Oct. 7, 1930. E. J. PELLETIER 1,777,676

APPARATUS FOR RESOLING SHOES

Filed May 7, 1928

Fig. 1,

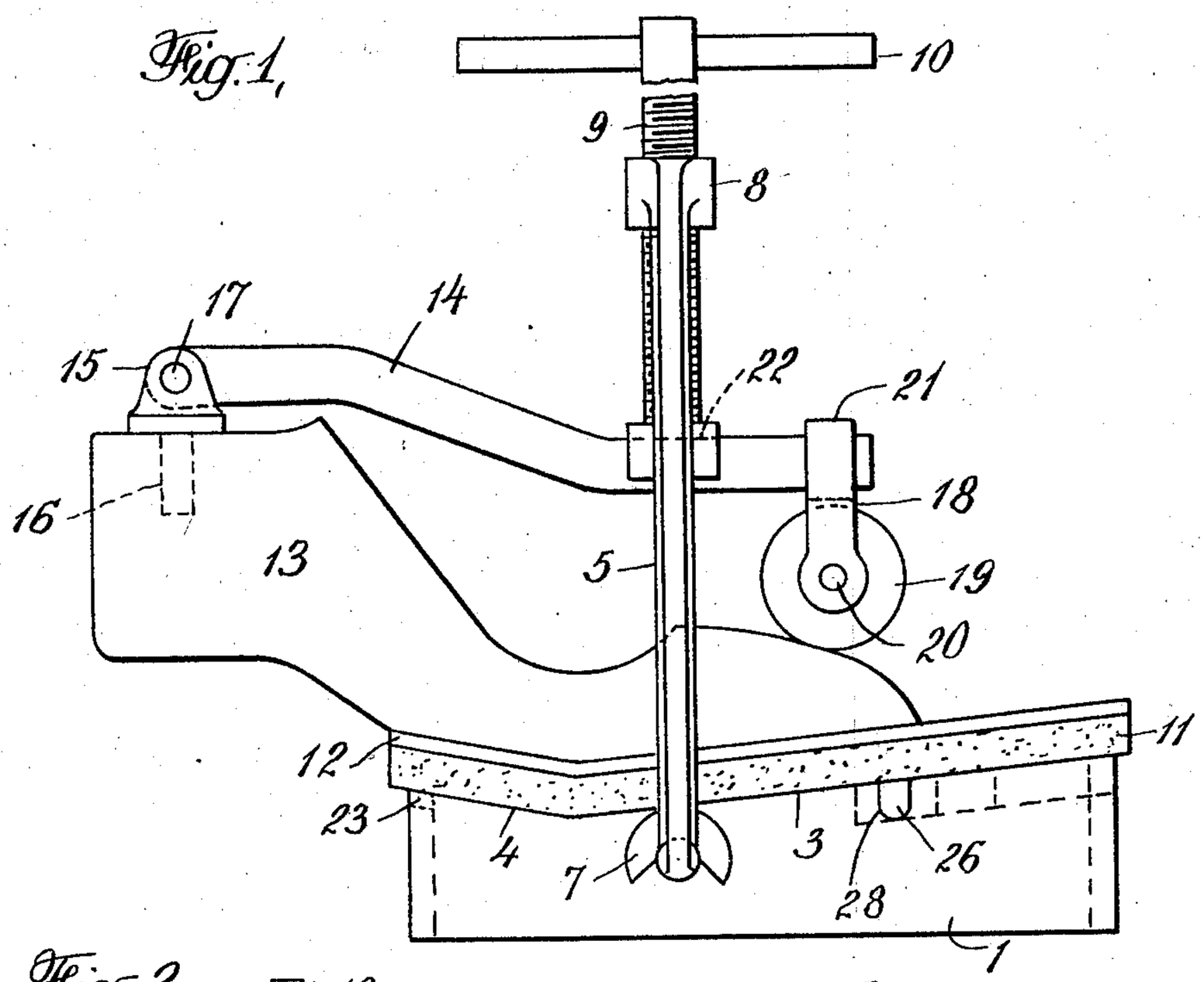


Fig. 2,

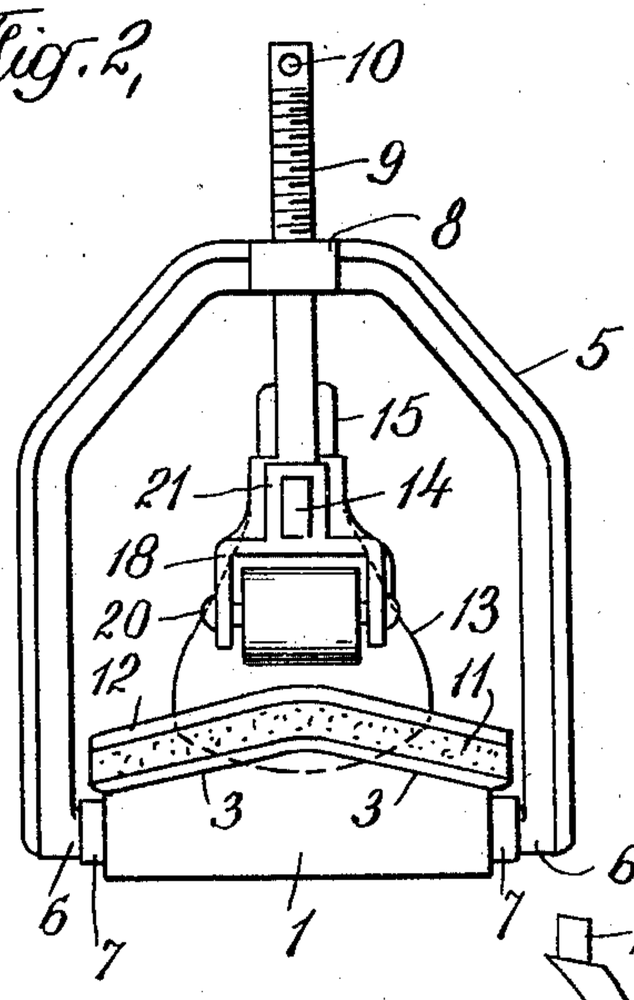


Fig. 3,

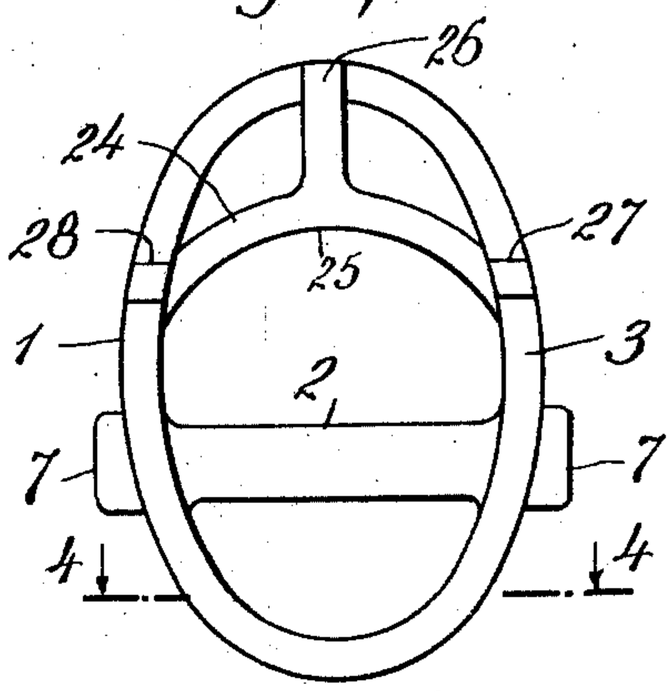


Fig. 4,

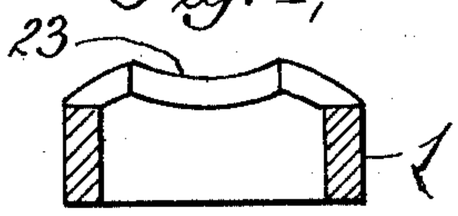
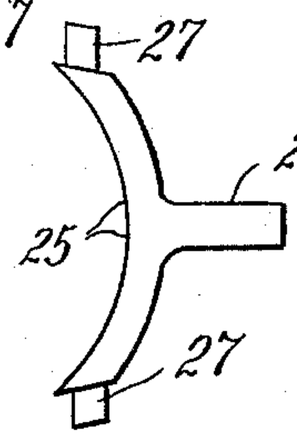


Fig. 5,



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UNITED STATES PATENT OFFICE

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APPARATUS FOR RESOLING SHOES

Application filed May 7, 1928. Serial No. 275,869.

My invention relates to improvements in apparatus for resoling shoes; and particularly to a press by which a new sole can be attached to a shoe by cementing the sole in place, without the use of either nails or stitches.

An object of the invention is to provide a simple but efficient device by which a sole can be quickly and easily secured to a shoe in a manner that causes the sole to adhere to the shoe throughout its extent, and eliminates the likelihood of the sole afterwards becoming separated.

The nature and advantages of the invention are set forth in the description that follows, and the novel features are pointed out in the appended claims. While I illustrate herein a preferred form of my invention, I may obviously make changes in the shape, size and arrangements of parts, without abandoning the principle of the invention or exceeding the scope thereof.

On said drawings,

Figure 1 is a side view of a resoling press according to my invention;

Figure 2 is a front view of same; on a slightly reduced scale;

Figure 3, a top view of the base or bottom frame of such a press; on the same scale as Figure 2;

Figure 4 is a section on the line 4—4 of Figure 3; and

Figure 5 is a view of a detail of the press.

The same numerals identify the same parts throughout.

My invention is especially adapted for cementing soles on the shoes of women, but it can of course be used for men's shoes also. The press comprises a base in the form of an open frame 1, having a cross bar 2. The upper edge of this frame slopes downward from front to back, as indicated at 3, but near the back the upper edge turns upward again on both sides of the frame, as shown at 4. At 5 is an inverted yoke, the ends of the arms of which are turned in at 6 to engage under bearing projections 7 at the opposite sides of the frame 1. At the middle of the yoke is a threaded bearing 8 for a threaded pressure rod 9, having on its upper extremity a handle 10.

Supported on the base 1 is a pad of sponge rubber 11 or other suitable elastic cushioning material covered by a sheet of stiffer material, such as leather or the like 12. During the adhesive process the shoe receiving a new sole rests on the leather 12, and the sole during its attachment to the shoe is pressed down on the leather until the cement dries and the sole sticks in place. To fill the shoe, a last or form 13 of substantially the same size as the shoe is chosen, this last carrying a pivoted pressure lever 14. In the top of this last adjacent the rear end is a U-shaped bearing comprising two lugs 15 and a stem or shank 16, which fits into an opening in the last; and the lugs are perforated to receive a pivot pin 17 to engage the lever when the end of the latter is disposed between the lugs 15. At the opposite end of this lever is an inverted yoke 18, between the arms of which is a pressure roller 19, mounted on a pin 20 held in openings in the arms of the yoke 18. The shank 21 of this yoke has an opening of the same shape as the cross section of the lever 14 so that the yoke can be made to slide along the lever when adjustment of the pressure roller 19 is necessary. The lower extremity of the pressure rod 9 thrusts the pressure lever downward and may be cleft to receive this lever, as indicated at 22.

In practice, to resole a shoe, the shoe and the new outsole to be attached to the shoe are properly treated with a suitable adhesive. The shoe is then put on the last or form 14, and the sole is laid on the leather 12, enough cement being employed to make sure that the sole and the shoe will be properly secured together. The handle 10 is now turned and the rod 9 is forced down, causing the lever 14 to force the pressure roller 19 to press the shoe and the sole under it againts the leather 12 and rubber pad 11. The reaction of the cushion 11 causes the pressure to be distributed over the leather 12, and made uniform in degree against the sole on the shoe, so that the cement makes every part of the sole fast against the shoe.

The layer of leather 12 is cemented to the

cushion 11 and makes contact underneath with the sole being put on the shoe. The sponge rubber distributes the pressure, and the leather 12 keeps the rubber out of contact with the sole. If the leather layer 12 were omitted, the sole as it is being cemented on the shoe would sink into the top of the sponge rubber, which would curl up around the edge of the sole, and thus the drying of the cement would be hindered.

At the rear of the frame 1, the top edge 4 can be made hollow or concave as shown clearly in Figure 4 at 23, so that the new sole as it is cemented on is forced to better advantage against that part of the shoe which is immediately under the arch of the owner's foot.

For large shoes, the reducer 24 (Figure 5) is removed from the base 1. This reducer is in the form of a wide yoke having arms 25 and a shank 26. The arms and shank have projections 27 to be received in recesses 28 of the frame 1. With relatively small shoes, the reducer is utilized, and the toe part of the shoe will then reach forward as far as the point where the reducer is placed. To resole large shoes, however, the reducer must be taken out, so that the cushion effect of the sponge rubber 11 can extend all the way to the front end of the frame 1, and therefore all over the sole as it is cemented to the shoe.

Because of the pivot pin 16, the lever 14 can be swung from side to side to some extent, and the lower end of the pressure rod 9 can be shaped to allow a certain amount of this side play to the lever 14. The roller 19 can be slipped along the lever to any desired point. Thus the best adjustment can be obtained for compressing the last with the shoe and sole down against the layer 12 on the sponge rubber 11.

While the device is described as designed for attaching half soles, the same principle can be utilized for attaching whole soles to a shoe by cementing. In that case the frame 1 will have a contour corresponding to that of the entire shoe, instead of merely the forward part thereof.

With a press of this description, a sole can be attached to a shoe very readily, and made to adhere to the shoe over its whole surface, because of the even pressure distributing and cushioning effect of the sponge rubber 11.

The press is quite simple in construction, inexpensive to manufacture, and very easy to operate; and certain in its results.

Having described my invention, what I believe to be new and desire to secure and protect by Letters Patent of the United States is:

1. A press for soling shoes comprising an oval frame having sloping top edges, a cushion of sponge rubber resting on said edges, a layer of relatively stiff material on said cushion, a yoke having its arms with inturned ends to engage bearing projections on the side of the frame, a pressure rod having screw threaded engagement with the yoke, a last having a pressure lever mounted thereon to swing up and down or sideways, and a pressure roller on the lever, the rod being in line with the lever to engage the same when screwed down, so that when a shoe bearing a sole is on said last, it can be forced down against the layer, and the pressure distributed by the cushion over said sole to secure it against the shoe over its whole extent, the base having a recess in its rear end adjacent the arch supporting part of the shoe, and a size reducer for said press.

2. A press for attaching soles to shoes, comprising a frame, and a size-reducer fitting into one end of the frame, the size-reducer having a plurality of arms engaging the frame and supported thereby, together with means for compressing the sole against the shoe to cause it to adhere thereto.

Signed at Brooklyn, in the county of Kings and State of New York, this 28th day of March, A. D. 1928.

EMILE J. PELLETIER.