D. K. CROSS.

TIPS FOR BOOTS AND SHOES.

No. 188,005. Patented March 6, 1877.

Fig. 1.

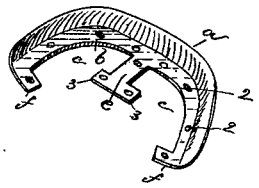


Fig. 2.

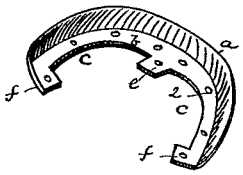


Fig. 3.

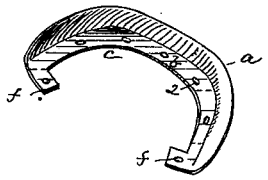


Fig. 5.

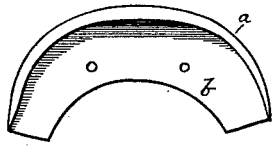
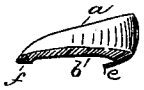


Fig. 4.



Witnesses.
S. H. Latimer.
W. J. Pratt.

Inventor.
Daniel K. Cross.
per Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

DANIEL K. CROSS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN TIPS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **188,005**, dated March 6, 1877; application filed February 12, 1877.

To all whom it may concern:

Be it known that I, DANIEL K. CROSS, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Boot and Shoe Tip, of which the following is a specification:

This invention relates to improvements in tips for boots and shoes.

Prior to this invention it has been common to provide the tip with a base part to project backward between the upper and outsole, and the nails, pegs, or stitches used to unite the outsole to the upper have extended through such base.

In another tip patented to me the base has been provided with slots to receive the stitches or nails.

I find, in practice, that the narrow connecting-piece at the extreme inner curve of the tip, left by slotting the base, can be removed with advantage to the tip, for, by so doing, the tip may be contracted or spread to fit the toe of the shoe closely, or shoes of different sizes.

In the tip herein claimed the principal portion of the base is cut away, so that the pegs, nails, or stitches have free passage through the outsole and upper without passing through the substance of the tip, and the tip may be easily spread or contracted to fit shoes of different sizes.

The tip may have two or more lugs, provided with holes to receive tacks, to enable the tip to be confined to the upper and insole.

In an ordinary tip, wherein the base is solid or only slotted, when the tip does not fit the toe in width, it cannot be contracted or spread to fit.

When an awl is driven into and through the ordinary flat base the protecting rim or edge of the tip is, by the resistance of the metal to the awl, caused to move away from the toe of the upper and fit it less closely than before the awl penetrated it, and so, also, when a tip having a connected base (either solid or slotted) is struck by a hammer during the process of fitting the tip to the toe, the rim is frequently thrown out of contact with the end of the toe, or when one end of the tip is struck too hard it frequently turns so that the other end cuts the upper.

Figure 1 represents one of my improved tips in perspective; Figs. 2 and 3, modifications thereof; Fig. 4, a side view, and Fig. 5 a view of an ordinary tip.

In the drawing, the rim *a* is of usual shape, to fit the toe of the upper. The base *b*, instead of being made wide and solid, thereby connecting the two ends of the tip rigidly, as in Fig. 5, is cut away, as at *c*, leaving but a narrow base, which, when in place upon the toe, falls outside the row of nails, pegs, or stitches that unite the upper and outsole. This narrow base will be provided with a series of holes, 2, to receive tacks or nails to confine the tip to the upper and inner sole, outside the line of pegs, nails, or stitches subsequently inserted to unite the two soles. At its center the narrow flange has a backwardly-projecting arm, *e*, provided with one or more holes and projections, 3. At the ends of the tip are perforated arms *f*, adapted to receive a tack. The tacks driven through these holes in the tip and into the upper and inner sole will hold it in place without the assistance of the usual pegs, nails, or stitches commonly passed through the outsole, base, and upper.

The tip, being open or unconfined at its back edge, may be spread or contracted to fit different-sized shoes.

When fitting the tip and securing it by the nails, the parts *e f* will readily yield or bend under the blow of the hammer, without drawing or throwing the front of the rim from contact with the toe, as is the case with a tip having a solid base.

The small ends 3 will act to prevent the tip from being drawn forward at the toe.

By cutting away the base, as at *c*, much metal is saved, and the tip is made cheaper.

I claim—

A metallic boot or shoe tip, having its base cut away, as at *c*, and provided with an arm, *e*, having projections 3, and with perforated arms *f*, all substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL K. CROSS.

Witnesses:

G. W. GREGORY,

S. B. KIDDER.