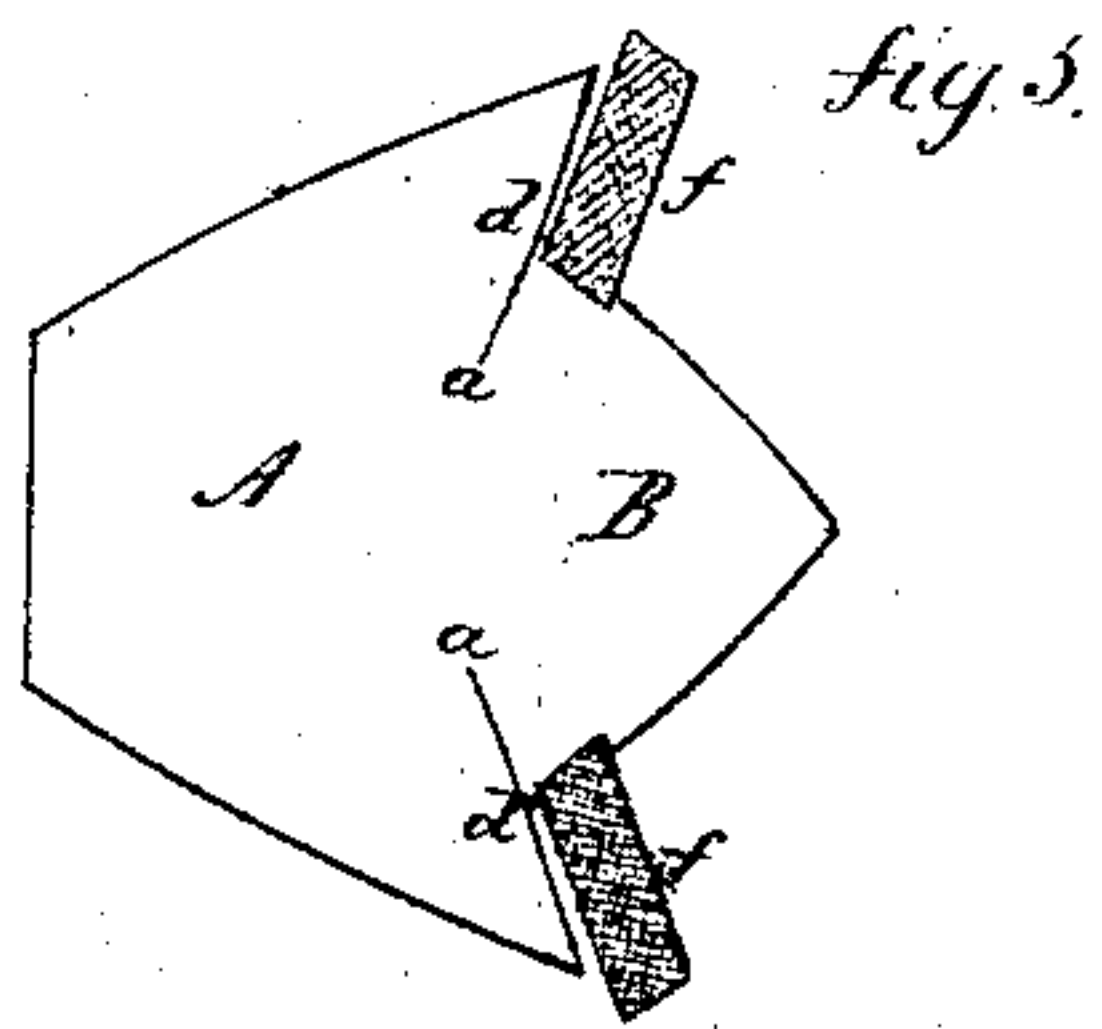
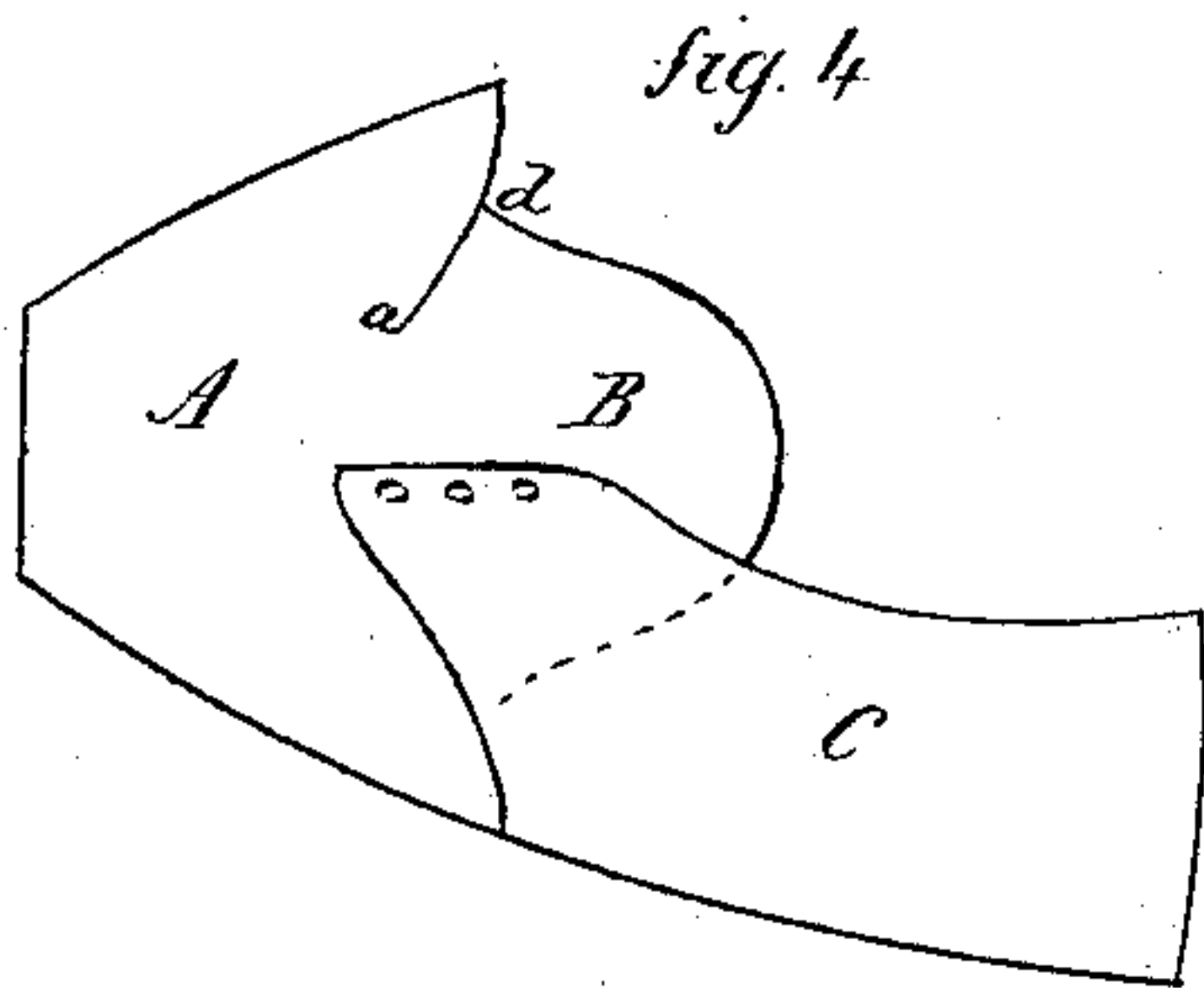
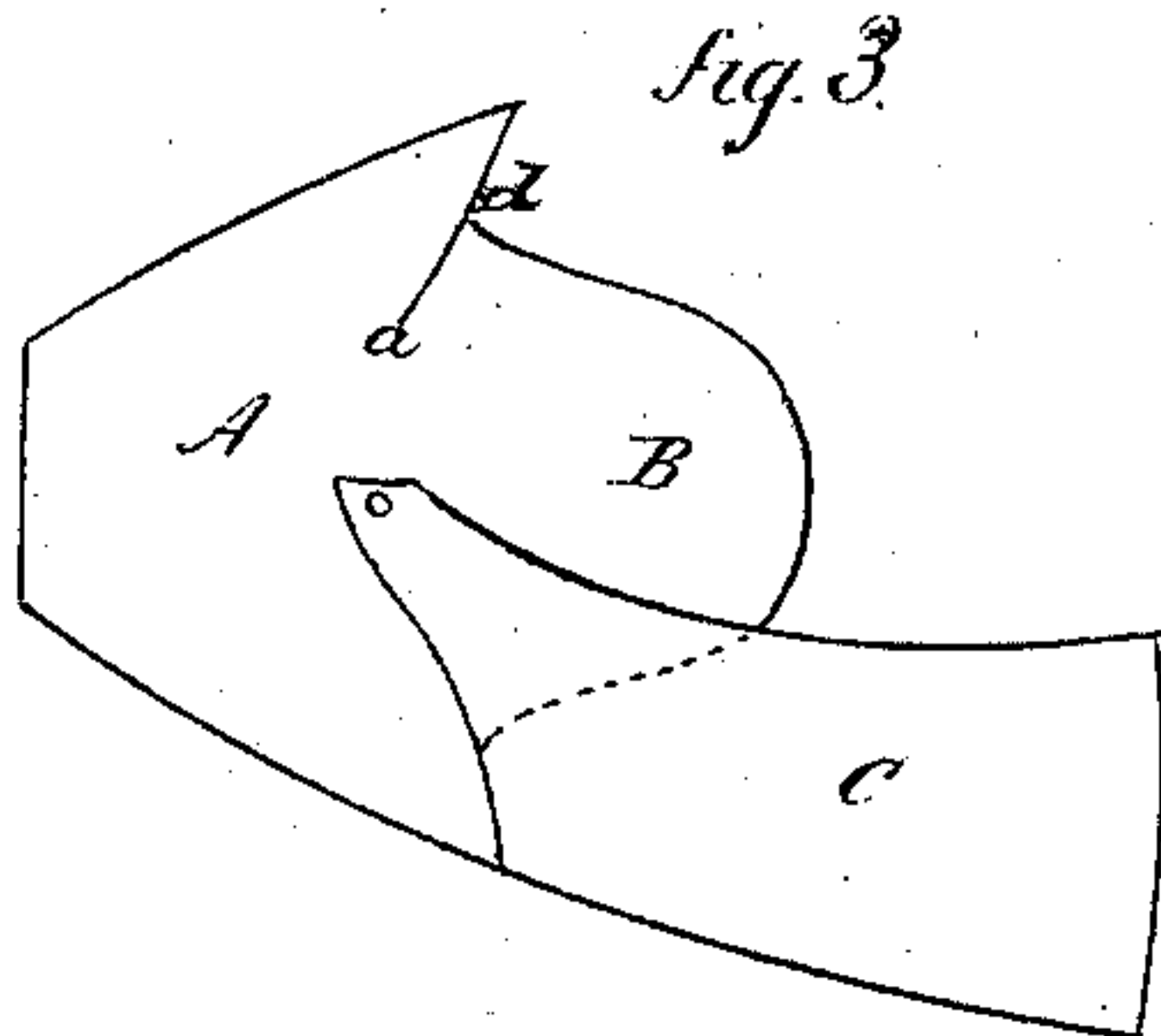
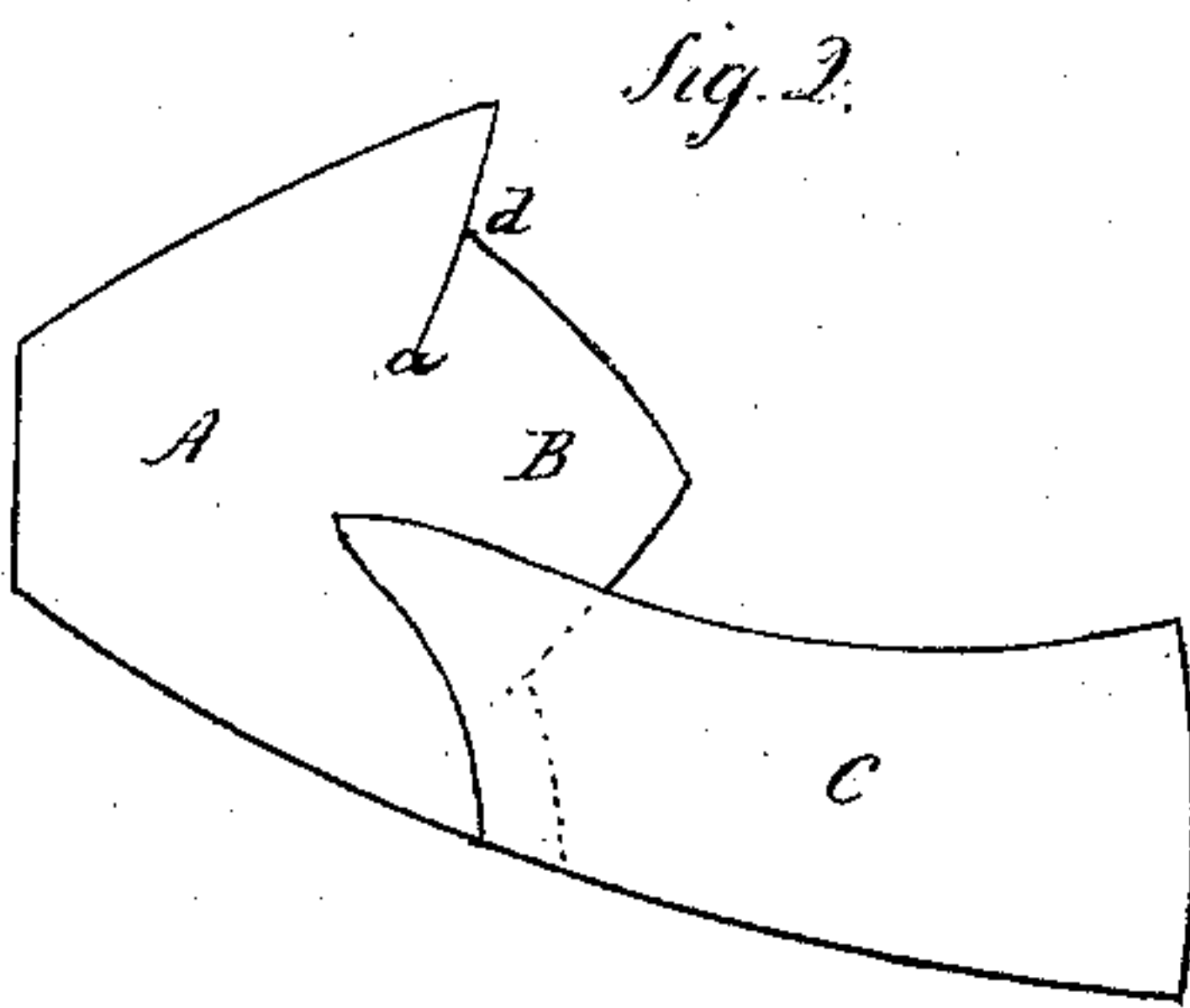
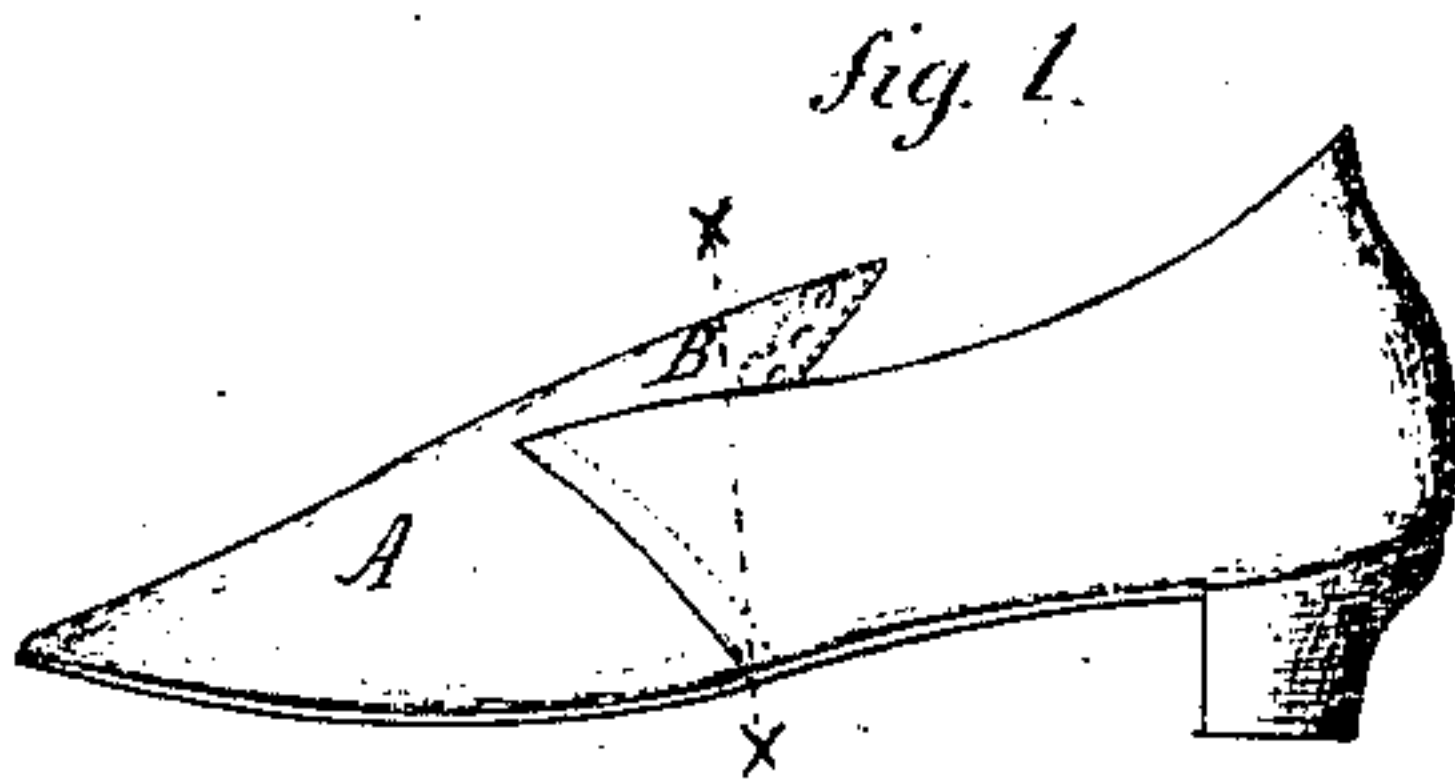


J. L. Joyce,

Shoe.

No. 106,488.

Patented Aug. 16. 1870.



Witnesses,  
J. H. Summray  
A. J. Tibbitts

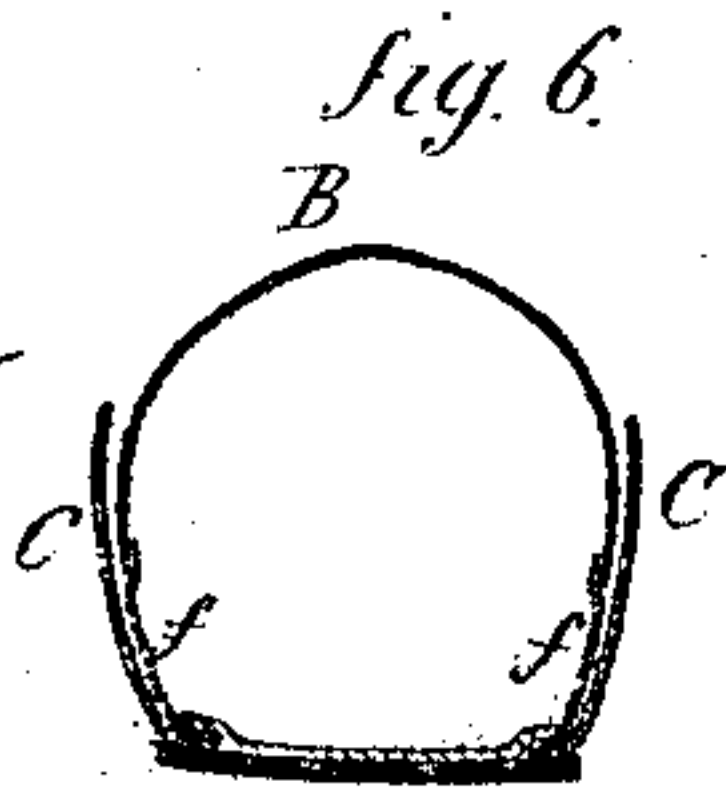


Fig. 7.

Joseph L. Joyce  
Inventor  
By his Attorney,  
John E. Seal

# UNITED STATES PATENT OFFICE.

JOSEPH L. JOYCE, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN SHOES.

Specification forming part of Letters Patent No. 106,488, dated August 16, 1870.

*To all whom it may concern:*

Be it known that I, JOSEPH L. JOYCE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Shoes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the slipper complete; Figs. 2, 3, and 4, the same principle of cutting applied to slippers of different patterns; Fig. 5, the vamp with the elastic attached; Fig. 6, a section through line *x x* of Fig. 1; and in Fig. 7, the manner of finishing the edge.

This invention relates to an improvement in cutting slippers or low-quartered shoes, and such as have a long vamp extending onto the instep; and the invention consists in cutting the vamp with an instep-piece attached to or formed thereon, the instep-piece cut or detached from the vamp upon each side a portion of its width, so as to yield to conform to the height of the instep, and cutting the quarter so as to attach to the vamp forward of the instep-piece; and, further, in the arrangement of an elastic between the instep-piece and sole, so as to allow the instep-piece to yield in putting on the shoe, and to draw the instep-piece down, so as to fit the instep when the shoe is on the foot.

The vamp is cut as seen in Fig. 5, A representing the vamp, and B the instep piece, which may be cut with the vamp, or separately, and stitched thereto between the points *a a*, but cut or divided from the vamp, from the points *a a* down to the edge *d* of the instep-piece. The shape of the instep-piece may be varied, as seen in the several diagrams. C is the counter, cut so as to extend forward of the instep-piece, as seen in the several diagrams, and there stitched to the vamp, and the counter may be cut for a slipper, as in Fig. 2, or for a single tie, as in Fig. 3, or for lacing, as in Fig. 4.

By this manner of cutting and attaching the quarter to the vamp, I am enabled to finish the edge by turning the outer inward, and the

lining outward, as seen in Fig. 7, to make an extremely neat and durable edge without binding, and to produce the same edge on the instep-piece; and, further, that the instep-piece, being partially separated from the vamp, yields to the instep, and affords a more comfortable and nicer fit than in the manner as heretofore practiced; and, to further facilitate the putting on of the shoe, as well as neatness of fit, I attach to the instep-piece, upon each side, and beneath the quarter, a piece of elastic, *f*, (see Figs. 5 and 6,) which extends down, and is secured at the sole in any convenient manner, by preference secured in the process of stitching the sole to the upper. This elastic yields when putting on the slippers, and, when the slipper is on the foot, tends to draw the instep-piece down onto and so as to fit the instep.

Another great advantage of this manner of cut and the elastic is that the same shoe may fit feet of different heights of instep, so that, in the manufacture, a less variety of shoes may be produced, the principal difference of manufacture being in the length only, the elastic instep-piece accommodating other differences, as well as widths and heights.

I do not wish to be understood as confining myself to any particular style of vamp or instep-piece, it being equally applicable to all shoes in which there is an instep-covering of vamp without any covering or support from the quarter.

I claim as my invention—

1. In the manufacture of shoes, the extension of the quarter forward onto the vamp, so that the upper edge of the quarter will pass beyond the instep-edge of the vamp, and be secured, substantially in the manner and for the purpose described.

2. In combination with the vamp A and instep-piece B, formed upon or united thereto, as described, the elastics *f f*, so as to yield for the accommodation of the instep-piece B, substantially as described.

JOS. L. JOYCE.

Witnesses:

A. J. TIBBITS,

J. H. SHUMWAY.