No. 784,207. PATENTED MAR. 7, 1905.

W. J. DUNN.

SHOE HOLDING DEVICE.

APPLICATION FILED FEB. 6, 1902.

Fig. 1.

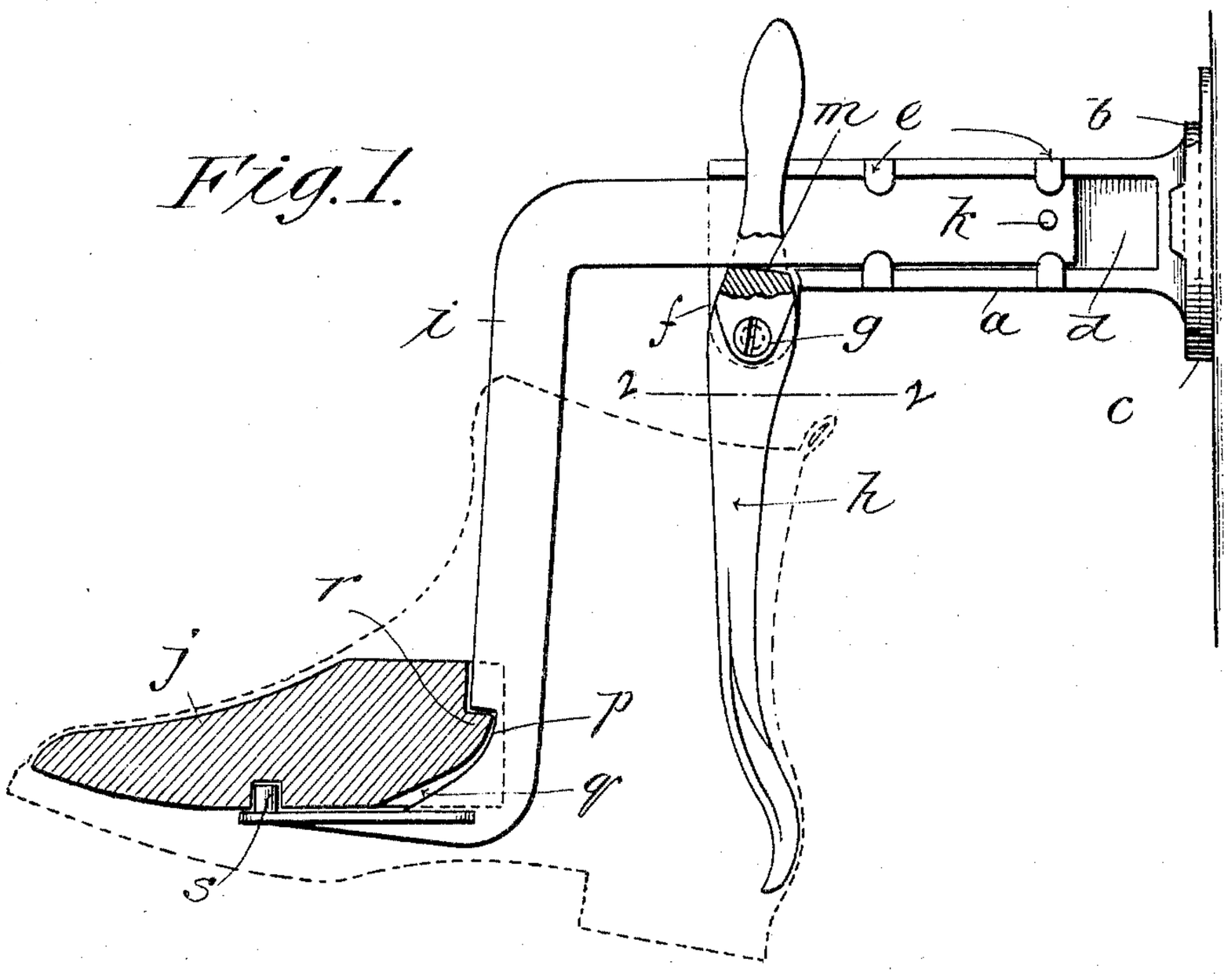


Fig. 2.

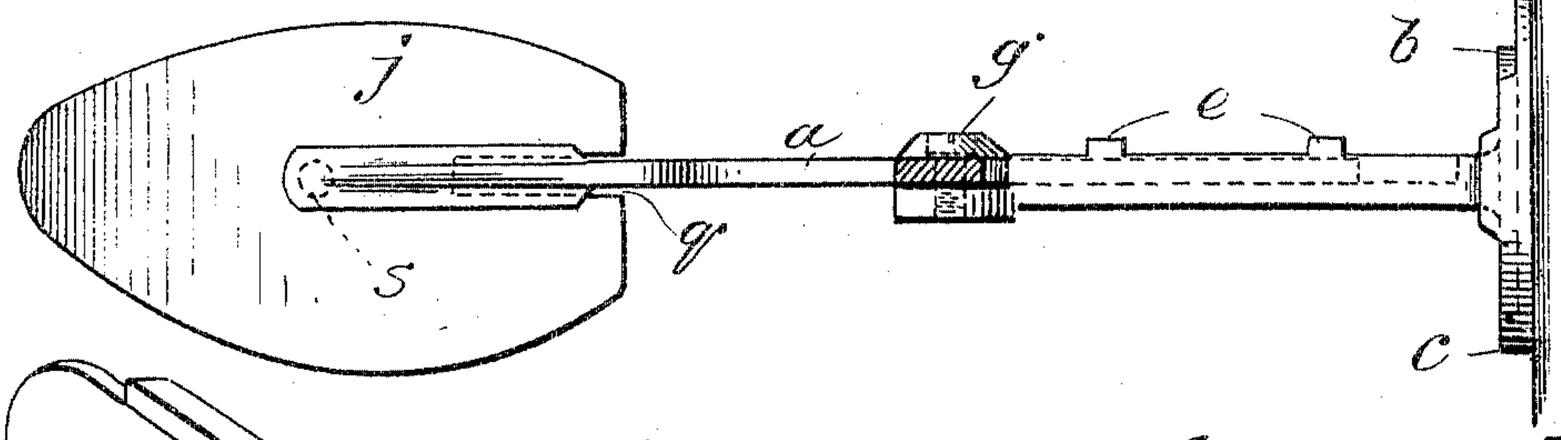


Fig. 3.

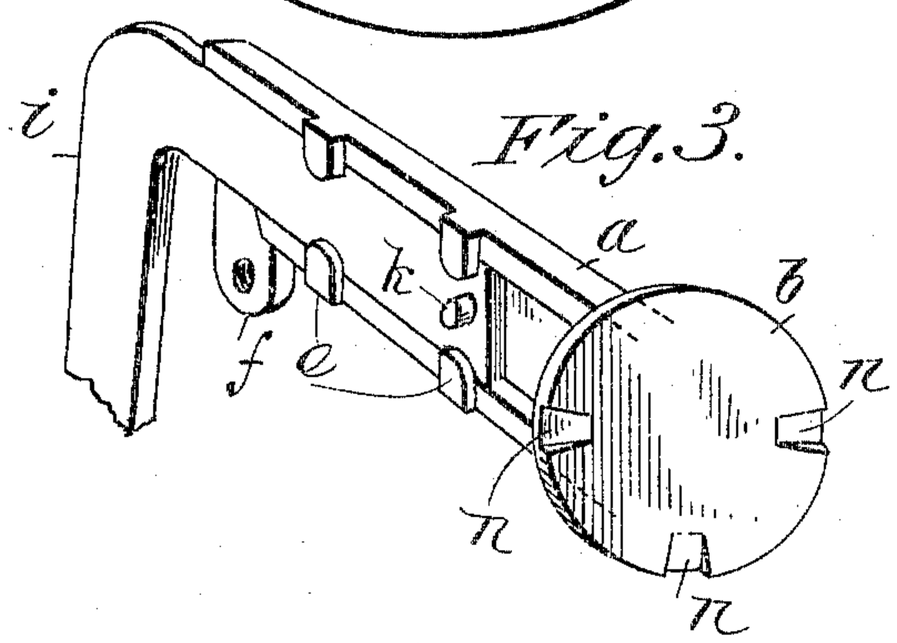


Fig. 4.

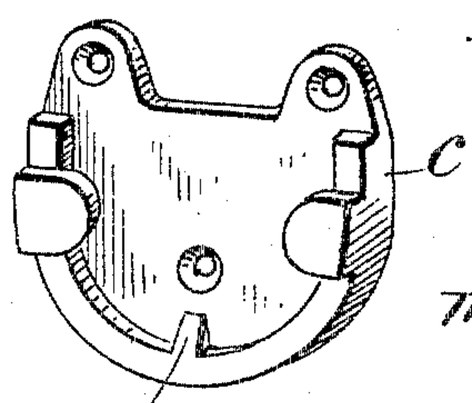
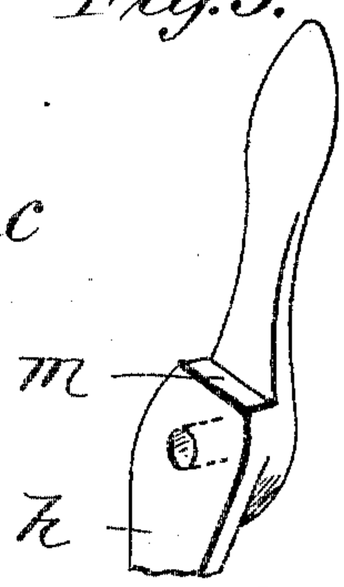


Fig. 5.



Witnesses:
J. R. Gaylies
R. L. Clemons

Inventor:
William J. Dunn
by Chapin & Lee
Attorneys.

No. 784,207. Patented March 7, 1905.

UNITED STATES PATENT OFFICE.

WILLIAM J. DUNN, OF CHICOPEE FALLS, MASSACHUSETTS.

SHOE-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 784,207, dated March 7, 1905.

Application filed February 6, 1902. Serial No. 92,838.

To all whom it may concern:

Be it known that I, WILLIAM J. DUNN, a citizen of the United States, residing at Chicopee Falls, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Shoe-Holding Devices, of which the following is a specification.

This invention relates to devices for holding shoes while being polished, &c.; and it has for its object the production of a device of this character which shall be of low cost and which is provided with means whereby the act of putting the shoe onto the device shall operate means for locking the parts of the latter together in proper position for holding the shoe while it is being polished.

A further object of the construction lies in the provision of means whereby the device may be rotated in its support to present either edge or the sole of the shoe uppermost.

Still another object lies in the provision of means whereby the toe-last of the device may be removably interlocked to its support in such manner that while it may be easily removed when there is no shoe on the last it cannot be removed by the act of putting the shoe on the latter or in removing it therefrom.

In the drawings forming part of this application, Figure 1 is a side elevation, partly in section, of a construction embodying my invention. Fig. 2 is a bottom plan view, the heel-arm being cut in the plane of line 2 2, Fig. 1. Fig. 3 is a perspective view of the rear end of the frame and a part of the shoe-carrying arm. Fig. 4 is a perspective view of the socket into which the frame is inserted for support. Fig. 5 is a perspective view of a part of the heel-arm.

In carrying out my invention I provide a frame *a*, having thereon a broadened base *b*, located substantially at right angles to the general direction of the frame and adapted to fit into a socket *c*, which may be screwed or otherwise secured to the wall or the side of a post, whereby when the frame *a* is inserted operatively therein it will project from said wall or post in substantially a horizontal plane. This frame and its base is preferably cast in one piece, and in the side thereof there is provided a shallow groove *d*, over the edges of which the lugs *e* project, and on the forward lower end of the frame is a short depending arm *f*, which is drilled through transversely to receive a screw or rivet *g*, on which there is hung loosely the heel-arm *h*. This heel-arm extends downwardly and has its lower end curved to fit approximately the contour of the heel at the counter. The upper end of the heel-arm *h* is finished off in the shape of a handle and projects somewhat above the frame *a*.

The shoe-carrying arm *i* receives the toe-last *j* on the lower end thereof, which lower end lies in a substantially horizontal plane and is substantially in line with and below the frame *a*, projecting forwardly therefrom, as shown in Fig. 1. The upper end of the shoe-carrying arm *i* is substantially parallel with its lower end and is fitted to slide in the groove *d* in the frame *a*. Near the end of the upper portion of the shoe-carrying arm is a boss *k*, projecting laterally therefrom, which prevents the arm from being drawn out of the groove *d*, said boss being arranged to come in contact with the handle part of the heel-arm when drawn out a certain distance. Said heel-arm is so constructed as to swing directly under the lower edge of the shoe-arm *i*, the handle part thereof being offset to pass up by the side of the shoe-carrying arm. This results in the formation of a shoulder *m*, so constructed and located relative to the under side of the shoe-carrying arm that when the heel-arm *h* is swung toward the toe-last *j* the shoulder *m* will swing up into contact with the lower edge of said arm and lock the latter rigidly in the groove *d*. This shoulder thus operates as a pawl or locking-dog having a fulcrum at *g* and being operated by the application of power to the lower end of the heel-arm, whereby it constitutes a powerful locking device, to release which the upper end of the heel-arm may be swung slightly toward the toe-last and the latter pushed into the groove *d* toward the wall.

To operate this device, it is only necessary to slip the shoe over the toe-last and draw it up until the heel-arm is in the proper posi-

tion against the counter. Then with one hand under the shoe to hold it in position the other hand may grasp the shoe-carrying arm *i* near the upper end thereof and draw it sharply outward, whereupon when the toe-last *j* reaches the toe of the shoe the heel portion of the latter will be drawn forward against the lower end of the heel-arm, and the swinging movement of this arm will cause the shoulder *m* to jam against the under side of the shoe-carrying arm, as shown in Fig. 1, locking the latter rigidly in its groove in the frame *a*. It is thus seen that the apparatus is entirely automatic as far as the locking devices are concerned, and once the shoe-carrying arm is locked by the heel-arm any desired operation may be performed on the shoe which the strength of the parts of the device will permit, for the shoe-carrying arm cannot be moved forward or backwardly while so locked, and the heel may be polished with a cloth or a brush in the usual manner without loosening the grip of the heel-arm on the under side of the shoe-carrying arm, for pressure on the lower end of the heel-arm in the direction of the toe of the shoe serves only to bind the shoe-carrying arm the tighter.

It not infrequently happens that it is desired to have easy access to the edges of the heel and sole of the shoe in polishing or performing some other operation on the shoe, and to this end the frame *a* is constructed to revolve in its socket *c* on its longitudinal axis, whereby the device as a whole may be swung up from its depending position (shown in Fig. 1) either to a position at right angles thereto in either direction or it may be swung upwardly through a half-circle to bring the sole of the shoe uppermost. Fig. 2 shows the device swung upwardly toward the observer to bring the plane of the sole in a vertical position.

To provide for holding the device rigidly either in the position in which it is shown in Fig. 1 or in any other position which it is desired to locate it, I preferably construct the base *b* circular in form and fit it into a circular socket *c*, and in the edge of the base *b* the notches *n* are provided adapted to slide over and engage the boss *o*, located in the socket *c*. This socket is U-shaped, to the end that the base *b* may be brought into the open upper end thereof. To revolve the device into either position described other than that shown in Fig. 1, it is only necessary to lift the base far enough out of its socket to disengage the notches *n* from the boss *o*, and then having rotated the device it may be dropped into the socket in position to have one of the other notches *n* engage said boss.

Ordinarily toe-lasts of different sizes are supplied for these shoe-holding devices, and it is desirable that the latter should be so constructed as to permit the easy removal and application of the lasts thereto; and it is also desirable that the lasts should be so secured on the shoe-carrying arm that they will not be removed from the latter in taking off the shoe from said arm, and to this end I construct the shoe-carrying arm with an undercut notch *p* therein, (shown in Fig. 1,) and vertically through the rear end of the last I provide a slot *q*, in the bottom of which slot there is provided on the last a projection *r*, adapted to fit under the shoulder constituting the upper boundary of the notch *p*, and on the extremity of the lower portion of the shoe-arm is a stud *s*, fitting into a hole in the bottom of the last. This construction permits any desired pressure to be applied to the top of the last in polishing the shoe or to either side of the last, and in removing the shoe, which of course must be done by dropping the heel and sliding the shoe forwardly off of the last, there is no danger that the latter will become disengaged from the shoe-arm. The last may be removed therefrom, however, by lifting the toe end thereof to disengage it from the stud *s* and then pulling the last forward to disengage the projection *r* thereon from the notch *p* in the shoe-arm, and to replace the last thereon the same operations are required in reverse order.

From the foregoing description it is seen that a device for holding shoes is provided which is extremely simple in its construction, practically automatic in the action of the locking devices, and capable of being operated to present any portion of the shoe uppermost without effecting any change in the relation of said locking device to the shoe-arm.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A shoe-holding device comprising a frame, a shoe-carrying arm slidable thereon, a heel-arm movable relatively to the frame and the shoe-carrying arm, and automatically-operating locking means between said shoe-carrying arm and said heel-arm, whereby the shoe-carrying arm may be locked by the operation of fitting a shoe on the device.

2. A shoe-holding device comprising a frame, a slidable shoe-carrying arm supported thereon, a swinging heel-arm, and locking means between said shoe-carrying arm and heel-arm, whereby the contact of a shoe on said shoe-carrying arm with the heel-arm, will lock said shoe-carrying arm in its support.

3. A shoe-holding device comprising a frame, a movable shoe-carrying arm thereon, a movable heel-arm, and automatically-operating locking means between said shoe-carrying arm and said heel-arm, whereby the movements of said shoe-carrying arm and

heel-arm, the one relative to the other, may effect the interlocking of said parts, by the act of fitting a shoe on the device.

4. In a shoe-holding device, a substantially horizontal frame, a shoe-carrying arm, one end of which is slidable on said frame, and another part of which is in a lower plane than said frame for entering the toe of a shoe; a heel-arm pivotally depending from said frame for entering the heel part of the shoe; a shoulder on said heel-arm for engagement with said shoe-carrying arm to lock it in the frame by the swinging movement of said heel-arm, imparted by the contact of the heel part of the shoe against said heel-arm.

5. In a shoe-holding device, a frame, a shoe-carrying arm, a toe-last on the latter for fitting the toe portion of the shoe, and means for removably securing the toe-last to said shoe-carrying arm consisting of a stud for engaging the sole of the toe-last, and a projection on the end of the last for engaging the shoe-carrying arm.

6. In a shoe-holding device, a frame, a shoe-carrying arm provided at its forward edge with a notch, and having a forwardly-projecting portion provided with an upwardly-projecting stud near its forward end, and a toe-last having a slot at its rear end for receiving a part of the arm adjacent the notch thereof, having a rearward projection located within said slot between the upper and lower ends of the latter, and having a depression in its bottom, located forwardly relatively to said slot, within which depression the said stud engages.

WILLIAM J. DUNN.

Witnesses:
WILLIAM H. CHAPIN,
K. I. CLEMONS.