Nov. 16, 1943. A. PERRI 2,334,437

SHOE SOLE PRESS

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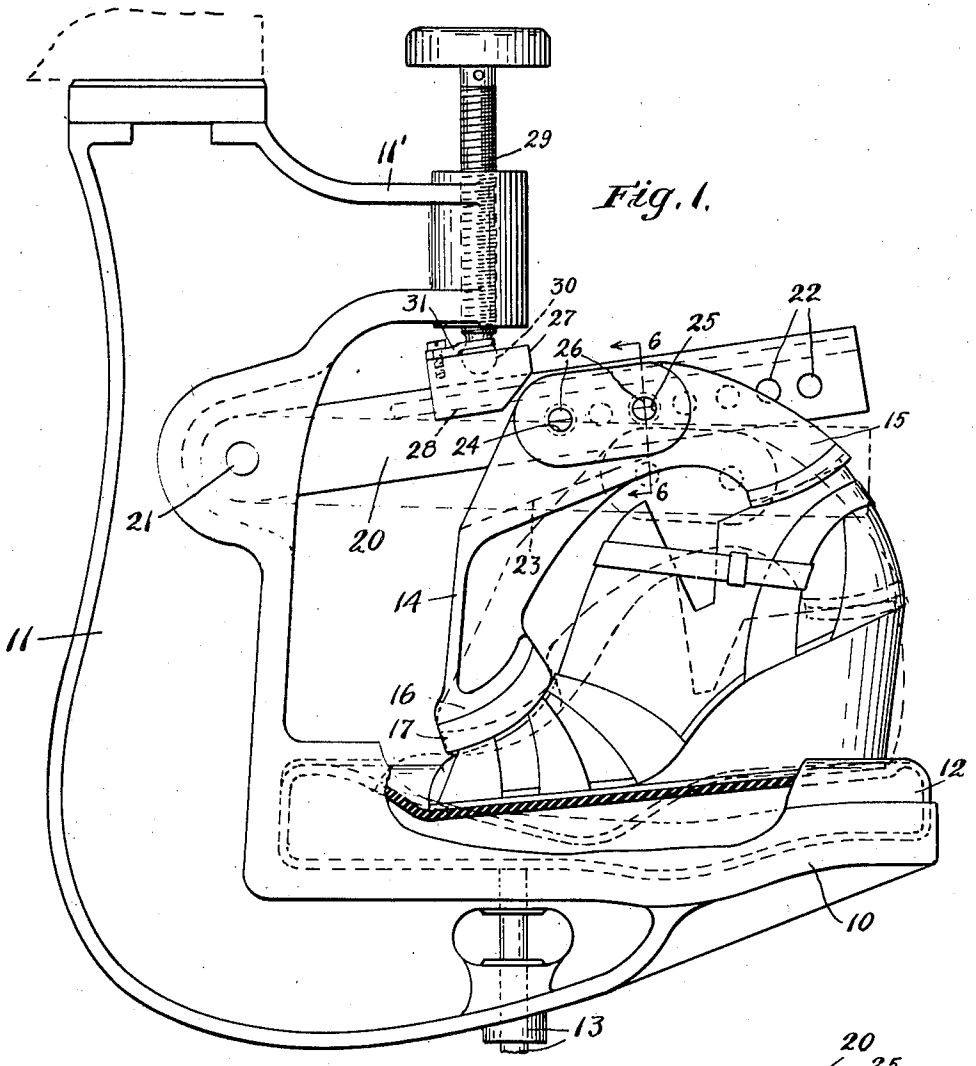


Fig. 1.

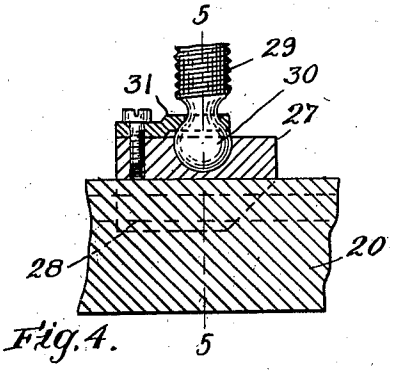


Fig. 4.

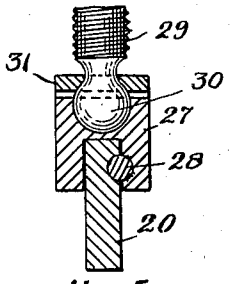


Fig. 5.

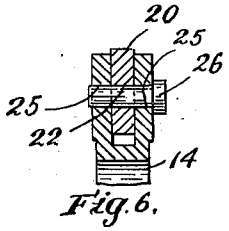


Fig. 6.

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SHOE SOLE PRESS

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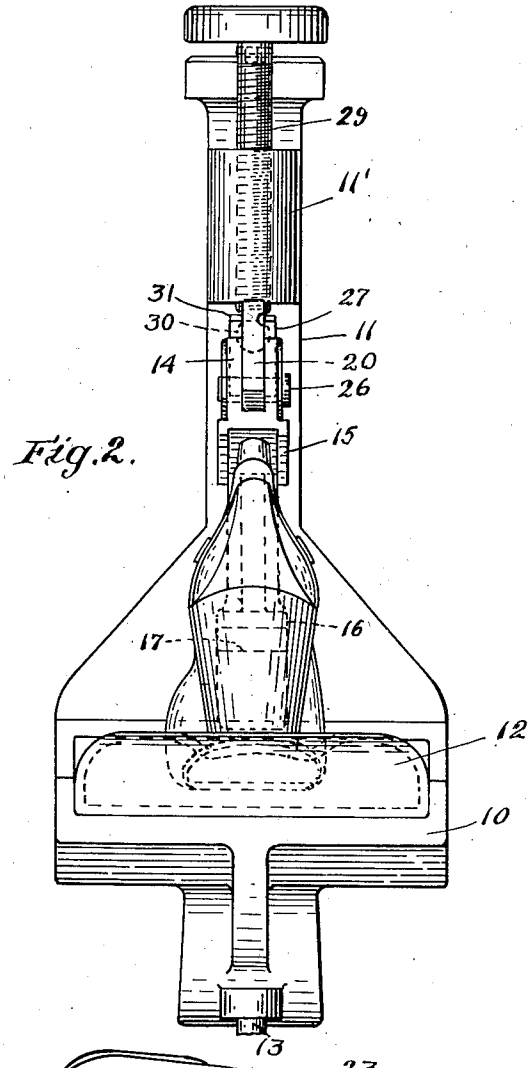


Fig. 2.

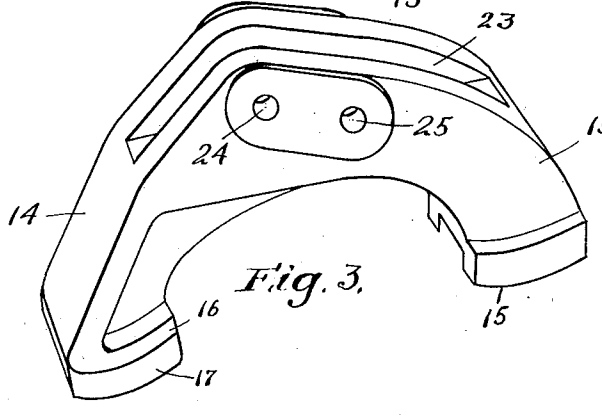


Fig. 3.

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UNITED STATES PATENT OFFICE

2,334,437

SHOE SOLE PRESS

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Application September 19, 1940, Serial No. 357,369

3 Claims. (Cl. 12—33)

This invention relates to certain improvements in presses of the type which are employed in pressing an outer sole against the bottom of a shoe when the sole is attached by a cementing process and more particularly to that type in which an angular shaped member simultaneously engages the heel and toe portions of the last, to resist the pressure of the bladder when it is inflated to press the sole against the bottom of the shoe.

The objects of my invention are to provide a press which is suitable for a considerable range of sizes of shoes, so that by making a simple adjustment the press may be made effective for all shoes which are ordinarily manufactured, and with which uniform pressure on the sole throughout its entire length, may be secured. Also to provide a press with which the shoes may be placed in position and removed with increased facility without the manipulation of shoe clamping levers.

I accomplish these objects by means of the construction hereinafter described in the following specification and as illustrated in the accompanying drawings in which:

Fig. 1 is a side elevation of a press illustrating a preferred embodiment of my invention.

Fig. 2 is an end elevation thereof.

Fig. 3 is a detail view of the last engaging member.

Fig. 4 is a detail sectional view of the holding bar adjusting means.

Fig. 5 is a detail sectional view at line 5—5 of Fig. 4.

Fig. 6 is a detail sectional view at line 6—6 of Fig. 1.

According to my invention an L-shaped frame is provided having a horizontally disposed base portion 10 and a vertically disposed arm portion 11. An inflatable bladder 12 is supported on the base portion to which an air supply 13 leads at its bottom, so that when the bladder is inflated it may be pressed against the bottom of a shoe held thereagainst, as in all presses of this type.

I further provide a last engaging and holding member 14, which consists of a rigid casting of curved formation having an engaging portion 15 for the top side of the heel end of a last, and a forepart engaging portion 16, so arranged that, when the portion 15 is engaged with the top of the heel end of the last, the portion 16 will bear on the top of the forepart of the last or of a shoe on the last. Said portion 16 has a pad 17 thereon, so that it will not cause injury to the shoe upper.

The means for holding the member 14, against the action of the bladder when it is inflated consist of a bar 20 which is connected at one end to the upright arm portion 11 of the frame by a pivot 21. Said bar has a series of equally spaced holes 22 therein throughout the greater portion of its length. The top portion of the rocker arm 14 has a slot 23 in which the lower edge portion of bar 20 is located and the ears formed by said slot have two holes 24, 25, which are spaced with relation to the holes 22, so that pins 26 may be placed in the holes 24, 25 and in two of the holes 22, to lock the member 14 to the bar, as shown in Figs. 1 and 6. A clip 27 is mounted astride the top edge portion of bar 20 and is connected thereto by a spline 28 and a screw 29 is threaded in the top overhanging portion 11' of the arm 11 and has a ball 30 at its lower end which engages the clip 27 in a socket formed in the top side of the clip, the ball being attached to the clip by a clamp 31, see Figs. 4 and 5.

As thus arranged the bar 20 and holding member 14 will be constantly supported, and the position thereof will not need to be changed for a succession of shoes of the same style and size. Adjustment for different sizes may be made by changing the position of the member 14 on the bar, and by adjusting the inclination of bar 20 by the screw 29, the clip 27 being slidable on the bar and the ball and socket connection permitting angular movement of the bar with relation to the screw.

When the bladder is inflated the member 14 is held in a position, suitable adjustments having been made, to hold the last and shoe thereon, so that a uniform pressure will be applied to the outer sole throughout its entire length. The construction may be such that the lower edge of the bar engages the bottom of the slot 23 in member 14 throughout the length of the slot, so that only one pin 26 is necessary to hold the member 14 rigidly with the bar, but if the bar does not engage the bottom of the slot in this manner a limited tilting of the member 14 with relation to the bar will be permitted if only one pin is employed, and it may be locked with relation to the bar if two pins are employed. With either arrangement the arm 14 will be held against tilting with relation to the bar when pressure is applied by the bladder.

The above described construction is such that

adjustment may be made so that uniform pressure may be applied to all parts of the sole simultaneously and the shoes may be placed in position and removed with facility, as the member 14 is constantly supported, and it is merely necessary to inflate and deflate the bladder. Deflation of the bladder releases the shoe clamping pressure so that the shoe can be removed from the press without the manipulation of the member 14, bar 20, or screw 29. Insertion of a second shoe and re-inflation of the bladder serves by itself to clamp the shoe in the press.

I claim:

1. A shoe sole press comprising a frame having a base portion, an inflatable bladder on said base for engaging the entire surface of an outer sole, an upwardly extending arm rigidly connected to said base at one end of said bladder, a rigid bar pivotally connected at one end to said arm and extending over said bladder, a holding member having a pair of arms respectively arranged for engagement with the top of the heel end and fore part of a last, means for connecting said holding member to said bar in different postions longitudinally of the bar and for holding the same against tilting movement with relation to the bar, and an adjusting screw threaded in said frame arm and having a swivel connection with said bar to support the same against movement independently of said screw.

2. A shoe sole press comprising a frame having a base portion, an inflatable bladder on said base for engaging the entire surface of an outer sole, an upwardly extending arm rigidly connected to said base at one end of said bladder, a rigid bar pivotally connected at one end to said arm and extending over said bladder, a holding member having a pair of arms respectively arranged for engagement with the top of the heel end and fore part of a last, means for connecting said holding member to said bar in different positions longitudinally of the bar and for holding the same against tilting movement with relation to the bar, a clip slidably connected to said bar and a screw threaded in said arm in the line of pivotal movement thereof and having a swivel connection with said clip to hold said arm fixed in any adjustment thereof.

3. In a shoe sole press of the type comprising a fixed upper jaw and a flexible and inflatable lower jaw comprising a bladder that is adapted to be inflated to clamp a lasted shoe between the jaws and deflated to permit loading and unloading of the lasted shoe between the jaws, said upper jaw comprising a pivoted lever capable of swinging toward and away from said inflatable jaw, means arranged to swing said lever toward and away from said inflatable jaw and to hold it fixed in any set position during the loading, pressing and unloading operations, a last-engaging holding member on and adjustable to different positions along the length of said lever, and means for holding said holding member in a predetermined adjusted position on said lever during the loading, pressing, and unloading operations.

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