May 2, 1950 S. I. BURD 2,505,941

STOCKING

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Fig. 1

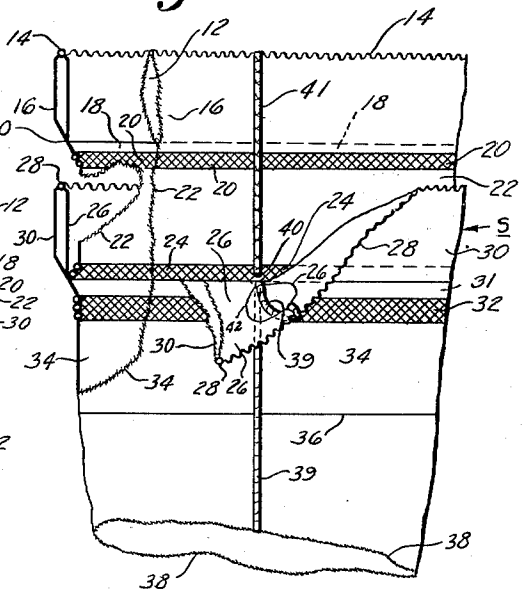


Fig. 2

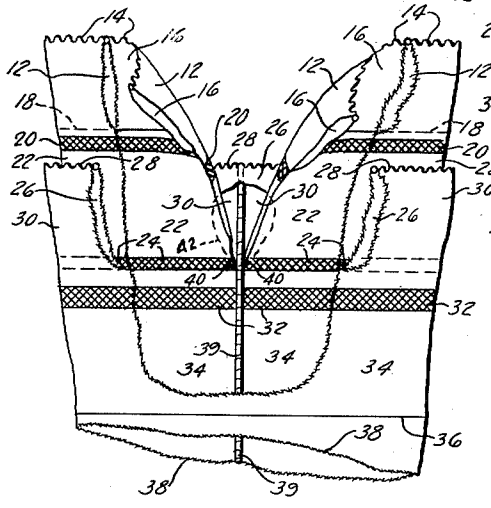


Fig. 3

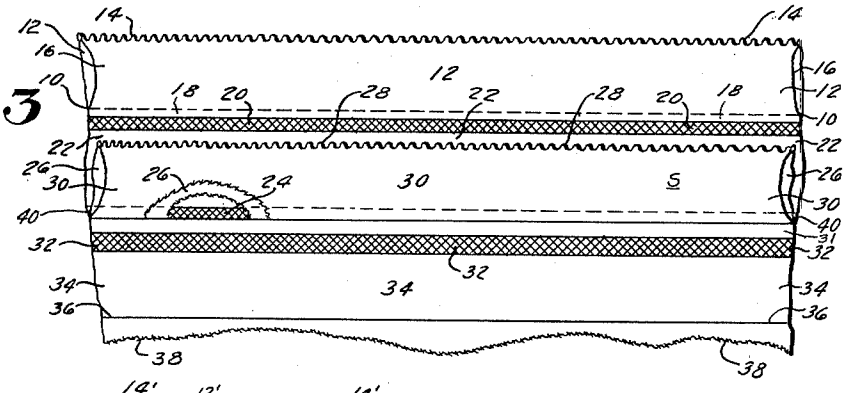
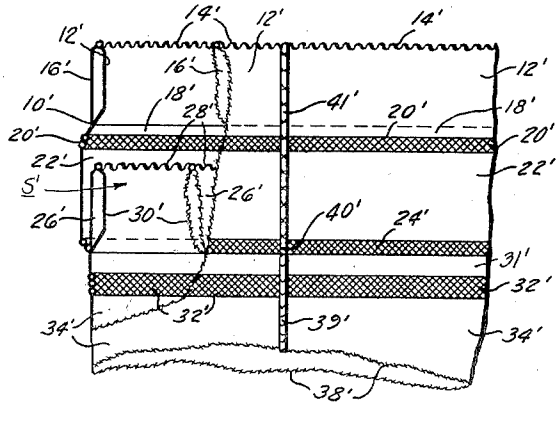


Fig. 4



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STOCKING

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3 Claims. (Cl. 66—173)

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In ladies' full fashioned hosiery the problem of keeping the back seam straight has been a very serious one and, as far as I am aware, none of the previous attempts to prevent the seam from assuming diagonal or other twisted or distorted positions has been successful.

Because the back seam of the full fashioned stocking, as heretofore constructed, extends continuously from the foot all the way to the uppermost edge of the welt, and because the garter straps which depend from the girdle are secured to the upper edge of the welt, any strain or stress exerted on the upper edge of the welt is transmitted directly to the back seam of the leg and causes it to depart from the straight up and down position which it assumes when the stocking is first put on. In other words, as the lady walks, or when she crosses her leg, or when she stoops, the garter straps tend to assume non-symmetrical positions relative to the hips and the thighs and therefore exert unequal and non-symmetrical pulling actions on the portions of the welt to which they are secured and thus distorting the seam of the leg accordingly.

It is, therefore, an object of this invention to produce an improved stocking construction whereby the back seam, under ordinary conditions and body movements, will remain straight, or at least substantially so.

Furthermore, the present trend in ladies' hosiery is to produce a better fit and at the same time reduce the necessity of manufacturing and carrying a large inventory in a large number of different sizes. To this end, it has heretofore been proposed to provide the stockings with very long welts formed of severable or of foldable sections so that, if the stocking is of right length the garter clasps are engaged with the top of the welt, and, if it is too long, one or more of said sections can be cut off or folded over to bring the stocking to the desired length.

It is, therefore, a further object of the invention to produce an improved adjustable welt construction whereby the length of the stocking may be reduced when desired.

A still further object is to produce an improved construction which will accomplish both of the foregoing objects and which will present an attractive and pleasing appearance.

These and other objects are attained by my invention as set forth in the following specification and as shown in the accompanying drawings in which:

Fig. 1 is a view, partly in rear elevation and partly in section of the fully seamed upper portion of a lady's full fashioned stocking embodying my invention, certain parts being broken away and other parts being distorted for clarity of illustration.

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Fig. 2 is a view, partly in front elevation and partly in section of the partially seamed upper portion of a lady's full fashioned stocking embodying my invention, certain parts being broken away and other parts being distorted for clarity of illustration.

Fig. 3 is an elevational view of the welt and adjacent portion of the leg as it appears when it comes off the legger and before the seaming operation is begun.

Fig. 4 is similar to Fig. 1, but showing another embodiment of the invention.

Since the invention resides in the structure of the welt of the stocking, only the uppermost edge of the stocking leg is shown, but it will be understood that the invention relates to a complete full fashioned stocking including a conventional leg and a conventional foot.

A stocking embodying my invention is produced as follows:

The welt is started on a flat legger, the starting point being designated by numeral 10, and the knitting operation proceeds until the inner welt wall 12 is completed; whereupon one or more courses 14 of picot or other open stitch are produced. The courses 14 impart a finished edge, and facilitate folding of the outer wall 16 of the welt upon the inner wall 12. After the wall 16 is completed the margins of the walls 12 and 16 are joined as at 18.

Beyond the junction of the walls 12 and 16, a border 20 is produced by means of any locked, lace, or other run-arresting stitch. Beyond the border 20, a single thickness portion 22, which is preferably of the same fabric as the walls 12 and 16, is produced. The portion 22 terminates in a run-arresting, locked stitch, or lace border 24, which merges with the inner wall 26 of an auxiliary or "skirt-welt S," which is substantially coextensive with the portion 22. The inner wall 26 terminates in a border 28, formed of picot or other locked, open work stitches, which arrest runs, provide a finished edge, and facilitate folding. Beyond the border 28 is knit the outer wall 30 of the skirt welt. The lower edge of the wall 30 is joined to the border 24 and is extended therebelow to form a margin 31 which terminates in a border 32 of picot, or other run-arresting, locked stitch open work. After the border 32, a single thickness shadow welt 34 is produced. The shadow welt 34 terminates at line 36, and is

followed by the leg 38, which is knit in any desired manner.

The structure so far described provides for adjusting the length, and to some extent the width, of the stocking, and it provides a comfortable and attractive construction. Thus, if the stocking is of the desired length, the garter clasps are engaged with the walls 12 and 16 at a point below the upper edge 14. If the stocking is too long, the upper welt is folded down along the border 24 so as to be nested within the skirt welt S and the shadow welt 34, and the garter clasps are engaged with the walls 26 and 30 of the skirt welt at a point below the picot edge 28. If the wearer so desires, the upper welt and the intermediate portion 22 may be removed by severing the fabric at or above the border 24 so that the skirt welt formed of the walls 26 and 30 will constitute the upper end of the stocking.

In conventional stockings, the edges of the leg, the shadow welt and the conventional welt are all joined by a single, continuous seam, which runs along the center of the back of the leg. As above stated, when the stocking is so seamed, the entire seam, and particularly the part thereof which extends along the back of the calf of the leg, is constantly pulled in one direction or another according to the stress and strains to which the garter clasps are subjected as a result of movement on the part of the wearer.

According to my invention, the edges of the leg 38, the shadow welt 34, and the skirt-welt, formed of walls 26 and 30, are seamed in one operation that is to say, they are joined by a single continuous seam, and the edges of the intermediate portion 22 and the upper welt, formed of the walls 12 and 16, are seamed in another operation, that is to say, they are joined by another seam which is not a continuation of the seam of the leg.

For example, the rear edges of the leg 38, shadow welt 34, and the walls 30 and 26 are joined by seam 39, which terminates at 40, and the back edges of the intermediate portion 22 and of the walls 16 and 12 are joined by a seam 41, which begins at point 40. In practice, the seams 39 and 41 join the entire edges of the outer walls 30 and 16, but only join the upper edges (as viewed in Fig. 1) of inner walls 26 and 12 of the welts, thus leaving an opening 42 which is only shown in connection with the skirt welt, but which will also be present in the upper welt also

It is also within the scope of the invention to stop the seam 39 at the upper end of the shadow welt 34 and to seam the welts separately with the portion 22 included in the seam of either of the welts or seamed separately.

In Fig. 4, I show another embodiment of the invention in which the skirt welt S' is disposed inwardly of, and nests within the corresponding portion of the stocking instead of being disposed outwardly of, and encircling the said corresponding portion of the stocking. In this embodiment the various parts are referred to by the prime of the numerals used to designate corresponding parts in Fig. 1.

With the garter clasps secured to the upper edge of the upper welt, and with the edges of the portion 22 and of the walls 16 and 12 joined by seam 41 (which is not a continuation of seam 39), the unequal strains exerted on the points of engagement of the garter clasps will move the upper welt and the intermediate portion 22 accordingly, but, because of the fact that the seam 41 is not a continuation of the seam 39

and, possibly, due to the presence of the flexible and expandible border 24, the force components are exhausted so that little or no pull is exerted, in any direction, on the seam 39. In other words, the movements of the body and the resultant strains only affect the intermediate portion 22 and the upper welt, but do not, appreciably or visibly, affect the disposition of the seam 39. That being the case, the seam 39 is only subjected to the symmetrical friction and pull exerted by the symmetrical calf of the leg and, therefore, if not distorted deliberately or by an unusual force, the seam tends to remain vertical and centered.

When, to shorten the stocking, the upper welt and the intermediate portion 22 are folded so as to nest within the skirt welt, and the shadow welt 34, and the garter clasps engage the walls 30 and 26, the presence of the upper welt and the portion 22 between the leg on one side and the shadow welt and the skirt welt on the other, apparently creates frictional engagement between the wales of the contracting fabrics and tightens the outer fabric against the leg. This, together with the presence of the open work area between the skirt welt and the shadow welt prevents or reduces transmission of the unequal strains exerted by the garter clasps to the back seam 39 of the leg.

The foregoing also applies to the embodiment of Fig. 4, except that in this embodiment, when the stocking is shortened by turning the upper welt or intermediate portion 22, or both, down, the skirt welt or the portion 22, or both, encircle and hug the skirt welt or both the skirt welt and the shadow welt, and will thus counteract or at least minimize the forces tending to distort the seam 39.

The explanation as to how the structure functions is the best that applicant has been able to find as a result of extensive trials and comparisons with or against various types of conventionally constructed stockings, and it has been conclusively established that, under comparable conditions, the seams of stockings constructed as shown and described remain straight for much longer periods and to much greater extent than the seams of any other type of stocking available.

What I claim is:

1. A lady's full fashioned stocking including a leg, a first double thickness welt near the upper edge of said leg, an intermediate portion beginning near the junction of said first welt with said leg and extending towards the free edge of said first welt, a first portion of open work fabric formed along the top edge of said intermediate portion, a second double thickness welt carried by the top edge of said first open work portion, and a second portion of open work fabric near the junction of said first welt with said leg.

2. A lady's full fashioned stocking including a leg, a first double thickness welt near the upper edge of said leg, an intermediate portion beginning near the junction of said first welt with said leg and extending towards the free edge of said first welt, a first portion of open work fabric formed along the top edge of said intermediate portion, a second double thickness welt carried by the top edge of said first open work portion, a second portion of open work fabric near the junction of said first welt with said leg, a seam connecting the vertical back edges of said first welt, and a separate seam connecting the vertical back edges of said second welt.

3. A lady's full fashioned stocking including a leg, a first double thickness welt near the upper edge of said leg, an intermediate portion beginning near the junction of said first welt with said leg and extending towards the free edge of said first welt, a first portion of open work fabric formed along the top edge of said intermediate portion, a second double thickness welt carried by the top edge of said first open work portion, a second portion of open work fabric near the junction of said first welt with said leg, a seam connecting the vertical edges of said leg and said first welt, and a separate seam connecting the vertical back edges of said intermediate portion and said second welt.

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