

L. R. BLAKE.

MANUFACTURE OF BOOTS AND SHOES.

No. 185,816.

Patented Jan. 2, 1877.



Fig. 1.

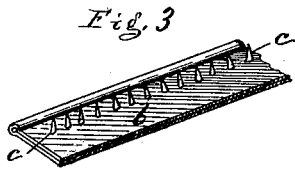
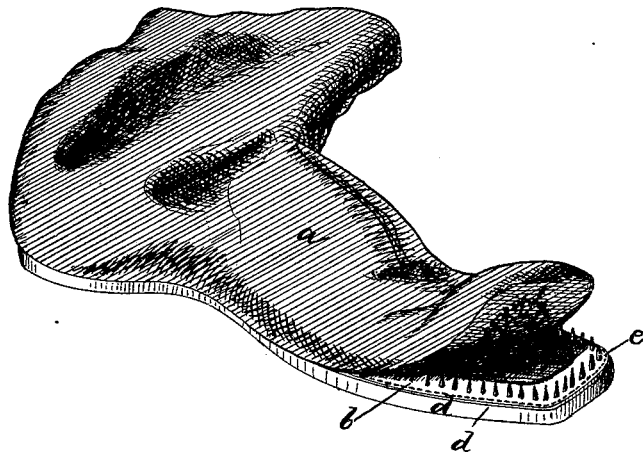


Fig. 3.

Fig. 2.



Witnesses.

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per *Condy Gregory Atty*

# UNITED STATES PATENT OFFICE.

LYMAN R. BLAKE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 185,816, dated January 2, 1877; application filed October 16, 1876.

### CASE A.

*To all whom it may concern:*

Be it known that I, LYMAN R. BLAKE, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Boots and Shoes, of which the following is a specification:

This invention relates to boots and shoes, and to the method of manufacturing the same.

In the manufacture of boots and shoes in which the outer sole is attached to a welt, the welt is always stitched to the inner sole and upper before attaching the outer sole, and the outer sole is then stitched to the welt.

In this invention the welt, studded with tacks or metallic fastenings, is first sewed to the outer sole, and the upper and inner sole are then attached to the welt and outer sole by the series of metallic fastenings in the welt.

The invention consists in a boot or shoe in which the outer edge of the welt and the outer sole are sewed together, and in which the welt, inside the line of stitching uniting the welt and outer sole, is connected with the upper and inner sole by a line of metallic fastenings; also, in a fibrous or cloth welt, set with tacks, as an article of manufacture; also, in the described improved method of manufacturing welted boots and shoes, consisting in stitching to the outer sole a welt studded or set with metal fastenings, and then applying such sole to the lasted shoe, the metal fastenings held in the welt alone entering the upper and inner sole, where they are clinched.

Figure 1 represents, in perspective, one form of shoe made in accordance with this invention. Fig. 2 shows a shoe with the sole but partially applied, and Fig. 3 represents a portion of a fibrous welt set or studded with tacks or metallic fastenings.

The upper *a* may be of any usual form or material common in boots or shoes. The welt *b* is, preferably, for light-weight shoes, made of a fibrous strip, with or without a cord, and of the color of the upper, or black. This welt may be made of leather, cut from a hide, as a long strip, by cutting the hide helically, or it may be a cloth or leather strip,

of suitable length and width. In this strip are set or studded a series of tacks or metallic fastenings, *c*, of any usual construction, preferably made to clinch upon an iron last, or an iron-plated last.

The welt *b*, studded with tacks or fastenings, is sewed or stitched to the outer sole *d* by a line of stitching, *e*, Fig. 2. The upper is lasted about a last, and is attached in the usual manner to an inner sole of suitable material.

The lasted shoe is placed in position with reference to the outer sole, and its attached welt studded with tacks, and the sole is then attached by driving the tacks into the upper and inner sole by a suitable hammer or instrument applied to the outer surface of the outer sole, or in any other proper way, to cause the tacks held in place by the welt on the outer sole to enter the upper and inner sole.

It is obvious that the welt might be nailed, or otherwise secured, to the outer sole, but such means would be inferior to stitches.

I claim—

1. A boot or shoe having its outer sole, inner sole, and upper united by an intermediate welt secured to the outer sole, the welt being set or studded with tacks or metallic fastenings, the outer ends or heads of which, when driven, will be concealed between the outer and inner soles, all substantially as described.

2. As an improved article of manufacture, a fibrous welt, set or studded with tacks or metallic fastenings, substantially as and for the purpose described.

3. In the manufacture of boots and shoes, the method herein described of uniting the upper and inner sole to the outer sole, consisting in stitching the welt to the outer sole, and nailing the upper and inner sole to the welt by a series of tacks or nails, sustained by the welt, substantially as described.

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

LYMAN R. BLAKE.

Witnesses:

GEO. W. GREGORY,  
S. B. KIDDER.