

J. E. Loughborough,

Shoe Sole.

N^o 17,115.

Patented Apr. 4, 1865.

Fig. 1

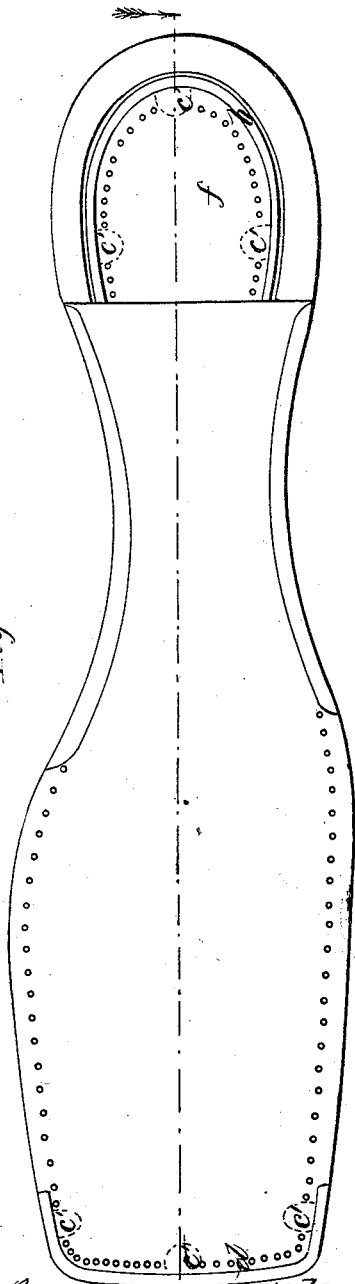


Fig. 3.

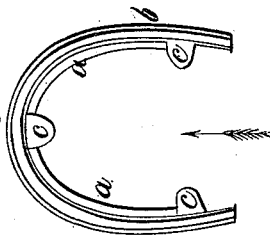


Fig. 4.



Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

IRA E. LOUGHBOROUGH, OF PITTSFORD, NEW YORK.

IMPROVED HEEL AND TOE PLATES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 47,115, dated April 4, 1865.

To all whom it may concern:

Be it known that I, IRA E. LOUGHBOROUGH, of Pittsford, in the county of Monroe and State of New York, have invented certain new and useful Improvements in the Construction and Method of Attaching Heel and Toe Plates of Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an inverted view of a boot sole and heel with my invention attached. Fig. 2 is a longitudinal section of the same. Fig. 3 is an inverted plan of the heel-plate detached. Fig. 4 is a front elevation of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the construction of metallic heel and toe plates for boots and shoes, with several lips projecting inward from the upper edge of the plate, one or more of these lips being provided on the upper side with a point or spur which is forced into the heel, whereby when the last "lift" or strata of leather is nailed on within the rim of the plates the latter is firmly and permanently secured to the boot.

To enable others to work my invention, I will describe its construction and application.

The heel-plate *b* is made tapering, as seen in Figs. 3 and 4, from top to bottom. The external taper of the plate should conform to the desired shape—vertically—of the heel, as seen at *b*, Fig. 2. There may be a connecting-flange, *a*, between the lips *c*, as seen in Figs. 3 and 4, which constitutes a rest upon which the edge of the outer or clamping lift, *f*, catches when nailed on. This rest renders the fitting of the clamping-lift much simpler and its hold upon the plate much more perfect and effectual than it otherwise would be, and the

points *e*, projecting upward into the body of the heel, together with the nails through the clamping-lift *f*, effects an entirely permanent attachment of the plate to the heel, as the plate cannot be removed without tearing off the said lift *f*. This removes one of the greatest, if not the greatest, objection heretofore existing against the use of heel or toe plates—that is, their great liability to get loose, and, in fact, as they have been made and applied heretofore, they were sure to get loose before they were much worn.

I propose to make the plates of malleable iron and case-harden them, but of course they may be made of any suitable metal.

If desirable, there may be several points or spurs *e* provided on the body of the plate, and this would doubtless add somewhat to the strength of their attachment to the boot or shoe.

It will be seen that by this construction and manner of attaching the plates no screws or rivets are required, and, when they are worn so as to be no longer any protection to the boot, they may be replaced with new ones by simply removing the clamping lift *f* and applying the new lift and plate, as in the first instance.

What I claim as my invention, and desire to secure by Letters Patent, is—

The external plate, *b*, when provided with projecting lips *c* and points *e*, it being secured to the boot by the clamping lift or lifts *f*, which are nailed on within the encircling rim of the plate, the edge of the lifts being entirely protected from wear by the said rim or flange.

IRA E. LOUGHBOROUGH.

Witnesses:

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