L. R. BLAKE.

BOOTS AND SHOES.

No. 185,814. Patented Jan. 2, 1877.

Fig. 1.

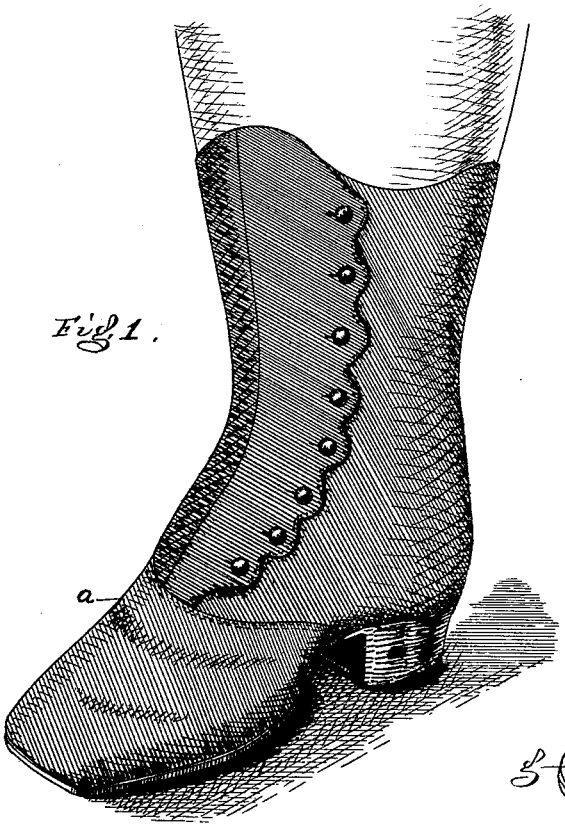


Fig. 4.

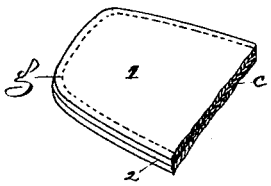


Fig. 3.

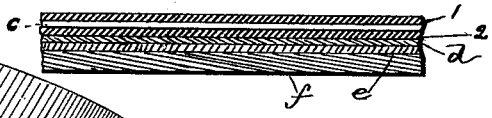
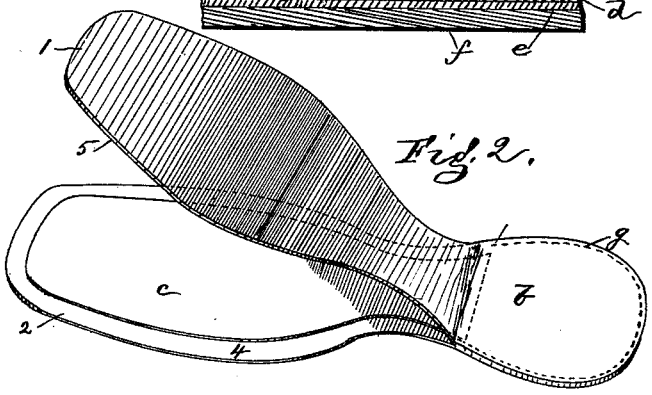


Fig. 2.



Witnesses.
L. H. Latimer.
W. J. Pratt.

Inventor
Lyman R. Blake
per Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

LYMAN R. BLAKE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. **185,814**, dated January 2, 1877; application filed November 27, 1876.

CASE C.

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 has reference to boots and shoes; and consists in an inner sole, composed of two thicknesses of leather or equivalent material used for inner soles, with an interposed piece of metal to give rigidity to the sole, afford a clinching-surface for the points of nails or tacks driven through the under layer of the inner sole, and also to prevent the passage of moisture to the upper portion of the inner sole, against which the foot rests.

In other cases, A B, filed in the United States Patent Office October 16, 1876, I have described a boot or shoe constructed by first sewing a welt studded with nails or tacks upon an outer sole, and then driving the tacks held by the welt into the upper, and outer sole. This sole to be herein described possesses many advantages for a shoe of this class, and also for boots and shoes of other construction.

Figure 1 represents a shoe provided with an inner sole made in accordance with this invention. Fig. 2 is a view of the inner sole partially separated. Fig. 3 is a diagram of the different layers of leather or material between the outer face of the outer sole and the upper face of the inner sole; and Fig. 4 represents a portion of an inner sole stitched at its edges.

The shoe *a* may be of any usual shape. The inner sole *b* is composed of a piece of leather or equivalent, split back to a point, preferably beyond the shank, thereby forming upper and lower portions 1 2, between which is placed a layer of sheet metal, *c*. After the interposition of the metal in the inner sole, the two portions of the inner sole are brought together and pasted or cemented or stitched, thereby forming a stiffer, but more elastic, inner sole than when leather alone is used. Any usual paste or cement used in connection with leather may be used for this purpose, or the edges 4 5 may be stitched together on the line *g*, Figs. 2 and 4.

In Fig. 4 I show a portion of an inner sole, illustrating how it will appear when stitched about its edges outside the metal. In Fig. 3, *f* represents the outer sole; *e*, the welt sewed to the outer sole and preferably set with tacks; *d*, the portion of the upper between the outer and inner soles; 2, the under portion of the inner sole; *c*, the metal; and 2, the upper portion of the inner sole. Tacks, driven through the folded-over portion of the upper, and through the under portion of the inner sole, will meet the metal *c*, will be broken off or clinched thereon, and will not extend through the upper portion 1 of the inner sole, to interfere with the foot or the smoothness of the inner sole.

This inner sole is specially advantageous for use in ladies' gaiters, making them more healthful, because the inner sole prevents the passage of moisture to the foot, as it passes through the thin outer sole, and it is easier for walking than a light thin sole, for it is more elastic.

It is evident that I might make an inner sole by pasting or uniting a piece of leather with the metal above and below it, and one of these sheets might be leather-board.

I claim—

1. As an improved article of manufacture, an inner sole composed of an upper and an under layer of leather, and an interposed layer of metal, substantially as described.

2. In a boot or shoe, an outer sole, a welt, an upper, and an inner sole, provided with a layer of metal, and a series of tacks to unite them together, the tacks being covered by the welt, and being clinched into the under layer of the inner sole, 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.