INSTRUCTIONS FOR USING THE Model Knitting Machine

MODEL KNITTING MACHINE CO.
PHILADELPHIA, PENNA.
U. S. A.
UNPACKING AND SETTING UP
THE MACHINE

Remove the machine from the packing box and fasten it to a table, window ledge or any convenient but firm place, by means of the thumb screws. Carefully clean off all the grease that was put on the polished parts to keep them from rusting while in transit.

Attach the hand gear wheel by means of the shaft and nut so that the red marks on both the gears will be together. Tighten the nut on the shaft so that it will not work loose.

Screw the post into the hole in the bed plate of the machine and attach the yarn guide to the top of the post so that the hole, in the single end of the guide, will be directly over the centre of the needle cylinder. Tighten the screw in the yarn guide that holds it on the post, Fig 2-D.

Draw down the knitted web which is in the machine, with your hand, and attach the heel hook to the web and hang the weights to the heel hook. Take the loose end and run off the rounds of yarn that are wound around the needles. Care must be taken not to turn the handle of the machine until you have the yarn in position to feed.

Should you have the rib dial attachment, then do not attempt to use it at this time, but lay it aside until you are thoroughly familiar with the plain machine. We always advise beginners to thoroughly understand the plain machine, and knit at least several dozen plain stockings, before attempting to use the rib dial attachment.
THE METHOD OF FORMING STITCHES

Fig. 2

Place a bobbin of yarn on the table directly under hole A or B at the double end of the yarn bracket. Run the end of yarn from the bobbin up through the hole in the yarn guide bracket A or B, through eyelet on top of yarn bracket E, under wire take-up lock F, through eyelet on end of take-up block G, and down through hole in bracket H to yarn carrier. Tie this end of the yarn to the end that you unwound from the needles, and pull the slack yarn toward the bobbin.

See that all the latches of the needles are open and down, and that the yarn is in position to feed even and properly. The machine is then ready to operate. Turn the crank slowly forward, and at the same time see that everything is working properly. You can then proceed to knit tubular work to any length you may desire. The stitches are formed at the top edge of the cylinder, and should the cloth ride up on the needles, then hold down on the webbing slightly with the left hand, or hang on more weights.

Turn the crank slowly and study every movement of the needles, and learn how the stitches are formed. It is very important that you make yourself thoroughly familiar with the workings of the needles, hand names of parts and the method of forming the stitch, as you will then be able to follow instruction more closely and save yourself considerable time and trouble.

Fig. 3

Fig. 3 represents eight needles in action in the machine. The dotted needles, 1, 2, and 3, represent the needles before they receive the yarn from the yarn carrier. Nos. 4, 5, 6, 7, and 8 represent needles in the act of forming the stitches. No. 4 shows the needle at the highest, and No. 6 at the lowest points at which the needles travel in the cylinder. Nos. 4 and 6 show the needles in its regular or idle position. The needle is raised up by the cam, as Nos. 1, 2, and 3, far enough to allow the stitch, which is on the needle, to pass below the latch as No. 4 and into the hollow M. The needle is then at its highest point and starts to descend. At this point the yarn K is fed in the hook of the needle, and as the needle descends the stitch which was in the hollow M, raises back of the latch and closes it, leaving the yarn K in the hook. The needle descends to its lowest point in the cylinder as Nos. 5 and 6, and the stitch, which was in the hollow M, passes over the hook of the needle and into the cylinder. No. 6 shows the needle drawing the length of stitch. It will be remembered that the further down this needle descends into the cylinder, the longer will be the stitch. From this point the needle raises to its regular position as No. 8. This process is repeated at each revolution of the machine.
DESCRIPTION OF PARTS

YARN GUIDE

The yarn guide conveys the yarn from the bobbin to the yarn carrier. The two arms, Fig. 2-A and B, are used when knitting different colors of yarn or in case you wish to knit double or two threads at the same time. The single arm of this guide should be directly over the centre of the needle cylinder. The double ends will then extend over the table, and the bobbins of yarn should be directly under the holes of the arm. This yarn guide is adjusted and set in place by the screw in the left side that binds on the post as shown in Fig. 2-D. All parts on this guide, that come in contact with the yarn, must be kept smooth, so that the yarn will pass through even and freely.

TAKE-UP SPRING

The take-up spring is used only when knitting the heel and toe or flat web. It is adjusted by the screw that passes through the drum on the yarn guide bracket, Fig 2-C. The spring must be adjusted so as to take up all the slack yarn when part of the needles are raised up out of action, and you are turning backward and forward, and also so that the yarn lays close to the needles. The spring should always be kept straight and clean. The take-up hook holds the yarn from running off the bobbin while the spring is taking up the slack. Care must be taken in having this work very freely and hold the yarn properly.

YARN CARRIER

The yarn carrier conveys the yarn to the needles. In threading always put the yarn through both holes from the outside to the inside. It is very important that it is set properly and kept smooth, so that the yarn will feed freely. It should be set close to the needles, although care must be taken not to set so close as to have the needles rub on it. This is adjusted by the small screw that runs through the yarn carrier to the top of the yarn carrier arm. In height, it must be adjusted so that the hook of the needles will catch the yarn as it feeds, although care must be taken so as not to have the latch touch the bottom of the carrier as it is closing. This adjustment is had by the screw that runs through the bottom of the yarn carrier arm to the cam plate. The yarn carrier can be raised up out of action and away from the needles.

CAM AND CAM PLATE

The Cams are used for drawing the needles up and down in the needle cylinder, in the forming of the stitches. Cam Q is stationary and needs no description. It merely acts as a guide to convey the needles properly to the stitch camms N and O, which perform the entire operation of knitting. O being used while knitting tubular work or when turning forward and N when turning backward when making heel and toe or flat webbing. The needles pass out over cam N, which raises them high enough to release the latch, down under cam O, which acts off the stitch from the needle and keeps the yarn in position to make a second stitch. It must be remembered that the needles must pass under one cam only, as otherwise it will not knit. In making a heel and toe, and when part of the needles are raised up out of reach of the cam, care must be taken to turn the handle back far enough to release all the needles from under the cam and allow it to drop down and bridge over so that the needles will pass over it to opposite cam.

STITCH REGULATOR

This regulator is an adjustment for the cams and needles whereby the length of stitches is regulated. The further the needles are drawn down into the cylinder the longer will be the stitch. If you wish to knit a longer stitch, then draw down on the regulator screw R, and if you wish a shorter stitch, then loosen the regulator screw R. A very slight turn of this regulator screw is required to change the stitch, so that you must notice the work carefully if you wish nice knitting. If your stitch is too close or too tight then the machine will not knit freely, and if your stitch is too loose then the knitting will be poor. In ordinary knitting you should adjust the regulator so that the stitches will be long enough to draw down into the cylinder and release themselves freely from the needles. The machine will not knit properly if you have the stitch too tight and the cams are likely to lock themselves if you have the stitch too loose. Also the tighter the stitch the heavier the weight required to hold down the webbing.