June 16, 1931. A. H. WITTENBERG 1,810,197

STOCKING

Filed April 14, 1928

Fig. 1.

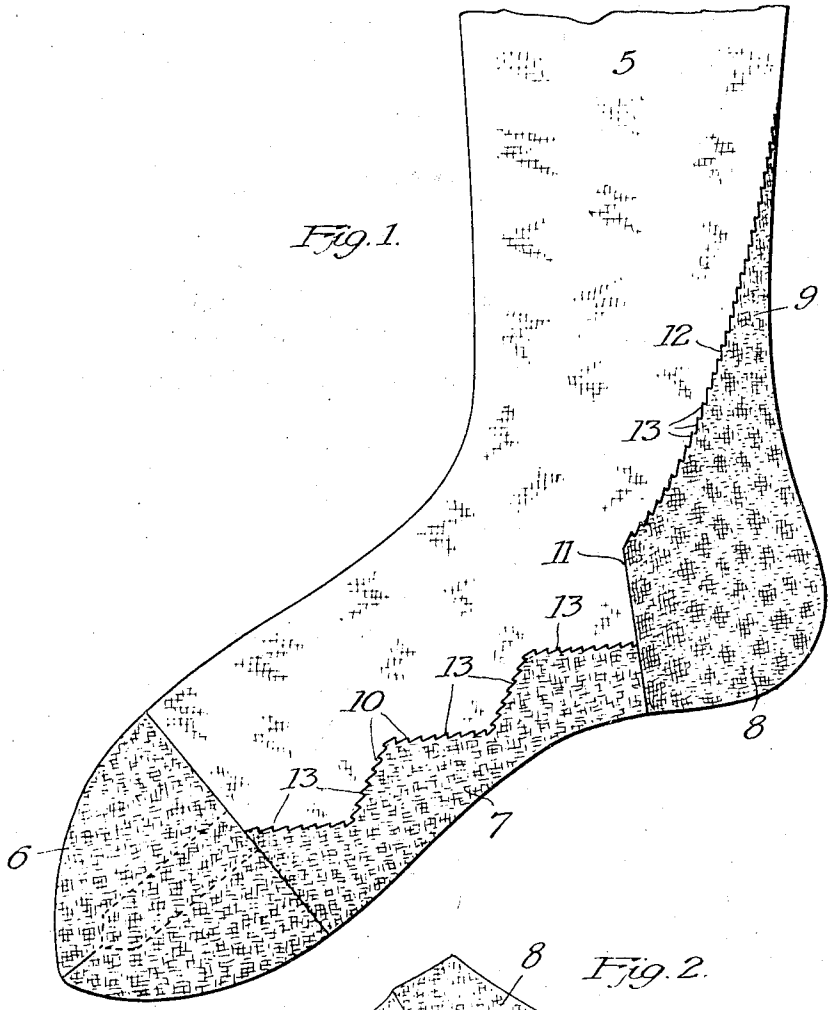
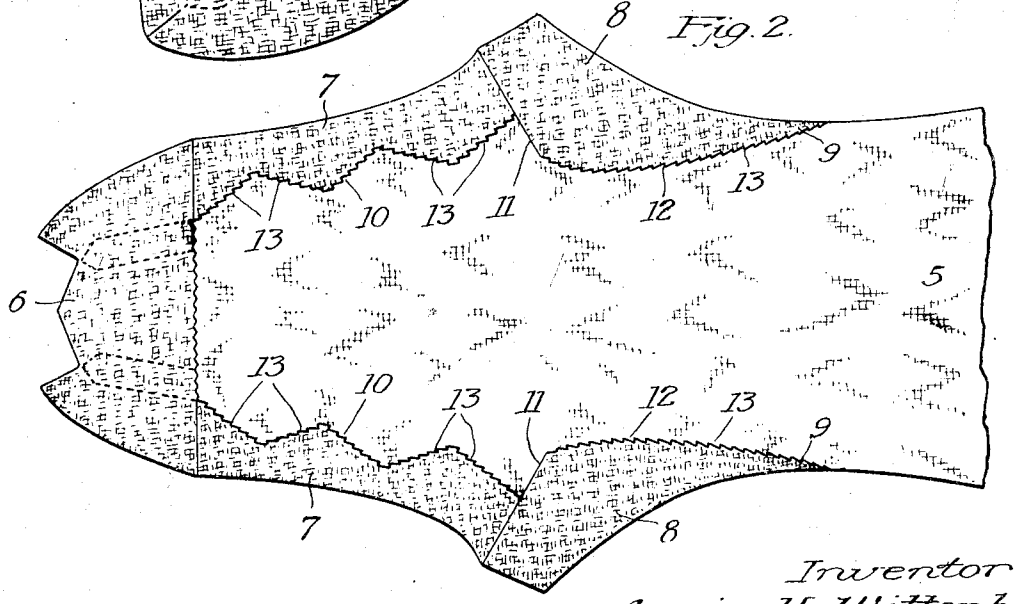


Fig. 2.



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UNITED STATES PATENT OFFICE

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STOCKING

Application filed April 14, 1928. Serial No. 269,892.

The invention relates to improvements in stockings, and more particularly to the foot portion thereof, the primary object of the invention being to provide an improved stocking construction having a reinforced sole and heel portion.

Another object of the invention is the provision of a stocking of this character so constructed and arranged that there shall be no weakening of the construction and therefore liability to tear at the juncture between the reinforced and non-reinforced portions.

Other objects will appear hereinafter.

The invention consists in the construction hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which

Fig. 1 is a side view of the foot portion of a stocking embodying the invention; and

Fig. 2, a developed plan of the foot portion of the stocking shown in Fig. 1, and showing the corresponding portion of the blank from which the stocking is made.

The form of construction illustrated in Figs. 1 and 2 comprises an upper portion 5, forming a leg, front ankle and top foot portion of the stocking, said portion 5 being made of a comparatively light and open mesh. The stocking leg portion thus provided is reinforced at the bottom for obvious purposes by a heavier and closer reinforced knitting. This reinforced knitting comprises a toe portion 6, a sole portion 7, a heel portion 8, and a rear ankle portion 9, as indicated. The toe portion 6 is the usual toe portion of a stocking of this character formed in the usual way and constitutes no part of the present invention. It will be noted, however, that the sole portion 7 is joined to the upper foot portion 5 along a tortuous line 10, said tortuous line 10 being subdivided into a plurality of steps 13, thereby forming a zig zag line of juncture between the sole portion 7 and the upper foot portion 5. This zig zag line of juncture is made by a special attachment to the full fashion hosiery machine which regulates and controls the character of the juncture. The reinforced heel portion 8 is joined to the upper foot portion 5 along a substantially vertical line 11, and the upper reinforced heel 8 and rear ankle portions 9 are joined to the front portions 5 along a tortuous line 12 which is rearwardly bowed or curved, as indicated in Fig. 1. The line of juncture 12 is also provided with steps 13, as indicated.

By this arrangement a stocking is provided which has a reinforced sole and heel portion joined to the upper portions of the stocking along a tortuous stepped line whereby the elasticity and strength of the juncture is greatly increased. In stockings of this character having reinforced foot portions, there is a tendency to concentrate the wear or strain along the line of juncture between said portions where said line of juncture is straight and thereby cause breakage along this line. By means of the arrangements specified, the concentration of wear and strain along the line of juncture is prevented and the elasticity and strength of the structure thereby greatly increased. It is also to be noted that, owing to the zig zag or stepped form of the line of juncture, breaks in the threads or "runs," are quickly stopped or checked, and thereby the life and appearance of the stocking greatly prolonged.

In making up the stocking the stocking is knit flat in the usual way, duplicate portions 7, 8 and 9 being formed on opposite edges thereof, as indicated in Fig. 2, and then the blank thus knitted is joined together along a bottom and rear seam in the usual way to form the stocking illustrated in Fig. 1, as will be readily understood by those skilled in this art.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I therefore do not wish to be limited to the precise details disclosed, but desire to avail myself of such variations and modifications as fall within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A full fashioned stocking, comprising reinforced sole and heel portions integrally formed with the foot portion of said stocking, the threads forming said foot portion and said heel portion being knitted with the threads forming the instep portion of the stocking along a tortuous line, said tortuous line running in zigzag fashion along the side of the sole and instep portion of the stocking at the sides of the foot portion thereof whereby pulling strains in said stocking are distributed over wide areas at the sides of the foot and heel portions of the stocking.

2. A full fashioned stocking, comprising reinforced sole and heel portions integrally formed with the foot portion of said stocking, the threads forming said foot portion being knitted with the threads forming the instep portion of the stocking along a tortuous line, said tortuous line running in zigzag fashion along the side of the sole and instep portion of the stocking at the sides of the foot portion thereof whereby pulling strains in said stocking are distributed over wide areas at the sides of the foot portion of the stocking.

In witness whereof, I have hereunto set my hand this 12th day of April, 1928.

ARMIN H. WITTENBERG.