Nov. 17, 1931. L. J. BYER 1,832,181

SOCK AND METHOD OF MAKING THE SAME

Filed Sept. 4, 1930

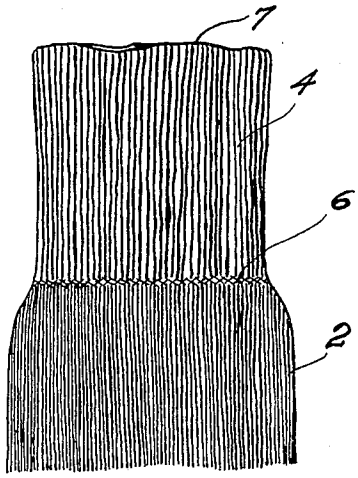


Fig. 1

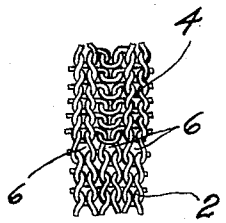


Fig. 2

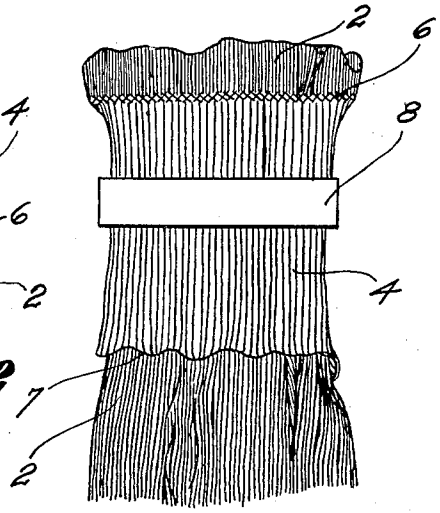


Fig. 3

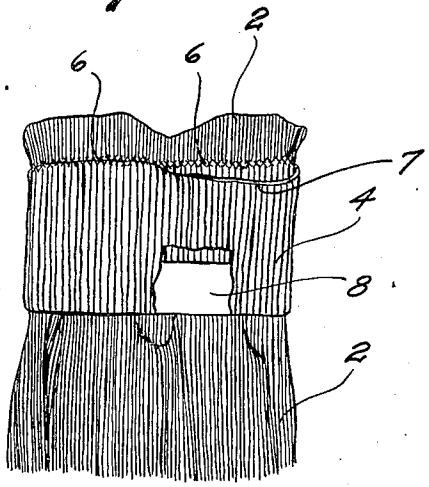


Fig. 4

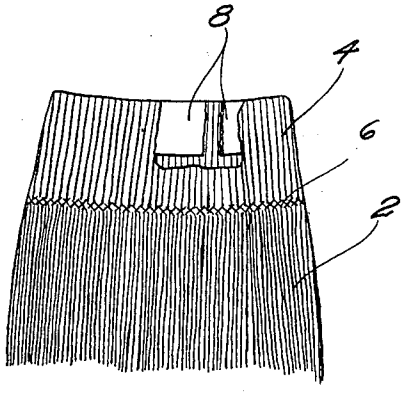


Fig. 7

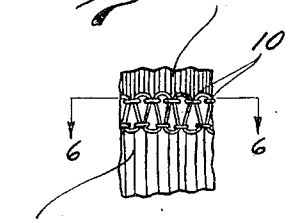


Fig. 5

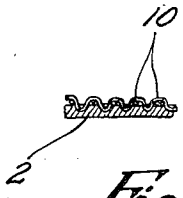


Fig. 6

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UNITED STATES PATENT OFFICE

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SOCK AND METHOD OF MAKING THE SAME

Application filed September 4, 1930. Serial No. 479,655.

The present invention relates to hosiery and methods of making the same, and more particularly to self-holding hosiery provided with a built-in garter for holding the hose upon the leg. From a more limited aspect, the invention relates to children's socks, particularly seamless knitted socks. These are cheaper to manufacture than full-fashioned hose, but the provision of built-in garters is attended with greater complications.

Among the proposals heretofore made has been to enclose the garter in a hem or cuff formed by bending the top of the sock over upon itself, enclosing the garter therein, and sewing the free end of the hem or cuff to the body of the hose. A conspicuous, unsightly seam is produced by this clumsy method of construction, just under the built-in garter, which is objectionable both as a seam and also because it is usually somewhat irregular in appearance. When the top of the stocking is ribbed, furthermore, an objectionable-appearing contraction is found just below the seam, if the garter is made large enough to prevent binding against the calf of the leg. These objections are of serious consequence in the case of children's socks, the upper portions of which are not hidden by other clothing, but are freely and openly exposed to view. It makes all the difference, indeed, between a sock that is sought after and cheerfully and proudly worn by the child and a sock that is unsaleable.

It is accordingly an object of the present invention to provide a sock with a built-in garter that shall be efficient in operation, cheap to manufacture and durable, but that shall, nevertheless, have no seam or other defect caused by the process of building in the garter. Other objects will be explained hereinafter and will be particularly pointed out in the appended claims.

The invention will now be described in connection with the accompanying drawings, in which Fig. 1 is a view of the upper portion of a ribbed sock prior to the incorporation therein of the built-in garter; Fig. 2 is an enlarged fragmentary view of a portion of the same; Figs. 3 and 4 illustrate steps in the process of manufacture of the sock of the present invention, Fig. 4 showing the sock partly completed and partly broken away; Fig. 5 is an enlarged fragmentary view of a portion of the sock shown in Fig. 4; Fig. 6 is a section taken upon the line 6—6 of Fig. 5, looking in the direction of the arrows; and Fig. 7 is a view corresponding to Fig. 4, with the upper portion of the sock in its normal position.

A feature of the invention resides in the use of a seamless, knitted hose that, as shown more particularly in Fig. 1, is provided with a body portion 2 and a ribbed top portion 4, knitted together at 6. The extreme, upper end of the ribbed top portion is indicated at 7. The portions 2 and 4 may be separately manufactured and then joined together at 6 or preferably the top portion 4 may first be made, as on a rib machine, and then suitably transferred to a footing or legging machine for adding the body portion 2 thereto by a continuous knitting process. In either case, the knitted junction line 6 between the body portion 2 and the top portion 4 has a smooth, generally merging appearance that is free from objectionable seams. This smooth junction line is naturally expected by very reason of the fact that the parts 2 and 4 are of different weave and different texture, and it does not, therefore, detract from the appearance of the sock, but is welcomed as a valuable appearance feature in itself, just as is the difference in appearance between the parts 2 and 4 themselves.

The ribbed portion 4 is now bent inwardly over upon itself, along the junction line 6, as shown in Fig. 3, and an endless garter 8 is slipped thereon, as is also illustrated in this figure. The free end of the ribbed top portion 4 is then bent back upon itself and over the garter 8, and the extreme, free end 7 is sewed to the sock along the junction line 6, as illustrated in Fig. 4, producing a kind of cuff or hem within which the garter is freely and loosely, but invisibly, enclosed. The length of the ribbed top portion 4 should not be too long, else the pocket of the resulting cuff or hem, within which the garter 8 is enclosed, would be undesirably deep. This pocket should not, on the other hand, be so

shallow that the garter becomes snugly enclosed therein, as this, again, would spoil the appearance.

The stitches 10 are overseam, blind stitches, penetrating not throughout the sock, but part way only, as shown more particularly in Fig. 6, with the result that the stitches 10 are invisible from the outside. As the junction line 6 is used as a guide along which the operator stitches the extreme end 7 to the junction line 6, there are no irregular appearing stitches, to one side or the other of the junction line 6. Such irregularity would cause the stitches to show from the outside, even though they do not go all the way through, and there would also be a tendency to cause a marred effect of the junction line 6 from the outside. Under the method of manufacture of the present invention, on the other hand, the junction line 6 has the same regular, uniform appearance as if there were no stitches 10 at all.

The resulting sock is unprovided on its exterior with any objectionable stitch seams, whether at the junction line 6 or anywhere else, and has all the appearance of a high-grade article. Owing to the nature of the construction, involving the use of the ribbed top 4, furthermore, the upper portion of the sock is never puckered, even when the garter is contracted, yet it readily expands with the garter when the latter is stretched, producing no binding effect whatever, and no wrinkling, either when held smoothly on the foot, or when not in use. It is therefore unnecessary to sew the garter itself to the sock, which would result in additional objectionable stitched seams. With proper design, the garter will fit exactly against the calf of the leg, being neither tight enough to bind nor loose enough to cause the sock to lose its hold. The garter may be made of suitable material to withstand the destructive action of washing fluids.

Modification will occur to persons skilled in the art, and all such are considered to fall within the spirit and scope of the invention, as defined in the appended claims.

What is claimed is:

1. A sock having a seamless knitted body portion and a seamless ribbed knitted top portion knitted together, the top portion being inwardly bent over upon itself and joined to the body portion at the junction line between the body portion and the top portion by stitches that extend part way only through the sock, the said junction line serving as a guide for the stitches, and the stitches being concealed when the sock is viewed from the outside, and a garter enclosed in the bent-over top portion, the knitted ribbed top portion expanding and controlling readily with the garter and without binding.

2. A sock having a seamless knitted body portion and a seamless ribbed knitted top portion smoothly knitted together, without any objectionable seams, the top portion being inwardly bent over upon itself and the free end of the top portion being joined to the body portion at the junction line between the body portion and the top portion by stitches that extend part way only through the sock, the said junction line serving as a guide for the stitches, and the stitches being concealed when the sock is viewed from the outside, and an endless garter loosely and freely enclosed in the bent-over top portion, the knitted ribbed top portion expanding and contracting readily with the loose garter and without binding.

3. A method of making seamless socks that comprises knitting a seamless knitted body portion to a seamless ribbed knitted top portion, bending the top portion inwardly over against the body portion along the knitted line of junction between the top portion and the body portion, placing an endless garter in the bent-over top portion, bending the free end of the top portion back over the garter and over the rest of the top portion, and sewing the extreme free end of the top portion to the sock along the said line of junction with stitches that extend part way only through the sock, whereby the garter becomes loosely and freely enclosed in the bent-over top portion.

4. A method of making seamless articles that comprises knitting a seamless knitted body portion to a seamless ribbed knitted top portion, bending the top portion over upon itself, placing an endless garter in the bent-over top portion, and sewing the extreme free end of the top portion to the body portion along the line of junction between the top portion and the body portion with the garter enclosed loosely and freely in the top portion.

In testimony whereof, I have hereunto subscribed by name.

LEONARD J. BYER.

CERTIFICATE OF CORRECTION.

Patent No. 1,832,181. November 17, 1931.

LEONARD JACOB BYER.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, line 61, claim 1, for the word "controlling" read contracting; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 13th day of December, A. D. 1938.

Henry Van Arsdale

(Seal) Acting Commissioner of Patents.