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METHOD OF MACHINE KNITTING SEAMLESS FASHIONED SKIRTS

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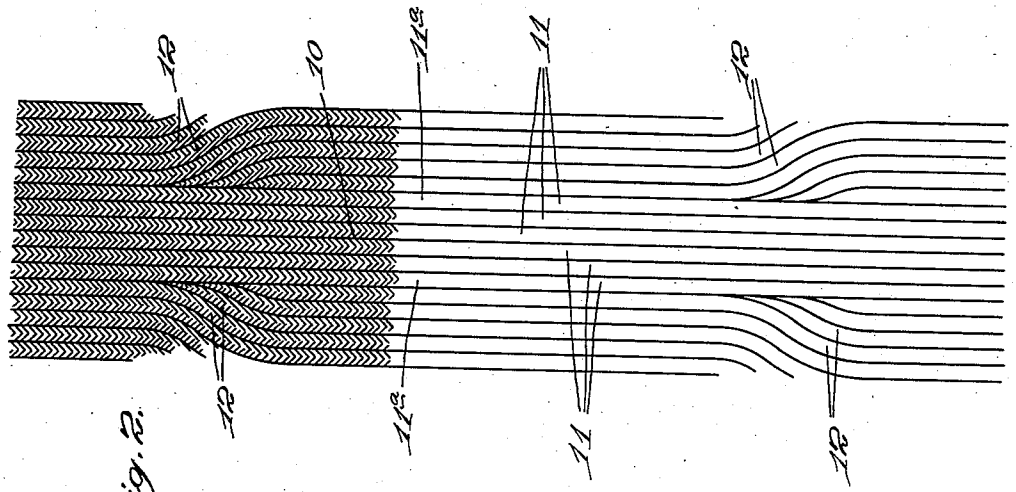


Fig. 2.

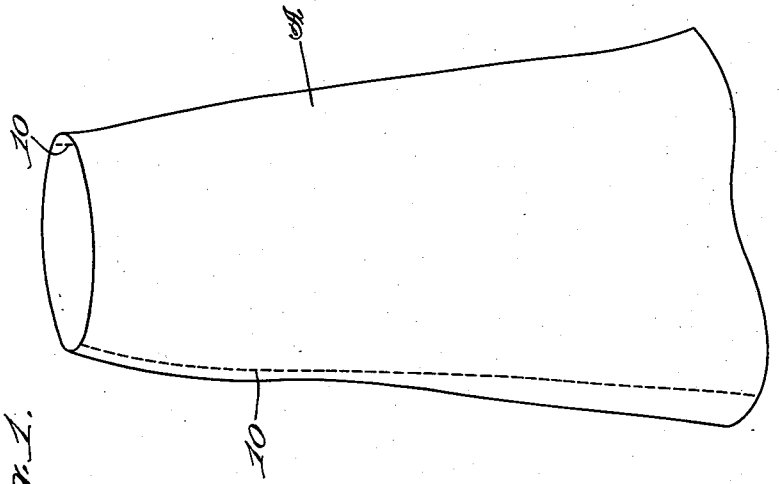


Fig. 1.

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METHOD OF MACHINE KNITTING SEAMLESS FASHIONED SKIRTS

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1 Claim. (Cl. 66—70)

This invention relates to a method for machine knitting seamless skirts and more particularly to a method for using a well known knitting machine for making seamless fashioned skirts.

An object of the invention is to provide a simple and effective method for utilizing the ordinary flat knitting machine in the making of seamless skirts, the skirts being fashioned to the exact sizes desired. Other specific objects and advantages will appear as the specification proceeds.

The invention is illustrated, in a preferred embodiment by the accompanying drawing in which—

Figure 1 is a perspective view of a skirt embodying my invention; and Fig. 2 a greatly enlarged broken view of a portion of the skirt along one side thereof.

For many years it has been common to knit by hand seamless fashioned skirts. Because of the absence of seams such skirts have been in demand and have brought much higher prices than similar skirts knitted on machines but having seams therein. In the knitting mills the practice has been to knit skirts in one flat piece and then, after cutting away sufficient material to fashion the skirt, to sew together the edges of the piece thus forming the tubular skirt body. It has been regarded as impractical to use an ordinary flat knitting machine for forming seamless knitted skirts, the skirts being fashioned to specific sizes.

I have discovered a method by which an ordinary flat knitting machine can be operated and handled expeditiously for knitting seamless skirts. Very little time and effort is required to complete a skirt. Using a single hand operated flat knitting machine, a relatively large number of skirts can be knitted by a single operator in a single day, the skirts being of different sizes and being fully fashioned.

Referring to an ordinary flat knitting machine, say, for example, a hand operated knitting machine, the construction of which is so well known that illustration herein is believed unnecessary, I adjust the machine in the usual manner so as to cause it to knit a tubular garment. I first knit a number of courses to form the bottom portion of the skirt, the knitting being accomplished in the usual way. After knitting in this manner sufficiently to form a tubular border about an inch or two in width, I remove a needle at the extreme end of each side of the machine; that is, one needle on each side of the machine and at each end of the machine is dropped. Prior to dropping each needle, the stitches from the outermost three needles are shifted each one needle width inwardly, thus causing the innermost of the three stitches to be superposed on the needle adjacent it on its inner side. I then knit about four courses and stop the machine. Another needle on each side of the machine is then dropped. Four more courses are again knitted and then another needle dropped. After the dropping of the three needles on each side and at each end of the machine, as just described, I proceed with the knitting at a rapid rate, forming quite a number of courses until about two inches or more of knitting has been accomplished. Three needles on each side of the machine are then successively dropped as before described and then knitting for a substantial extent is resumed. In this manner, the entire skirt is easily and expeditiously formed. Near the top of the skirt, a large number of needles are dropped in order to narrow the upper portion of the skirt. In order to conform to certain sizes, other variations in the spacing of the needle-dropping steps may have to be made.

As a result of the foregoing operations, there is formed on each side of the skirt A, a vertical line 10 in which the stitches from the dropped needles are brought together. This line is shown in greatly enlarged form in Fig. 2. It will be observed from Fig. 2, that the horizontal courses form about six central vertical wales 11. The dropping of needles at the ends of the machine at spaced intervals are indicated by the sharply inclined vertical wales 12. Thus it will be observed that on either side of the vertical wales 11 there are formed at spaced intervals three converging wales. The uniform converging of the wales at opposite sides of the central vertical wales 11 results in an almost invisible union. It is necessary to examine the line 10 with painstaking and extreme care to determine the stitch formations. An ordinary person examining the skirt cannot detect the disappearance of the stitches. The central group of vertical wales 11, with the even merging therein of three wales on each side thereof results in a product so uniform in appearance that the dropping of stitches cannot be detected except with the greatest effort. At the same time, the bringing together of the wales at uniform spaced intervals on opposite sides of the central group of wales produces a very sturdy product and the stress is so evenly distributed that there is no tendency to produce a seam or apparent seam at the line 10.

I am able to produce the vertical and central wales 11 by shifting the stitches in the manner

described above so that the innermost of the three stitches, on each side of the machine, is superposed on a needle already carrying a stitch. The remaining two stitches are merely shifted onto free needles. With this arrangement, it is the vertical wale 11*a* on each side of the central wales 11, that is merged with the adjacent wales through the superposing of stitches.

It will be understood that instead of having six central wales 11, a greater or lesser number can be formed according to the number of stitches shifted at one time.

By dropping three needles in succession, after knitting about four courses between the dropping of the needles, I am able to bring the ends of the merging wales 12 into alignment as they meet the wale 11*a*, thus allowing room for each of the wales to merge smoothly into the wale 11*a*, as shown more clearly in Fig. 2.

It will be understood that a formation similar to that shown in Fig. 2 is brought about simultaneously on the opposite sides of the skirt A by dropping needles on each side of the machine and at each end thereof simultaneously. The lines 10, however, may obviously be formed in other positions on the skirt.

By employing the method described, it is possible to knit readily on an ordinary flat knitting machine tubular skirts having no seams and with the stitch and wale formation such that there is no tendency for apparent seams to be formed. Moreover, it is possible for one operator to knit a number of skirts in one day on a single hand-operated flat knitting machine.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, but the appended claim should be construed as broadly as permissible, in view of the prior art.

I claim:

A process for knitting on a flat type knitting machine, a tubular seamless skirt comprising: knitting tubular courses of stitches to form the bottom border portion of said skirt, each of said courses having an equal number of stitches; shifting inwardly during the knitting of a course the stitches from the stitch-holding needles at each extreme end and also on each side of the machine to superimpose the innermost of the stitches shifted upon needles adjacent the needles from which the innermost stitches are removed; knitting only four succeeding courses having an equal number of stitches; again shifting inwardly the stitches from stitch-holding needles at each extreme end and also on each side of the machine to superimpose the innermost of the stitches just shifted upon needles adjacent the needles from which the innermost stitches just shifted are removed; knitting only four succeeding courses having an equal number of stitches, each of said stitches just shifted being knitted within a single course, again shifting inwardly the stitches from stitch-holding needles at each extreme end and also on each side of the machine to superimpose the innermost of the stitches just shifted from needles adjacent the needles from which the innermost stitches just shifted are removed; knitting another course of stitches, each of said stitches last shifted being knitted within said course; and repeating at intervals of substantially two inches measured vertically along said skirt, said steps in which stitches are shifted at intervals of four courses.

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