

(No Model.)

2 Sheets—Sheet 1

C. E. NORRIS.

STOCKING.

No. 311,356.

Patented Jan. 27, 1885.

Fig. 1.

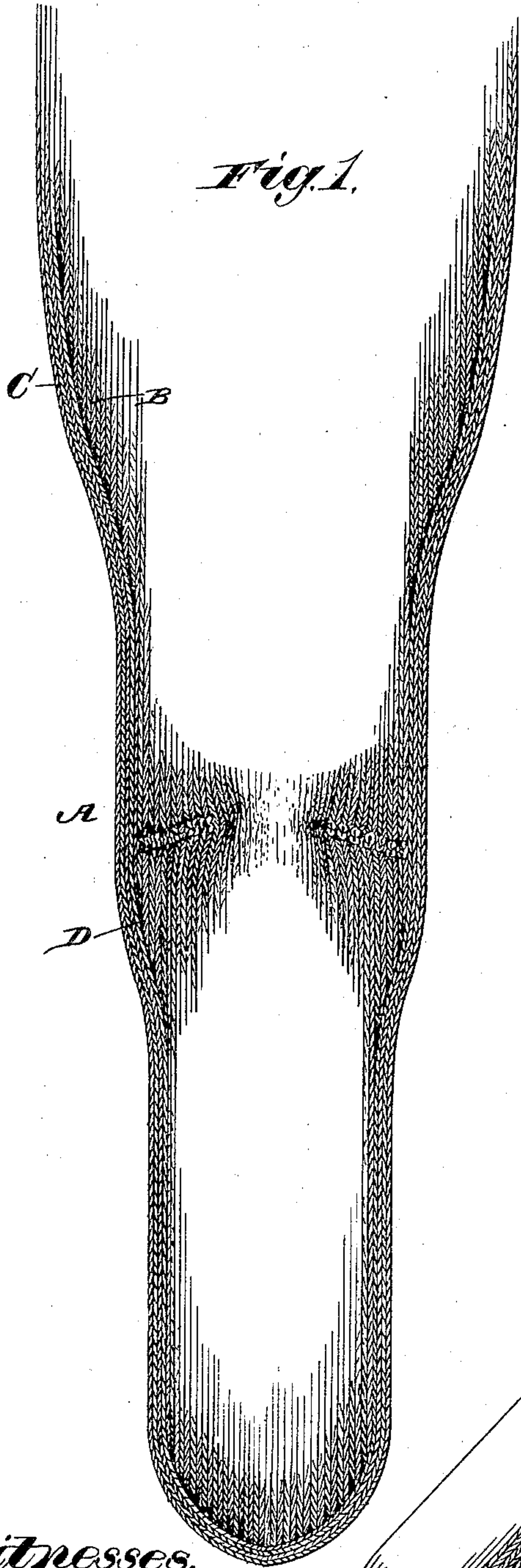
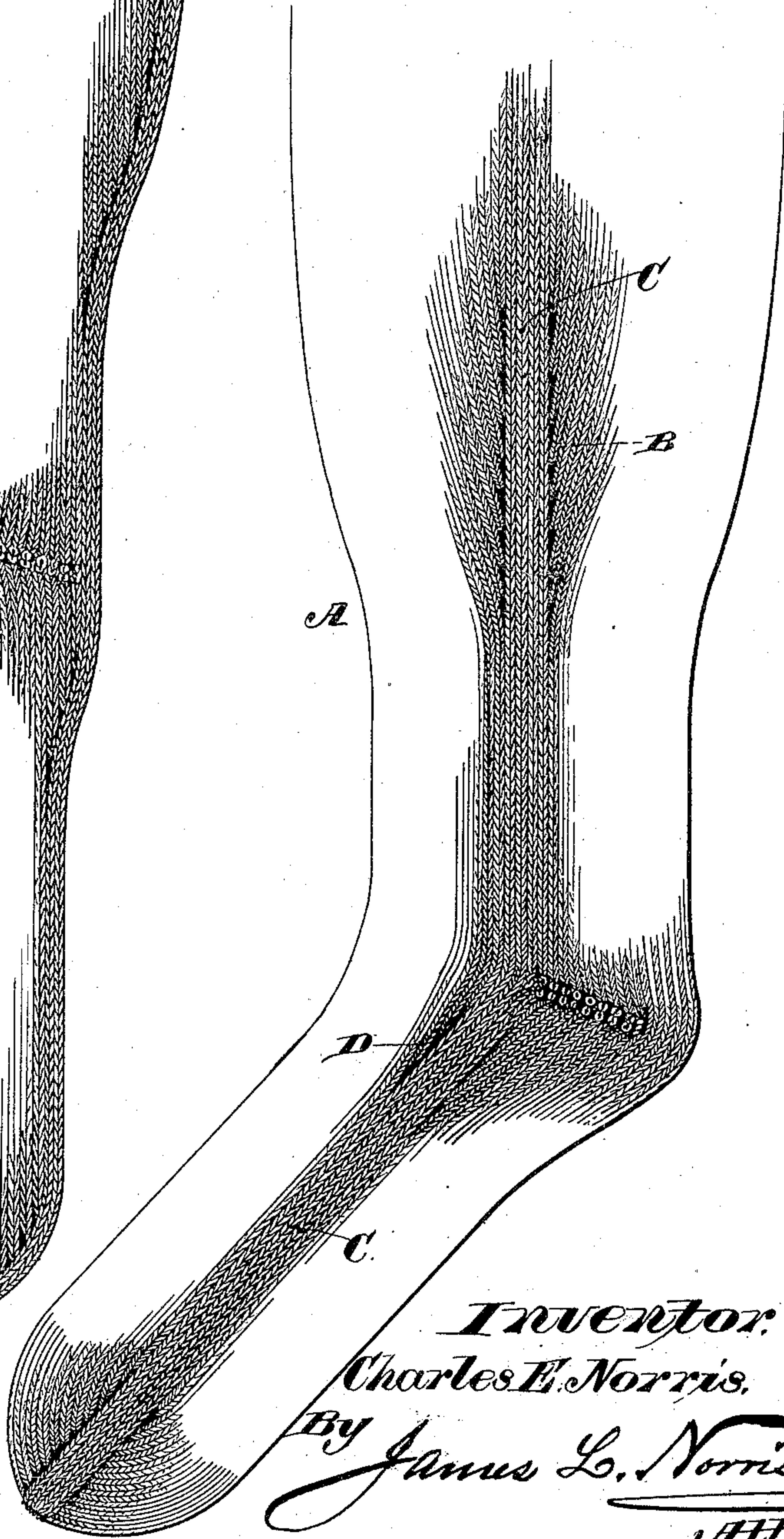


Fig. 2.



Witnesses,
Robert Corbett,
George W. Rea

Inventor:
Charles E. Norris,
By James L. Norris,
Atty.

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Fig. 3.

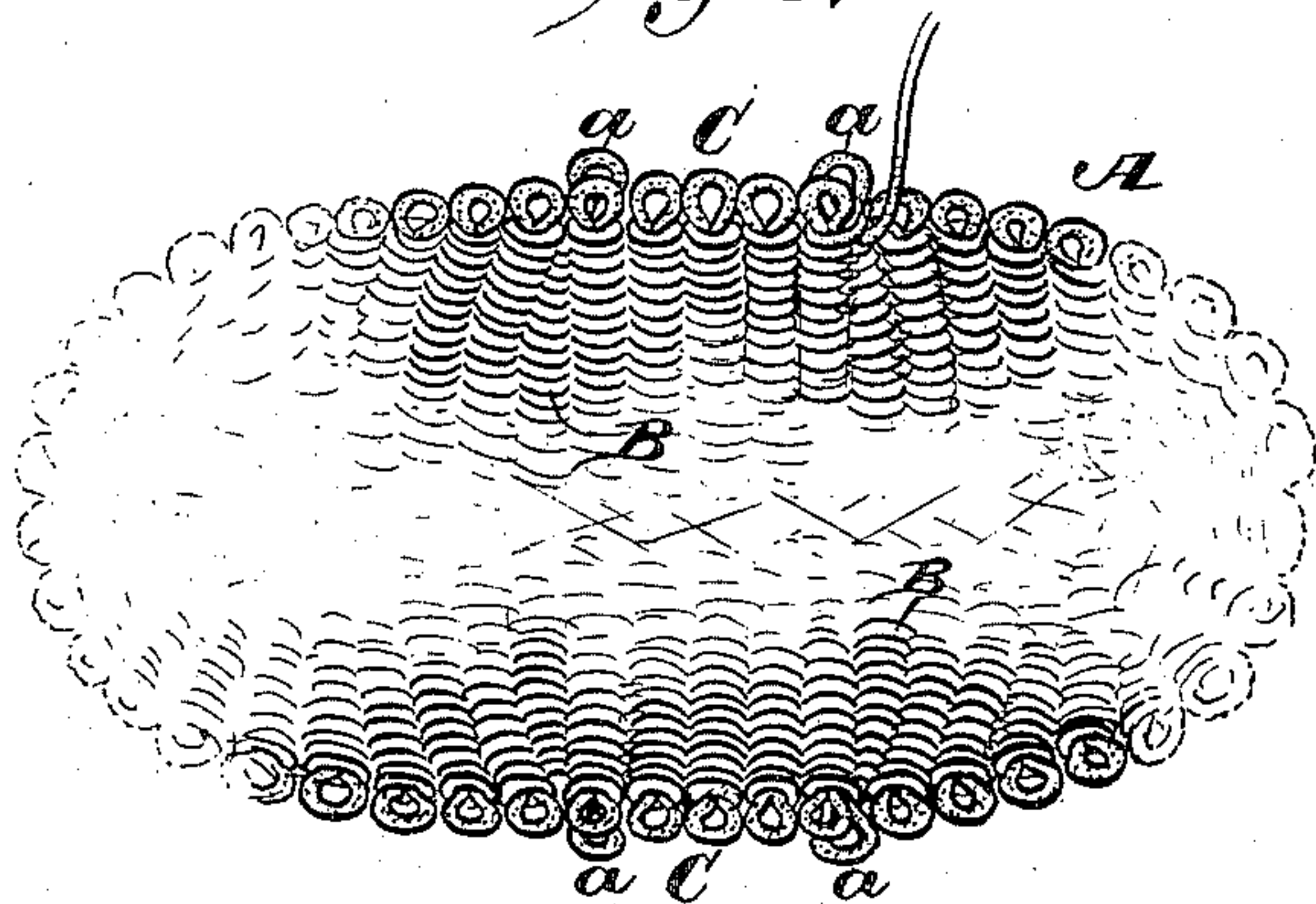
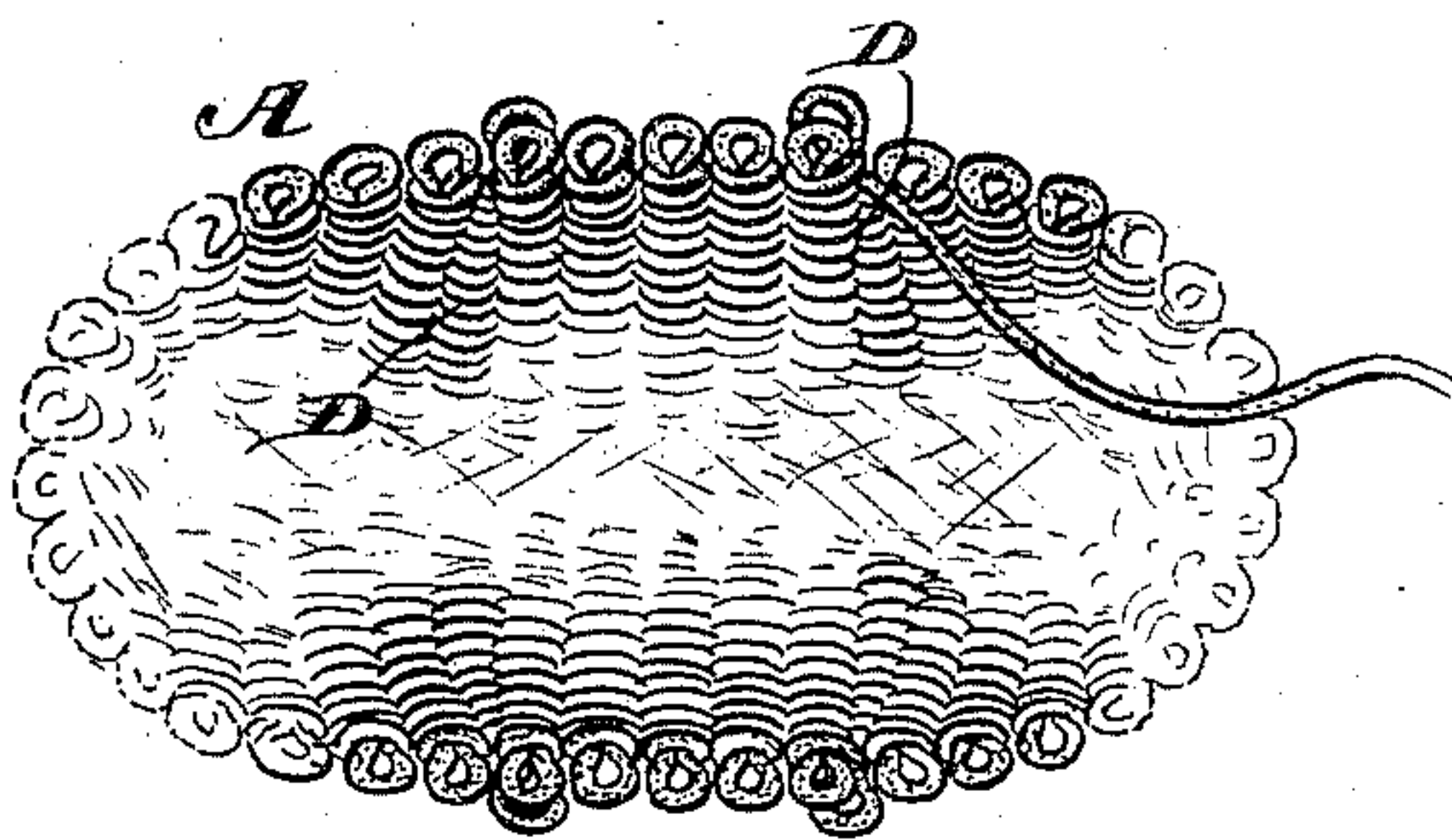


Fig. 4.



Witnesses,

Robert Emmett,

George W. Rea

Inventor,

Charles E. Norris,

By

James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

CHARLES E. NORRIS, OF LACONIA, NEW HAMPSHIRE, ASSIGNOR OF THREE-FOURTHS TO EUGENE VERMILYEA, OF WATERFORD, AND LEROY VERMILYEA AND ANSON TABOR, BOTH OF COHOES, NEW YORK.

STOCKING.

SPECIFICATION forming part of Letters Patent No. 311,356, dated January 27, 1885.

Application filed March 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. NORRIS, a citizen of the United States, residing at Laconia, Belknap county, New Hampshire, have invented new and useful Improvements in Stockings, of which the following is a specification.

My invention relates to stockings, and has for its object the production of a knitted seamless stocking having its sides tapering uniformly from the beginning of the narrowings in the foot made on opposite sides thereof and on both the top and bottom portion, as hereinafter particularly described.

Heretofore seamless stockings have been fashioned by having the narrowings made in the back of the leg and the narrowings in the foot made in the sole; but they have never been made, so far as I am aware of, with the narrowings formed in opposite sides of the leg on both sides of the center walls and converging toward the same, nor with the narrowings in the foot made in opposite sides on both sides of the center walls and converging toward the same, as hereinafter described.

Figure 1 is a rear view of a stocking flattened out, illustrating a stocking embodying my invention. Fig. 2 is a side view thereof. Fig. 3 is a cross-section taken through the narrowings in the leg. Fig. 4 is a cross-section taken through the narrowings in the foot.

In the drawings, the letter A designates a seamless stocking knitted on a machine constructed in accordance with my invention, as set forth in an application filed by me March 28, 1884, Serial No. 125,940. The narrowings B in the leg are formed on both sides by transferring the stitches *a* on both rows of the needles from opposite ends inwardly one or more needles, as may be desired, and then knitting until desired to introduce other narrowings, which are formed by transferring the stitches as before. There are eight narrowings, for illustration, in the opposite sides of the leg and on both sides of the center walls, but there may be any desired number. This method brings the narrowings in the stocking on opposite sides of the leg and on both sides of the center walls, C, the narrowings converging toward such walls. Any number of narrowings desired may be introduced and the knitting then proceeded with in the usual manner until the heel is reached, which is

formed without a seam, as described in said application hereinbefore referred to. After the formation of the heel the narrowings in the foot of the stocking are formed by transferring the stitches *b* inwardly, as described, for the narrowings in the leg, and as many as desired introduced—three being illustrated. These narrowings, too, are thus formed in opposite sides of the foot in both the top and bottom portions thereof, and on both sides of the center walls, C, converging toward the same. The knitting is then proceeded with in the usual way till the narrowings for the toe portion are to be made, which are formed in the usual way. By thus forming the narrowings in opposite sides of the leg and foot on both sides of the center walls and converging toward the same, as described and shown, the leg is made to taper uniformly from both sides, and the foot portion to narrow in from both its top and bottom, whereby is obtained a better shaped and neater fitting stocking than when the narrowings are made in the back of the leg, or on only the top or bottom of the foot.

It will be observed that the center walls, C, extend in unbroken rows from top to bottom of the stocking, and that there are four rows between the two sets of narrowings in both the leg and foot, although there may be more or less of such center walls between the narrowings.

Having thus described my invention, what I claim is—

1. A seamless knit stocking, the foot portion having the narrowings adjacent to the heel formed in opposite sides thereof on both sides of the middle walls, and converging toward said walls, substantially as described.

2. A seamless knit stocking, the leg portion whereof is formed with narrowings in opposite sides thereof on both sides of the middle walls, and converging toward such walls, and the foot portion formed with narrowings in opposite sides thereof on both the upper and lower sides of the middle walls, and converging toward said walls, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

Witnesses: CHARLES E. NORRIS.
STEPHEN S. JEWETT,
SAMUEL W. SANDERS.

Correction in Letters Patent No. 311,356.

It is hereby certified that the name of one of the assignees of Letters Patent No. 311,356, granted January 27, 1885, upon the application of Charles E. Norris, for an improvement in "Stockings," was erroneously written and printed "Anson Tabor" instead of *Amson Tabor*; that the proper correction has been made in the files and records pertaining to the case in the Patent Office, and should be read in the Letters Patent to make it conform thereto.

Signed, countersigned, and sealed this 10th day of February, A. D. 1885.

[SEAL.]

M. L. JOSLYN,
Acting Secretary of the Interior.

Countersigned:

BENJ. BUTTERWORTH,
Commissioner of Patents.