large quantities we must go to the dealers; so be careful about the work, become an expert and the rest will take care of itself.

Stretch a correct stocking—see how far down the different sections reach, and measure your fabric, which has a weight attached, accordingly. See also question 12, Page 19.

We will also accept socks whose cuffs are topped with what is known as Van Dyke finish on top, if you have learned to do this and it comes handy to you. Of course they must be done nicely.

To make Van Dyke tops you wind a piece of yarn around the needles exactly as on the straight finish described, only each cylinder needle is out opposite where the dial needles will work. You do this when the dial or ribber is not attached to the machine. Then you knit one revolution, put in the ribber, seeing that the dial lug is as far as it will go against the cylinder lug. Then you pick up the two spans of yarn, which are under the dial needles and put them into the hooks of the dial needles. This can be done with the dial needle itself by reaching its hook down into the cylinder between the two cylinder needles where a cylinder

needle is out and catching the two strands of spanning yarn on the dial needle, then put the dial needle into its place and when all are so in the dial you proceed to make the ribbed cuff. **Always use parting yarn between each pair of socks.**

Another method commonly used is to make a long string of cuffs and afterward cut them apart, transfer them to the cylinder having all of the cylinder needles therein and knit the leg and foot thereto.