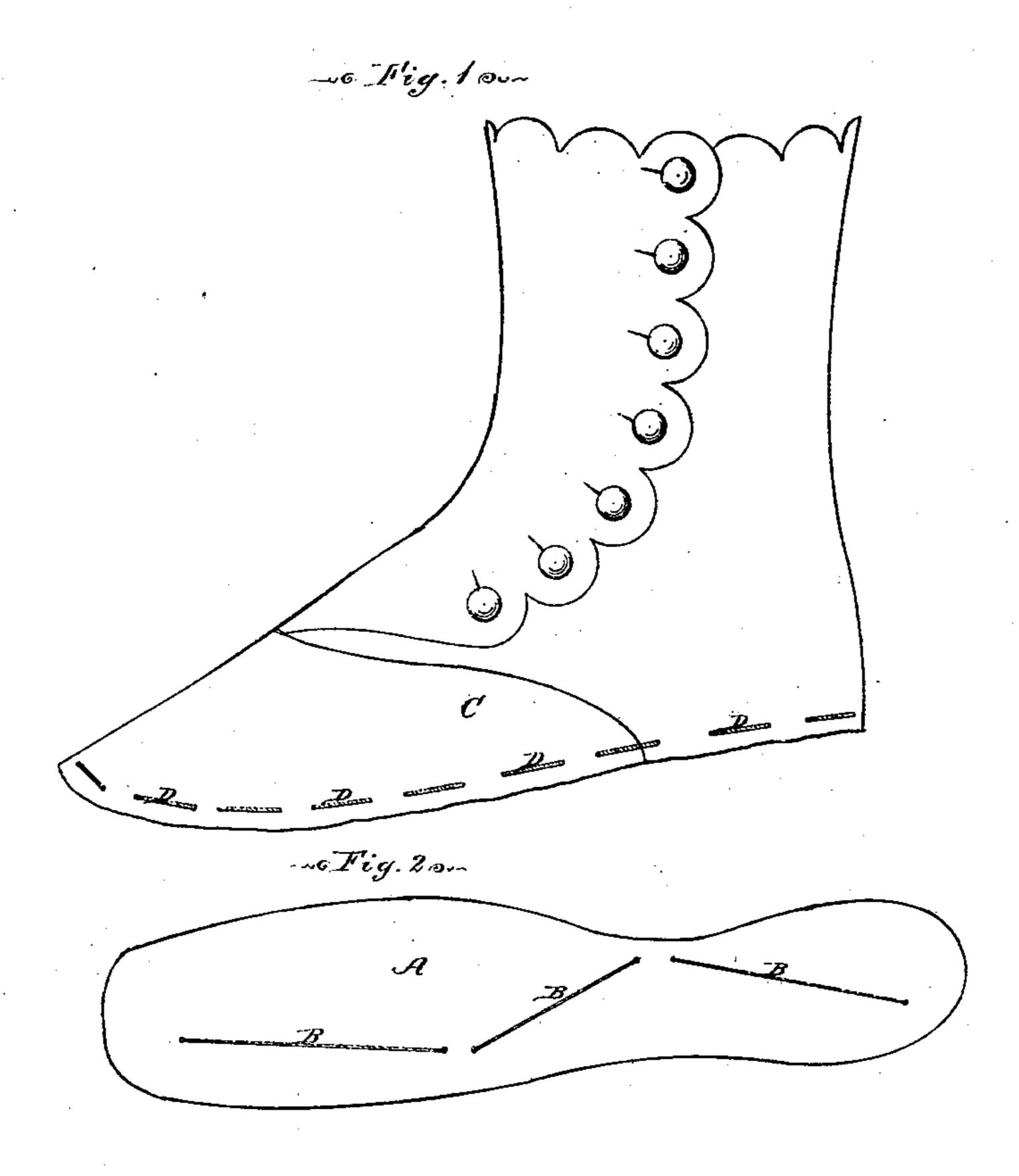
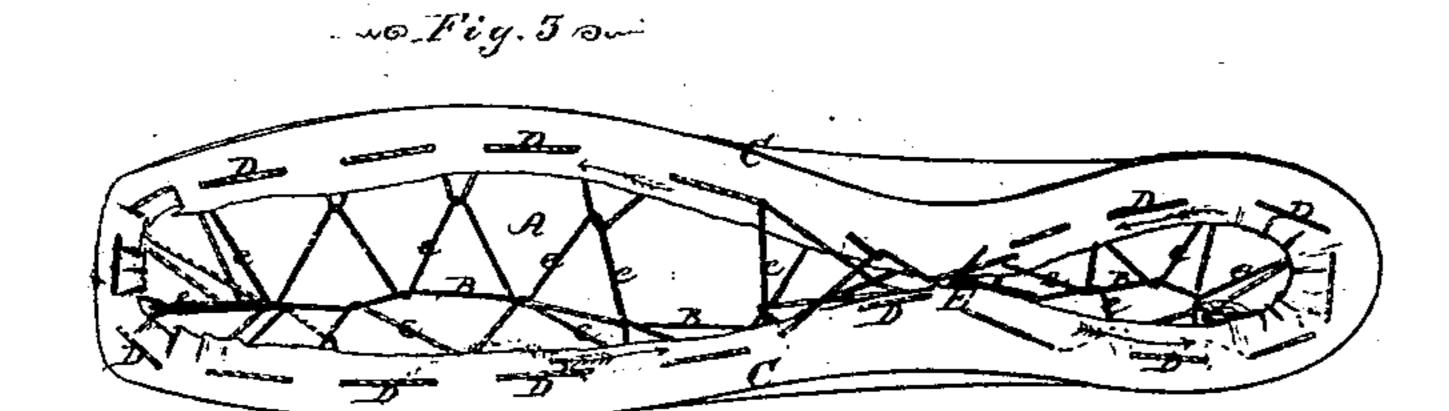
M. Chantaers,

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10.104.828.

Potented June 28.1870.





Charles F. Brown.

Milliam Chambers

Anited States Patent Office.

WILLIAM CHAMBERS, OF LYNN, MASSACHUSETTS.

Letters Patent No. 104,828, dated June 28, 1870.

IMPROVED METHOD OF LASTING BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM CHAMBERS, of Lynn, in the county of Essex and State of Massachusetts, have invented certain Improvements in Method of Lasting Boots and Shoes, of which the following is a specification.

Figure 1 is a side elevation of the upper of a boot, and

Figure 2, a plan view of the sole, both embodying my invention.

Figure 3, a plan view, showing the uppor and sole on the last, and the method of securing the same.

The object of this invention is to last the upper of a boot or shoe without the use of nails; and

It consists in drawing two or more irregular stitches of strong thread through the inner sole from end to end, and a row of similar stitches around the bottom of the upper, and connecting said stitches or loops, when on the last, by irregular lacings, extending from the stitches of the sole outward to those of the upper, thereby binding the same firmly and fitting it to the last, as will hereinafter more fully appear

In the drawing—

A represents the inner sole, through which are drawn the irregular stitches B.

C represents the upper, which has a row of similar stitches, D, around its lower edge.

The sole A is placed on the bottom of the last, and the upper C around the same, as shown in fig. 3.

e e, &c., represent lacings, which commence at E and run from the stitches B of the sole to the stitches D of the upper, and, being drawn tightly in the zigzag lines shown in fig. 3, draw said stitches to a state of extreme tension.

The course of lacings e is from the point E around the sole in the direction of the arrows in fig. 3, making a complete circuit of the same, and drawing the upper tightly around the last in all directions, and causing it to fit perfectly.

It is not necessary that the precise method of lacing given be followed, and it will be readily-seen that if any part of the upper is wrinkled or loose, it can be remedied by tightening the lacing at or near that part. This method does away with the use of nails in lasting, and is much more perfect than the old method.

The outer sole being put on after the operation above described, the lacings are protected and rendered permanent, while they can be at any time operated to tighten the upper by the removal of the outer sole; they also serve to strengthen the boot or shoe, thus making a much better article of commerce.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The method of lasting herein described, by means of the series of irregular stitches B in the sole A, and the row of loops D in the upper C, connected by lacings e, and operating in the manner and for the purpose set forth.

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

WILLIAM CHAMBERS.

Witnesses:

CARROLL D. WRIGHT, CHARLES F. BROWN.