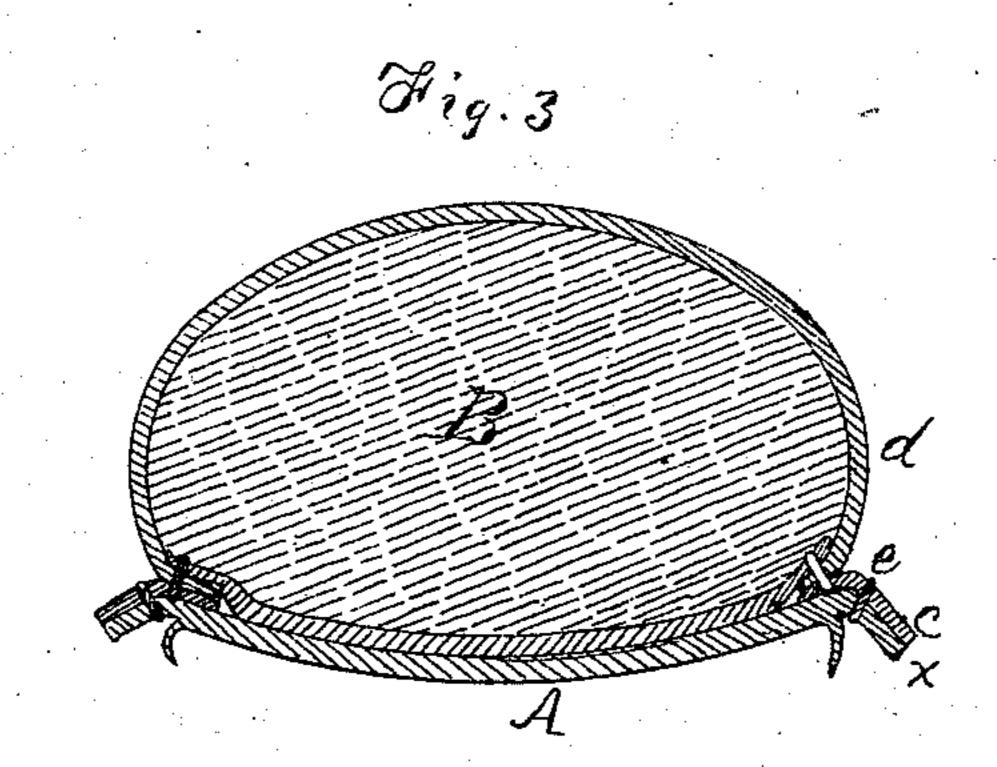
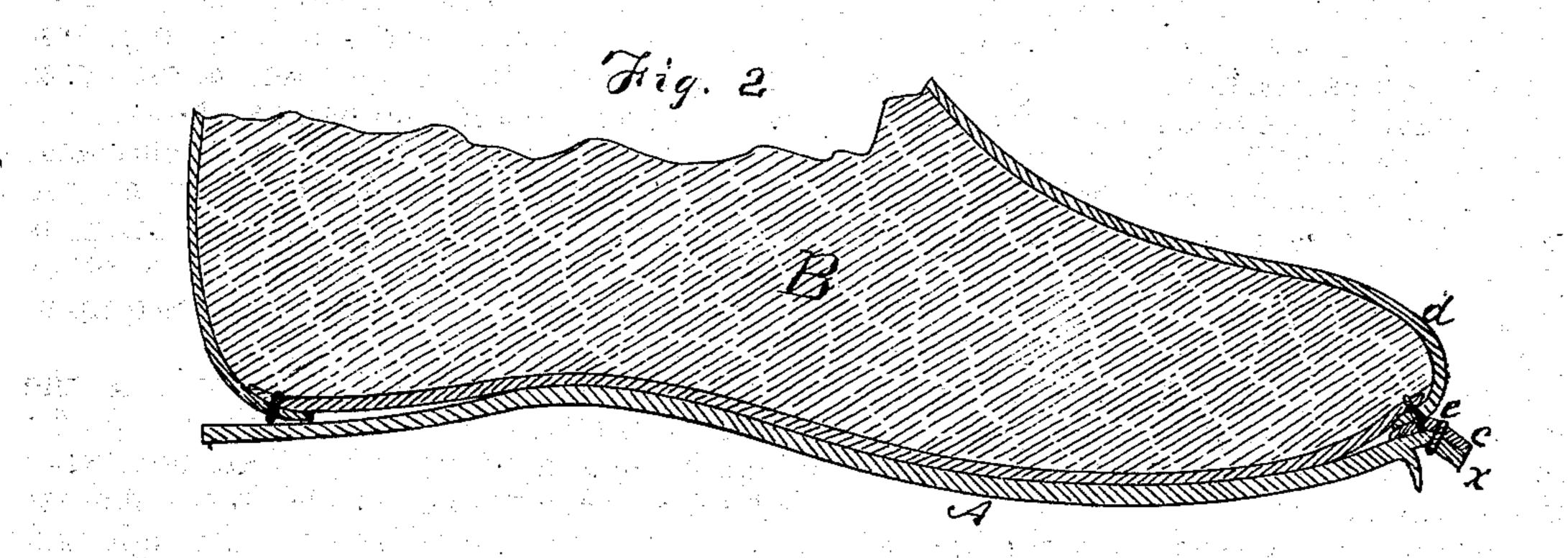
## H. H. HUTCHENS.

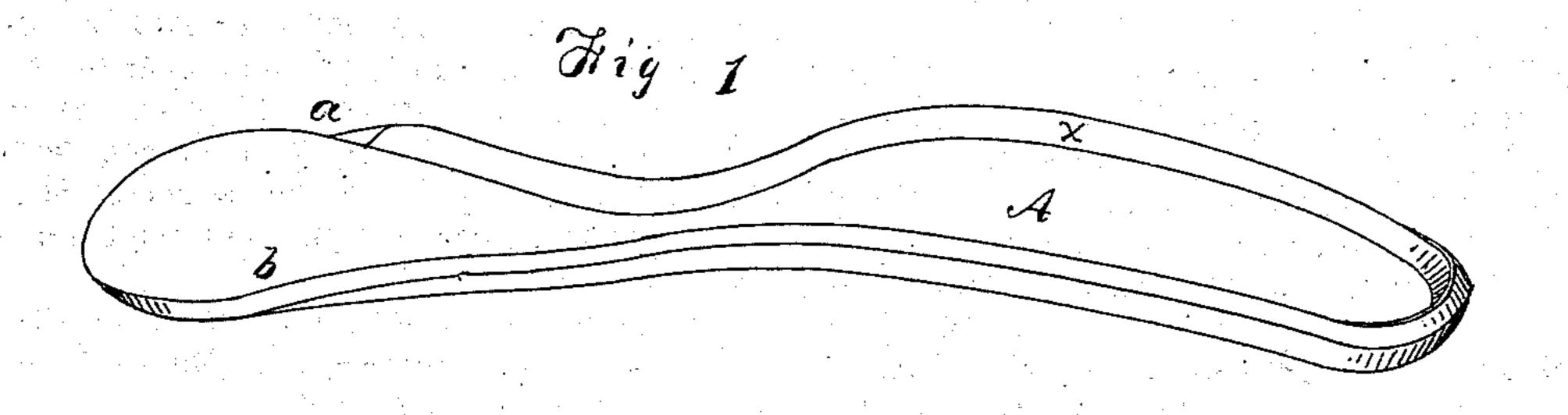
## Manufacture of Boots and Shoes.

No.155,584.

Patented Oct. 6, 1874.







Seo. W. Copland. Thos & Conlin Horatio N. Hertchen

## UNITED STATES PATENT OFFICE.

HORATIO H. HUTCHENS, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 155,584, dated October 6, 1874; application filed June 26, 1873.

To all whom it may concern:

Be it known that I, Horatio H. Hutchens, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Boots and Shoes, of which the following is a specification, which, with the description and accompanying drawings, will enable those skilled in the art to practice my invention.

Figure 1 is a perspective view of the outside of my improved sole. Fig. 2 is a longitudinal vertical section of a shoe with the said sole applied. Fig. 3 is a transverse vertical section of the same.

The object of my invention is to produce an outer sole of a boot or shoe, which can be easily sewed to a welt, welt-sole, or half-sole through and through the outer edges of the same, while the finishing-last is in the boot or shoe, by what are known as wax-thread sewing-machines.

In the process of manufacture, I last my boot or shoe, in the first instance, with the finishing-last, and do not withdraw it until the boot or shoe is finished, thus saving time, trouble, and the expense of two sets of lasts.

In the drawings, A represents a sole, with a flange, x, turned down upon its edge at an angle of about forty-five degrees, commencing at a, near the heel, and extending around the sole to an opposite point, b. The sole is so molded that it conforms to the bottom of a finishing-last, and it is provided with a suitable channel for the stitches.

Figs. 2 and 3 are sections of a boot or sloe with the finishing-last B therein. In this boot or shoe the welt or welt-sole c having first been properly united to the vamp d, the outer sole A is then sewed thereto, as shown at e, by means of wax-thread sewing mechanism, and without removal of the last. When the boot or shoe is so far completed, the flange is flattened out by rolling, hammering, or other process, and the boot or shoe is finished up in the usual manner.

Soles have been made to conform to the bottom of the last; and the mere turning of a flange in soles is not new; but I am not aware that soles with a flange, formed in the manner and for the purpose of sewing through and through, as herein described, have been made heretofore.

Having thus described my improvement, what I claim is—

1. The outer sole A, having the flange x turned upon its edge, outward and backward, substantially as and for the purpose described.

2. In the manufacture of machine-made boots and shoes, forming a flange outward and backward upon the out-sole, for the purpose of attaching the same to a welt, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORATIO H. HUTCHENS.

Witnesses:

GEO. W. COPELAND, THOS. J. CONLIN.