(No Model.)

J. F. PRATT.

SOLE PROTECTOR.

No. 407,609. Patented July 23, 1889.

Fig. 1.

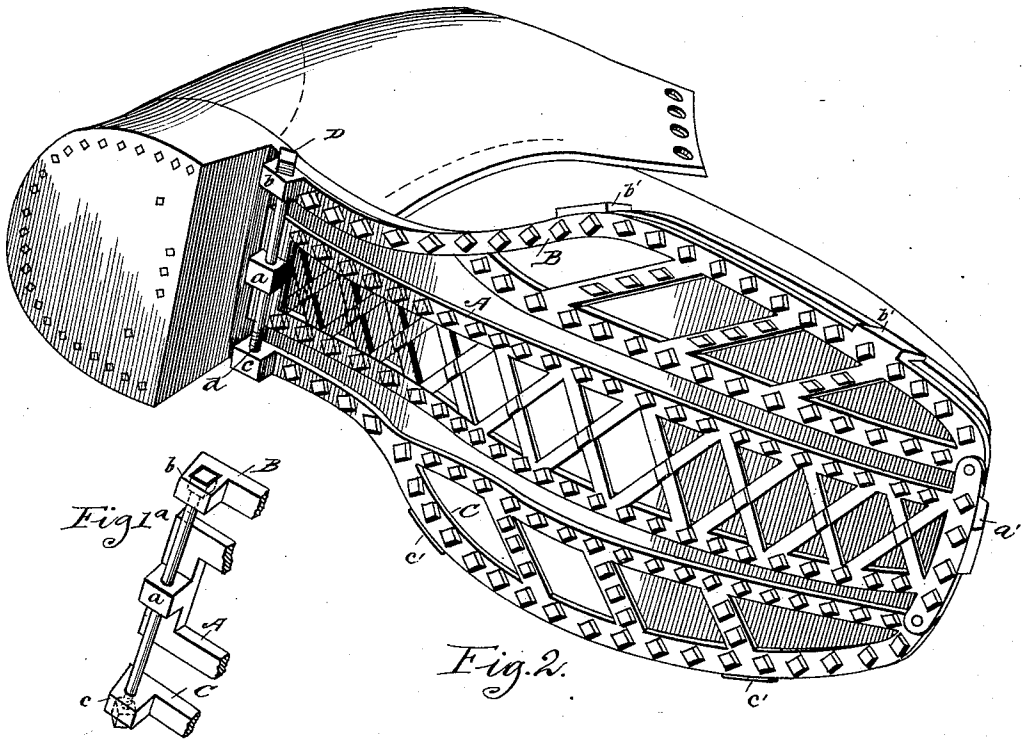


Fig. 1a

Fig. 2.

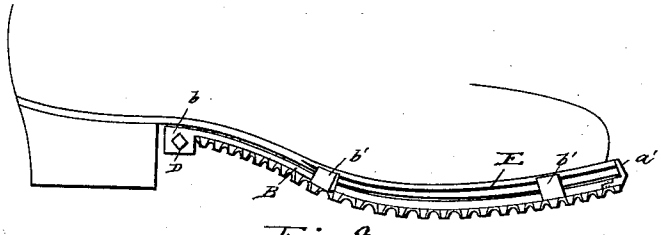
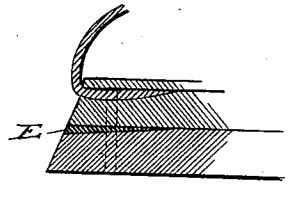


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES F. PRATT, OF CHICAGO, ILLINOIS.

SOLE-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 407,609, dated July 23, 1889.

Application filed January 4, 1889. Serial No. 295,268. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. PRATT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sole-Protectors, of which the following is a specification.

This invention is an improvement upon the sole-protector patented to me in Letters Patent of the United States No. 327,194, dated September 29, 1885; and the object of my improvements is to so construct the protector that it shall better protect the center of the sole and the shank of the shoe.

Another feature of my present improvements is to provide a superior device for tightening and clamping the sole-protector on the shoe, and still another feature relates to the provision of the sole with a plate to prevent wear of the sole-edge.

In the accompanying drawings, Figure 1 is a perspective view of my improved sole-protector applied to a shoe. Fig. 1ª is a modification. Fig. 2 is a side elevation, and Fig. 3 a vertical section of a fragmentary portion of the sole.

In my present construction I make the protector of three pieces—a central piece A, which conforms closely to the bottom of the sole from toe to heel, and provided, preferably, with corrugations throughout its length, and two side plates B C, each of which is pivotally connected to the central portion at the toe. These side pieces are adapted to swing laterally to permit the placing of the protector on the sole. The clamping device herein shown is a bolt D, having one of its ends secured with one of the side pieces and its other screw-threaded, as at *d*, whereby to adapt it to engage a threaded aperture formed in the rear of the other of the side pieces. The bolt will be most conveniently secured by means of the lugs *a b c*, formed integrally with the three sole-plates A B C, and having apertures through which the bolt passes, the aperture of one of the side pieces being threaded to engage the threads of the bolt. A preferable arrangement is the one shown in Fig. 1ª, where the bolt-head is let into a square recess, passes through a plain aperture in the other lug, and has a nut turned on its threaded end. The central piece has a toe-clamp *a'*, and the side pieces have clamps *b' c'*, which extend upwardly and engage the sole-edge. The side pieces are drawn toward each other by means of the clamping-bolt D, and they may be so tightly clamped thereby against the edge of the sole as to prevent their working loose, as experience has shown will be the case with a less secure fastening.

In order to prevent chafing or cutting of the sole-edge by the side clamps, which not only injures the leather, but permits the sole-protector to work loose, I employ a piece of metal to receive the wear, which will be secured in any convenient manner to the sole-edge in position corresponding to the location of the clamps, but preferably in the manner shown in the drawings, where E represents a thin metal strip of the general contour of the outer edge of the sole and placed between the two layers of the sole, as shown in Fig. 3 of the drawings, so that its outer edge will be flush with the edge of the sole. This plate may be secured on the bottom of the sole instead of between the outsoles. The plate A preferably has the corrugations extended down well toward the heel, so as to protect the shank of the sole. This is particularly desirable in a shoe used by puddlers and rolling-mill men, who are compelled to stand upon and walk over pieces of hot metal, which rapidly destroys the shoe unless the sole is entirely protected. This construction permits the sole-plate to be more perfectly fitted to the shank of the sole. The tightening-bolt furnishes means for securely locking the plate in place, and the metal strip prevents wear on the sole-edge and prevents the plates from working loose.

Other equivalent means for tightening and securing the pivoted plates may be devised than the bolt shown and described, and so I do not confine myself to this specific means—as, for example, the screw-threaded bolt shown in Fig. 1; or the said bolt may be threaded at each end.

I claim—

1. A sole-protector having in combination a central plate and side plates pivoted thereto at the toe and provided with clamps to engage the sole-edge, each of said plates having

toward the heel lugs having bolt-holes and a bolt whereby to draw the side plates together to secure the protector to the shoe, substantially as described.

2. A sole-protector having in combination a central plate and side plates of substantially the length of the sole from toe to inner edge of heel, said plates having corrugations to protect the shank of the sole, the side plates connected pivotally to the center plate at the toe and provided with clamps, and each of said plates being provided toward the heel with projecting lugs having bolt-holes and a bolt whereby to draw the side plates toward each other to clamp the protector to the shoe.

3. The combination, with a shoe having metallic plates inserted in its sole-edge to provide a wearing-surface, of a protector having a central plate and side plates pivoted thereto at the toe, and provided with clamps to engage the sole-edge and adapted to bear upon the metallic plates in the sole-edge, each of said plates having toward the heel lugs having bolt-holes and a bolt whereby to draw the side plates together to secure the protector to the shoe, substantially as described.

JAMES F. PRATT.

Witnesses:
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