Oct. 14, 1930. C. F. MACK 1,778,221

FULL FASHIONED STOCKING

Filed Sept. 20, 1928

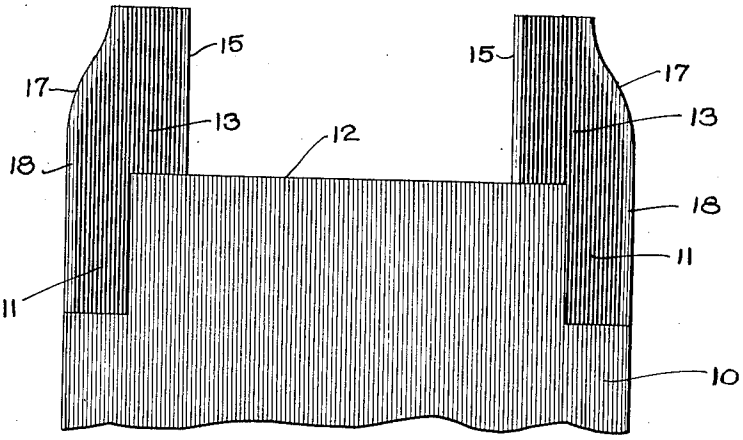


FIG. 1

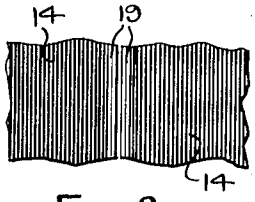


FIG. 3

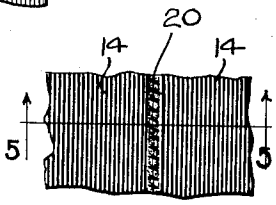


FIG. 4

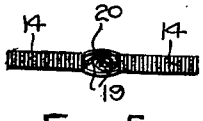


FIG. 5

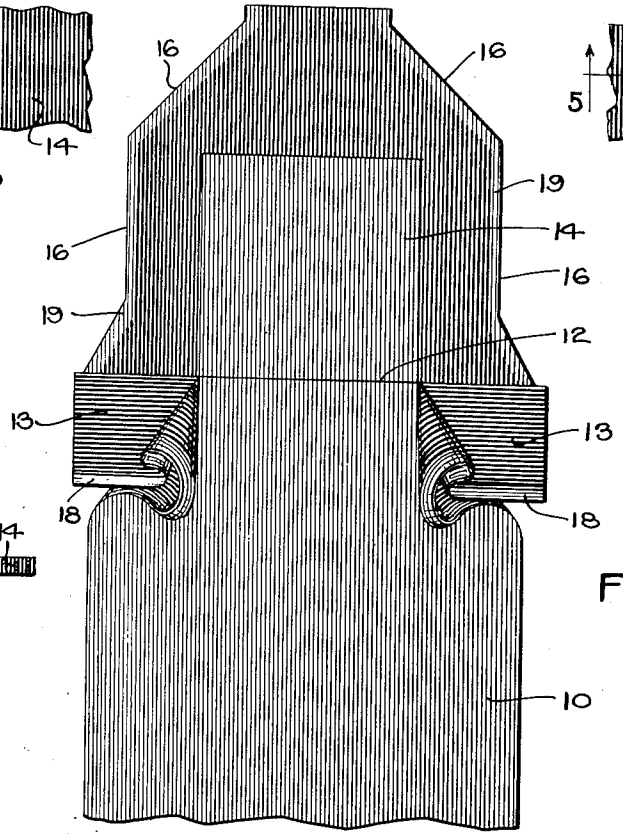


FIG. 2

Inventor

CARL FREDERICK MACK

By Fearedelson

Attorney

Patented Oct. 14, 1930 1,778,221

UNITED STATES PATENT OFFICE

CARL FREDERICK MACK, OF PHILADELPHIA, PENNSYLVANIA

FULL-FASHIONED STOCKING

Application filed September 20, 1928. Serial No. 307,215.

This invention relates to hosiery and more particularly to a method of manufacturing full fashioned stockings whereby to obtain a substantially flat seam in the foot, toe and heel portions of the stocking.

In the manufacture of hosiery it has been the common practice to reinforce the toe, foot and heel portions thereof in order to increase the wearing qualities of the stocking. Inasmuch as it is necessary in the manufacture of full fashioned hosiery to seam the foot from toe to heel along the edges of the foot, this seam being extended vertically along the back of the heel toward the top of stocking, various attempts have been made from time to time to reduce the bulk of the seam. A bulky seam is not only unsightly to the eye but is particularly objectionable when it is in the sole and heel of a stocking for the obvious reason that it is uncomfortable to the wearer. The fact that it is the foot of the stocking which is ordinarily heavily reinforced only aggravates the objectionable condition referred to.

It is among the principal objects of this invention to so fabricate a full fashioned stocking and particularly the foot portion thereof as to substantially eliminate the bulky, unsightly and generally hard-seam which is produced when the adjoining edges of the reinforced portions of the stocking are seamed together.

A further object of the invention is to so treat the edges of the stocking which are to be joined together that the resultant seam is considerably smaller and flatter than that heretofore obtained and in consequence of which the stocking is rendered much more comfortable to the wearer.

Stated somewhat more specifically, the object of this invention is to eliminate all splicing, plaiting or reinforcement at the marginal edges of the normally reinforced portions of the stocking. This not only makes it possible to obtain a smaller, flatter and more uniform seam extending from toe to heel of the stocking, but also makes unnecessary that operation in bar topping which is known as loose course making, this operation being ordinarily performed prior to the transference of the stocking leg to a flat footing machine for forming the foot and toe of the stocking.

Other objects and advantages of the invention will appear more fully from a reading of the following description.

In the accompanying drawings, which are merely illustrative of the principles of the present invention:

Figure 1 is a partial plan view of a full-fashioned stocking web showing the heel tabs or prolongations thereof knitted in conformity with the principles of the present invention;

Figure 2 illustrates the manner in which the full-fashioned foot is appended as an integral continuation of the fabric shown in Figure 1, this foot being also knitted in conformity with the present invention;

Figure 3 is a partial elevational view showing the relative position of the marginal edges of the foot portion of the stocking preliminarily to the seaming operation;

Figure 4 shows the completed seam; and

Figure 5 is a view taken on the line 5—5 of Figure 4.

Referring more specifically to the drawings and particularly to Figure 1 thereof, it will be observed that the stocking comprises the usual web 10 having the reinforced heel portions 11, the reinforcement of these heel portions 11 being obtained in the usual manner, as by the use of multiple threads. These reinforced heel portions 11 of the stocking are extended lengthwise beyond the topping edge 12 of the stocking web 10 to form heel tabs or prolongations 13.

Figure 2 illustrates the usual manner of securing the foot portion, designated generally by the reference numeral 14, to the bottom end of the leg portion of the stocking, it being observed that this is effected by pulling the heel tabs 13 in opposite directions so that the inner edges 15 thereof are on a straight line with the bottom edge 12 of the web of the stocking. With the parts 13 of the stocking thus straightened out, the bottom end of the stocking web is fitted upon what is known as a straight transfer bar, and

when so positioned upon the transfer bar the knitting is continued to form the foot 14 by the full fashioned method of knitting. It is upon the completion of the foot knitting that the edges 16 of the foot and the edges 17 of the heel are seamed together to complete the stocking.

Ordinarily the reinforcement in the foot and heel of the stocking extends to the very edges thereof with the result that when these edges are seamed together, a seam is obtained which is bulky and uncomfortable to the wearer of the stocking. I overcome this objectionable condition by terminating the reinforcement in the foot and heel portions of the stocking short of the edges 16 and 17 thereof. In the accompanying drawings the reinforced portions of the stocking have been shown by the relatively heavy lines, while the relatively light lines represent the portions of the stocking in which all reinforcement has been eliminated.

I have found it preferable to terminate the reinforcing in the heel portions 11 of the stocking web two or three wales from the outer edges thereof in consequence of which narrow strips or areas 18 are formed in these heel portions wherein the general body of the stocking web is exposed. Similar strips or areas 19, in which all splicing, plaiting or reinforcing has been eliminated, are formed in the marginal edges of the foot portion of the stocking. In the seaming operation non-reinforced areas 19 of the foot are brought together as are the non-reinforced areas 18 of the heel, the body of the seam including only the marginal edges of the foot and heel portions of the stocking wherein all reinforcement has been eliminated. Obviously, this results in the production of a seam the body of which is considerably less bulky than in those cases where the reinforced portions of a stocking were brought together in the seaming operation, the resultant seam being almost as flat as the reinforced body portions of the foot and heel. Figure 3 shows non-reinforced edges 19 of the foot portion of the stocking brought together preliminarily to the seaming operation, while Figures 4 and 5 show the completed seam. It will be observed that this completed seam, designated generally by the reference numeral 20, includes only the non-reinforced edges of the foot the bulk of the seam being no more than that which is produced upon seaming together the longitudinally extending edges of the leg web 10 of the stocking.

In addition to the foregoing, I have found it expedient to eliminate all splicing, plaiting or reinforcing along the inner edges 15 of the heel tabs 13 of the stocking in order to facilitate positioning the stocking web upon the transfer bar. By terminating the reinforcing in the heel tabs of the stocking web just short of the inner edges 15 thereof it becomes possible to dispense with that operation in bar topping known as loose course making, this operation being not only tedious but also requiring the careful attention of a skilled operator.

It will be understood, of course, that the present invention may be varied or modified in practicing the same without departing from the real spirit or the principles thereof, and it is accordingly intended to claim the invention broadly, as well as specifically, as indicated by the appended claims.

What is claimed as new and useful is:—

1. A method of producing a seam in the reinforced foot and heel portions of a stocking of a thickness corresponding substantially to that of said reinforced portions which consists in terminating the reinforcement short of the edges of said portions of the stocking whereby to produce narrow strips of non-reinforced webbing, and in seaming together the edges of the stocking, the body of the seam including only said non-reinforced strips of the webbing.

2. A method of forming a full fashioned stocking which consists in reinforcing the foot, toe and heel portions thereof, terminating said reinforcing short of the marginal edges of said foot, toe and heel portions whereby to expose the web of the stocking at the marginal edge thereof, and in joining the portions of the web so exposed to form a seam in the toe, foot and heel of the stocking of a thickness corresponding substantially to that of the reinforced area.

3. In the method of seaming the toe, foot and heel portions of a full fashioned stocking, the step of terminating the usual reinforcement in said toe, foot and heel portions of the stocking short of the marginal edges thereof whereby to provide opposed marginal strips of non-reinforced webbing adapted to constitute the body of the stocking seam.

4. In a full fashioned stocking having reinforced toe, foot and heel portions the reinforcement being terminated short of the marginal edges of said portions of the stocking whereby to expose the web thereof, and a seam for joining the opposed edges of said reinforced toe, foot and heel portions together the body of which consists solely of said exposed web exclusive of any reinforcing.

5. In a stocking, reinforced foot portions adapted to be joined together, said foot portions being each characterized in that the reinforcement therein terminates short of the marginal edge thereof whereby to provide a marginal strip of non-reinforced webbing, and a seam for joining the opposed edges of said portions together, the body of said seam consisting solely of said strips of non-reinforced webbing.

CARL FREDERICK MACK.