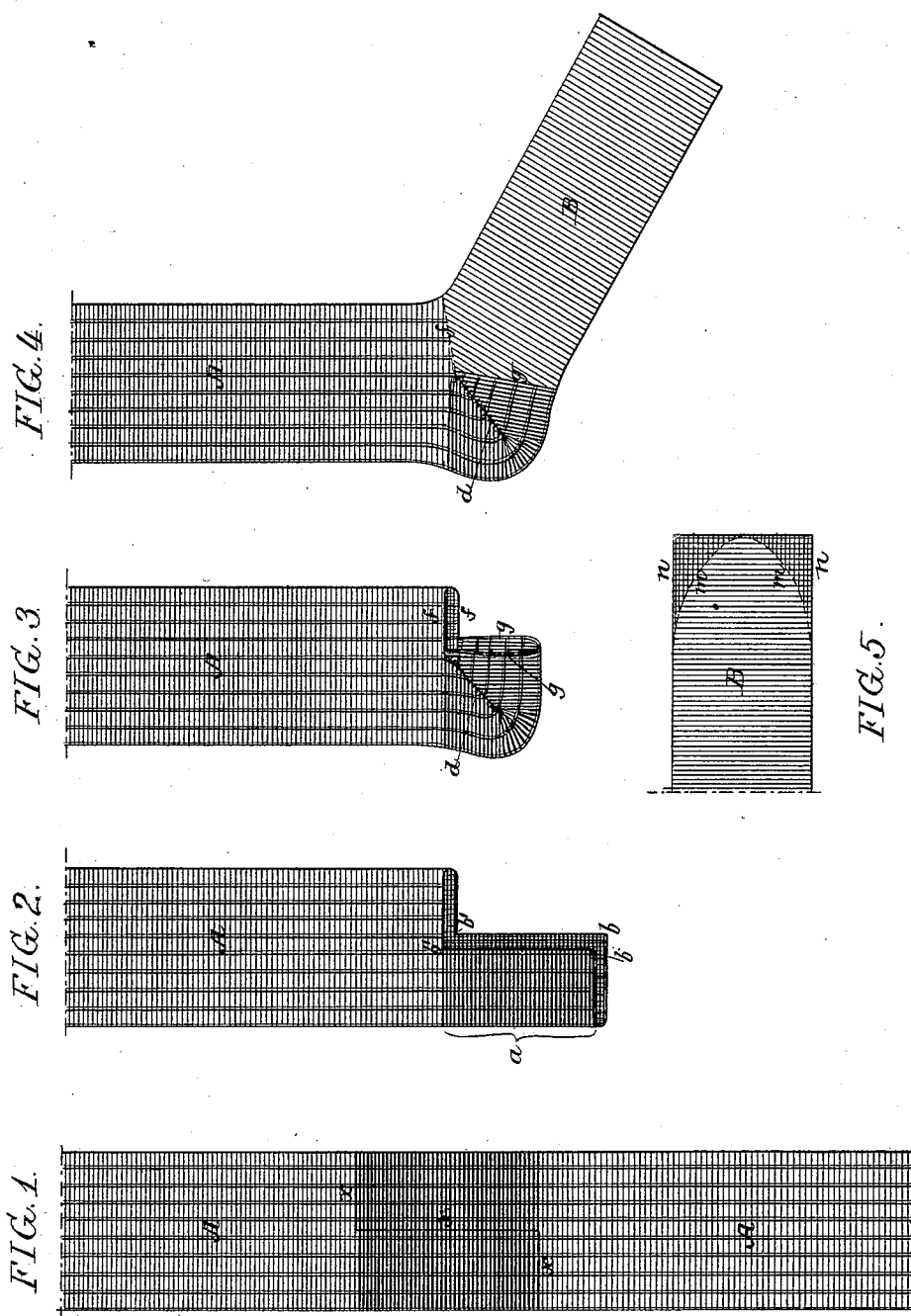


(No Model.)

J. WHITTLE.
STOCKING.

No. 420,754.

Patented Feb. 4, 1890.



Witnesses:

Alex. Parkoff
William D. banner.

Inventor:
Joseph Whittle
by his Attorneys

Howson & Howson

UNITED STATES PATENT OFFICE.

JOSEPH WHITTLE, OF PHILADELPHIA, PENNSYLVANIA.

STOCKING.

SPECIFICATION forming part of Letters Patent No. 420,754, dated February 4, 1890.

Application filed December 17, 1888. Serial No. 293,871. (No specimens.)

To all whom it may concern:

Be it known that I, JOSEPH WHITTLE, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Stockings, of which the following is a specification.

The object of my invention is to produce a stocking which will have a strong, durable, and elastic leg and heel, a seamless leg, a seamless body portion in the foot, and no longitudinal seam in the body of the heel, said heel being, if desired, thicker than the other parts of the stocking.

In the accompanying drawings are shown the various steps in the formation of a stocking in accordance with my invention.

For the leg and heel of the stocking I employ ribbed knitted fabric, a tube A of such fabric being cut on the lines *x*, Figure 1, so as to form stocking-blanks, with depending tongues or projections *a*, as shown in Fig. 2, this portion of each blank being intended to form the heel of the stocking, and the tube A being knit with a double or heavy thread at suitable intervals for a space equal to the length of the tongue portion *a*, if the heel is to be re-enforced.

In order to form the heel, the tongue *a* is doubled upon itself, as shown in Fig. 3, so that the lower corners *b* of the tongue are brought up to meet the upper corners *b'*. This forms a bulging of the fabric at each side of the heel; but this superabundance is removed and the heel completed by the formation of an inclined seam *d* at each side of the same, as in Fig. 3, the surplus material being removed either before, during, or after the sewing operation. The heel is thus formed without any longitudinal seam at the bottom, as such a seam would be objectionable if formed in the ribbed fabric of which the heel is composed.

In order to form the body of the foot, the fabric around the lower end *f* of the front portion of the leg and that around the front end *g* of the heel is applied to the needles of a circular-knitting machine, by which a plain seamless tubular web B is formed, this web constituting the body of the foot, as shown in Fig. 4.

To complete the toe, a curved line of stitches *m* may be run around the front portion of the tube B, as shown in Fig. 5, the surplus portions *n* being removed. The line of stitches is preferably run around the toe from side to side, rather than from top to bottom, as this insures a more acceptable disposal of the seam at the toe.

Owing to the ribbed character of the fabric forming the leg and heel of my improved stocking, these portions are warm and durable and the leg is extremely elastic, while the body of the foot is of plain fabric, which is more desirable for this part of the stocking and permits the shaping of the toe without the formation of bulky seams.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The within-described stocking having a leg of ribbed fabric, with ribbed and folded heel-pocket having diagonal side seams, and a foot with seamless tubular body of plain fabric, secured at its inner end to the lower portion of the ribbed leg and the front of the ribbed heel, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH WHITTLE.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.