

T. M. NEWHALL & A. F. CHASE.  
 Method of Lasting Boots and Shoes.

No. 202,955.

Patented April 30, 1878.

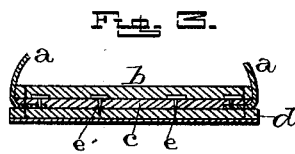
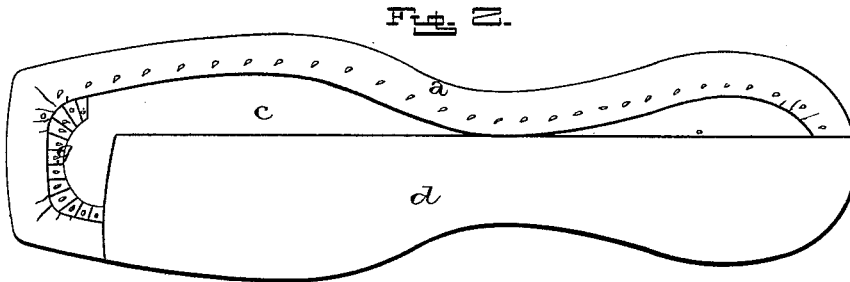
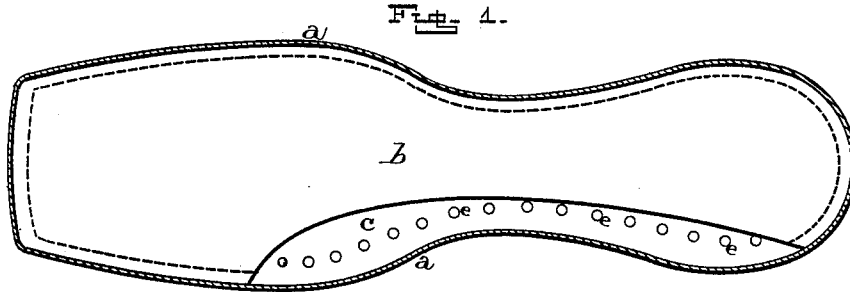
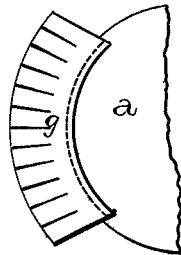


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

TIMOTHY M. NEWHALL AND AMOS F. CHASE, OF LYNN, MASSACHUSETTS.

## IMPROVEMENT IN METHODS OF LASTING BOOTS AND SHOES.

Specification forming part of Letters Patent No. **202,955**, dated April 30, 1878; application filed April 15, 1878.

*To all whom it may concern:*

Be it known that we, TIMOTHY M. NEWHALL and AMOS F. CHASE, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Lasting Boots and Shoes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in lasting boots and shoes; and it consists, first, in passing the tacks through either the filling or the inside sole, so that the heads of the tacks will be in the shoe and the points project outward toward the sole, whereby the upper, when drawn over the edge of the inner sole, can be made to catch upon these tacks, and be securely held in position.

It further consists in sewing or otherwise fastening to the toe of the upper a piece of kid or other material, which is cut into strips along its outer edge, for the purpose of catching over these tacks, and thus preventing the necessity of cutting the edges of the upper, all of which will be more fully described hereinafter.

The accompanying drawings represent our invention.

A represents the upper, B the inner sole, C the filling, and D the outer sole, of a common boot or shoe. Passed through the filling or the inner sole, at any suitable distance from the outer edge, are the headed tacks E, which are passed through the filling, either by hand or by machinery, before the filling is placed in position. As the sharp points of these tacks project some distance beyond the outer side of the filling, when the edge of the upper is drawn over the outer edges of the inside sole and filling, it will catch over these tacks, and thus be held securely in position. After the upper has been fitted neatly to the last all around the ends of these tacks are clinched, with the exception of a few, which are left standing for the purpose of holding the outside sole in position while being sewed.

It will be seen that these tacks are passed through the filling at a sufficient distance from

the edge to allow the shoe to be sewed in the usual manner, either by the McKay sewing-machine or any other one that may be preferred.

Sewed or otherwise secured to the toe of the upper is a strip of kid or other suitable material, G, which has its outer edge cut into strips, as shown. In drawing the upper over the toe these strips serve to catch over the tacks, and thus hold the upper in position at this point without the wrinkling and the thickening of the upper, as in the old method. These strips, being separate, can be readily taken hold of, and each one pulled in a different direction, so that the upper is quickly fitted into position without any of the pounding or tacking down of the wrinkles, as usually has to be done.

Another great advantage of this strip consists in shortening the upper at this point to such an extent as to make a very considerable saving in material, as the upper does not have to be cut so long. These strips can be made from any of the waste material that is usually found lying around the shop.

Those tacks which are left standing serve to secure the outer sole in position while being sewed, pegged, or otherwise fastened, so that after the upper has been fastened in position it is only necessary to press the outer sole down upon the tacks that are left standing, when it will be securely held in position for all ordinary purposes.

By thus passing the tacks through the filling or inside sole, so that the sharp points will project outward, the upper can be fastened in position much more readily and quickly, and the tacks will not project upward into the inside of the boot or shoe, to the discomfort of the wearer.

We are aware that an iron plate having sharp, pointed projections on its under side, so as to project through the inner sole, and have the edges of the upper fastened over them, has been used, and this we disclaim. Where this iron plate is used, the plate itself is so expensive, and is so difficult of removal after the sewing has been done, that it was long since abandoned as useless. The points which pass through the toe and the front part of the boot or shoe could only be removed by wrenching

them out of the leather, and this was a hard and difficult thing to do. By our method of passing the tacks through the inner sole or filling, they are left in position after the sewing is done, and assist in securing the upper in place.

Having thus described our invention, we claim—

1. The improved process of lasting boots and shoes, consisting of first inserting headed tacks in the insole or filling, with their sharpened ends projecting, then folding the edge of the upper over upon the projecting ends, thereby holding the lasted upper in place, substantially as set forth.

2. In the process of lasting boots and shoes, the method of lasting the toe or other portions of the upper by attaching a piece of thin leather or other suitable material thereto, and cutting its outer edge into strips, all substantially as and for the purpose specified.

In testimony that we claim the foregoing we have hereunto set our hands this 12th day of April, 1878.

TIMOTHY M. NEWHALL.  
AMOS F. CHASE.

Witnesses:

F. A. LEHMANN,  
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