No. 877,826. PATENTED JAN. 28, 1908

C. BENSCHEIDT.

SUPPORT FOR USE IN FINISHING LASTS.

APPLICATION FILED JUNE 6, 1907.

Fig. 1.

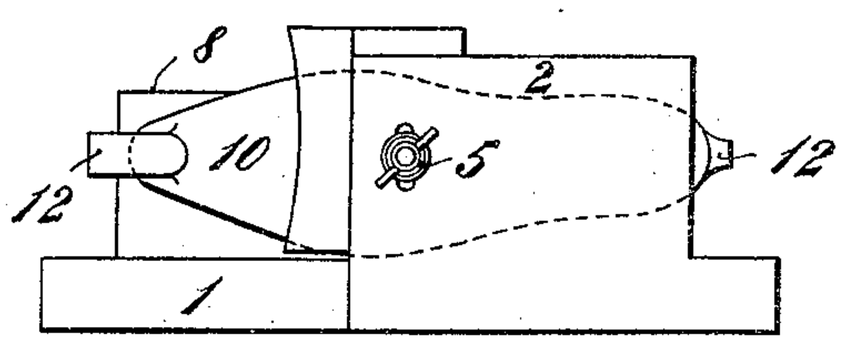


Fig. 2.

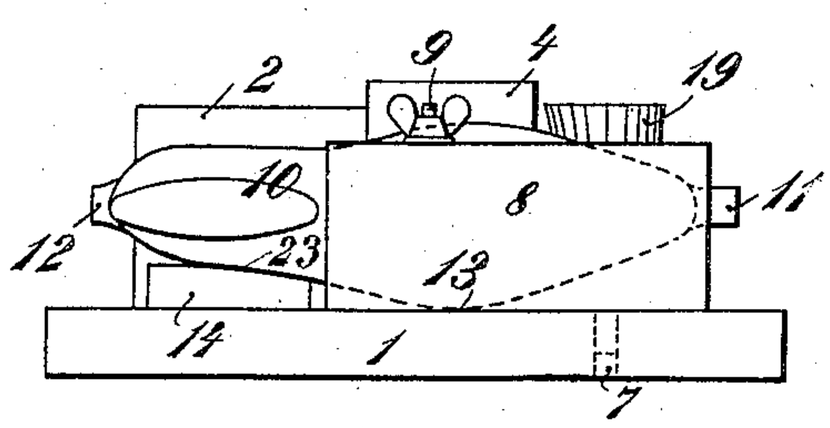


Fig. 3.

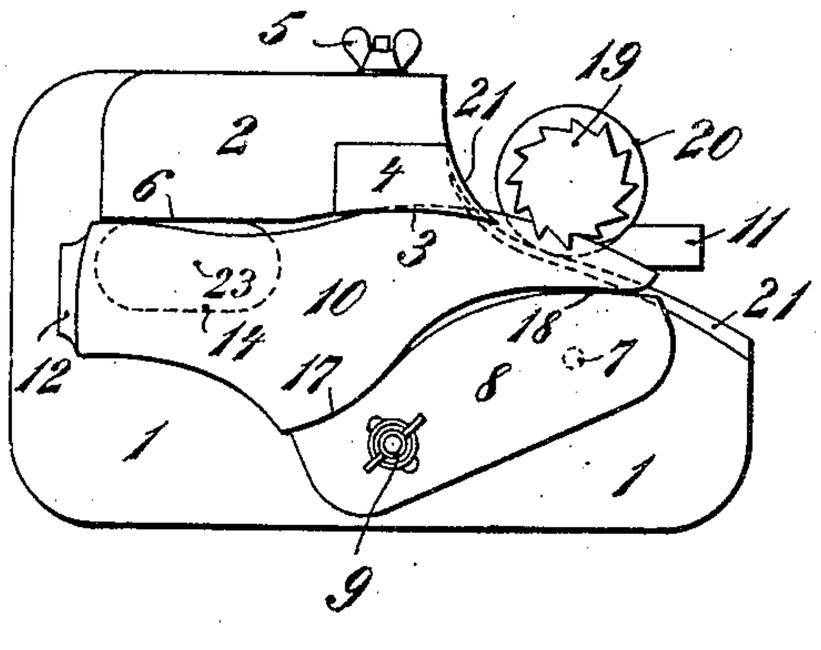


Fig. 4.

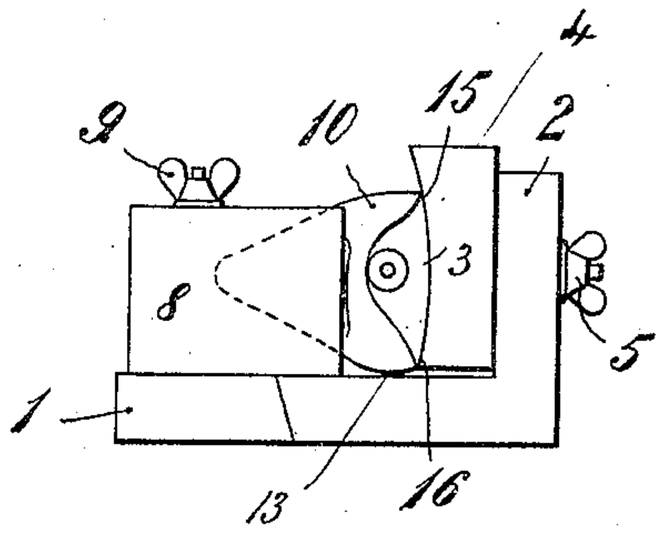
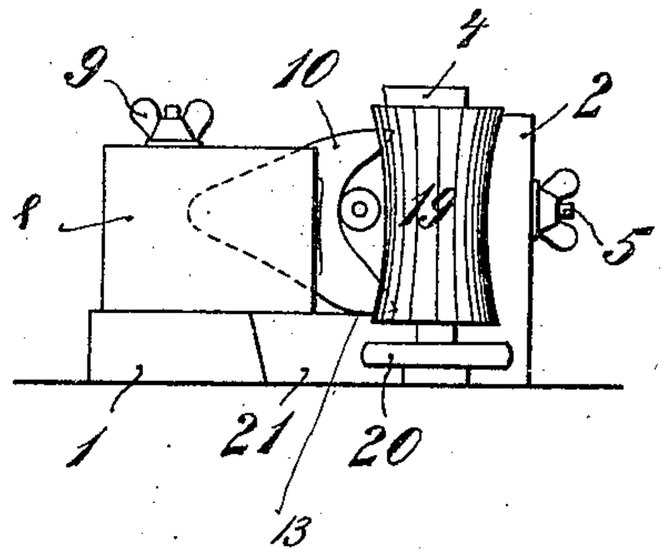


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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SUPPORT FOR USE IN FINISHING LASTS.

No. 877,826. Specification of Letters Patent. Patented Jan. 28, 1908.

Application filed June 6, 1907. Serial No. 377,664.

To all whom it may concern:

Be it known that I, CARL BENSCHEIDT, engineer, residing at Alfeld-on-the-Leine, Germany, have invented certain new and useful Improvements in or Relating to Supports for Use in Finishing Boot and Shoe Lasts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a support for use in machining or finishing lasts for shoes and boots which makes it possible to secure the lasts in such a secure and exact position, from which they can be readily released, that the foremost portion of the sole surface on which is situated the projection supporting the body portion, which must remain during milling, can be mechanically removed by means of the milling cutter.

A device according to this invention is shown in the accompanying drawings in which:

Figure 1 is a front elevation, Fig. 2 a back elevation, Fig. 3 a plan view, and Figs. 4 and 5 side elevations of the device.

The milling cutter is shown in the latter figure, but it is omitted in Fig. 4.

On a bed plate 1 is arranged a fixed projection or abutment 2, on which is mounted in a vertically adjustable manner a part 4 slightly recessed on the face 3, which can be fixed by means of a screw 5. The face 6 of the abutment 2 is at a right angle to the face of the bed plate 1. Opposite the abutment is rotatably mounted about a pin 7 an adjustable part 8 which can be fixed in position by means of a screw pin and thumb nut 9.

The last 10 which before the milling is provided with the heel and toe projections 11 and 12, is placed in the manner illustrated between the abutment 2, 4 and the adjustable part 8 on the bed plate 1, so that its toe part lies between the parts 4 and 8. The position of its longitudinal axis is determined, on the one hand, by its being supported at 13, and on the other hand by a wedge 14 on which it rests at the point 23, and which is secured to the bed plate 1. The last is prevented from rotating about its longitudinal axis by the sole resting not only with a portion of the heel against the vertical surface 6 of the abutment 2, but also with two points arranged in line at a right angle, or nearly at a right angle, to the longitudinal axis, namely at 15 and 16 against the part 4. The sole is thus supported at three points. The upper side of the last rests with two points, namely at 17 at the instep, and at 18 at the toe, against the adjustable part 8. The last is thus supported in a tapering recess or opening, into which it can be introduced with the toe forward, at seven points, namely at three points at the surface of the sole, at two points at the instep and toe, and at two points at the lateral surface, so that it is completely secured against movement and rotation, and the workman can keep it fast with a slight pressure, so that the projection 11 at the point can be removed by the milling cutter 19.

In order that the milling cutter should produce the exact shape of the surface of the sole, it is connected with a guide roller 20 which, during the milling, bears upon the curved limiting surface 21 of the bed plate, in such manner that the workman pushes the whole device resting loosely on the table of the milling machine, against the roller 20 which travels on the guide surface 21, the projection 11 being in this way removed from the front end of the last.

In order to enable the same bed plate to be used for lasts of different sizes the surface 21 of the bed plate 1 is so curved, that if the support is pressed with the curved surface 21 against the roller 20 which is vertically adjustable independently of the milling cutter 10, the way of the support if the roller is placed close to the surface of the table of the milling machine is different from the way the support makes if the roller is placed in at another level. The surface thus represents a series of templets arranged one above the other and utilized singly according to the position of the roller 20, and corresponding to different curved shapes of sole of lasts of different sizes.

The support 14 must be exchangeable for different shapes of lasts, and the supporting part 4 for the "ball" of the foot is vertically adjustable.

What I claim is:

1. In a support for a last, the combination, with a base plate provided with a stationary block 2 having a recess at one end, of a vertically adjustable block 4 provided with a concave face and secured in the said recess, a curved block 8 pivoted at one end to the said base plate and provided with a clamping

device, and an adjustable wedge-shaped support for the heel of the last slidable on the said base plate.

2. In a support for a last, the combination, with a base plate provided with a stationary block 2 having a recess at one end, of a vertically adjustable block 4 provided with a concave face and secured in the said recess, the end portions of the said blocks 2 and 4 and the base plate being provided with curved guide surfaces 21, a curved block 8 pivoted at one end to the said base plate and provided with a clamping device, and an adjustable wedge-shaped support for the heel of the last slidable on the said base plate.

In testimony whereof I affix my signature, in presence of two witnesses.

CARL BENSCHEIDT.

Witnesses:
PAUL R. THOMPSON,
JAMES M. BOWCOCK.