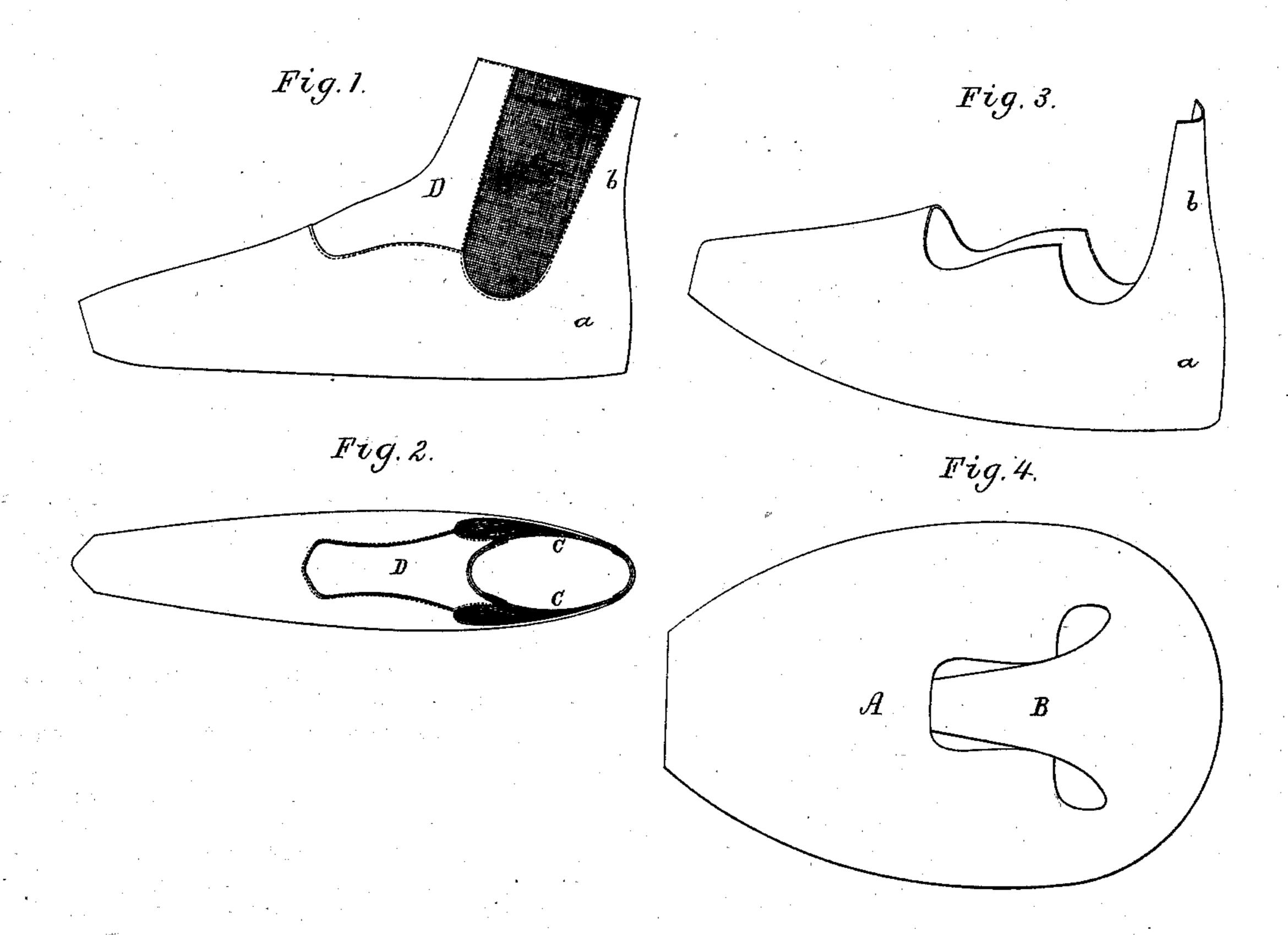
## J. BROWN. Shoe-Uppers.

No. 216,306.

Patented June 10, 1879.



Witnesses. S. N. Piper M. Lund Inventor.

John Brown.

by attorneg.

M. S.L.

## UNITED STATES PATENT OFFICE.

JOHN BROWN, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN SHOE-UPPERS.

Specification forming part of Letters Patent No. 216,306, dated June 10, 1879; application filed March 24, 1879.

To all whom it may concern:

Be it known that I, John Brown, residing at No. 51 Eliot street, of the city of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of the Uppers of Shoes; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side view, and Fig. 2 a top view, of a shoe-upper made in accordance with my improvement, with its vamp, quarters, and heel and ankle-piece in one piece of leather. Fig. 3 is a perspective view of the vamp and quarters, heel, and ankle-piece. Fig. 4 is a top view of the piece of leather or blank and mode of cutting it in order, by the subsequent process of crimping, to bring it into shape for use.

A distinctive feature in my invention is the making the vamp, quarters, and heel, or such and the ankle-piece of the upper, or the main part thereof, from a single piece of leather, so that there shall be no seam up the back or middle of the heel-piece, or such and the ankle-piece of such upper, and the said upper shall have notches or recesses for receiving elastic gores, all as represented. Furthermore, I combine, with an upper so made, side elastic gores, or such and an instep-piece, the whole, except the gores, being suitably or properly lined, as occasion may require.

In carrying out my invention so as to produce an upper with a heel and ankle-piece, I take a piece of leather, A, of the right shape, or of the form shown in Fig. 4, or approximating thereto, and cut it through at or in the instep portion, or thereabout, (but not from edge to edge or to either edge,) so as to form in it a tongue or ankle-piece, B, which is to extend above the heel. Next, the leather is to be wet and the heel portion and ankle-piece should be turned up and back, and the whole stretched or crimped, so as to give to the piece of leather

the form of an upper, with the heel portion a and the ankle-piece b without any seam at the back of the heel and ankle-piece. Fig. 3 shows the piece of leather in such condition, or after being cut, stretched, or crimped, and notched in its opposite sides and close to the back tongue, b, ready for being sewed to two elastic gores, C C, or to such and a separate front or instep piece, D, arranged as shown.

I find that shoes can easily be made with seamless uppers by my improvement with a large saving of stock, and to great advantage in other respects.

I am aware that before my invention shoeuppers have been made in one piece and provided with one or more tongues and substantially inelastic ankle-pieces, which render it necessary for the upper to be open from the instep upward, and to have buttons and button-holes or lacing-holes to the opening. In my shoe there is no such opening and no such devices for closing it.

What I claim as my invention is as follows, viz:

1. A seamless shoe upper provided with notches to receive elastic gores, and with an ankle-tongue, b, as represented, in combination with such gores, and an instep-piece, D, arranged and applied substantially as set forth.

2. A seamless shoe-upper, A, having a heel-tongue, b, in one piece with the rest of the upper, in combination with an instep-piece, D, and two elastic gores, C C, arranged between such instep-piece and the heel-tongue, all being connected and disposed substantially as set forth, whereby the shoe-upper is without any instep-opening, and devices for closing such extending down from its top or mouth, for reception of the foot of a person.

JOHN BROWN.

Witnesses:

R. H. Eddy, W. W. Lunt.