June 20, 1950 S. L. DILLS 2,512,489

STOCKING HAVING A CONTRASTING SEAM AND METHOD OF PRODUCING SAME

Filed Oct. 3, 1947

Fig. 1.

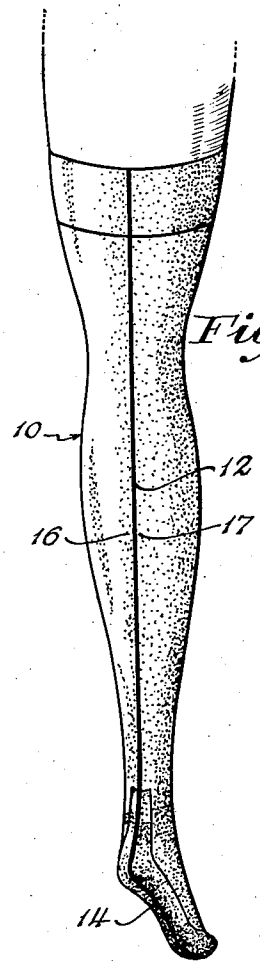


Fig. 2.

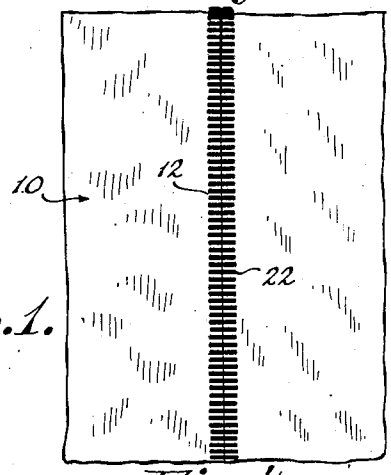


Fig. 3.

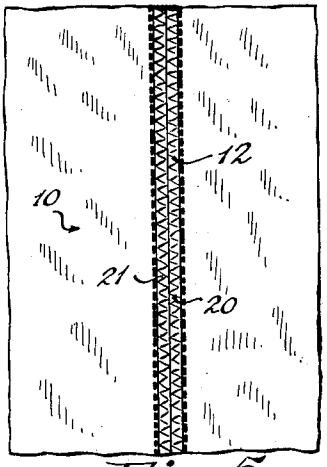


Fig. 4.

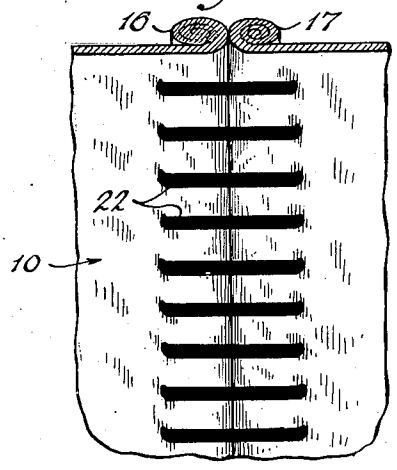
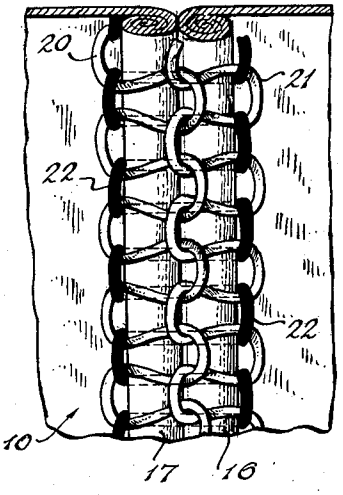


Fig. 5.



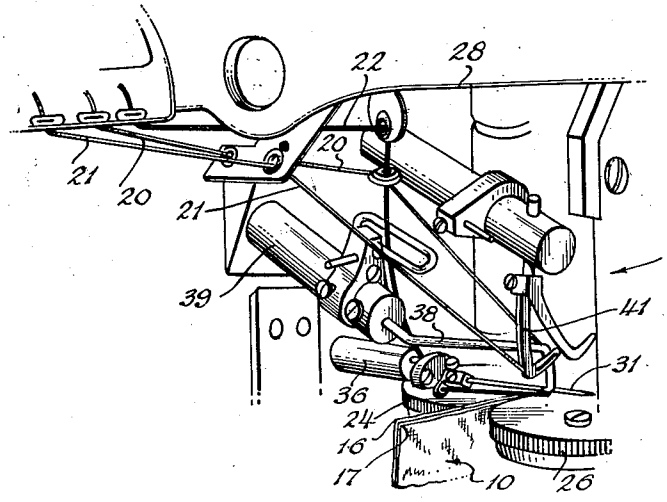


Fig. 6.

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STOCKING HAVING A CONTRASTING SEAM AND METHOD OF PRODUCING SAME

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3 Claims. (Cl. 2—239)

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The present invention relates to hosiery seams, and more particularly, to a seam for a stocking which contrasts in appearance with the fabric of which the stocking is constructed. This fabric is generally knitted as a blank which has edges joined by a seam and it is this seam with which the invention is concerned in the more important aspect thereof. However, the invention may apply to "seamless" stockings which may be provided with an ornamental line of stitching in accordance with the invention. The manner of accomplishing this result will appear hereinafter in the general description of the invention. The term "seam" as used herein is understood to be applicable to the true seam of full fashioned hosiery as well as a line of stitching provided as a physical structure in seamless hosiery. The seam of full fashioned hosiery results from the joining of the selvage edges of the knitted stocking blank.

The principal object of the present invention is to provide a seam of contrasting appearance along the back of a completed stocking.

A closely related object is to provide novel methods for producing a seam or line of stitching which contrasts in appearance with the contiguous fabric.

Another object is to provide a seam for hosiery which presents a contrasting appearance with the fabric of the hosiery and which is unaffected by subsequent dyeing of the hosiery blank.

Still another object is to provide a stocking having a contrasting seam appearing on only one side of the stocking.

Other, and, perhaps, more specific objects of the invention, will become apparent from a reading of the following specification in connection with the accompanying drawings in which:

Fig. 1 is a view in rear elevation of a leg clad with a stocking embodying the present invention;

Fig. 2 is a fragmentary detail view of the seam of this invention as seen from the outside or "right side" of the stocking.

Fig. 3 is a view similar to Fig. 2 of the seam as seen from the inside or "wrong side" of the stocking;

Figs. 4 and 5 are still further enlarged views and correspond, respectively, to Figs. 2 and 3; and

Fig. 6 is a fragmentary view of a seam stitching machine of a well-known type.

Referring to the drawing, reference character 10 indicates a stocking of the full fashioned type in its entirety. The stocking 10 is usually stitched

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up from a blank of knitted material along a seam 12 which extends longitudinally down the back of the stocking and along the middle of the foot sole. The latter seam portion is indicated at 14.

The blank of knitted material is usually made up from undyed yarn, or in trade parlance, it is made "in the grey." The stocking yarn is silk, rayon, nylon or like material suitable for the purpose. After dyeing, "boarding" is the last step in the manufacture of a stocking such as appears in Fig. 1. This proces gives the stocking its final shape.

The seam 12 is made by bringing the edges 16 and 17 of the material together under a sewing or stitching machine 18, such as is fragmentarily shown in Fig. 6, and stitching these edges with a stitch which allows the fabric to lie substantially flat on each side of the seam when the stocking is worn. The selvage edges of the blank may be allowed to curl, or to remain curled, before and during the stitching process. Normally, however, the stitching machine is equipped with an uncurler (not shown) which straightens the selvage edges of the blank. The present invention is applicable to a seam irrespective of the condition of the selvage edges.

The seam 12 of the invention is provided, in the illustrative embodiment of Figs. 2 to 5, by a stitching process involving three threads. The process is equally applicable to a two thread seam. The seam of Figs. 2 to 5 is made by using two regular seaming threads 20 and 21 of nylon, silk, cotton or other fiber, and one thread 22 of dye-resisting yarn of a color or shade which will contrast in appearance with the dyed stocking. The thread 22, during the stitching process, is kept on the outside of the stocking 10. This is illustrated in Figs. 1, 2 and 4. The threads 20 and 21 are or may be looped on the inside of the stocking 10 to complete the stitching of the seam 12.

As seen in Fig. 1, the seam 12 stands out as a dark line down the middle of the leg of the wearer, thus enhancing the appearance of the clad leg of the wearer. As above stated, a line of stitching may be produced on the back of a seamless stocking. One dye-resisting thread together with one or more stocking threads, may be used to achieve this effect.

Fig. 6 suggests a means by which the invention may be carried out. The sewing or stitching machine 18 of this figure is of the type wherein the stitch forming devices and the work supporting and feeding devices 24 and 26 are located exteriorly of a support housing 28. A machine of this type for forming a two thread seam is shown

in U. S. Patent No. 2,043,711, granted July 9, 1936. A machine for forming a three thread seam is shown in U. S. Patent No. 2,133,229, granted October 11, 1938. Either of these machines or their present day variants are suitable for practicing the invention disclosed herein. An identical machine is described on page 33 in a booklet entitled "Union Special Hosiery Seamer" of the Union Special Machine Company, 400 North Franklin Street, Chicago, Illinois.

The work supporting and feeding devices, referred to above, are in the form of the feed wheels or cups 24 and 26. Means (not shown) are provided for imparting a step by step rotating movement to both feed cups. Means (not shown) also are provided for spreading the feed cups to introduce the matched edges 16 and 17 of the stocking blank which are to be joined by the stitching process of this invention. Spring pressure means (not shown) presses the cup 26 toward the cup 24 during operation of the machine.

The stitch forming mechanism comprises a needle 31 carried by a needle bar 36. The needle 31 is threaded with the dye-resisting thread 22. The needle bar 36 reciprocates in a horizontal line, and the needle enters the fabric substantially at the line where the fabric is gripped by the feed cups.

A thread carrying looper 38 is mounted on a looper support 39. This looper 38 manipulates the thread 20. The looper support is mounted for oscillation and endwise reciprocation. A front looper 41 manipulates the thread 21 during the stitch forming process. The threads have been identified herein and in the several figures of the drawing. Details of the sewing machine are set forth in the patents and the publication referred to above and their detailed description need not be repeated here as they do not constitute a part of the invention. Many other stitching operations are possible which will result in the desired exposure of the thread of contrasting color. The novel method herein involved is concerned with production of the contrasting and distinctive seam and the novel product, namely, distinctive hosiery.

Referring again to Fig. 6, the threads 20 and 21 are threads capable of being fully affected by the dye stuff to which the finished stocking is exposed

in the final dyeing procedure. These threads are threaded into the loopers 38 and 41, respectively as stated above. It will be understood that if the stocking blank to be stitched is knitted from pre-dyed yarn, the threads 20 and 21 will preferably be pre-dyed, to the same shade or color, or the entire blank and the threads 20 and 21 may be a natural color or undyed. The thread 22 is threaded through the tensioning instrumentalities and the needle 31, and is of such character that it contrasts with or stands out in appearance from the finished stocking. As explained above, it is a dye resistant thread for stockings made in the grey. For pre-colored hosiery, it is preferably of a fast color contrasting with the hosiery material, but it may be neutral in appearance to contrast with a pre-colored stocking.

The claimed invention is:

1. The method of providing a stocking having a seam which contrasts in appearance with the dyed finished stocking comprising, stitching a seam in said stocking by incorporating a seam thread which will be affected by the dye in the finished stocking, incorporating a dye resistant seam thread having a contrasting appearance, and dyeing the finished stocking.

2. The method of providing a stocking having a seam which contrasts in appearance with the dye finished stocking comprising, stitching a seam in said stocking by incorporating seam threads which will be affected by the dye in the finished stocking, incorporating a dye resistant seam thread having a contrasting appearance, and dyeing the finished stocking.

3. A stocking "in the grey" having a seam, said seam comprising at least one dyeable thread, and at least one dye resistant thread.

SAMUEL L. DILLS.

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