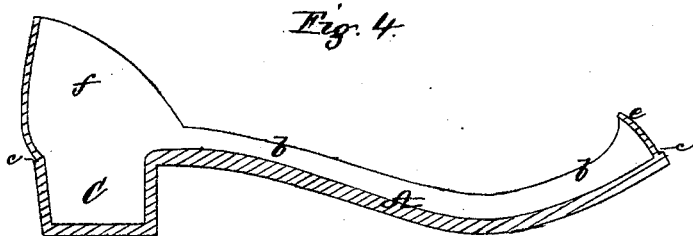
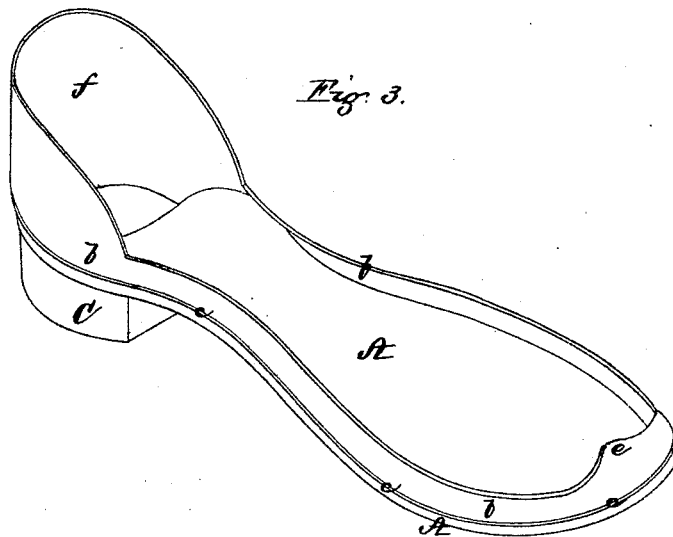


W. E. PRUSHA & E. L. WALES.

Improvement in Boots and Shoes.

No. 114,340.

Patented May 2, 1871.



Witnesses.  
Lewis A. Howe  
James C. Hodgkin

Inventors,  
William F. Prusha  
Elisha L. Wales

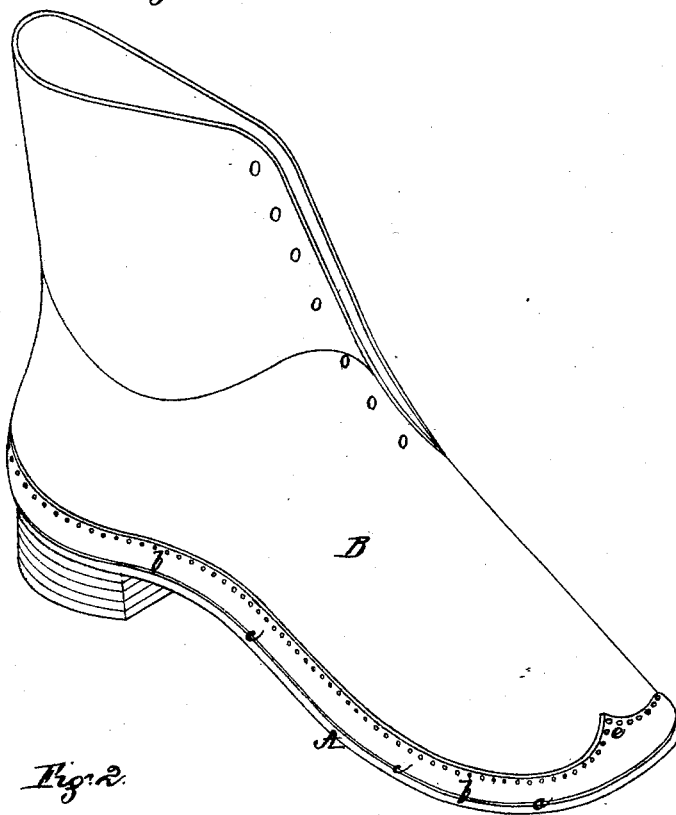
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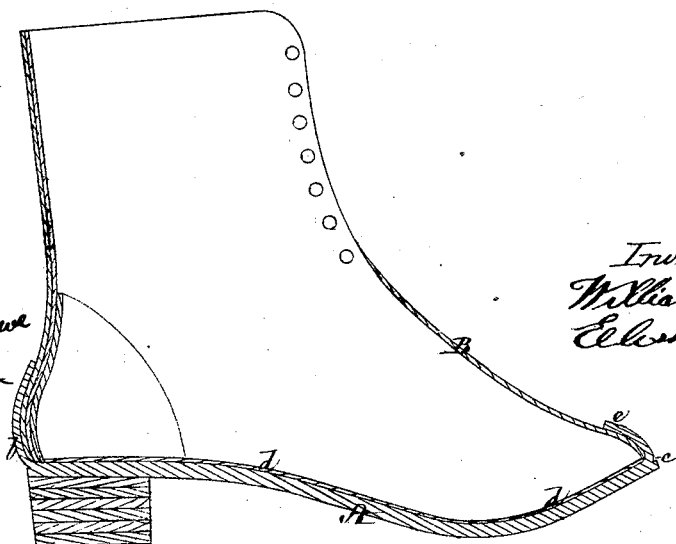
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*Fig. 1.*

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*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

WILLIAM F. PRUSHA AND ELISHA L. WALES, OF MARLBOROUGH, MASS.,  
ASSIGNORS TO THEMSELVES AND LEWIS A. HOWE, OF SAME PLACE.

## IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. **114,340**, dated May 2, 1871.

*To all whom it may concern:*

Be it known that we, WILLIAM F. PRUSHA and ELISHA L. WALES, of Marlborough, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a perspective view of a shoe made in accordance with our invention. Fig. 2 is a central vertical section through the same. Fig. 3 is a perspective view of the sole and the projecting portion, the heel being formed in one and the same piece therewith. Fig. 4 is a central vertical section through the same.

The object of our invention is to cheapen the manufacture of boots and shoes, and at the same time enable us to produce a superior article; and our invention consists in molding or "striking up" a leather sole with a projecting portion, to which the "upper" is secured by rivets, stitching, or otherwise, the sole being finished, and, together with the projecting portion, perfectly shaped to fit the foot at the time it is molded, and a crease or indentation simultaneously formed, to represent the division between the upper and the sole of an ordinary boot or shoe, by which construction the inner sole is dispensed with, together with the operation of "lasting," and also the labor of trimming and finishing the edge of the outer sole, while the boot is pliable and easy to the foot; and our invention also consists in forming a leather tip or protector at the toe of the boot or shoe by molding or striking it up in one and the same piece with the outer sole, the crease to represent the division between the upper and the sole being formed at the same time; and our invention also consists in extending the projecting portion of the sole up at the heel, whereby we are enabled to dispense with the counter or stiffening usually employed; and our invention furthermore consists in molding or striking up a leather heel in one and the same piece with the outer sole, the hollow heel so formed being after filled with any suitable material.

To enable others skilled in the art to understand and use our invention, we will proceed

to describe the manner in which we have carried it out.

In the said drawing, A represents the sole of shoe. This sole is formed of a piece of leather cut to the proper shape, and then compressed when wet in a suitable die, which gives it the form seen in the drawing, with a projecting portion, *b*, turned up all around its edge, the portion *b*, and also the sole, being finished and perfectly shaped to fit the foot at the time it is molded or struck up, while a crease or indentation, *c*, is also made at the same operation, to represent the division-line between the upper and the sole of an ordinary boot or shoe. This crease can be made to represent on the outside any desired thickness of sole.

Previous to putting the leather in the die the edge which forms the portion *b* is skived down, so as to leave it of less thickness than the sole. After the sole has been removed from the die the upper B is secured to the projecting portion *b* by means of rivets, stitching, or in any other suitable manner, which operation finishes the shoe, and leaves it as seen in Fig. 1.

The inner sole of an ordinary boot or shoe adds nothing to its wear, but is required in order that the different parts may be properly secured together, and can only be dispensed with in a "turned" shoe.

Our improved construction, however, enables us to dispense with the inner sole entirely, thus effecting a saving of stock, while the operation of lasting and the labor of trimming and finishing the edge of the outer sole are also dispensed with, resulting in a considerable saving of labor.

A thin lining, *d*, of any suitable material, is pasted upon the inside of the sole A, to give the interior of the shoe a neat and finished appearance.

The portion *b* serves to protect the shoe all around its edge, and when cut so as to extend up at the toe, as seen at *e* in the drawing, it serves as a leather toe tip or protector, which is molded or formed in one and the same piece with the outer sole, A, and with a crease or indentation, to represent the division between the sole and the upper.

In Figs. 3 and 4 the portion *b* is cut so as

to extend up at the heel, as seen at *f*, thereby forming a stiffening, and enabling us to dispense with the separate counter or stiffener usually employed.

In Figs. 1 and 2 the heel is represented as formed of "lifts" in the ordinary manner, but in the shoe represented in Figs. 3 and 4 it is formed by being struck up or molded in one and the same piece with the sole *A*, the hollow heel *C* thus formed being afterward filled with some suitable cheap material.

It is evident that, instead of striking up the portion *b* entirely around the sole, it may be formed to extend up from one or more portions only of the sole—for instance, at the toe to form a tip, or at the heel to form a stiffener, or both, the upper being secured to the remaining portion of the sole by pegs or stitching, in the ordinary manner. In such case, however, an inner sole would be required.

*Claims.*

What we claim as our invention, and desire

to secure by Letters Patent as an improvement in the manufacture of boots and shoes, is—

1. A leather sole with a projecting portion struck up having a crease or indentation, *c*, and to which the upper is secured, substantially in the manner and for the purpose described.

2. A leather toe tip or projection struck up in one and the same piece with the outer sole, and with a crease or indentation, *c*, substantially as set forth.

3. A leather heel-shell struck up in one and the same piece with the outer sole, substantially as set forth.

Witness our hands this 3d day of March, A. D. 1871.

WILLIAM F. PRUSHA.  
ELISHA L. WALES.

Witnesses:

LEWIS A. HOWE,  
JAMES E. HODGKISS.