

(No Model.)

N. GILLARD & H. LOEWER.
BOOT TREE.

No. 441,657.

Patented Dec. 2, 1890.

Fig. 1.

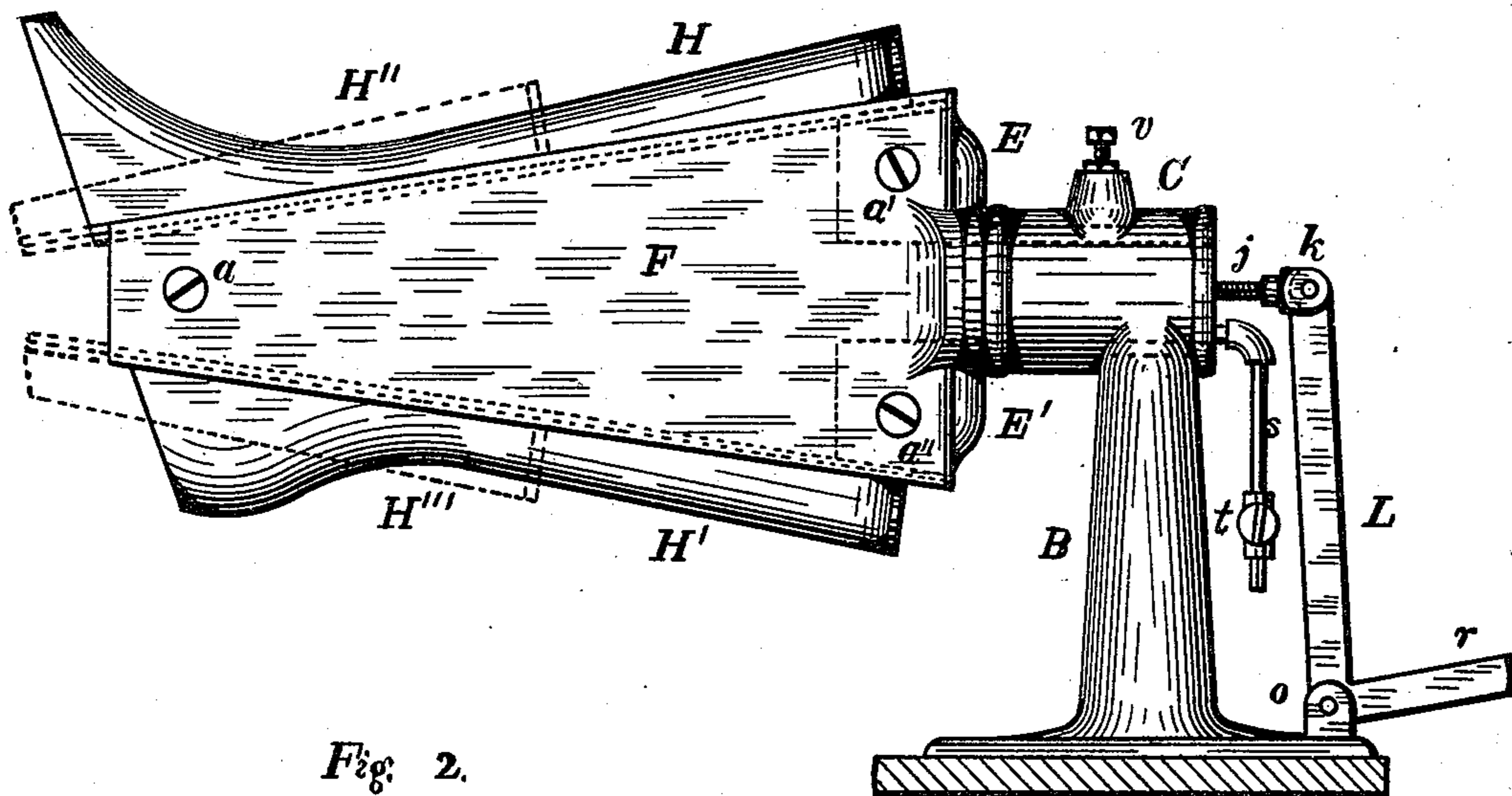
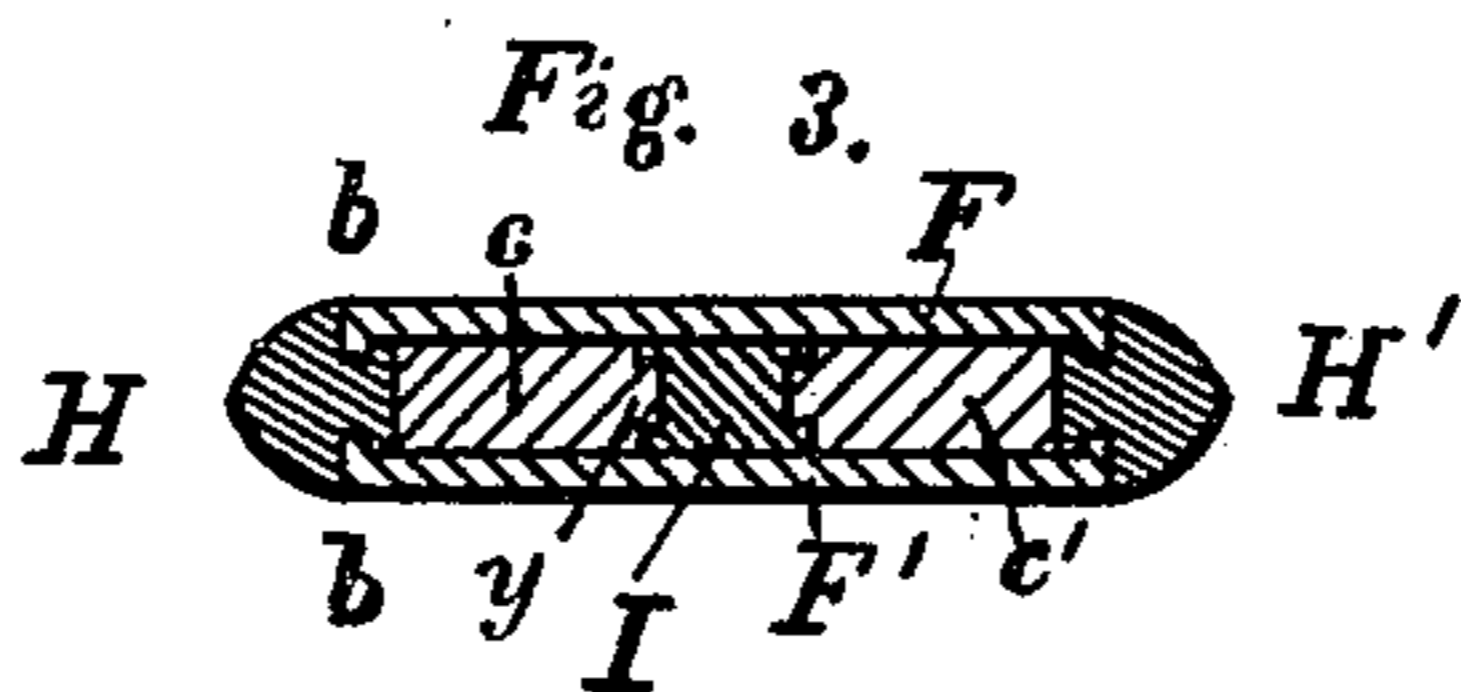
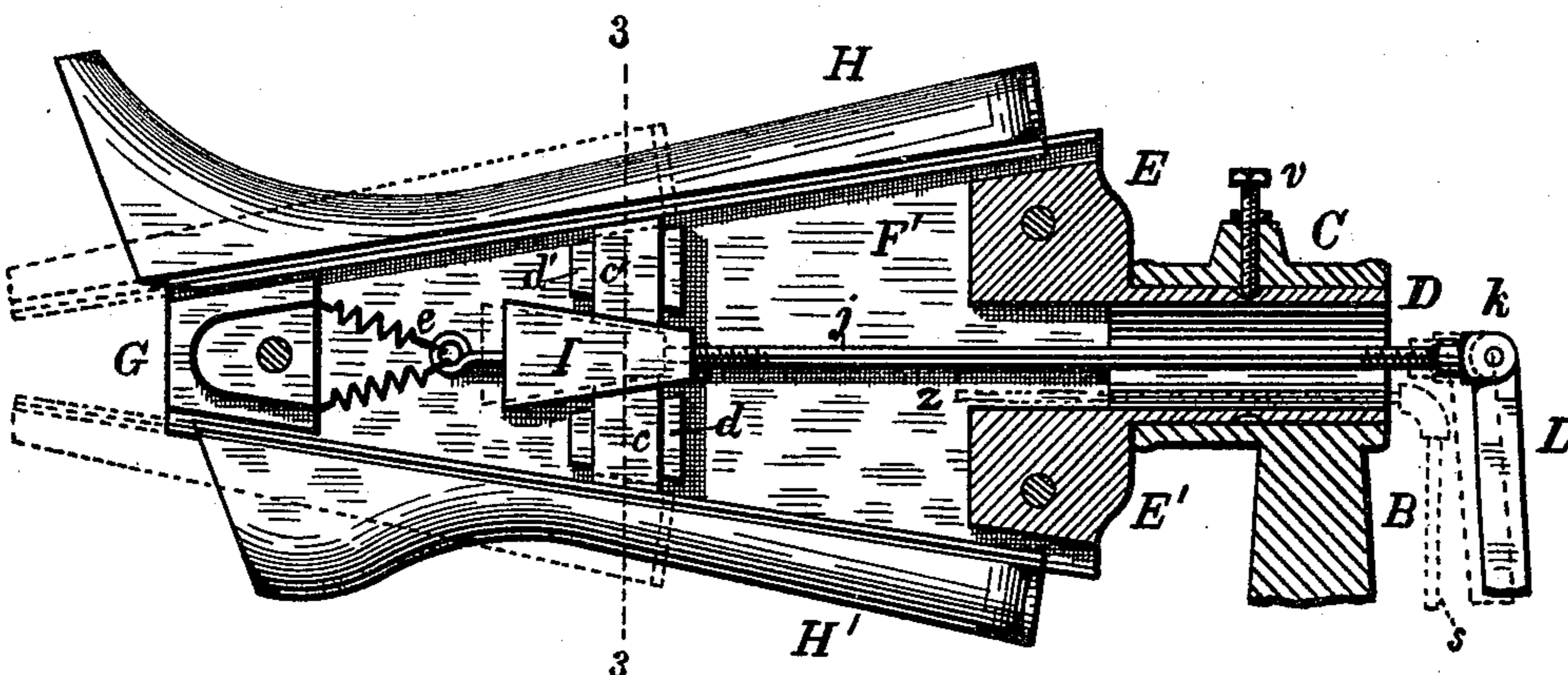


Fig. 2.



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UNITED STATES PATENT OFFICE.

NATHANIEL GILLARD AND HENRY LOEWER, OF ROCHESTER, NEW YORK,
ASSIGNORS OF ONE-THIRD TO PATRICK BYRNES, OF SAME PLACE.

BOOT-TREE.

SPECIFICATION forming part of Letters Patent No. 441,657, dated December 2, 1890.

Application filed November 25, 1889. Serial No. 331,484. (No model.)

To all whom it may concern:

Be it known that we, NATHANIEL GILLARD and HENRY LOEWER, of Rochester, in the county of Monroe and State of New York, have jointly invented certain Improvements in Machines for Treeing Shoes, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to certain improvements in machines for sustaining shoes in position to be conveniently treed or otherwise operated upon preparatory to boxing the said goods for the market.

Our improved machine is represented in the accompanying drawings, and the novel features thereof specified in the claims annexed to the said specification.

Our improved machine for treeing shoes is represented in the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a central longitudinal section. Fig. 3 is a transverse section on the line 3 3, Fig. 2.

Our improved shoe-tree consists, essentially, of the sliding shoe-stretching jaws $H H'$, arranged to slide at an angle with each other on the rotatable supporting-frame $F F'$, and the clamps $c c'$, adapted to secure the jaws in any desired position, the clamps being constructed so as to be operated from a treadle by the elbow-lever L and rod j .

A represents any suitable bench or table, on which the apparatus is supported on the standard B , provided with a hollow socket C , in which the tubular support D for the frame revolves, being secured therein by a set-screw v , entering a groove around the tubular support, or other suitable device. The tubular support is provided with the projecting lugs or wings $E E'$, to which the plates $F F'$ of the frame are secured by the screws $a' a''$. At their outer ends one of the plates is provided with a lug or distance-piece G , through which the screw a passes.

The jaws $H H'$ are provided along their inner edges with the projecting ribs $b b$, Fig. 3, which engage with corresponding grooves in the edges of the frame-plates $F F'$, being free to slide therein, except when secured by the clamps. It will be observed that the jaws are

given a contour adapted to fit the interior of the shoes, and that they are arranged at an angle with each other, so that when slid partially off of the frames their outer ends approach each other, so as to admit of the application of the shoes thereon. The jaws are movable lengthwise independent of each other, so that by sliding the front jaw farther out from the frame the smallest shoes may be placed on the jaws. The jaws are separated after the shoe has been placed thereon by being slid along the inclined edges of the frame, so as to secure the shoe firmly thereon while it is being dressed or treed or otherwise prepared for the market. The jaws are clamped firmly in place during this operation by the movement of the wedge I , the inclined sides of which bear against the inner ends of the clamp-blocks $c c'$ and force them outward, so as to bind the jaws in the grooves in the frame. The clamp-jaws slide between suitable lugs $d d'$ on the frame-plate. As indicated at y , Fig. 3, the wedge I may be provided with a dovetailed groove, into which a rib on the clamp-blocks of corresponding shape is fitted, so that the movement of the wedge draws the blocks inward as well as forces them outward. The wedge is drawn toward the left hand in Fig. 2 by the spring e , which may be conveniently attached to the lug G by being bent around the same, as shown. The rod j , by which the wedge is operated, extends outward through the tubular support D , being attached to the upper end of the elbow-lever L by a swivel or other device, which permits the rod to turn axially when the jaws and frame are revolved in the socket C . The lever L is pivoted at o to the standard B or the table A , the other end r of the lever being connected by a rod or chain to a foot-treadle, by the depression of which the operator clamps the jaws in place.

In order to provide for the application of a certain amount of heat to the interior of the shoe during the finishing operation to which it is subjected while on the jaws, we introduce into the tubular support D on the frame a burner z on the end of a tube s , provided with a regulating-cock t , by which a small flame of gas may be caused to afford the requi-

site supply of heat in the proper location to effect the desired result.

We claim—

1. The combination, with the frame F F',
5 of the sliding shoe-stretching jaws H H', arranged to slide at an angle with each other along the edges of the frame, and the movable clamps c c', arranged to clamp the jaws in any desired position, substantially as de-
10 scribed.

2. The combination, with the frame F F',

of the sliding shoe-stretching jaws H H', arranged to slide at an angle with each other along the edges of the frame, the movable clamps c c', and wedge I, substantially as de- 15 scribed.

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Witnesses:

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