Feb. 3, 1948. E. B. BEACHAM 2,435,489

STOCKING AND METHOD OF PRODUCTION

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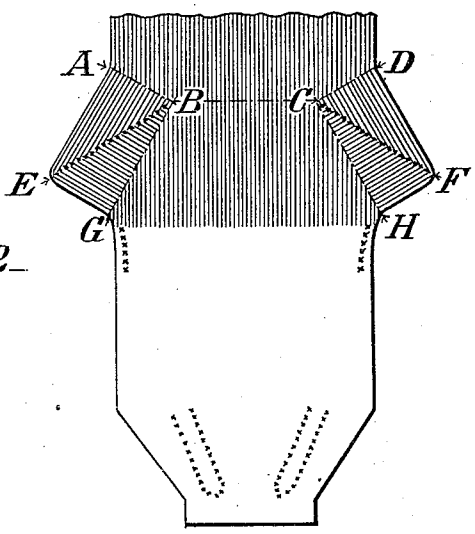



FIG. 2.

FIG. 4.

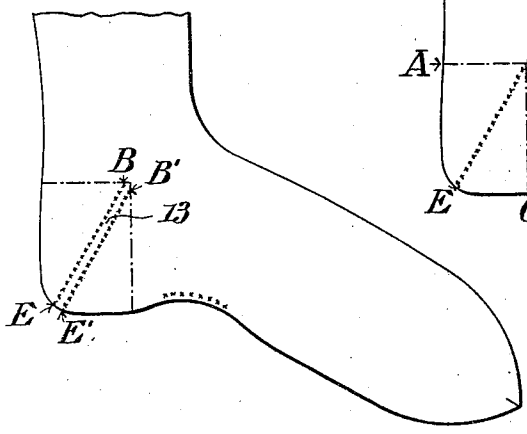
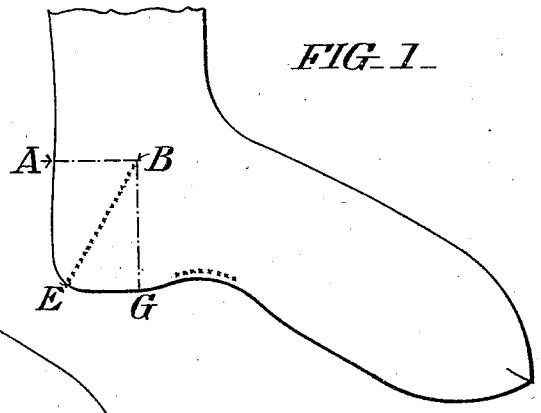



FIG. 1.




WITNESSES

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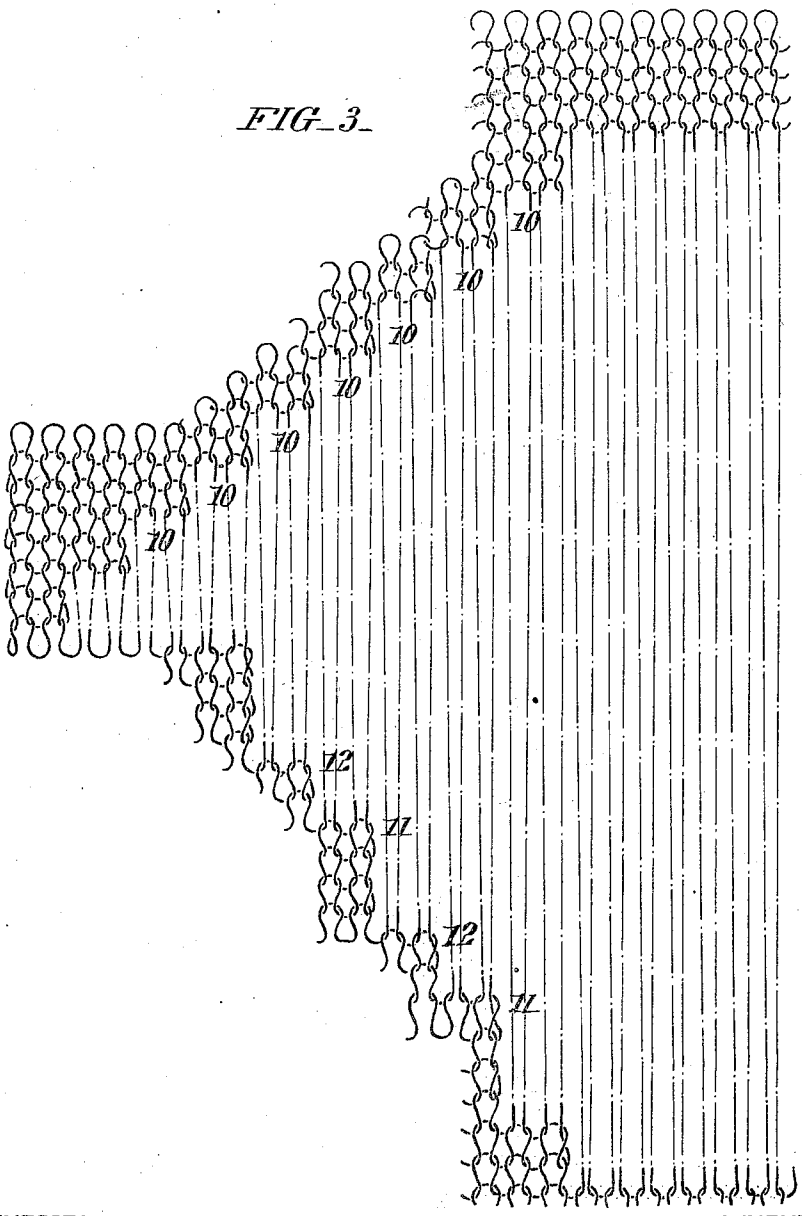
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FIG. 3.




WITNESSES

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Patented Feb. 3, 1948

2,435,489

# UNITED STATES PATENT OFFICE

2,435,489

## STOCKING AND METHOD OF PRODUCTION

Edwin Brand Beacham, Easton, Pa.

Application August 14, 1945, Serial No. 610,744

9 Claims. (Cl. 66—187)

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This invention relates to stockings, particularly fashioned stockings formed by seaming of continuously knit flat selvaged blanks, and also to methods of producing such stockings.

The chief aims of my invention are to improve the fit of stockings of the sort referred to, more especially with a view toward precluding the sleazy fit and wrinkling of the ankle tops characteristic of the continuously knit stockings generally known as "single unit" or "round heel" stockings now being made in large quantities; and to provide a simple and expeditious method of knitting by which the above drawbacks or difficulties are overcome.

In the drawings,

Fig. 1 is a view in side elevation of the foot portion of a fashioned stocking conveniently embodying my invention.

Fig. 2 shows the foot portion of the flat knitted blank from which the stocking is formed.

Fig. 3 is a spread-out diagrammatic view showing the interloopment along the diagonal suture of one of the heel cheeks of the blank; and

Fig. 4 is a view like Fig. 1 showing a modification.

From Figs. 1 and 2 of these illustrations it will be observed that my improved stocking is characterized by having vertically-elongate oblong heel cheeks A—B—G—E and C—D—F—H respectively defined by narrowed and widened triangular complemental upper and lower gores A—B—E, D—C—F and E—B—G, F—C—H which are united by diagonal sutures E—B and F—C.

The leg and ankle portions of the stocking blank (Fig. 2) are knitted in the usual way on a straight knitting machine of the "Cotton" type to the course A—B—C—D from a single main yarn, or, if desired, from plural main yarns of the same count or gauge employed in recurrent succession as ordinarily practiced in "ringless" knitting. In the knitting of the heel cheeks which immediately ensues, the main yarn may be used in fashioning one of the heel cheeks, and a separate yarn in fashioning the other heel cheek. If ringless knitting is practiced, such separate yarn may be one of the several other main yarns. After the line A—B—C—D is reached, knitting is suspended on the instep needles between the points B and C, and narrowing resorted to in the concurrent fashioning of the upper heel gores A—B—E and D—F—C by progressively decreasing the traverse of the carriers for the two yarns in every other course by two loops as at 10 in Fig. 3 to the line E—B—C—F,

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the narrowing being preferably terminated somewhat short of the selvage edges of the blank as shown. After completion of the upper heel gores in the manner explained, the procedure is reversed, that is to say, progressive widening is resorted to in concurrently forming the complemental lower heel gores E—B—G and C—F—H by gradually increasing the inward traverse of the carriers for the two yarns to the line G—B—C—H. However, during this widening phase, the traverse of the carriers is increased by two needles in every fourth course and at every second course in alternation as indicated at 11 and 12 in Fig. 3. After completion of the heel cheek at the line G—B—C—H, knitting is resumed on all the needles and the foot portion of the blank formed in the conventional way or in any other suitable manner. If desired, or found expedient, the heel cheeks may be reinforced by interknitting splicing or plating yarns with the main yarns as generally customary in the art.

Due to the method of fashioning herein disclosed, it will be evident that I secure a much fuller heel and higher pocket and hence a better fitting stocking in which the foot is disposed more nearly at right angles to the leg, than is possible of attainment with the practice recently followed in the production of the so-called continuously knitted "round heel" or "single unit" stockings.

The modified stocking of Fig. 4 is produced by following the procedure above set forth except that a few full width courses 13 are run in (either plain or ringless as the case maye be) after completion of the upper heel gores and before commencement of the lower heel gores, with resultant formation of double parallel sutures E—B and E'—B' as shown, and with consequent slight increase in the length of the ankle top.

Having thus described my invention, I claim:

1. A stocking having a vertically disposed oblong heel pocket with complemental triangular upper and lower gores at each side united by a diagonal suture, the fabric of each upper gore being narrowed by at least one needle loop in uniformly spaced courses, and each lower gore being widened by at least one needle loop in differently spaced courses some by a distance greater than in the first gore.

2. A stocking having a vertically disposed oblong heel pocket with complemental triangular upper and lower gores at each side united by a diagonal suture, the fabric of each upper gore being narrowed by two needle loops in every other course, and each lower gore being widened

by two needle loops in courses respectively spaced by four and two in alternation.

3. A flat knitted selvaged stocking blank having at each side thereof an oblong heel cheek with complemental triangular upper and lower gores united by a diagonal suture, the fabric of one gore being narrowed by at least one needle loop in uniformly spaced courses, and the other gore being widened by at least one needle loop in differently spaced courses, some by a distance greater than in the first gore.

4. A flat knitted selvaged stocking blank having, at each side thereof, a vertically disposed oblong heel cheek with complemental triangular upper and lower gores united by a diagonal suture, the fabric of each upper gore being narrowed by at least one needle loop in uniformly spaced courses, and each lower gore being widened by at least one needle loop in differently spaced courses some by a distance greater than in the upper gore.

5. A flat knitted selvaged stocking blank having, at each side thereof, vertically disposed oblong heel cheeks with complemental triangular upper and lower gores united by a diagonal suture, the fabric of each upper gore section being narrowed by two needle loops in every other course, and the fabric of each lower gore being widened by two needle loops in courses respectively spaced by four and two in alternation.

6. The method of producing a knitted stocking having, at each side thereof, a vertically disposed oblong heel cheek with complemental triangular upper and lower gores united by a diagonal suture, which method comprises the step of respectively forming the upper gores by narrowing by the extent of at least one needle loop in uniformly spaced courses, and forming the lower gores respectively by widening to the extent of at least one needle loop in differently spaced courses some by a greater distance than in the upper gores.

7. The method of producing a knitted stocking having at each side thereof, a vertically disposed oblong heel cheek with complemental triangular upper and lower gores united by a diagonal suture, which method comprises the step of respectively forming the upper gores by narrowing by the extent of two needle loops in every other course, and



forming the lower gores by widening to the extent of two needle loops in courses respectively spaced by four and two in alternation.

8. The method of producing a flat knitted selvaged stocking blank having, at each side thereof, a vertically disposed oblong heel cheek with complemental triangular upper and lower gores united by a diagonal gore, which method comprises, with use of separate yarns for the two cheeks, the step of respectively forming the upper gores by narrowing to the extent of at least one needle loop each time in uniformly spaced courses, and forming the lower gores by widening to the extent of at least one needle loop each time in differently spaced courses some by a greater distance than in the upper gores.

9. The method of producing a flat knitted selvaged stocking blank having, at each side thereof, a vertically disposed oblong heel cheek with complemental triangular upper and lower gores united by a diagonal gore, which method comprises, with use of separate yarns for the two cheeks, the step of respectively forming the upper gores by narrowing to the extent of two needle loops in every other course, and forming the lower gores by widening to the extent of two needle loops in courses respectively spaced by two and four in alternation.

EDWIN BRAND BEACHAM.


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