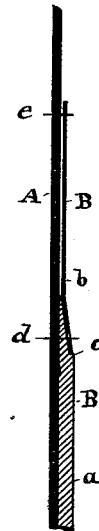
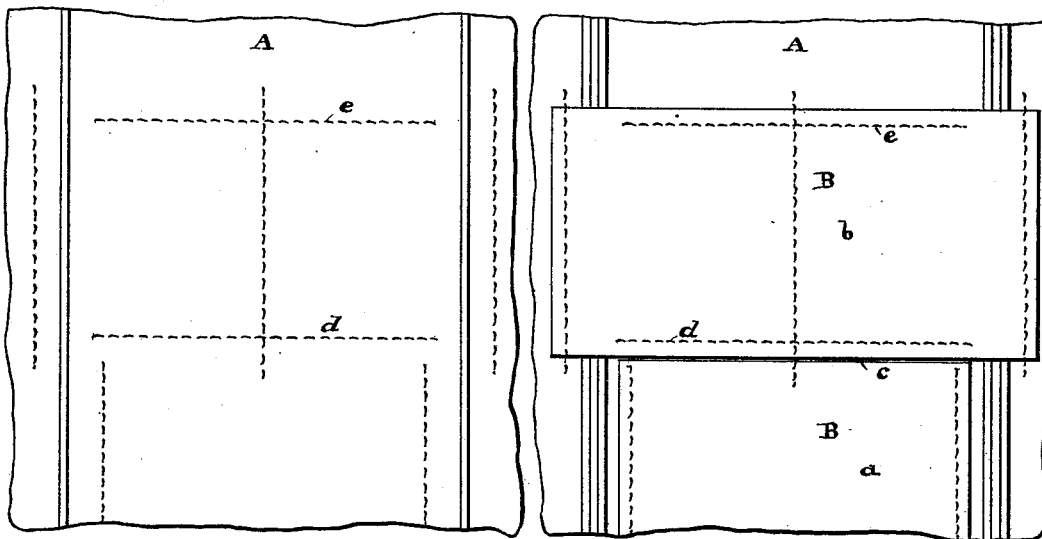


**Patented May 6, 1879.**

— FIG. II —



— FIG. IV —



INVENTOR

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# UNITED STATES PATENT OFFICE.

WILLIAM R. MILLER, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **215,147**, dated May 6, 1879; application filed March 14, 1879.

### *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 the Manufacture of Boots, 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.

This invention relates to a novel construction of the heel-stiffener of a boot, whereby the same may be extended vertically to a point considerably beyond that at which the stiffener usually terminates without a corresponding increase in the cost of the device; and it consists in forming the said stiffener of two pieces of leather differing in quality and thickness, scarfed together, the lower piece being of sole-leather, and the upper one of such leather as is ordinarily used for boot-uppers, as will hereinafter fully appear.

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

Figure 1 is a partly-sectional view of a boot embodying my present improvements. Fig. 2 is a vertical section of parts of the improved boot on an enlarged scale. Figs. 3 and 4 are, respectively, an extended outside and an inside view of the parts shown in Fig. 2, also on an enlarged scale.

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

A is the back of the boot, and B the stiffener, consisting of two parts, *a* and *b*. The lower part, *a*, is of sole-leather, of a common thickness throughout its inner exposed height, or to the point *c*, where it connects with the upper part, *b*. The said upper part, *b*, is in thickness considerably less than the one *a*, to which it is secured in a manner to cause no

projecting edge to interfere with the introduction and withdrawal of the foot to and from the boot. To effect this flush connection, the part *a* of the stiffener at the point *c* is reduced in thickness equal to that of the upper part, *b*, and then skived to a feather-edge. A transverse row of stitches, *d*, fastens the two parts of the stiffener together, and the whole to the back A; and a second row, *e*, connects the upper edge of the device to the back.

It is an advantage for the stiffener to extend above the heel of the foot; but to carry this device to that point, were the same constructed entirely of sole-leather, would materially add to the expense of the boot, and the substitution of a continuous piece of upper-leather for the sole-leather stiffener would render the boot entirely too flexible for use.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. A heel-stiffener composed of the parts *a* and *b*, the former being made up of thick stock and scarfed to receive the latter, whereby a flush connection of said parts on the inner side is formed, all being stitched together, substantially as specified.

2. A boot-heel stiffener constructed, in the direction of its height, of two pieces of leather of different thicknesses, the lower section, near its upper edge, being reduced in thickness equal to the thickness of the upper section, and from that point skived to a feather-edge, and secured to the said upper section by means of a row of stitches, substantially as and for the purpose herein set forth.

In testimony whereof I have hereunto subscribed my name this 13th day of March, A. D. 1879.

WM. R. MILLER. [L. S.]

Witnesses:

WM. T. HOWARD,  
WM. C. NICHOLLS.