(No Model.)

C. M. HAYDEN.

Lasting Tool.

No. 236,430.

Patented Jan. 11, 1881.

Fig. 1.

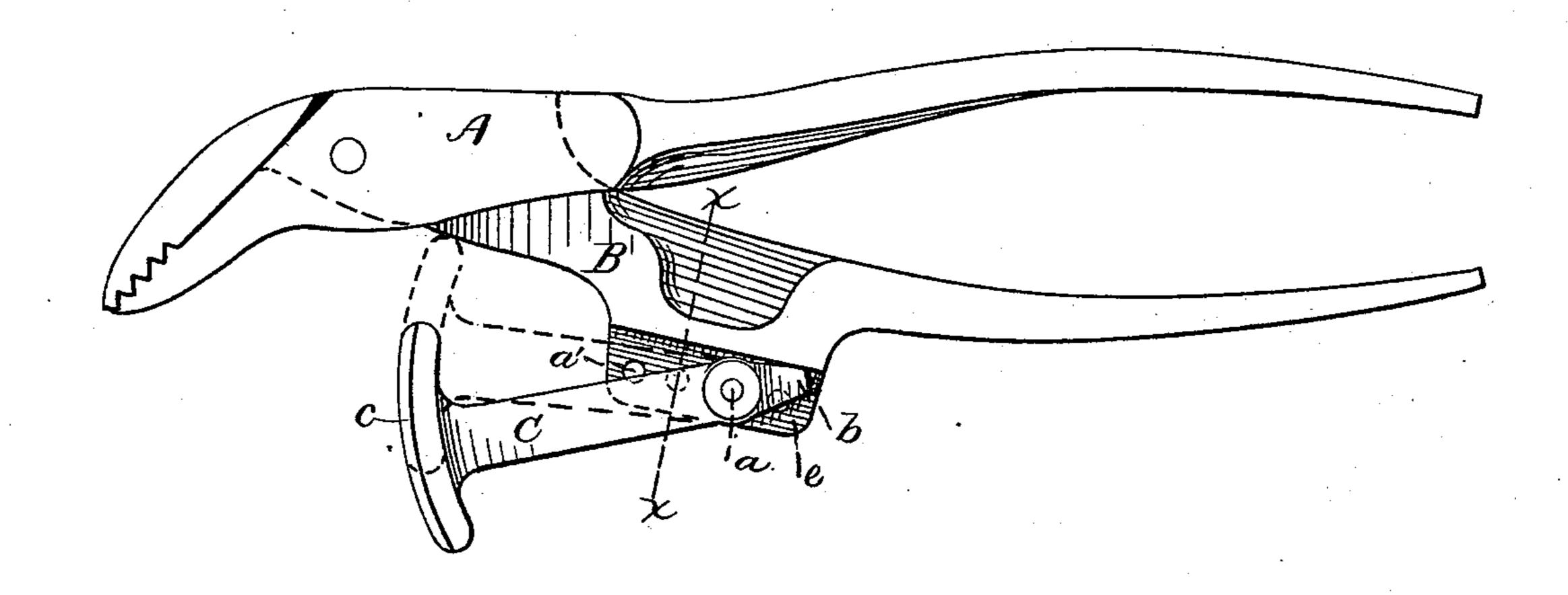
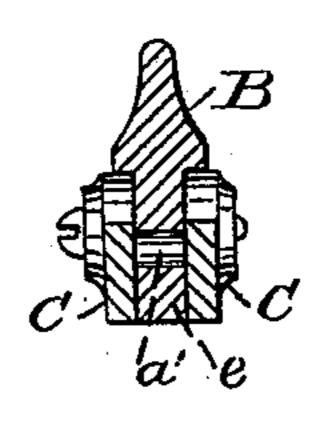


Fig. 2.



Witnesses. WH. H. Emmons J. Bann Lad

Streventor. bh. M. Hayden by St. Adams All-

## United States Patent Office.

CHARLES M. HAYDEN, OF BRIDGEWATER, ASSIGNOR TO FRANCIS T. CRAFTS, OF ABINGTON, MASSACHUSETTS.

## LASTING-TOOL.

SPECIFICATION forming part of Letters Patent No. 236,430, dated January 11, 1881.

Application filed October 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. HAYDEN, of Bridgewater, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in Shank-Lasters, of which the following is a specification.

My invention relates to an improvement in lasting-tools having a movable fulcrum; and it consists in the combination, with the usual form of pinchers constituting the lasting-tool, of an adjustable rocking fulcrum, having a curved braing-surface which is caused to bear on the side of the boot or shoe to be lasted in such a manner as to enable the edge of the upper to be griped and drawn over the inner sole without raising the edge of the upper.

My invention is illustrated in the accompanying drawings, in which Figure 1 is a side view of an implement embodying my invention. Fig. 2 is a section of the same on the line  $x \ x$ .

A is the upper shank, of which the lower jaw forms a part; and B is the lower shank, carrying the upper jaw. e is a flange or rib on the under part of shank B, to which is pivoted, at a, a fulcrum-arm, C, having an extension, b, at the rear of the pivot, which bears against a shoulder on shank B to prevent the arm C from dropping lower than is necessary.

30 At the outer or forward end of the arm C is a curved surface or bearing-face, c, forming the arc of a circle the radius of which is central at the pivot a.

The fulcrum-arm C-may be adjusted toward or from the jaws of the tool by setting the

pivot a in the separate holes a' in the flange e, as required.

When in operation, the face c of the fulcrum being properly adjusted to its position, the jaws gripe the edge of the upper, and the combined action of the curved edge c and pivoted fulcrum-arm serves to draw the edge nearly in close contact to or parallel with the bottom of the last without lifting up the edge of the upper, as in the use of the ordinary fixed fulcrum. The fulcrum-arm, with its curved face, acts also as a toggle joint to increase the purchase of the tool. The shanks or handles do not require to be griped by the hand, as the simple pressure upon the upper shank serves to hold the jaws pressed together upon the edge of the upper.

With my improvement a shoe can be lasted much more easily, in less time, and with much better result than with the ordinary tool hav- 55 ing a fixed fulcrum.

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

The adjustable fulcrum arm C, provided with the curved face c and pivoted to the 60 shank B, as shown, in combination with the shanks A and B and their respective jaws, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub- 65 scribing witnesses.

CHARLES M. HAYDEN.

Witnesses:
Jos. H. Adams,
F. T. Crafts.