

H. E. VAN BENSCHOTEN.

Heel-Protectors for Boots and Shoes.

No. 148,392.

Patented March 10, 1874.

Fig. 6.



Fig. 3.

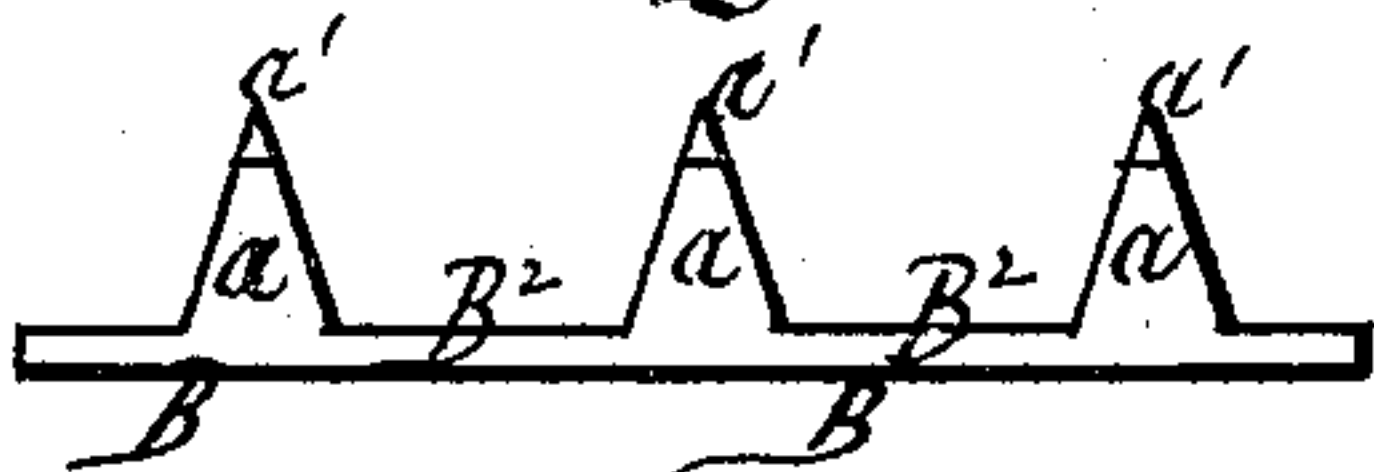


Fig. 8.

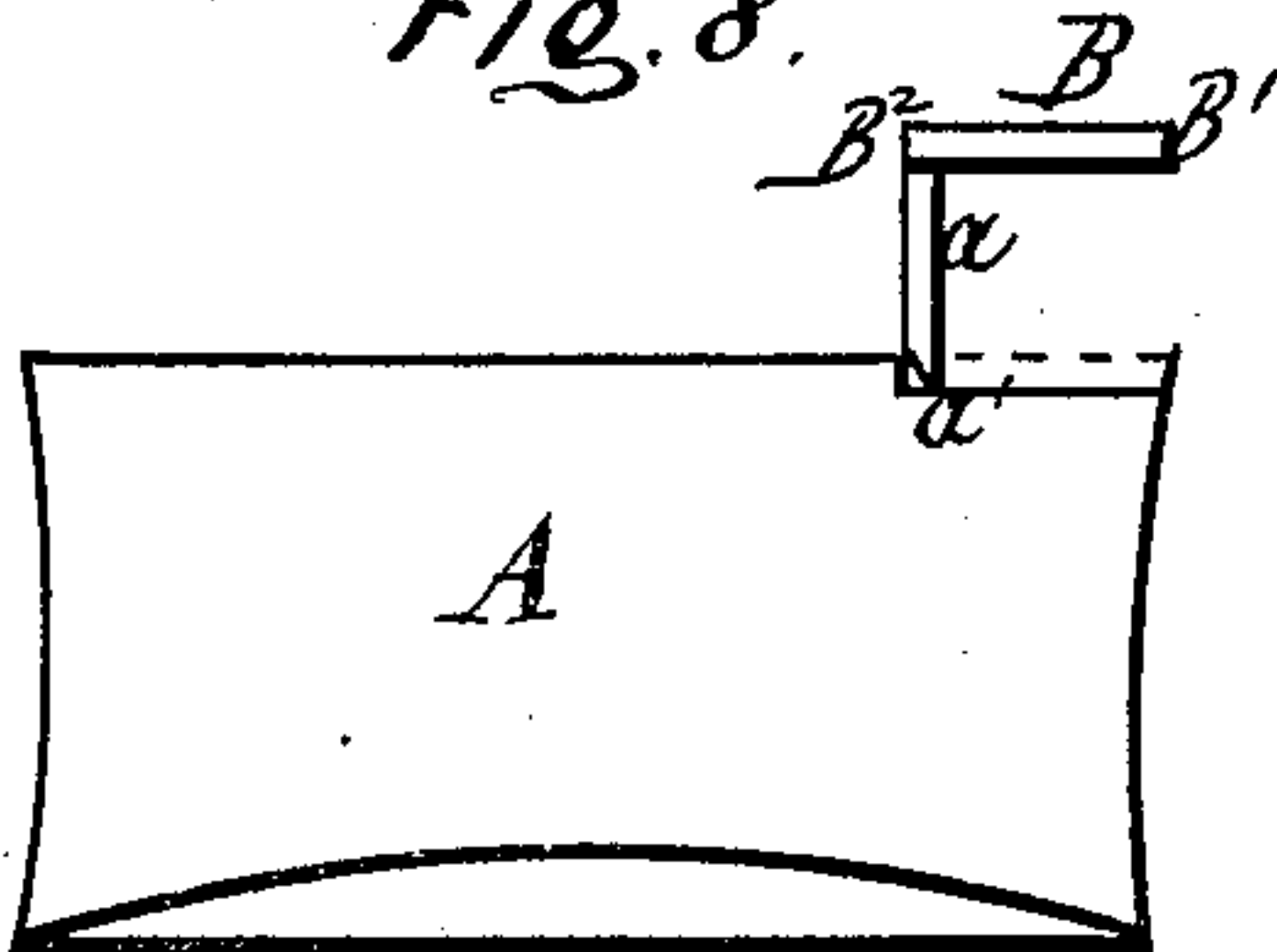


Fig. 5.

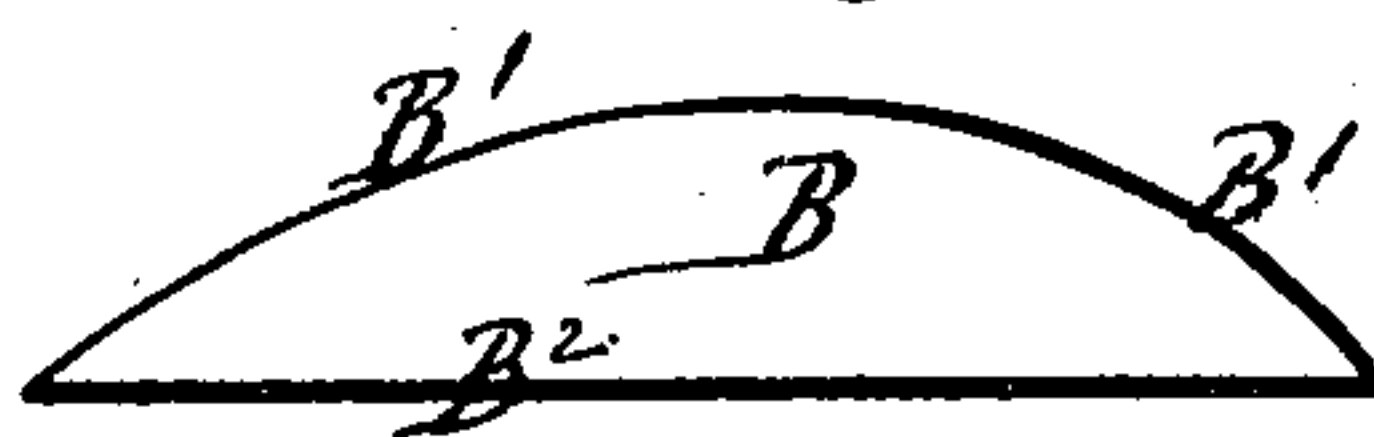


Fig. 4.

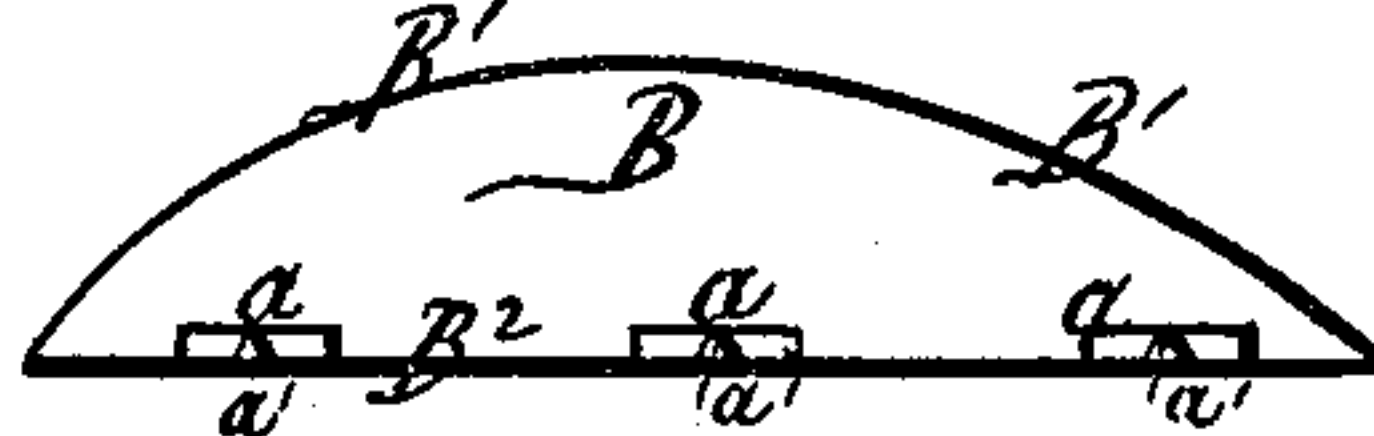


Fig. 7.

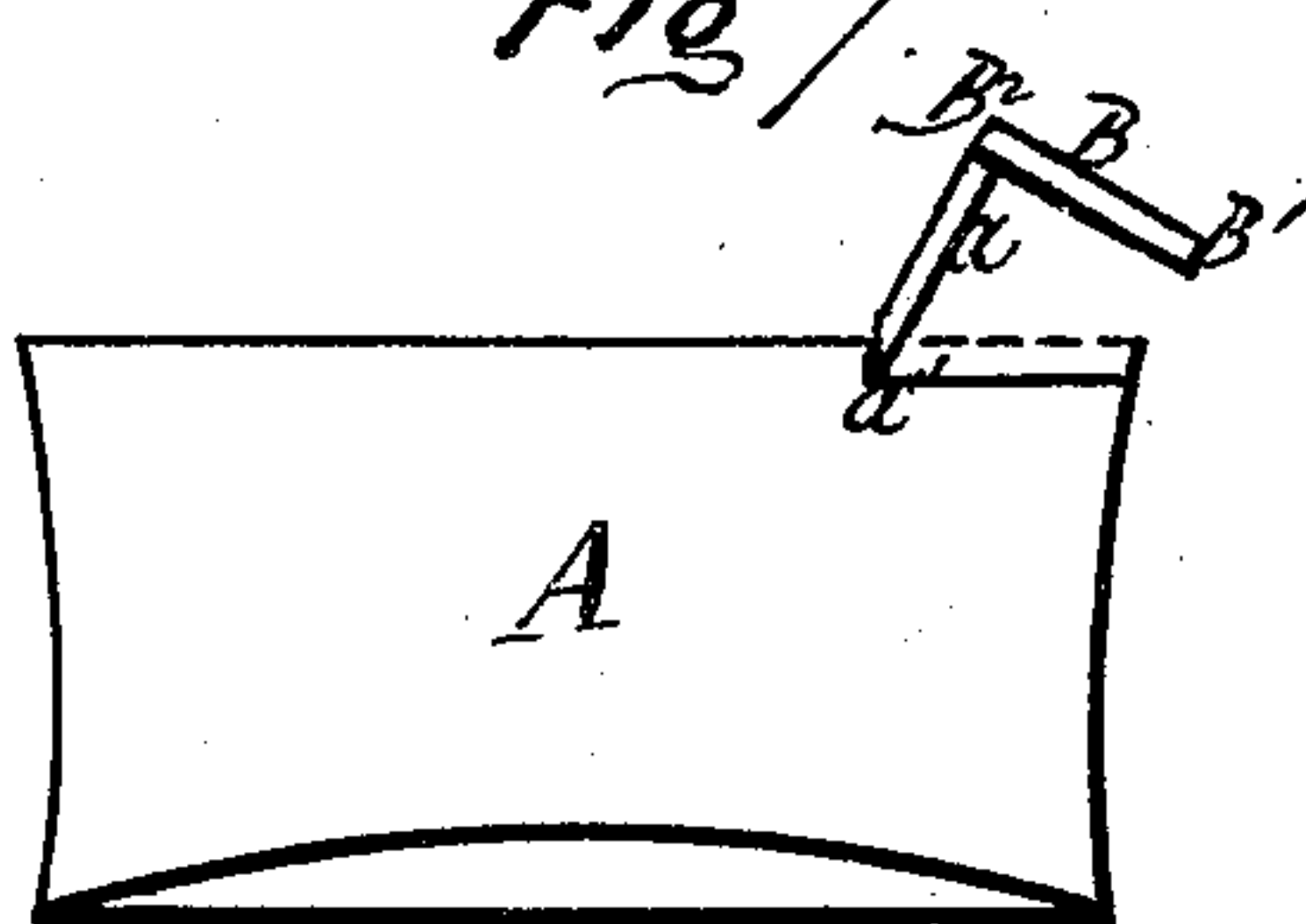


Fig. 1.

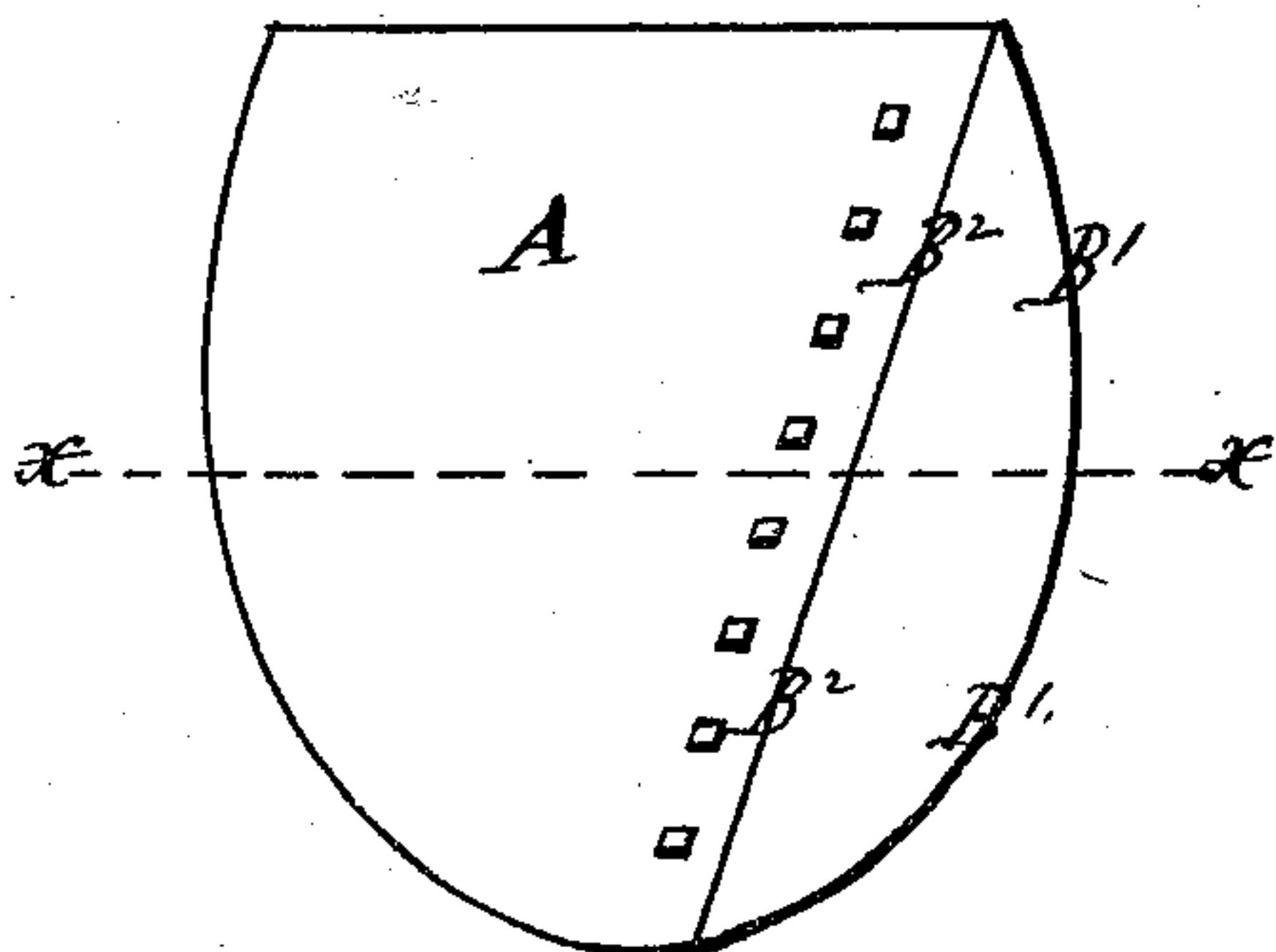
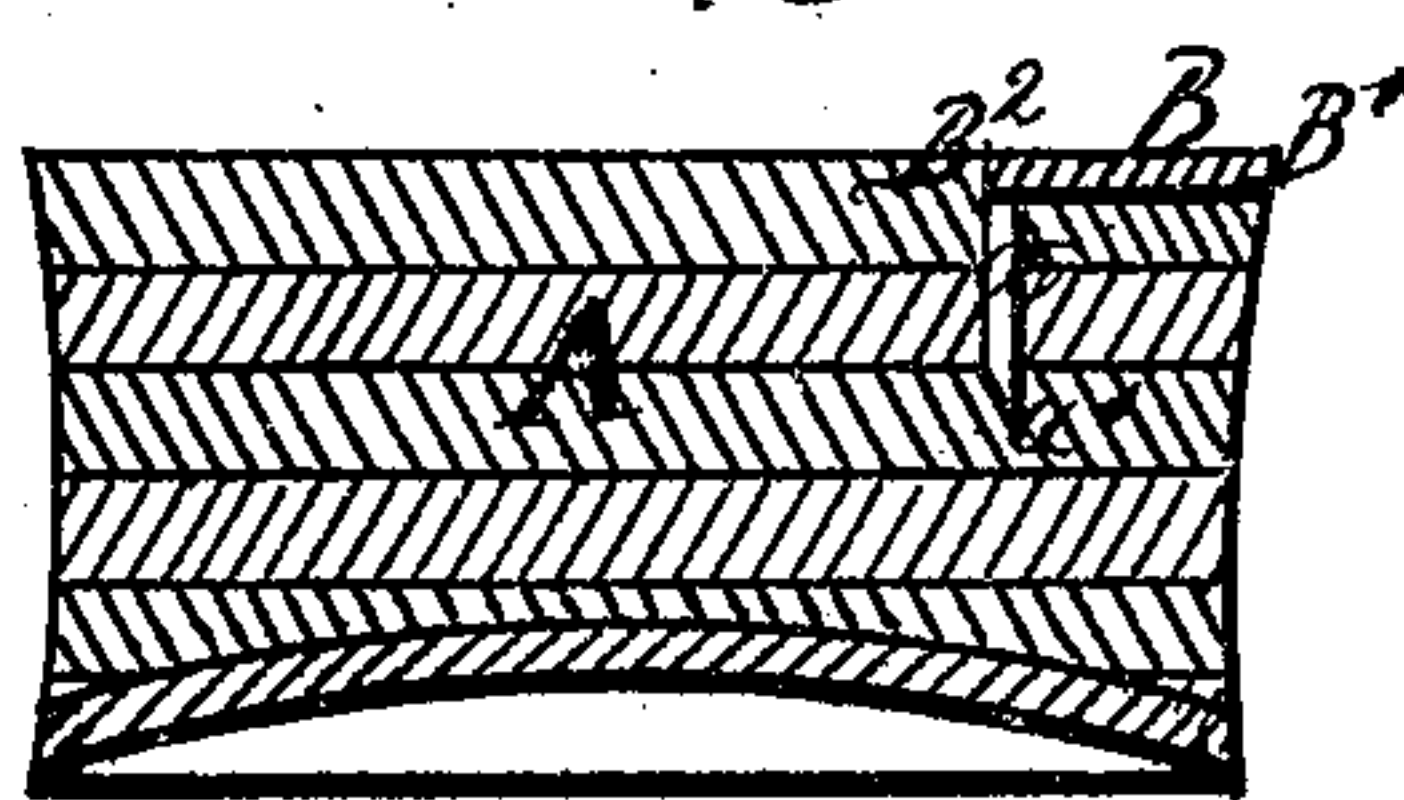


Fig. 2.



Witnesses.

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# UNITED STATES PATENT OFFICE.

HENRY E. VAN BENSCHOTEN, OF HUDSON CITY, NEW YORK.

## IMPROVEMENT IN HEEL-PROTECTORS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **148,392**, dated March 10, 1874; application filed February 6, 1873.

*To all whom it may concern:*

Be it known that I, HENRY E. VAN BENSCHOTEN, of Hudson City, Columbia county, State of New York, have invented certain Improvements in Heel-Protectors for Shoes and Boots, of which the following is a specification:

The object of my invention is to produce, as a new article of manufacture, a light, strong, and cheap sectional protector for the heels of boots and shoes.

Heels are generally worn off more on one side than the other, which tends to destroy the boots and shoes, by twisting and straining the same, in addition to making walking difficult, and necessitating frequent heeling to prevent it. This wearing down is frequently caused by temporary weakness of the ankle of the wearer, and, consequently, requires a temporary appliance to counteract the same, which can readily be removed when the cause of weakness is cured.

Several inventions have been made to overcome these difficulties, and revolving heels, and circular and horseshoe-formed heel-irons, and other similar devices have been resorted to; but such devices have not been sectional, and have not met with general approval, on account of their weight, the noise occasioned by striking against flooring and pavement, and their tendency to slip. All that is required is that a small sectional part of the heel should be protected by a light piece of metal, which can be easily put on, and just as readily removed and substituted by a piece of leather, when required.

In carrying out my invention, I form a heel-protector of a flat piece of metal, one surface of which is curved to the shape of that portion of the outer form of the heel of the boot to which it is to be applied, while the other surface is formed straight, thereby enabling a portion of the leather of the heel to be readily removed for its insertion, and as easily replaced when the protection is no longer required. The under side of the plate is provided with shanks or prongs, arranged in a row parallel to, and flush with, the edge

of the straight side, in position to be pressed into the leather of the heel.

In order to apply my improved protector, all that is necessary is to make a straight cut across the leather of the heel, and remove a portion of the leather of the heel corresponding in size and depth with the size and depth of the protector. The protector may then be applied by simply hammering the same down into position; and it may as easily be removed, and the aperture in the heel replaced by a piece of leather.

But, that my invention may be fully understood, I will describe the same in detail by the aid of the accompanying drawing.

Figure 1 represents an under-side view of a heel with my improved protector applied thereto. Fig. 2 is a vertical section through the line *x x*, Fig. 1. Fig. 3 is a side view, Fig. 4 a plan, and Fig. 5 an under-side view, of my improved heel-protector separately.

A is a heel of a boot or shoe, in the bottom part of which is cut away a piece of leather on the side most likely to be worn, covering a space of the form of the protector. The protector is constructed of a flat piece of metal, B, one surface, B<sup>1</sup>, of which is curved to the shape of that portion of the outer form of the heel to which it is to be applied, while the side or surface B<sup>2</sup> is formed straight. The under side of the plate B is provided with shanks or prongs *a a*, arranged in a line parallel to and flush with the straight side or surface B<sup>2</sup>. These shanks or prongs *a a* are inclined, on one side, at their points *a'*, in order that they may be more easily and more closely placed against the line of the leather, which will form the continuous surface of the heel when the protector is in place, so that when the prongs have been placed in position and then raised vertical, they may be hammered down into the leather.

By placing the shanks or prongs *a a* of the protector B in the position shown by Fig. 7, and then raising the same into a vertical position, as shown by Fig. 8, over the space cut out in the heel A, and applying blows with a hammer to the protector B on



the under surface, the shanks or prongs *a* are easily driven into the leather until the protector is even with the under surface of the heel.

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

As a new article of manufacture, a flat sectional heel-protector, formed of sheet metal,

having a curved side,  $B^1$ , a straight side,  $B^2$ , and a series of bevel-pointed shanks or prongs, *a a*, arranged in a line parallel to, and flush with, the edge of the straight side, substantially as shown and described.

HENRY E. VAN BENSCHOTEN.

Witnesses:

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