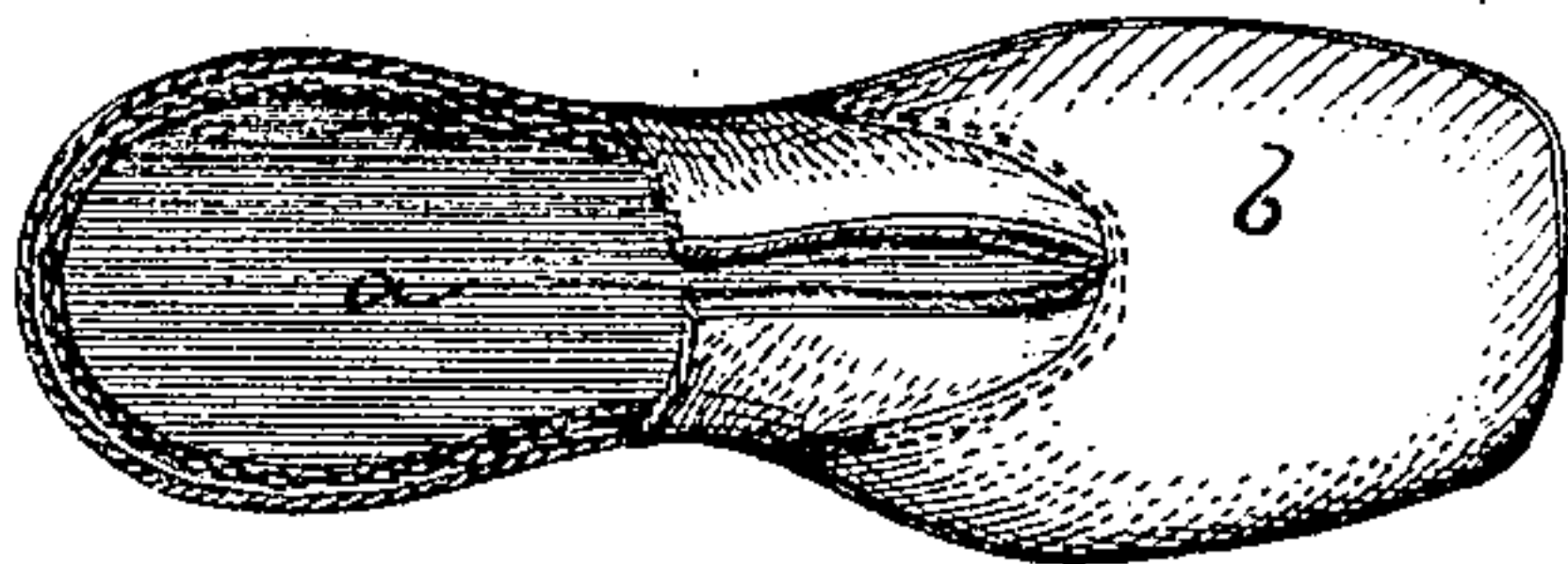
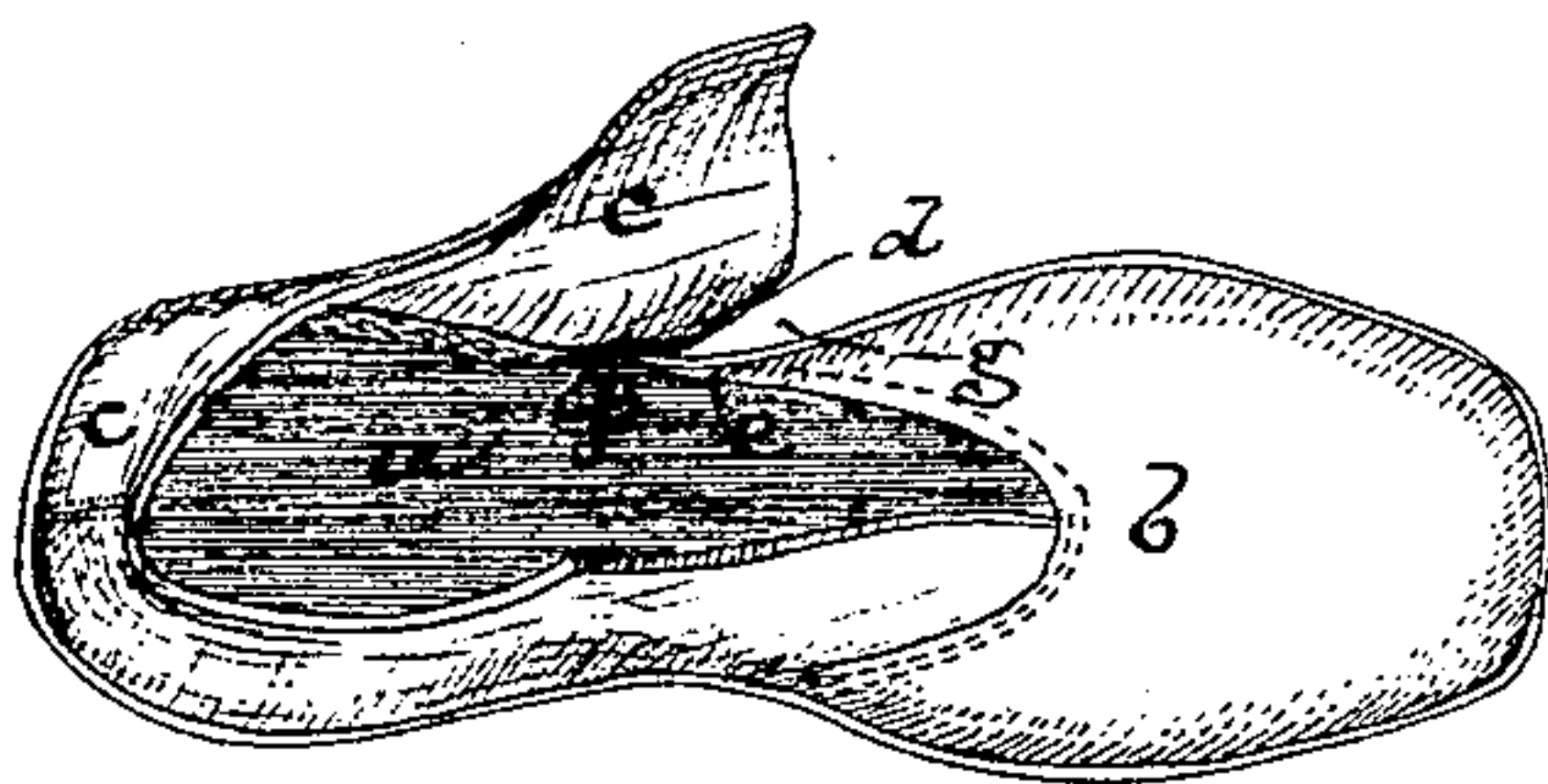
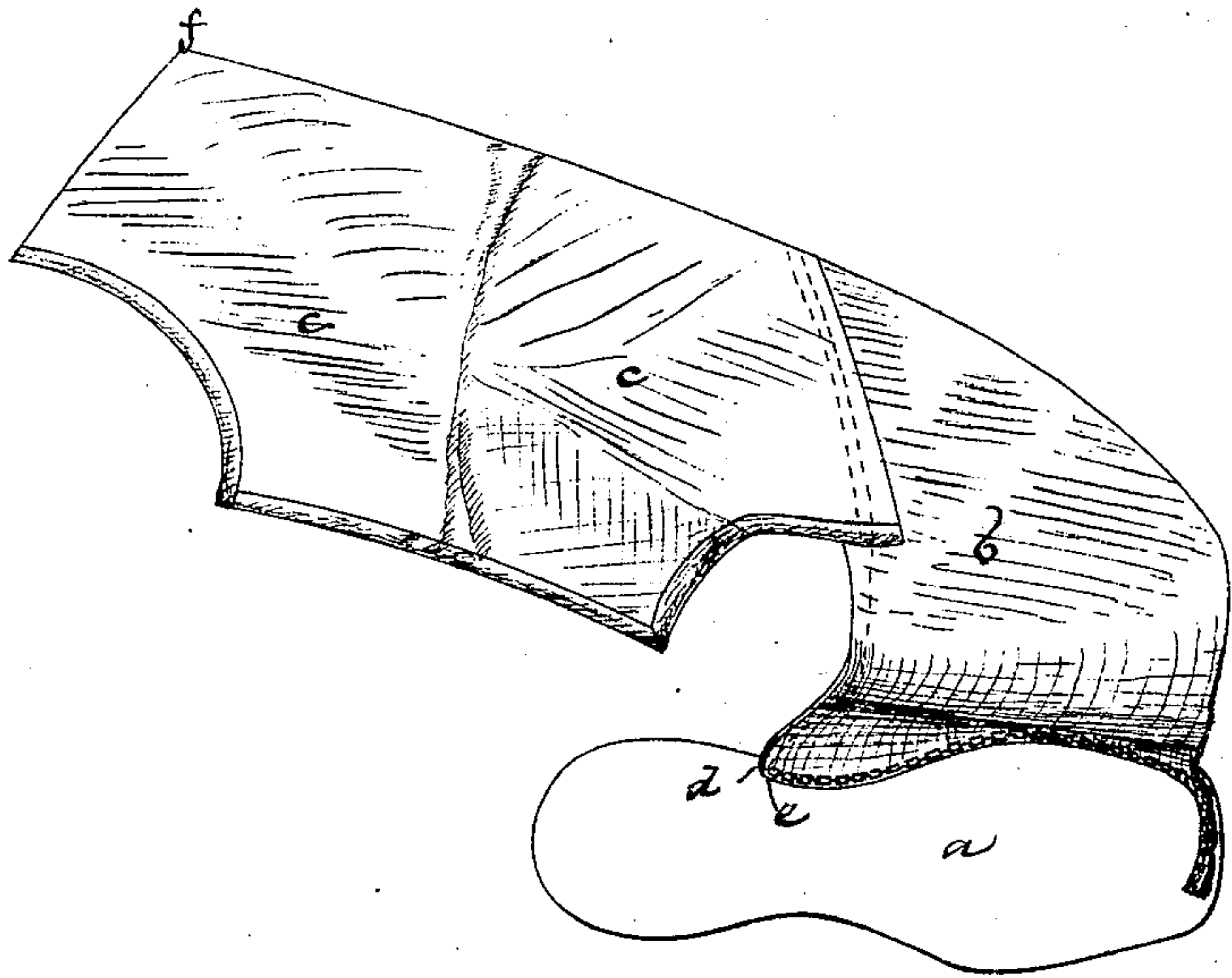


G. A. RICHARDSON.

Improvement in Manufacture of Shoes.

No. 129,252.

Patented July 16, 1872.



Witnesses,
J. B. Kiddle,
M. W. Frothingham.

Inventor
George A. Richardson.
By his Atty.
Crosby & Gould

UNITED STATES PATENT OFFICE.

GEORGE A. RICHARDSON, OF READING, MASSACHUSETTS.

IMPROVEMENT IN THE MANUFACTURE OF SHOES.

Specification forming part of Letters Patent No. 129,252, dated July 16, 1872.

To all whom it may concern:

Be it known that I, GEORGE A. RICHARDSON, of Reading, in the county of Middlesex and State of Massachusetts, have invented an Improvement in the Manufacture of Machine-Sewed Shoes; 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 uniting the soles and uppers of boots and shoes by machine-sewing it is customary to use an inner sole, lasting the upper to the inner sole and passing the stitches through the three edges, the shoe being supported upon a "horn." When a machine-sewed shoe is made without a permanent inner sole, and is sewed right-side out, a narrow inner sole is used to last to, said sole being removed when the stitching is finished. But most machine-sewed shoes having no inner soles are made as "turns," the shoe being wrong side out and the stitches being passed through the inner portion of the sole and the upper without extending to the outer surface of the sole.

My invention relates to a method of uniting the soles and uppers of shoes formed without inner soles, and without turning.

United States Letters Patent No. 124,084 have been granted to me for an improvement in sewing turns with a common sewing-machine, and my present invention is to some extent analogous to the invention shown in said patent, the process of sewing being substantially the same, except that the parts are right-side out, (so that when united they form the shoe without turning,) and the edge of the upper is laid over the edge of the sole instead of under said edge. In my present invention one end of the vamp is stitched to one end of the quarter, forming a long, irregularly-shaped piece, and having laid the sole right side up upon the work-plate of an ordinary wax-thread sewing-machine, or of any other suitable machine, with one side of the shank under (or over) the point of the needle, I then lay the edge of the vamp upon the sole in proper position to be united thereto, and insert the stitches by the machine, guiding the side-edge, toe-edge, and opposite side-edge of the vamp to the quarter, the side and heel and opposite

side portions of the quarter-edge being similarly laid upon the sole and guided, while the sole is fed along the edge of the sole until the starting point is reached. This leaves two adjacent vamp and quarter edges ununited, and the shoe is finished, as to the union of the parts, by stitching up these two edges. The invention consists in this method of uniting the sole and upper of a shoe, or in sewing a shoe right side out without an inner sole, using a connected vamp and quarter, starting at one end of the vamp-edge and sewing all along the said edge, and then along the whole length of the quarter-edge to the point of starting, the open quarter and vamp edge being finally closed by stitching. A slipper-shoe has been sewed upon a sewing-machine by forming the front part of the vamp with a slit extending to or nearly to the toe to permit the entrance of the needle-bar or feed-bar; but this forms an imperfect sole, the edges of the slit having to be stitched together or connected by a lacing, while in my method no extra seam is made, one ordinary seam being left open until the sole and vamp are united, and then closed.

The drawing represents a shoe embodying my construction, and a sole and upper partly connected, to illustrate the process. *a* denotes the sole; *b* the vamp; *c* the quarter and heel-piece. The sole being laid on the work-supporting plate, (its outer or smooth surface against the plate,) with the point *d* under the needle, the edge of the vamp at the point *e* (or the end of the vamp-edge) is laid upon the upper surface of the sole and the stitching then commences, continuing around the sole and upper until the point *f* reaches the point *d*. This will leave the slit *g*, which is then closed up.

By this means a much better shoe can be made than when the shoe is made as a turn, as the sole and vamp do not have to be bent and wrenched to turn them.

I claim—

The improvement in uniting the uppers and soles of boots and shoes, substantially as shown and described.

G. A. RICHARDSON.

Witnesses:

FRANCIS GOULD,
S. B. KIDDER.