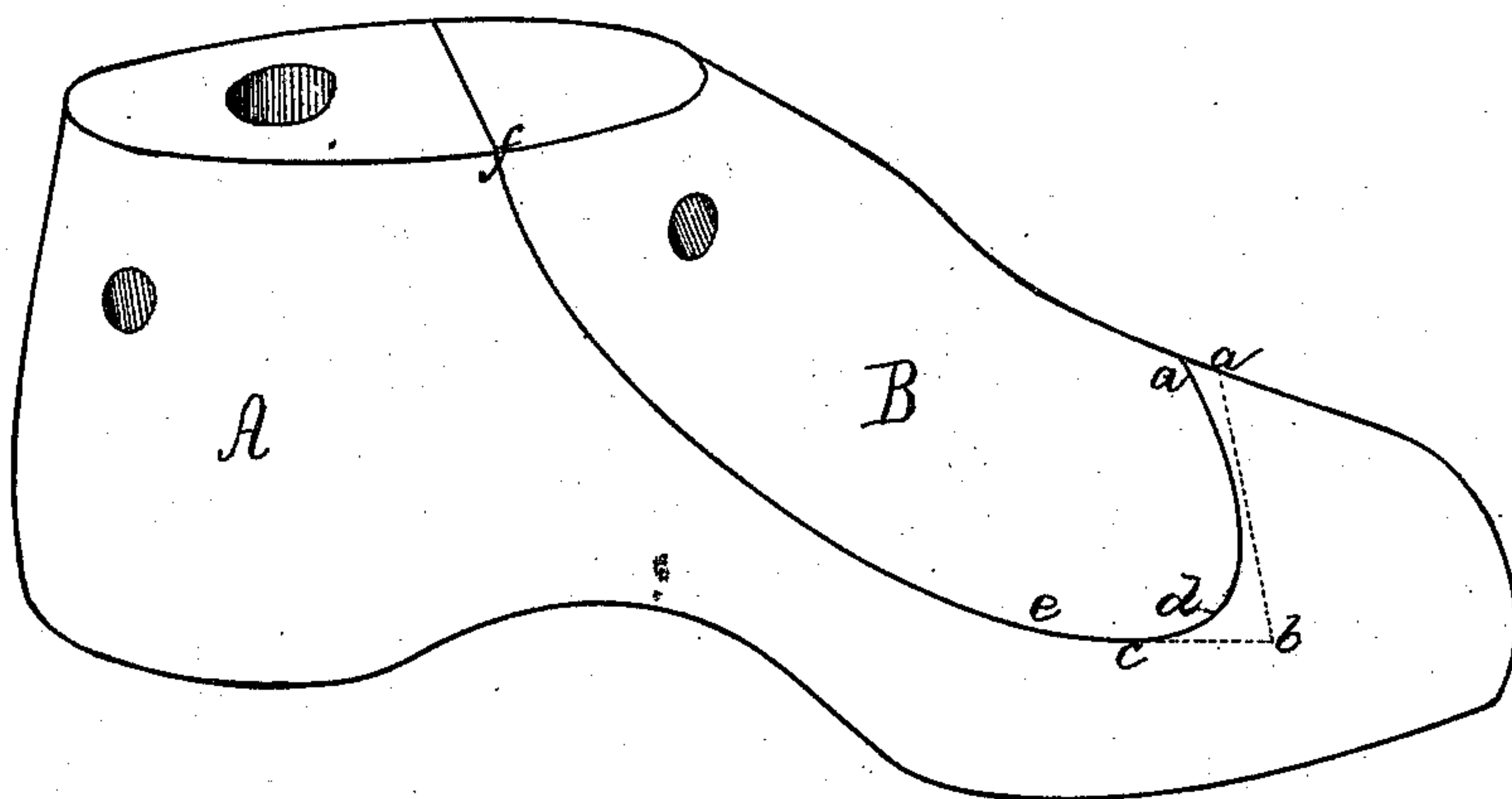


W. I. STETSON, S. C. CHAMBERLIN & J. C. BICKFORD.

LAST.

No. 173,426.

Patented Feb. 15, 1876.



Witnesses.

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UNITED STATES PATENT OFFICE.

WARREN I. STETSON, SPENCER C. CHAMBERLIN, AND JOHN C. BICKFORD,
OF BERLIN, ASSIGNORS OF ONE-FOURTH THEIR RIGHT TO CHARLES A.
SHAW, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LASTS.

Specification forming part of Letters Patent No. **173,426**, dated February 15, 1876; application filed
May 28, 1874.

To all whom it may concern:

Be it known that we, WARREN I. STETSON, SPENCER C. CHAMBERLIN, and JOHN C. BICKFORD, all of Berlin, in the county of Worcester and State of Massachusetts, have invented an Improvement in Lasts; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

The improvement relates to a new mode of cutting the block from the body of the last, and by a single cut of the saw, and whereby also the last so made is stronger, and less liable to be broken at the toe by falling, or by rough usage, or in the act of "leveling."

The block, as is well known, is usually cut from the last by making a cut across the top of the last near the toe, as shown in dotted lines *a b* in the figure, this cut extending about half-way or more through the last, and then another cut, *c b*, nearly at right angles to *a b*, is made, these two separate and independently-made cuts meeting at *b*. The disadvantages of this old mode of cutting, in addition to the fact that it is impossible to do it rapidly, and by a single act and continuous saw-cut, are, that the last is much weakened, and always has a tendency to break apart at the line of junction of the two cuts. It is almost impossible, practically, except with the extremest caution, to have the two cuts *a b* and *b c* precisely meet. On the contrary, almost uniformly they will cross each other more or less, and so leave a weak place, which invites a break or a split at that point. This is the cause of the destruction of large numbers of lasts, and a consequent addition to the cost of the boots and shoes.

Now, to avoid these objections and losses,

as well as to economize the cost of making a last, and to make a better and more durable article at less cost than the poorer one, is the object of our invention.

In the drawing, A is the body of the improved last, and B the block sawed therefrom by a single continuous saw-cut, the cut having no angular part, and no weak part near the toe; but, on the contrary, it is made in a curved line at the part near the toe, as shown by the line *a d e*, this cut then continuing from such curve to the ankle part of the block at *f* in any degree of curvature desired, or in a straight line, if preferred.

It will now be seen that there is no danger of breaking by a fall a last so cut, as there is no weak point and no sharp angular part, as in the old form; and there is no possibility, when making the single cut, of producing the overcut defect caused in the old method by accidentally making one saw-cut cross the other, thus leaving a gash or weakening crease. The curve near the toe also is of such form as to hold the block to place equally well as when cut in the usual angular form.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A last having its upper part, for receiving and holding the block, formed by a continuous saw-cut, curved from a point, *a d*, in the rear of the toe to a point, *f*, in the ankle portion of the last, substantially as shown and described.

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Witnesses:

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