

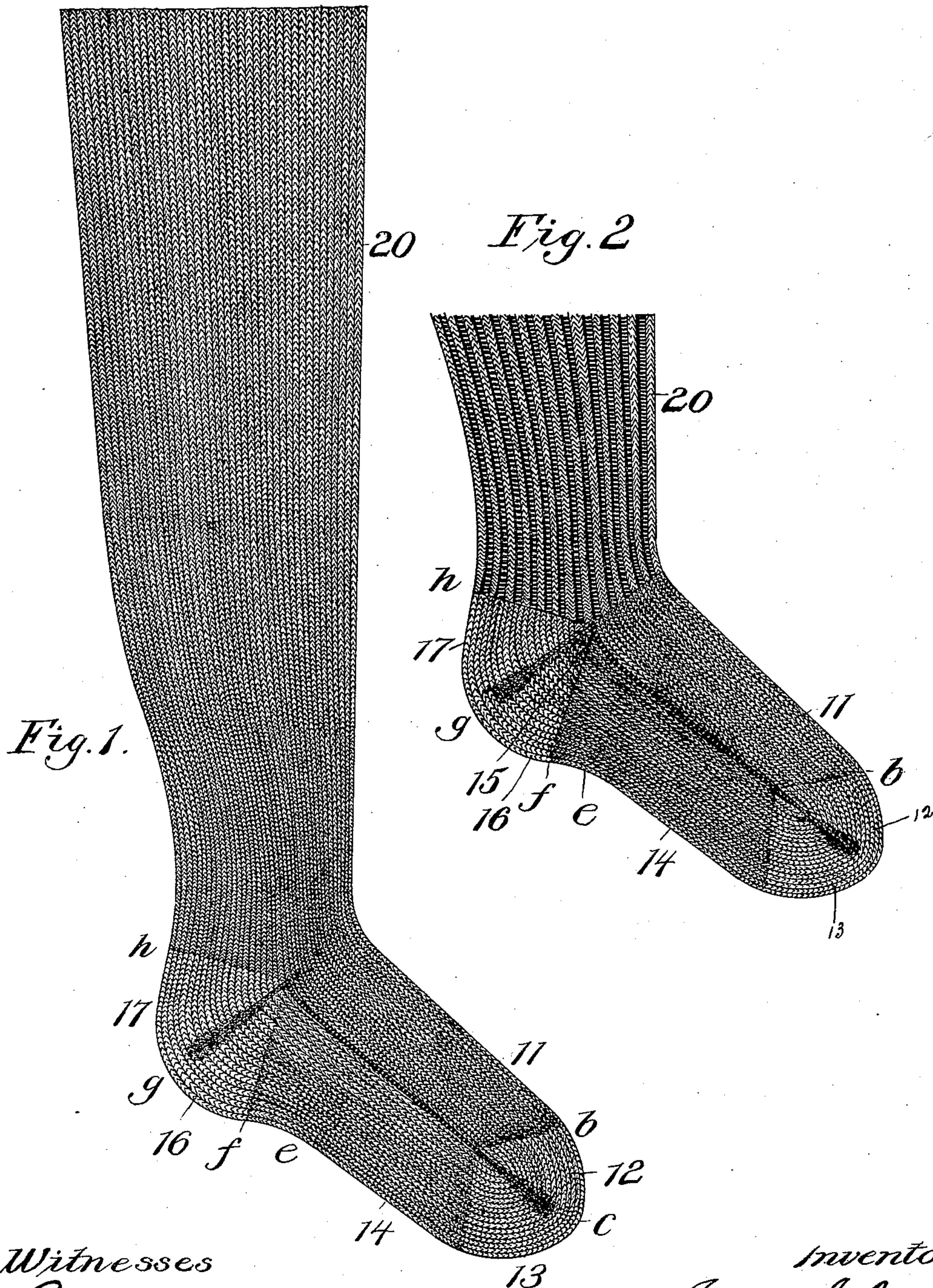
(No Model.)

2 Sheets—Sheet 1.

J. A. BURLEIGH.
METHOD OF MAKING STOCKINGS.

No. 475,263.

Patented May 17, 1892.



Witnesses
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L. W. Burleigh

Inventor:
Joseph A. Burleigh
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(No Model.)

2 Sheets—Sheet 2

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Fig. 3.

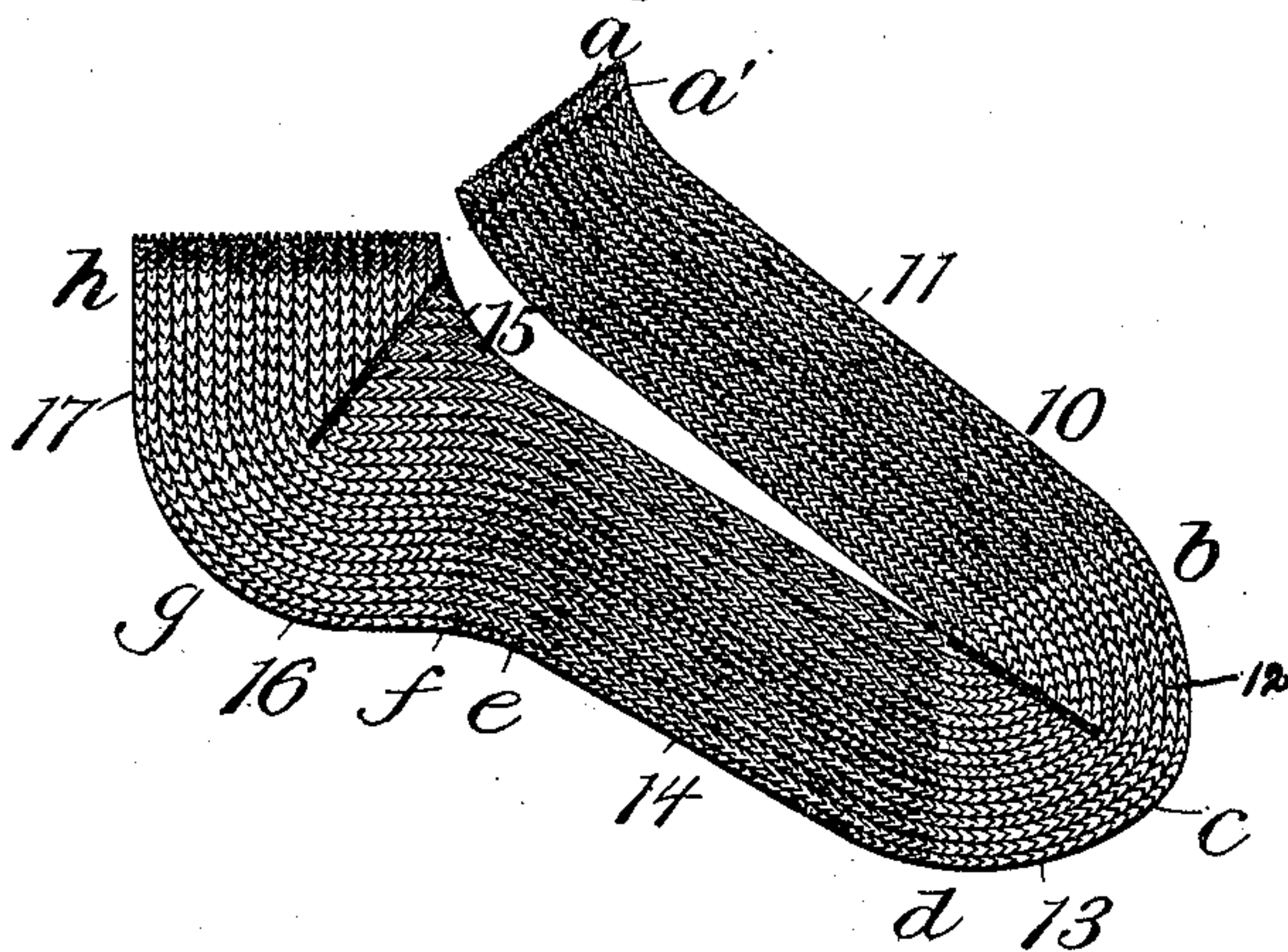
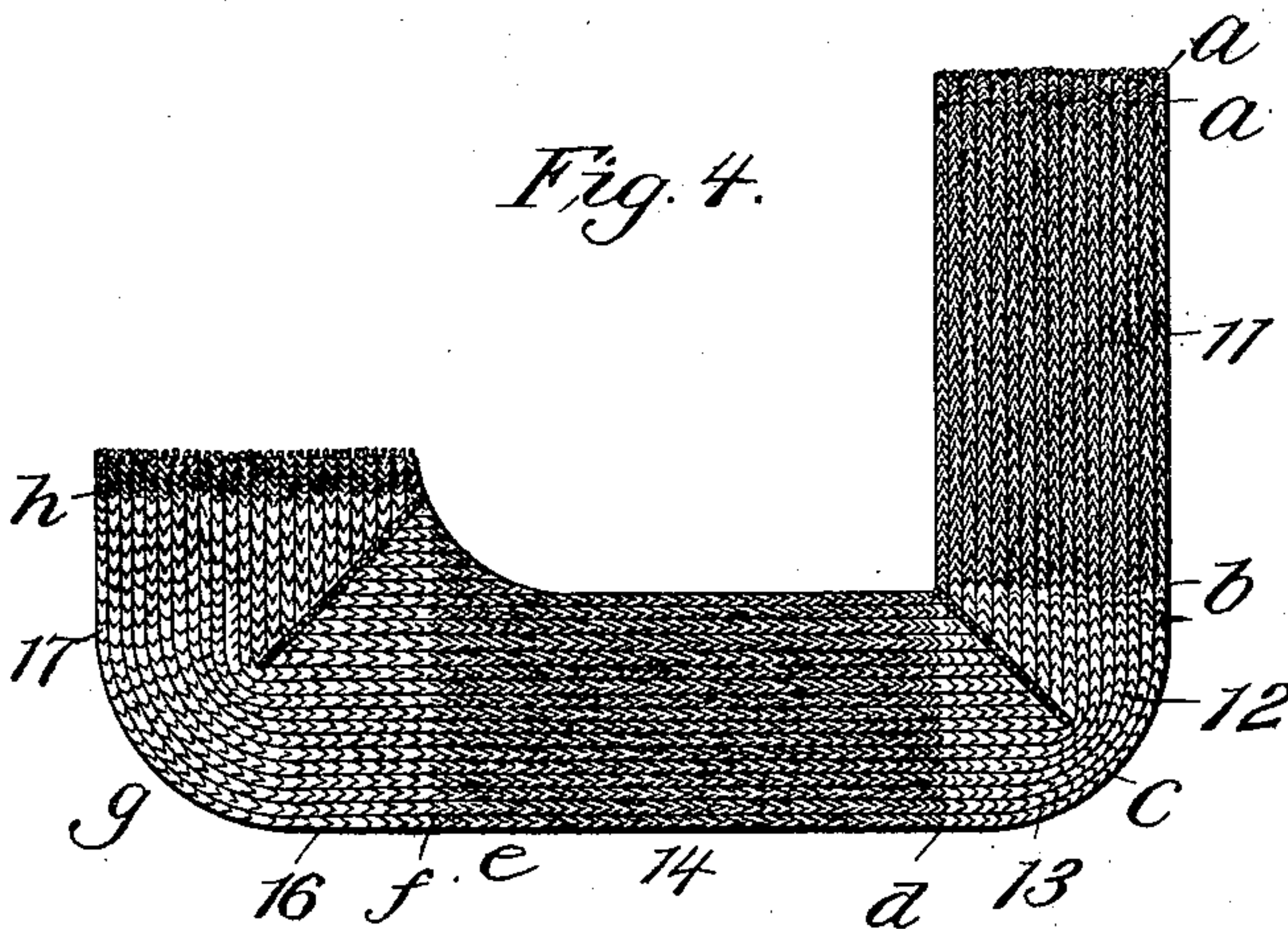


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH A. BURLEIGH, OF GILFORD, NEW HAMPSHIRE.

METHOD OF MAKING STOCKINGS.

SPECIFICATION forming part of Letters Patent No. 475,263, dated May 17, 1892.

Application filed November 25, 1891. Serial No. 413,021. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. BURLEIGH, a citizen of the United States of America, residing at Gilford, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Methods of Making Stockings, of which the following is a specification.

The object of this invention is to provide a method of knitting fashioned stockings which will reduce the amount of time and skilled labor required in their production and consequently diminish the cost thereof.

Figure 1 of the accompanying drawings represents a side elevation of a stocking made by this method, the leg of which is composed of plain knitting. Fig. 2 represents a side elevation of a portion of said stocking, the leg thereof being composed of tuck-stitch knitting. Fig. 3 represents a side elevation of the fashioned foot of said stocking after being folded and before the leg is knit thereon. Fig. 4 represents a side elevation of the foot-blank as it comes from the straight-knitting machine.

Similar letters and numerals of reference indicate corresponding parts in the different figures.

The stocking made by this method comprises a fashioned foot 10 and a leg 20, said leg and foot being knit together in one continuous fabric. The foot 10 comprises an upper foot portion 11, an upper toe portion 12, a lower toe portion 13, a lower foot portion 14, preferably provided with integral gores 15, a front heel portion 16, and a rear heel portion 17. The leg 20 comprises a tubular fabric, seamlessly united with the upper foot portion 11 and the rear heel portion 17.

The method of making this stocking is as follows: The blank for the foot is knit in a flat web on a flat-bed knitting-machine. The knitting begins at the point *a*. A few courses above the upper end of the upper foot portion a web of a width suitable for the upper half of the foot is produced. At a point *a'* at the upper end of the foot portion about the fourth or fifth course of the knitting a loose course or courses having elongated loops is formed in the fabric to serve as a guide in the subsequent transfer of the foot to a cir-

cular machine for knitting the leg. A straight web is then knit from the point *a'* to the point *b*, comprising a sufficient number of courses to produce a stocking of the length desired—say one hundred to one hundred and twenty courses, more or less. Then the thread may be shifted, if desired, to a thread of a different color or character to produce the toe. Then the fabric is narrowed in the usual manner of narrowing knit fabric for about twenty-six loops on each side from the point *b* to the point *c*, the narrowed portion of the fabric embracing about fifty-two courses, more or less. Then the fabric is widened in the usual manner of widening from the point *c* to the point *d* to form the lower portion of the toe, which also includes about fifty-two courses, more or less, the edges of the narrowed and widened portion being knit together as the widening proceeds, forming a seamless toe. Then the toe-thread is thrown out and the original thread brought into use and a flat web of uniform width is knit from the point *d* to the point *e* to constitute the lower foot portion or bottom of the foot. Then the fabric is widened for about twelve courses from the point *e* to the point *f*, forming the integral gores 15, to constitute the enlargement for the instep and bottom of the foot. Then the thread is again changed, if a heel of different color or character is desired, and the fabric is narrowed from the point *f* to the point *g* to form the front portion of the heel, the narrowing including about thirty-two loops (more or less) on each side, which makes the heel larger than the toe. Then the fabric is widened thirty-two loops (more or less) on each side from the point *g* to the point *h*, forming the rear portion of the heel, the edges of the narrowed and widened portions being knit together as the widening proceeds, forming a seamless heel. Then the original thread is fed to the needles and four or five courses (more or less) are knit in a straight web above the top of the heel to form a margin for attachment to a circular machine. If the heel be composed of a thread of a different color from that of the body of the stocking, the top of the heel forms a guide-line for attachment to the circular machine. If of a thread of the same color, a loose course will be knit at the top of the heel corresponding to that at the

top of the instep. The foot-blank is then removed from the straight-knitting-machine and its two opposite ends are run onto a circular-knitting machine, the slack or loose course at the top of the instep and the similar loose course at the color-line at the top of the heel serving as guide-lines on which the needles of the circular machine are made to pierce the fabric, the meeting edges of the upper foot portion and rear heel portion being slightly overlapped. The fabric is then raveled down to the needles of the circular-knitting machine and a tubular fabric constituting the leg is then knit onto the foot, the knitting proceeding upward from the top of the foot to the top of the leg. The transverse lines at the points *b*, *d*, *f*, and *h* do not indicate seams, but the color-lines between the heel and toe of one color and the foot and leg of another color. The point where the leg is knit onto the foot is invisible in the completed stocking. The partially-finished stocking is then placed on a stocking-seaming machine and the selvages of the upper and lower foot portions are stitched in the ordinary manner. The stocking is then washed or dyed in the usual manner and dried on a former.

I claim as my invention—

1. The method of knitting a stocking, which consists in knitting in straight courses a foot-blank and attaching margins at the top of the heel and instep portions thereof, transferring said foot-blank on determined lines of transfer near the opposite ends thereof, raveling said attaching margins down to the determined lines of transfer, and knitting a leg onto said foot-blank in complete circular courses, substantially as set forth.

2. The method of knitting a stocking, which consists in knitting in straight courses two selvaged flat webs constituting the upper and lower foot portions, a seamless toe connecting said foot portions, a seamless heel connected to the lower foot portion, and attaching mar-

gins at the top of the heel and instep, transferring said foot portions on determined lines of transfer, raveling said attaching margins down to the lines of transfer, and knitting a leg onto said foot portions in complete circular courses, substantially as described.

3. The method of knitting a stocking, which consists in knitting in straight courses a foot-blank and attaching margins at the top of the heel and instep portions thereof, forming a loose course near the top of the instep, transferring said foot-blank on a determined line of transfer at the top of the heel and on the line of said course at the top of the instep, raveling said attaching margins down to said determined lines of transfer, and knitting a leg onto said foot-blank in complete circular courses, substantially as set forth.

4. The method of knitting a stocking, which consists in knitting in straight courses a foot-blank and attaching margins at the top of the heel and instep portions thereof, forming loose courses in the fabric at the top of the heel and instep, transferring said foot-blank on the lines of said loose courses, raveling said attaching margins down to the determined line of transfer, and knitting a leg onto said foot-blank in complete circular courses, substantially as set forth.

5. The method of knitting a stocking, which consists in knitting in straight courses two selvaged flat webs constituting the upper and lower foot portions, a seamless toe connecting said portions, and a seamless heel connected to the lower foot portion, transferring said foot portions, and overlapping in the transfer the upper foot portion and rear heel portion, and knitting a leg onto said foot portions in complete circular courses, substantially as set forth.

JOSEPH A. BURLEIGH.

Witnesses:

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