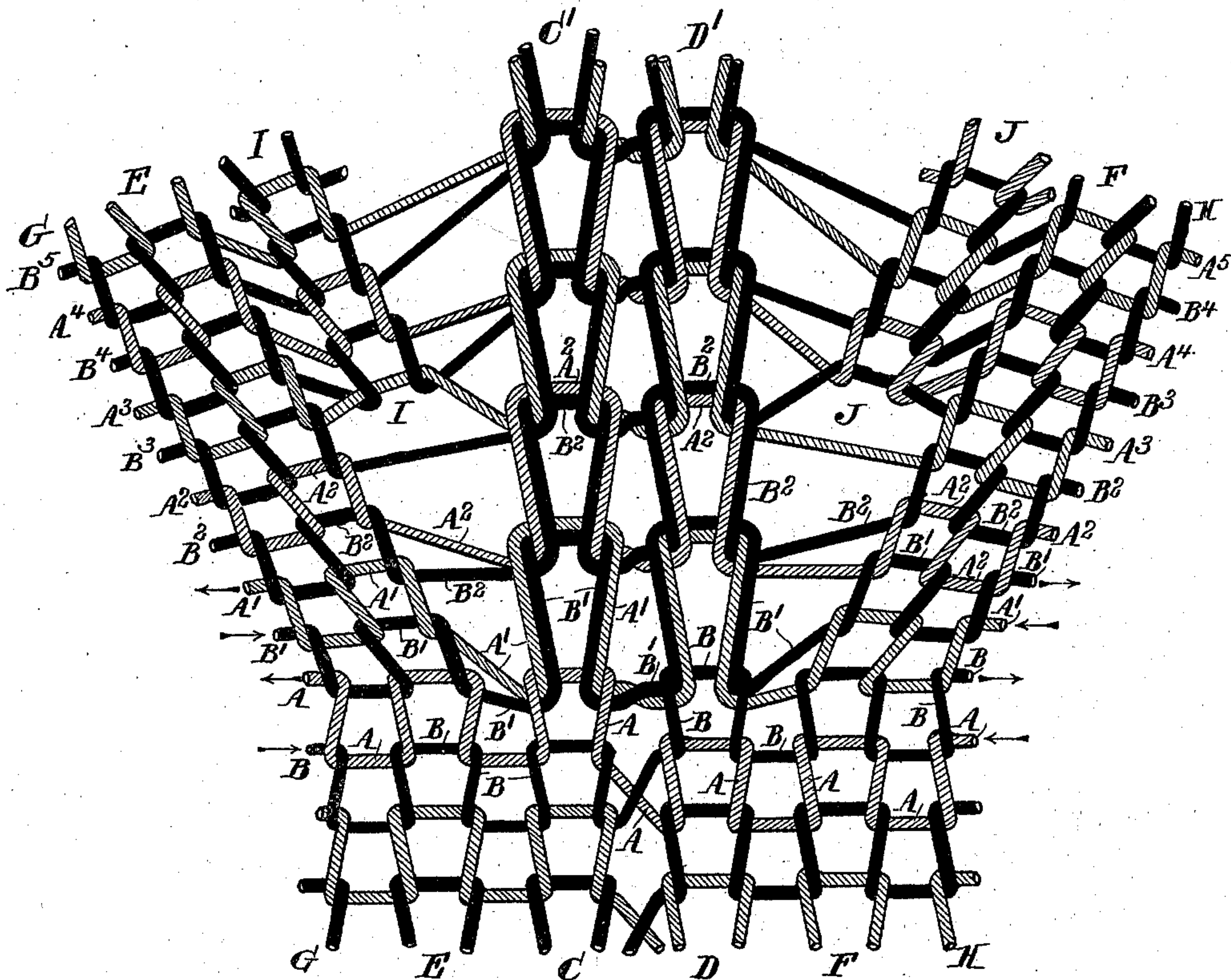


(No Model.)

C. H. YOUNG,
TUBULAR KNIT FABRIC.

No. 574,082.

Patented Dec. 29, 1896.



Witnesses.

Henry D. Young
Stewart

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UNITED STATES PATENT OFFICE.

CHARLES HENRY YOUNG, OF LACONIA, NEW HAMPSHIRE, ASSIGNOR TO
HIMSELF, AND RALPH EMERSON, OF ROCKFORD, ILLINOIS.

TUBULAR-KNIT FABRIC.

SPECIFICATION forming part of Letters Patent No. 574,082, dated December 29, 1896.

Application filed August 21, 1896. Serial No. 603,450. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES HENRY YOUNG, a citizen of the United States, residing in Laconia, in the county of Belknap, in the State of New Hampshire, have invented a certain new and useful Improvement in Tubular-Knit Fabrics, of which the following is a true and exact description, reference being had to the accompanying drawing, which forms a part thereof.

My invention relates to tubular-knit fabrics formed of yarns running in opposite directions, and has for its object to provide an improved seam where the yarns cross each other, and particularly an improved manner of widening the tubular fabric, whereby a slightly, strong, and close seam is obtained.

My invention will be best understood as described in connection with the drawing, which represents a portion of a tubular-knit fabric embodying my improved seam and widening construction, and in which A A', &c., indicate a yarn running in one direction (as shown, from right to left) and B B', &c., a yarn running in the opposite direction, the yarn A A', &c., being further distinguished by being white, while the yarn B B', &c., is black. The wales of the knit fabric are marked C-D, E F, G H, and I J, said last-mentioned wales being, as shown, widening-wales thrown in between wales E and C' and F and D', C' and D' indicating the upper and altered form of the wales marked at the bottom C and D.

The seam formed in an ordinary way between the two sides of the fabric is shown at the bottom of the drawing, and may be said to lie between the wales C and D, while my improved seam, which may be said to incorporate the wales C and D, is shown at the upper part of the drawing at C' D'. In the ordinary seam the yarns A and B cross each other between the wales C and D, each rising above the other at that point and being formed into loops drawn through those of the other yarn as they recede from said seam. In my improved seam, however, the threads A and B are laid together in the needles which knit the wales C' and D' and drawn through the last loops in said wales simultaneously, or knit together at this point, each said thread rising above the other as it recedes from the

wales and being knit singly or independently into or drawn through the loops of the oppositely-running yarn, as shown.

Where the fabric is to be widened, the widening-wales, such as I and J, spring from the sides of the wales C' and D', in which the yarns are knit together, as shown, the new needles being thrown in between the needles which knit the wales C' and D', and, for instance, the needles which knit the wales E and F, and the needles on which the yarns are knit together—that is, those which knit wales C' and D'—being advanced to proper register with the new needles, which knit the widening-wales, as I and J.

The seam may obviously be formed with a single wale in which the yarns are knit together or with more than two such wales, but I prefer the two wales, or, as it might be said, "double" wale C' D', as shown. The new seam is particularly desirable as a part of widened fabric, as the appearance and reality of a very strong and close seam is thus secured.

The seam on the opposite side of the goods to that on which the seam formed by wales C' and D' is located may be formed in the same way as said seam or in any other convenient manner.

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

1. A tubular-knit fabric composed of yarns running in opposite directions said yarns being knit singly on the sides of the fabric and knit together at their point of intersection.

2. A tubular-knit fabric composed of yarns running in opposite directions said yarns being knit singly in the sides of the fabric and knit together for at least two wales at their point of intersection.

3. A tubular-knit fabric composed of yarns running in opposite directions said yarns being knit singly on the sides of the fabric and knit together at their point of intersection and said fabric having widening-wales springing from the sides of the wale or wales in which the yarns are knit together.

CHARLES HENRY YOUNG.

Witnesses:

FRANK HAMMOND,
W. BARROWCLOUGH.