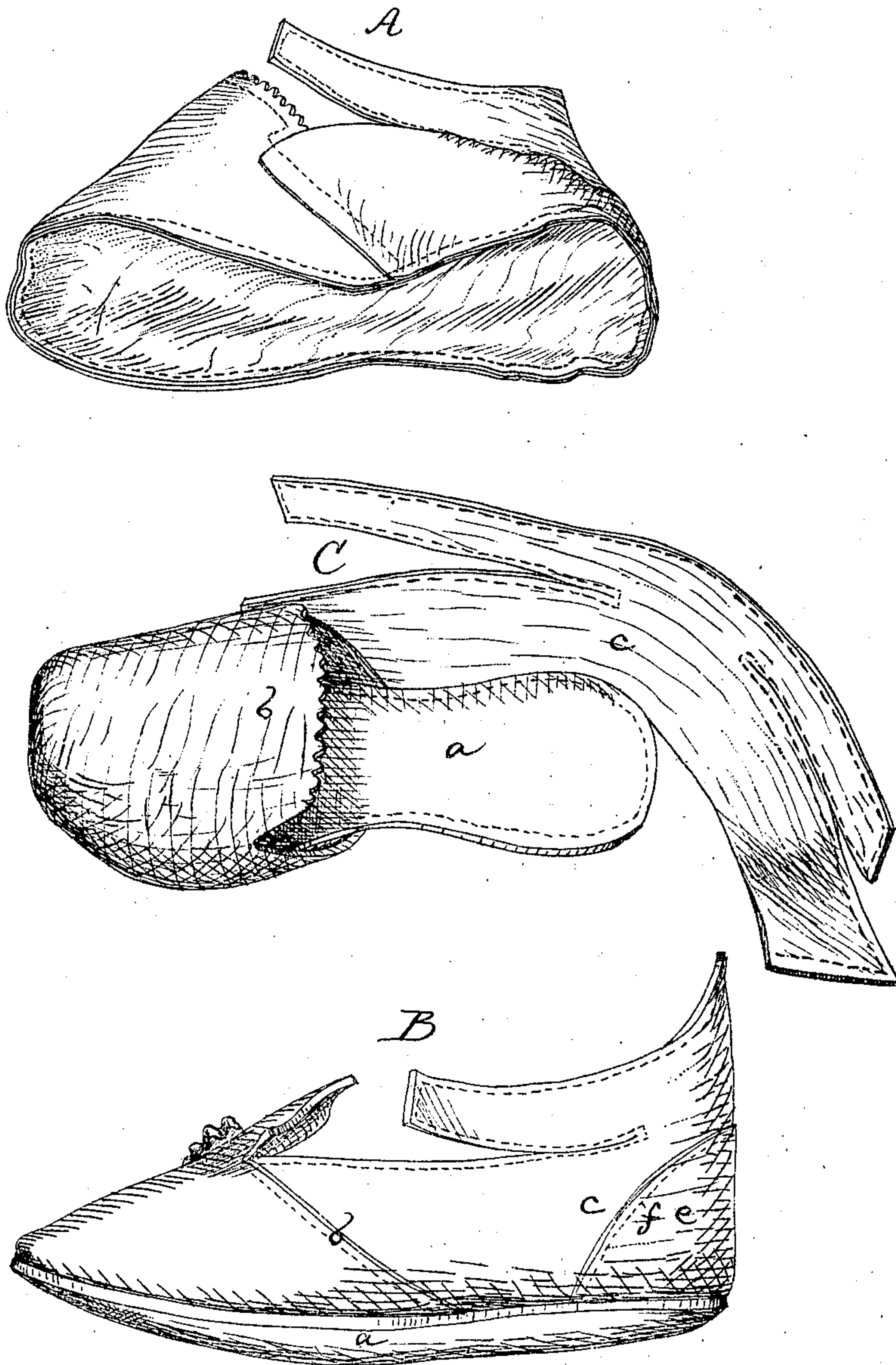


G. A. RICHARDSON.

Improvement in Shoes.

No. 124,084.

Patented Feb. 27, 1872.



Witnesses.
Mo. W. Frothingham.
J. B. Kidder.

George A. Richardson,
By his Atty.
Crossly & Gould

UNITED STATES PATENT OFFICE.

GEORGE ALDEN RICHARDSON, OF READING, MASSACHUSETTS.

IMPROVEMENT IN SHOES.

Specification forming part of Letters Patent No. 124,084, dated February 27, 1872.

To all whom it may concern:

Be it known that I, GEORGE ALDEN RICHARDSON, of Reading, in the county of Middlesex and State of Massachusetts, have invented an Improved Shoe; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In the manufacture of shoes more particularly designed for infants' use it is customary to make both the upper and sole of each shoe of soft and equally flexible leather, and to make the shoe as a turn, bending the sole and upper and stitching through them, the ultimately outer surface of the upper and corresponding outer surface of the sole lying together, with their edges both outward, the stitches passing through them from the ultimately inner surface of the upper to the ultimately inner surface of the sole, both of these surfaces being outward for the stitching operation, a shoe of this kind in its turned or unfinished form being shown at A. These shoes are very weak and slight, the soles are too flexible to give proper support to the upper, and the stitches show, the sole having no outer edge in the finished shoe, said edge being within the shoe.

In my invention I have sought to produce a thick or stiff-soled shoe in which the sole shall be made of sole leather and the sole and upper shall be so united as to show (in the finished shoe) an edge of the thickness of the sole. I make the improved shoe as a turn, and without lasting it or temporarily securing together the upper and sole. To accomplish this I lay the sole flat on the sewing-machine bed or work-support, (the inner or sock surface to the table,) and then taking the upper (one end of the quarter being stitched to the vamp) I begin by pressing the upper at one corner, under the edge of the sole, and sew through the sole and upper, the edges of the sole and vamp of course standing in opposite directions, the one outward and the other inward. As the machine feeds the sole forward I continue to press the edge of the upper under the edge of the sole, bending the shoe at the toe to enable the stitch-forming mechanism to act across the toe. In this way I sew all around the shoe without lasting, without materially bending the sole, and without stitching to the extreme edge of the sole. When the upper and sole have been

thus united all around the edge of the sole the shoe is turned and the other end of the quarter is stitched to the vamp. I have then a thick or rigid sole shoe, having and needing no inner sole.

Shoes can be about as speedily formed in this manner as by the old process, and shoes so made will last very much longer and are very much neater in appearance. It is in this process of making the shoe and in the shoe so formed that my invention consists.

B in the drawing shows a finished shoe so made. C shows the shoe partly made. *a* denotes the flat, thick, and rigid leather sole. *b* is the vamp; *c*, the quarter and heel portion. Beginning at the point *d* I stitch through the sole and through the edge of the upper, and as the latter is brought into position to be united to the sole only as the stitching progresses, there is, therefore, no difficulty in keeping the form of the sole and in bringing the upper and sole together to effect a perfect union. To improve and strengthen the heel I stitch to the quarter an auxiliary piece or stiffener, *e*, by a row of stitches, *f*, the opposite edge of this stiffener being in line with the corresponding edge of the quarter and both being stitched as one to the sole. This piece adds very materially to the endurance of the shoe.

Claims.

1. I claim the described method of making "turned" shoes, the same consisting in taking a sole unattached to its vamp, and, while the sole is lying flat upon the horizontal table of a sewing-machine, conducting or guiding the edge of the vamp under the edge of the sole step by step as the sewing progresses until the two are united by the stitching all round the sole, and then turning the shoe, all as described.

2. I also claim the improved "turned" shoe formed by uniting the sole and vamp, as above described, and without any preparatory lasting.

3. Also, in a "turned" shoe, the combination, with the upper or quarter, of the heel piece or stiffener *e*, stitched at its upper edge to the vamp and united at its lower edge to the sole while the sole and vamp are being stitched together by stitches passing through the upper and stiffener and sole.

G. A. RICHARDSON.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.