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REINFORCED AND RUNPROOF HOSIERY

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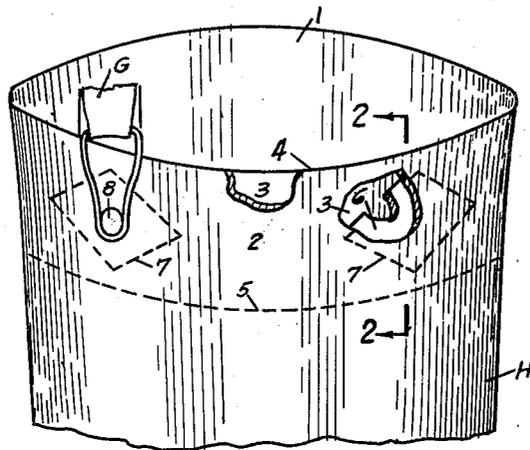


FIG. 1

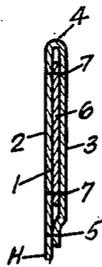


FIG. 2

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REENFORCED AND RUNPROOF HOSIERY

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The present invention relates to reenforced and run-proof hosiery, particularly of the class worn by women, in connection with an attaching means such as a garter.

The primary object of the invention is to incorporate into any of the well-known types of stockings, particularly those worn by women, means to so distribute the strain set up by attachment to a garter as to obviate the breaking of stitches and the formation of runs.

Another object is to so incorporate such a strain-distributing means into a stocking as not to mar or detract from the appearance of the stocking, or to add substantially to its weight.

Another object is to incorporate a strain-distributing means into a stocking and at the same time improve its ornamental appearance.

Other objects and aims of this invention, more or less specific than those referred to hereinabove, will be in part obvious and in part pointed out in the course of the following description of the elements, combinations and arrangements of parts and applications or principles, constituting the invention.

The invention is based upon the observation that the most frequent cause of runs is the fact that a pull applied at one point near the top of the stocking is transmitted along a line throughout the length of the stocking. The strain along this line is usually sufficient to weaken all the threads in its path and to pull out the weaker threads. The essential thought of my invention is to reduce the strain along this line to a point below that sufficient to substantially weaken the intersecting threads. I accomplish this by providing one or more pieces of material sewed in between the two thicknesses of the welt to serve as strain-distributing means for pulls applied in their immediate vicinity. As will be hereinafter explained, the pieces of material are of a shape and dimensions particularly designed to broaden out the line of strain into a band of sufficient width so that the strain along any line within the band thus formed is insufficient to materially weaken any of the threads within the band.

In the drawings:—

Figure 1 is a fragmentary perspective view partly broken away of a stocking embodying the preferred form of my invention and showing the manner of attachment of a garter thereto.

Figure 2 is a sectional view on the line 2—2 of Figure 1.

The stocking itself is designated by the reference letter H, and since it may be of any of the types and styles of hosiery on the market, only so much of the stocking is shown as is necessary to illustrate my improvement and the manner in which it may be applied to the stocking. The stocking is shown provided with a welt 1 having the two thicknesses 2 and 3 formed by folding the top of the stocking over on the fold line 4 and stitching it down on the line 5. The welt may, if desired, be formed from a section of fabric folded upon itself and having its free edges secured together and to the upper end of the leg portion of the stocking in any suitable manner. The welt may be of any desired width, but in general the incorporation of my improvement renders it possible to use a narrower welt than is usual in the art.

Between the two thicknesses of the welt are secured one or more pieces of fabric 6. These pieces of fabric may be of any suitable material, preferably soft in texture, such as felt. Each piece is shown in the form of a diamond 6 with its longer diagonal disposed substantially transversely of the length of the stocking and secured to both thicknesses of the welt by a line of stitching 7 in the form of a diamond. However, I do not desire to limit myself as to the form of either the piece of fabric or of the lines of tacking or stitching. For, as has been explained, the essential feature of my invention is the spreading of the strain ordinarily set up along one line of the stocking by a pull at a point near the top of the stocking over a band of sufficient width to prevent the pulling out of a thread anywhere between the top and the bottom of the stocking. To produce this result effectively, the reenforcing piece 6, or the line of stitching 7, or both, may be of circular or elliptical form, or of

any other regular or irregular form, having a dimension transverse to the length of the stocking sufficient to insure the distribution of the strain over an area wide enough to  
5 reduce the strain along any line of the area to a point below that necessary to cause a run.

The manner at attachment of the garter to the stocking is shown in Figure 1 wherein  
10 G represents the garter and 8 the tuft formed by the stud or button of the garter.

The manner in which the reenforcing piece 6 acts in relieving the strain can be visualized by studying this figure of the drawings. In  
15 the absence of the reenforcing strip 6, the pull of the garter would be transmitted along a single line running through the tuft 8. This line of strain would weaken any thread along its path and tend to pull out weak  
20 threads including those in the foot of the stocking, particularly where one part of the foot is stitched to another. The piece 6 and the line of stitching 7 cause the line of strain which ordinarily runs through the tuft 8 to  
25 broaden out into a band having a width substantially equal to the longer diagonal of the piece 6, thus reducing the strain along the line running through the tuft 8 to a point below the breaking point of the threads subjected to the pull. This same reasoning applies to the stresses and strains set up in pulling on a stocking on the foot of the wearer. By grasping the stocking at the reenforced points while it is being put on, the life of the  
35 stocking is greatly increased.

Although I have described my invention in detail and, therefore, utilized certain specific terms and language herein, it is to be understood that the present disclosure is  
40 illustrative rather than restrictive, and that changes and modifications may be resorted to without departing from the spirit or the scope of the claim appended hereto.

I claim:—

45 In a double welt stocking, means for broadening out the line of strain produced by the pull of a garter on said stocking into an area down the length of the stocking of sufficient width to reduce the strain along said line to a  
50 point below that necessary to cause a run, said means consisting of a piece of fabric sewed in between the two thicknesses of the welt by a line of stitching extending around the said piece of fabric and which passes  
55 through both thicknesses of the welt, the area within said line of stitching providing a space for the direct attachment of a garter to said stocking.

In testimony whereof I hereby affix my signature.  
60

ABRAM CARSON.