

J. R. SWITZER.
LASTS.

No. 178,685.

Patented June 13, 1876.

Fig. 1

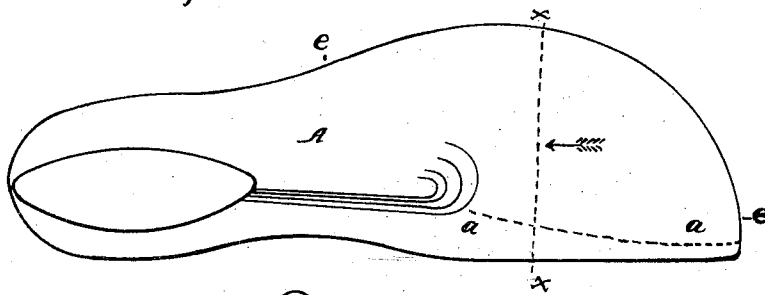
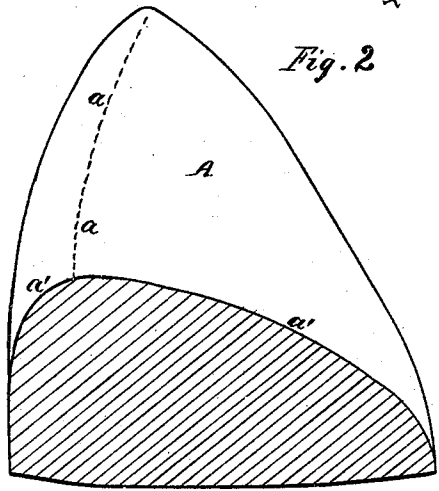


Fig. 2



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH R. SWITZER, OF ELGIN, ILLINOIS.

IMPROVEMENT IN LASTS.

Specification forming part of Letters Patent No. **178,685**, dated June 13, 1876; application filed April 28, 1876.

To all whom it may concern:

Be it known that I, JOSEPH RUSSEL SWITZER, of Elgin, in the county of Kane and State of Illinois, have invented an Improved Last for Boots and Shoes, of which the following is a specification:

Figure 1 in the accompanying drawing is a top or plan view of a last embodying my invention, and Fig. 2 is a vertical cross-section of the same in the plane of the line *x x*.

Like letters of reference indicate like parts.

The object of this invention is to make a last having such a form that the boots and shoes made thereon will approximate more nearly than is usual to the form of a perfectly-formed human foot; and to that end my invention consists in the peculiar construction of the forward part of the last, substantially as hereinafter specified.

In the drawing, A represents my improved last.

It will be perceived, from reference to Fig. 1, that the outer part of the forward part of the last lies in a curved line extending from or near the part corresponding to the arch or hollow of the foot to, or nearly to, the part corresponding to the position of the great toe.

It will also be perceived, from reference to Fig. 2, that that part of the last extending from the inner side of the instep to the end of the great toe is higher than the parts lying on either side of this line.

The highest part above referred to is represented by the broken line *a a*, and the last is beveled off gradually on one side of this line, and is rounded off more abruptly on the other, as represented by the line *a' a'*. In other words, the last is curved in a line corresponding to the lateral swell of the sole of the human foot, and to the position occupied by the ends of the toes, and is thickest where the forward part of the foot is thickest. The curved line referred to is included between the points *e e*.

These are the essential features of my present invention; and,

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A last for boots and shoes wherein the outer forward part of the sole lies in the curved line *e e*, extending from or near the arch of the sole to, or nearly to, the part corresponding to the position of the great toe, and wherein the last is highest or thickest from the instep to the part corresponding to the end of the great toe, or along the line *a a*, and is beveled as described, substantially as and for the purposes set forth.

JOSEPH RUSSEL SWITZER.

Witnesses:

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