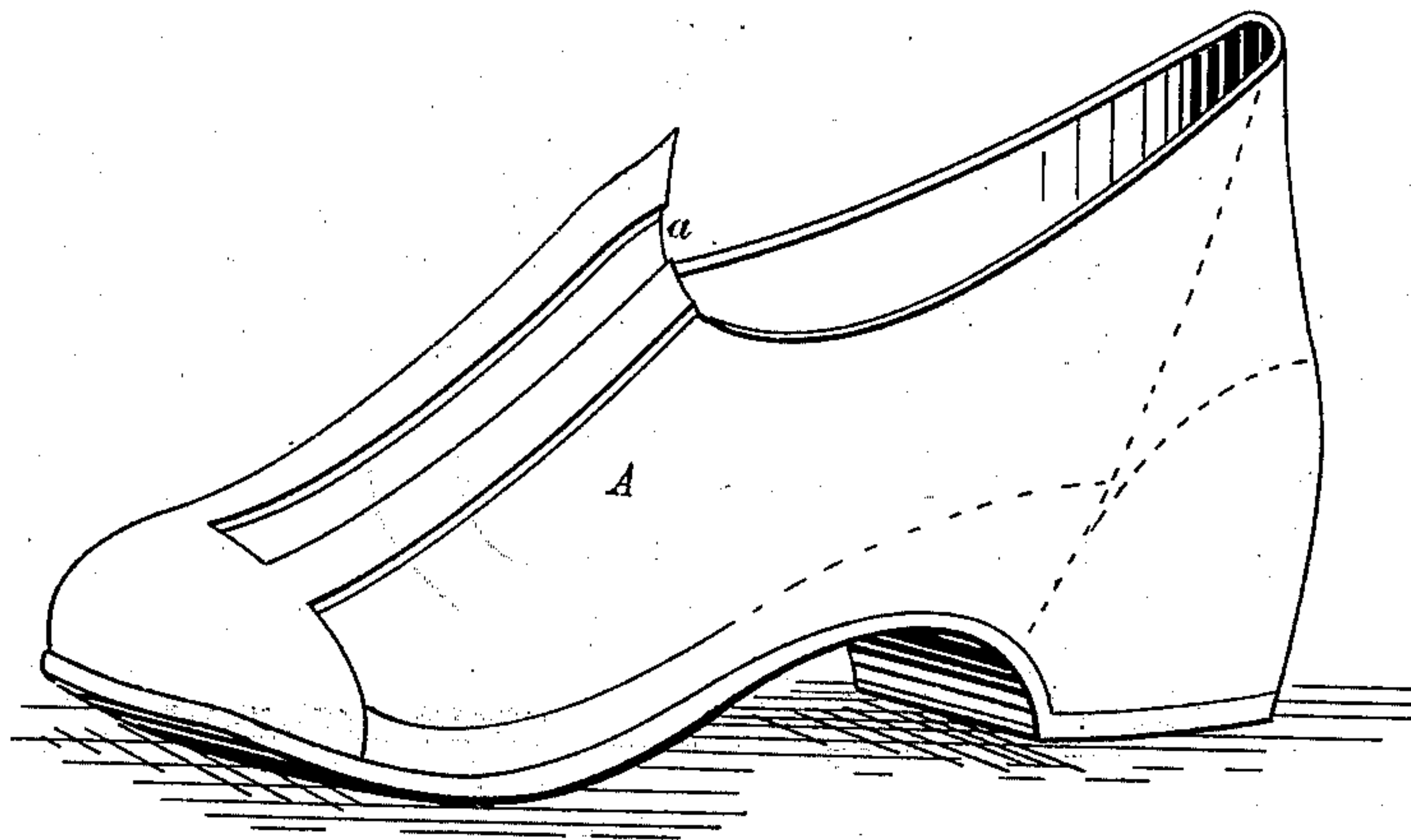


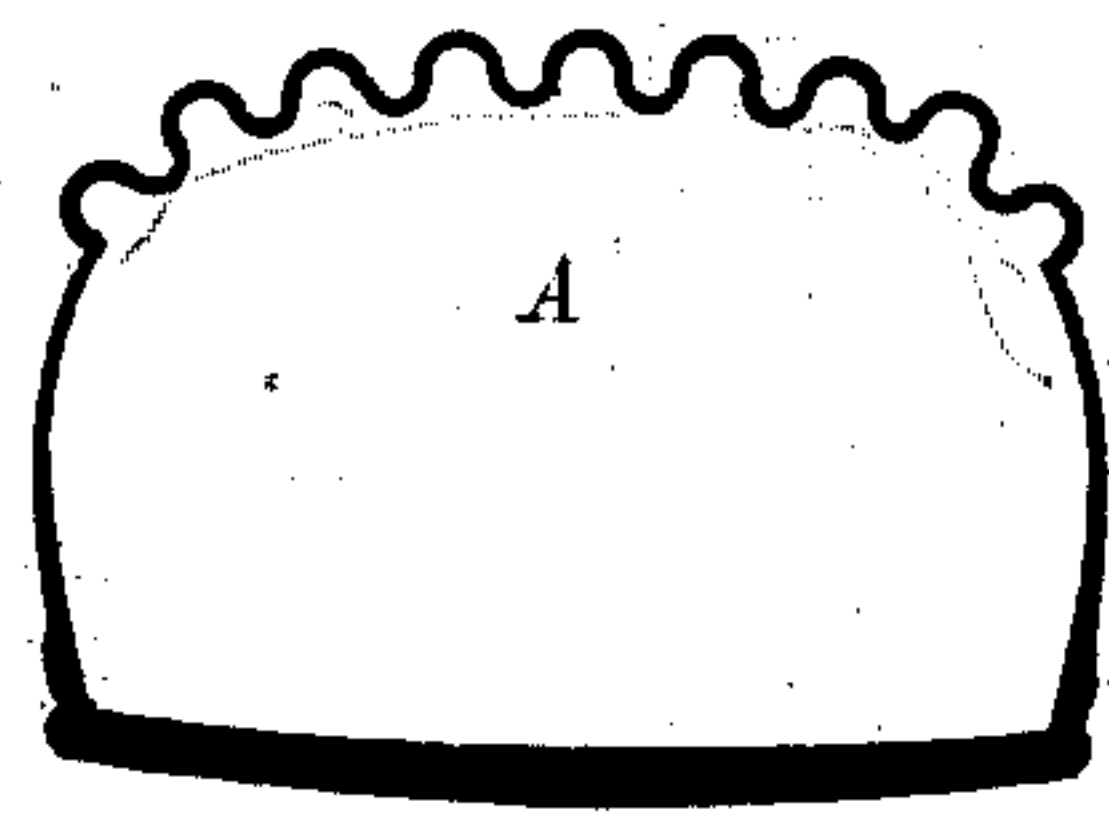
W. R. MILLER.
Rubber Boot and Shoe.

No. 227,811.

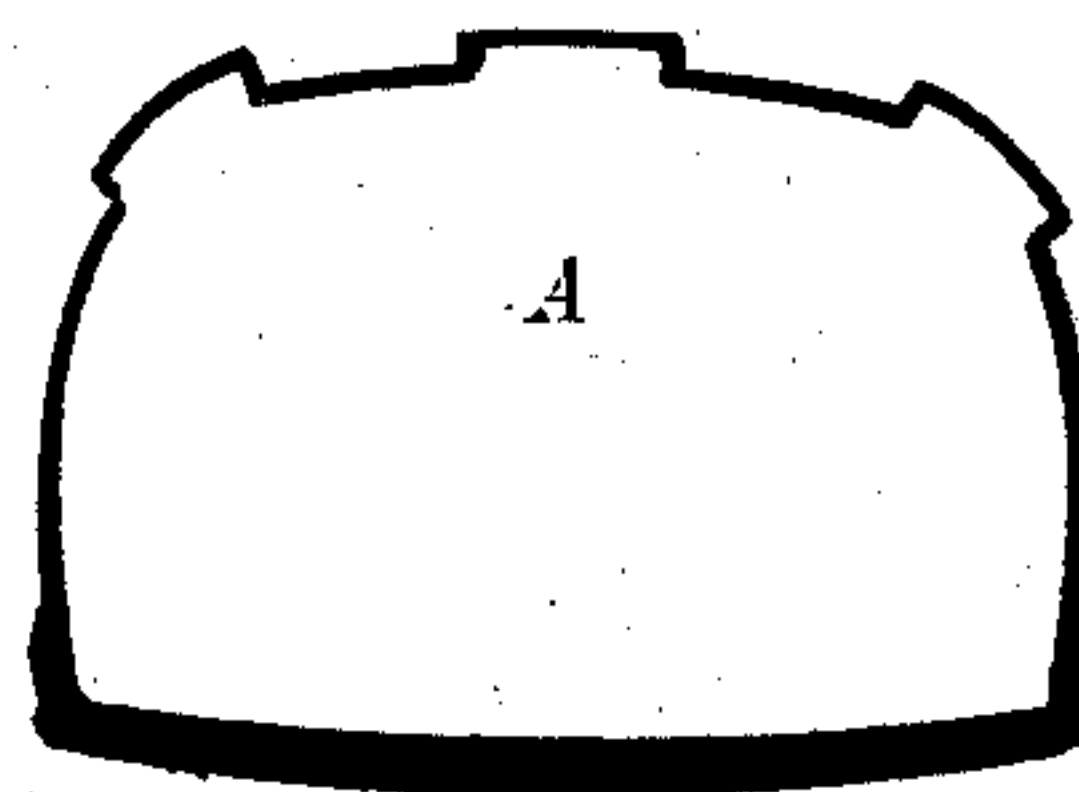
Patented May 18, 1880.



— FIG. I. —



— FIG. II. —



— FIG. II. —

— WITNESSES —

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— INVENTOR —

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att'y.

UNITED STATES PATENT OFFICE.

WILLIAM R. MILLER, OF BALTIMORE, MARYLAND.

RUBBER BOOT AND SHOE.

SPECIFICATION forming part of Letters Patent No. 227,811, dated May 18, 1880.

Application filed January 15, 1880.

To all whom it may concern:

Be it known that I, WILLIAM R. MILLER, of the city of Baltimore and State of Maryland, have invented certain Improvements in Rubber Boots and Shoes, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to construct a rubber shoe in such manner as to increase the expansibility of its upper without reference to the extensible or stretching properties of the material from which it is manufactured, and also to improve the ventilating features of the shoe by reducing the surface of the same in contact with the leather boot or shoe sought to be protected from moisture. With this view I make the rubber-shoe upper, or a portion of the same which is practically of a common thickness, much fuller than is necessary to effect a good fit, and take up the superfluous length or fullness by crimping or corrugating the upper longitudinally of the shoe, beginning at the edge thereof and extending toward the sole.

By this construction the rubber shoe can be stretched entirely out of its proper shape and enlarged sufficiently to allow of the insertion of the leather boot without difficulty or danger of tearing the material. It also admits of the shoe assuming its original form on the leather boot, when the crimps or corrugations then serve as channels for ventilating purposes.

In the further description of my said invention which follows, reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a perspective view of the improved rubber shoe, and Fig. II a cross-section of the same.

Fig. III is also a cross-section of the shoe, showing a modified construction of the same.

Similar letters of reference indicate similar parts in all the views.

In the said drawings, A is the upper of the rubber shoe, which is longitudinally crimped or corrugated from the termination of the upper at *a* toward the toe.

By this construction the portion of the shoe which in ordinary rubber shoes impedes the introduction of the leather boot thereto is easily stretched, as in the operation of drawing on the shoe the corrugations or crimps are taken-out and an extended smooth surface for the time presented.

After the rubber shoe is fairly in place it assumes its original shape, and channels or grooves are again formed, which serve to ventilate the shoe.

I am aware that it is not new to crimp or corrugate a rubber shoe transversely, and also that rubber shoes have been corrugated longitudinally by means of extra thicknesses of rubber secured to the shoe; but such constructions do not admit of the expansibility of the shoe—a result effected by my invention, and such construction I therefore do not claim; but

I claim as my invention—

A rubber shoe having its upper of a common thickness throughout and crimped or corrugated longitudinally from the edge of the opening for the foot toward the toe, whereby the upper, in the act of drawing the shoe over the leather boot, is stretched independently of the extensibility of the rubber of which it is formed, substantially as set forth.

WM. R. MILLER.

Witnesses:

WM. T. HOWARD,
HARRY V. ALBAUGH.