J. W. COSGROVE.

SOLE HOLDER.

APPLICATION FILED JUNE 8, 1917.

1,363,314. Patented Dec. 28, 1920.

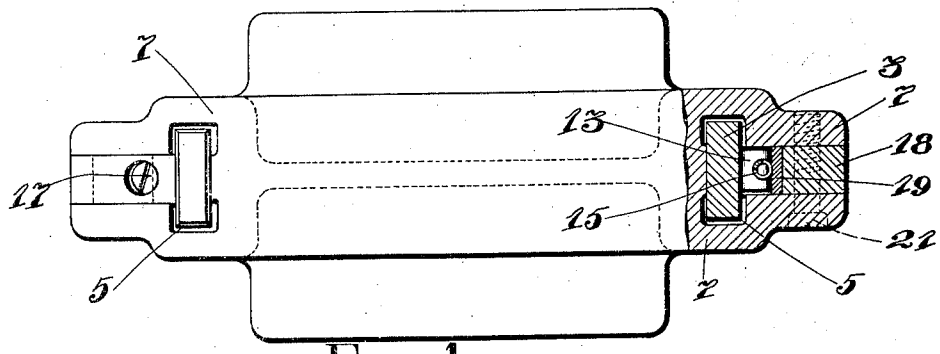


Fig. 1.

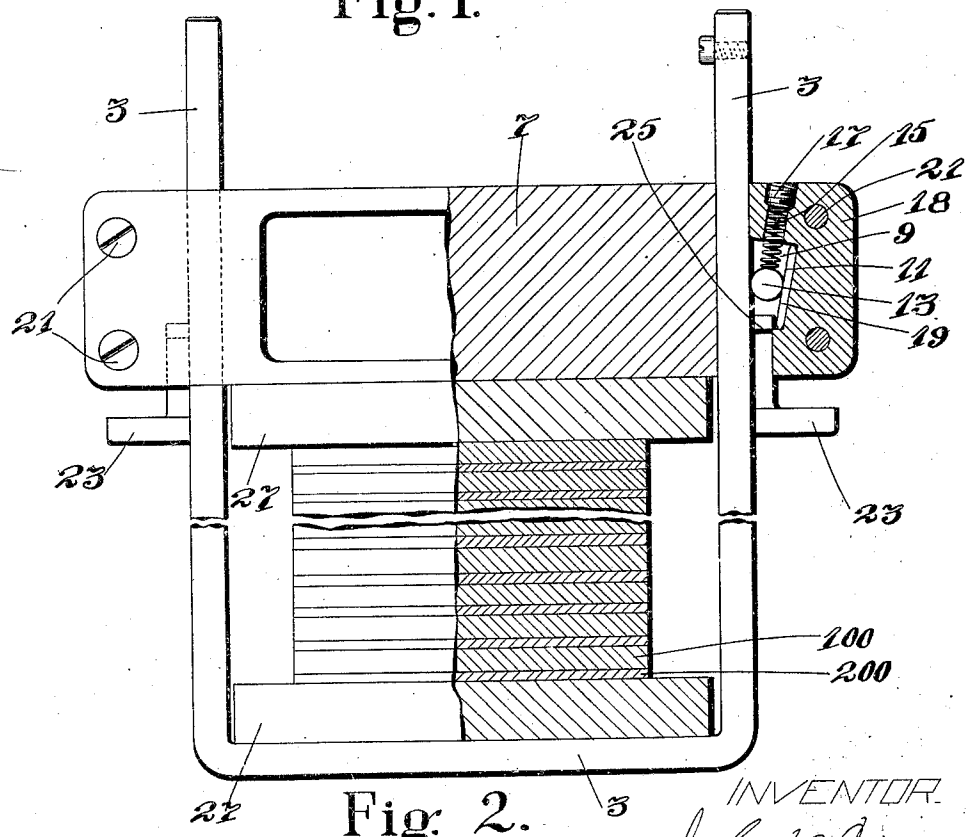


Fig. 2.

INVENTOR.

John W. Cosgrove

By his Attorney,

Nelson W. Arnold

UNITED STATES PATENT OFFICE.

JOHN W. COSGROVE, OF MEDFORD, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SOLE-HOLDER.

1,363,314. Specification of Letters Patent. Patented Dec. 28, 1920.

Application filed June 8, 1917. Serial No. 173,532.

To all whom it may concern:

Be it known that I, JOHN W. COSGROVE, a citizen of the United States, residing at Medford, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Sole-Holders, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to holders for piles of blanks and is herein illustrated in connection with sole holders for use in the manufacture of boots and shoes.

In the manufacture of certain kinds of boots and shoes it is customary to cement a tap to the sole preparatory to sewing the two together. Commonly a pile of soles with the taps freshly cemented thereto is subjected to pressure for a time sufficient to permit the cement to dry or set. It is desirable to provide for this operation a press and a plurality of small holders each of which may be filled, placed in the press and, after having been subjected to pressure, removed therefrom and allowed to stand until the cement has set. The pressure imparted by the press should, of course, be maintained by the holder.

Such a holder may comprise a U-shaped frame and a clamping member slidable on the arms of the frame, means being provided for permitting free sliding movement of the clamping member in one direction only. In the illustrative device the clamping member takes the form of a block or bar having slots to receive the arms of the frame and provided with sockets each having an inclined wall between which and the corresponding arm of the frame is located a roller. With this construction the block may be moved freely toward the base of the frame in order to apply pressure to the pile of blanks, and upward movement of the block is prevented by the action of the rollers so that the pressure imparted to the pile of blanks by the press is automatically maintained. In order to permit this pressure to be released when desired slidable members extend into the sockets and may be manipulated to move the rollers away from the base of the frame when desired.

These and other features of the invention, including certain details of construction and combinations of parts, will be described in connection with an illustrative machine and pointed out in the appended claim.

Referring now to the accompanying drawings,—

Figure 1 is a plan of a holder in which the present invention is involved, one arm of the frame and one end of the clamping member being shown in cross section;

Fig. 2 is an elevation, partly in cross-section, of the holder.

The U-shaped frame 3 has upright arms which are slidable in slots 5 formed in the clamping bar 7. Communicating with the slots 5 are sockets each provided with a wall 11 inclined to the direction of the extent of the slots whereby there is formed between the one surface of each arm and the inclined wall of the corresponding socket a chamber 9 tapering toward the base of the frame. Mounted in each chamber is a roller 13 normally urged downward at all times by a spring 15 the upper end of which bears upon an adjusting screw 17 threaded into the clamping block. In the illustrative machine the tapering chambers referred to above are made by inserting in slots formed at each end of the block 7 properly shaped pieces 18 provided on their inner sides with hardened plates 19 the surfaces 11 of which form the inclined walls which have been referred to above. The pieces 18 are held in place by screws 21.

With this construction the block 7 can be moved freely in a downward direction but as soon as force is applied upwardly to separate the clamping block from the frame, the rollers 13 force the arms of the frame against the inner walls of the slots 5 and thereby lock the block to the frame. In order to permit the block to be released from the frame when desired, there extends into each chamber 9 a slidable member 23 which may be moved upwardly to force the corresponding roller 13 upwardly in opposition to the action of the spring 15. Each member 23 is provided at its upper end with a projection 25 to prevent it from dropping out of the chamber 9.

In the operation of the machine the soles 100 with taps 200 cemented thereto are arranged as shown in Fig. 2 with boards 27 at the top and bottom as well as intermediate

the top and bottom if desired. The clamping block 7 is then pushed down against the top board, and the holder is placed in a press, the pressure there applied being retained by the action of the locking members or rollers 13. When the desired amount of pressure has been thus applied the holder is removed from the press and allowed to stand until the cement which holds the taps to the sole has dried sufficiently. The members 23 are then forced upwardly, by a suitable wrench if desired, thereby moving the rollers 13 to inoperative position and permitting the block 7 to be raised and the soles to be removed from the holder.

Although the invention is set forth in connection with an illustrative device, it should be understood that the invention is not limited to the scope of its application to the particular device which has been shown and described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent of the United States:

A holder for a pile of blanks, having, in combination, a U-shaped frame, a clamping block in the form of a substantially straight bar having slots to receive the arms of the frame and sockets communicating with said slots, said sockets each having a wall inclined to the direction of extent of the arms, a roller in each socket, springs acting upon said rollers, and movable members having portions located in the sockets beneath the rollers and other portions extending downwardly into positions accessible to the operator whereby the members may be raised to move the rollers in opposition to the springs.

In testimony whereof I have signed my name to this specification.

JOHN W. COSGROVE.