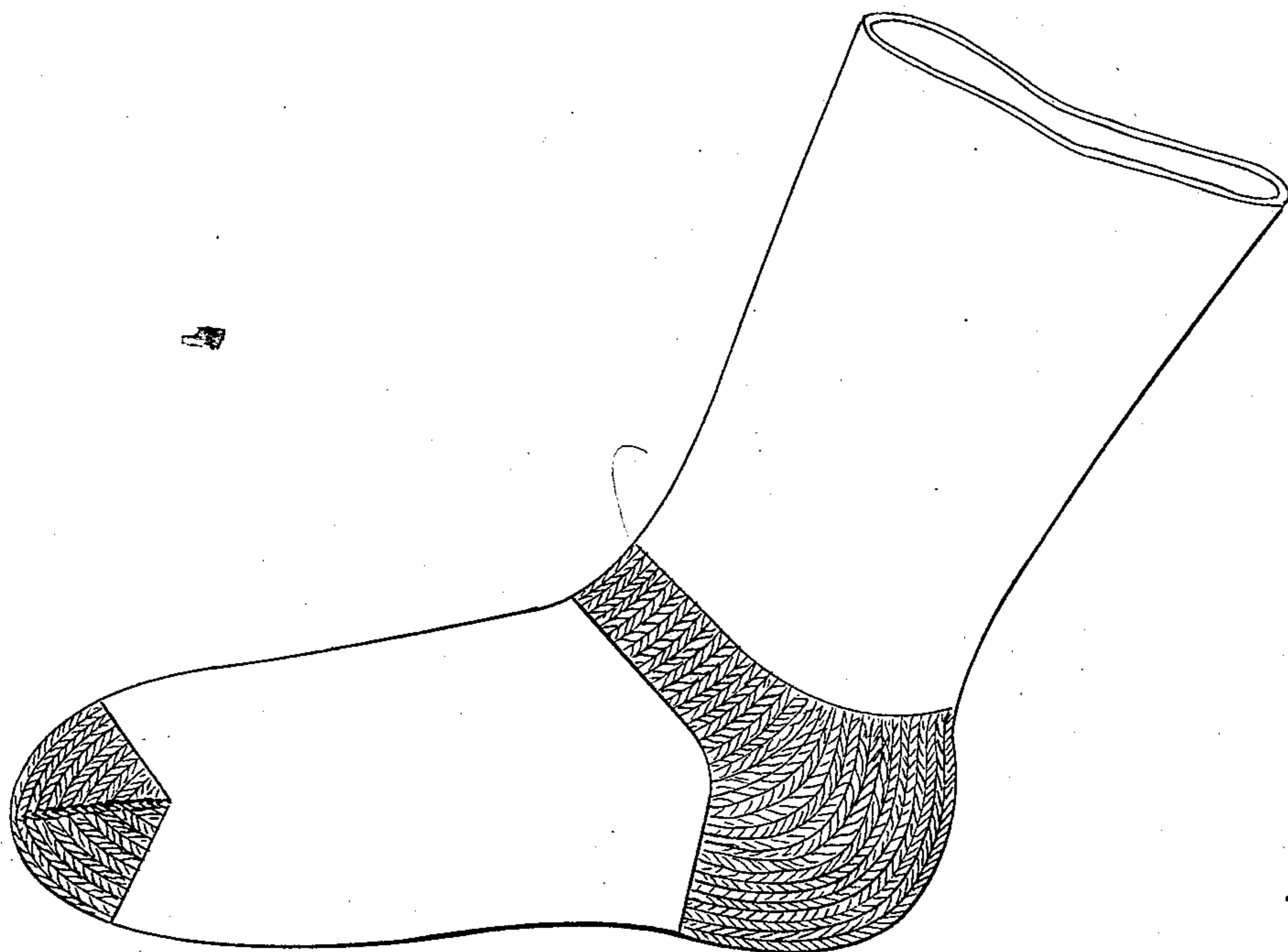


A.C. Carey,
Fabric.

No. 67,264.

Patented July. 30. 1867.



Witnesses.
Jas. D. Patton } *A. C. Carey.*
H. M. Burdell } *By atty A. B. Strongton.*

United States Patent Office.

AUGUSTUS C. CAREY, OF MALDEN, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND HUGH K. MOORE, OF SAME PLACE.

Letters Patent No. 67,264, dated July 30, 1867.

IMPROVEMENT IN MACHINE-KNITTED STOCKING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, AUGUSTUS C. CAREY, of Malden, in the county of Middlesex, and State of Massachusetts, have invented certain new and useful improvements in Machine-Made Knitted Stockings, and that the following is a full, clear, and exact description of the same, and of the difference between my invention and what has heretofore been known or practised.

Letters Patent of the United States were granted to me on the 24th of April, 1866, for an improvement in machine-made knitted stockings, which were a good and merchantable stocking, but not so perfect in form, nor so readily knit as the stocking of my present invention. I propose in the knitting of my present form and style of stocking to use a machine with two rows of needles and a jacquard pattern to each row, but gain several important advantages in my new mode of knitting over that of my former invention or patent, as follows: first, a more perfect, smooth, and close heel; second, a much larger heel without danger of breaking the instep; third, a better-shaped heel, and its relation to the toe more like that of a hand-knit stocking; and, fourth, the knitting can be done faster, and hence cheaper. In my patent as above referred to the heel of the stocking was knit in part upon each of the two rows of needles, first forward and back upon a part of one row of needles, then forward and back upon a part of the opposite row, and so on, increasing the number of needles each time across, until the heel was as large as required.

In my present plan of knitting a stocking by machinery, I knit the toe and foot portion, beginning at the centre of the row of needles, and not at one side thereof, as in the former patent, but the whole heel is knit upon one row of needles only, viz, by first throwing forward one, two, or more needles in the centre of one of the rows of needles, and each time across throwing forward one or more additional needles, (occasionally knitting all around on both rows,) until all the needles (if all should be required) of one row are at work. Then I decrease the number thrown forward one, two, or more needles at each revolution, until it has got back to the number of needles with which the heel was commenced. Thus I knit in one side a diamond-shaped piece or a gore, which makes a kind of bag for the heel, which is more roomy and better shaped. The advantages of this plan of knitting the heel on one of the rows of needles of a two-rowed knitting machine, instead of knitting it upon a part of the two rows, I have stated above as four in number, one of which consists in knitting a smoother and tighter heel, and which I accomplish as follows: Suppose that, in commencing the knitting of the heel, I have thrown forward five needles; then the sixth needle on the side of the row that takes the yarn first (whichever side that may be) is thrown only half way forward to the knitting-line, and catches and holds the yarn, but it does not knit. The next time across, six, seven, or more needles are thrown forward, and the needle next to those thus thrown forward is thrown forward only half way, and catches and holds the thread, but does not knit, and so on, the needle next to the series that is knitting only going forward far enough to catch and hold the thread, but not to knit. By this means I entirely avoid making holes in the heels, as was the case in my former mode of knitting. When I speak of throwing forward the needles, &c., I of course refer to needles thrown forward mechanically, and directed by a jacquard pattern working in connection with them.

Having thus fully described my invention, what I claim as a new article of manufacture, is—

A machine-made knitted stocking, the toe of which is commenced in the centre of the two rows of straight needles, and the heel of which is knit upon one of the two straight rows of needles of the machine, whilst the other portions are the product of both rows, by which means I produce a heel closely knit, without holes or openings, and of better shape and form than heretofore knit by machinery, and bearing a greater similarity, with regard to the toe portion, to hand-knit stockings, substantially as herein described.

Witnesses:

A. B. STOUGHTON,
H. K. MOORE.

A. C. CAREY.