H. H. BIGELOW.

Heels for Boots and Shoes.

No. 153,306. Patented July 21, 1874.

Fig. 1.

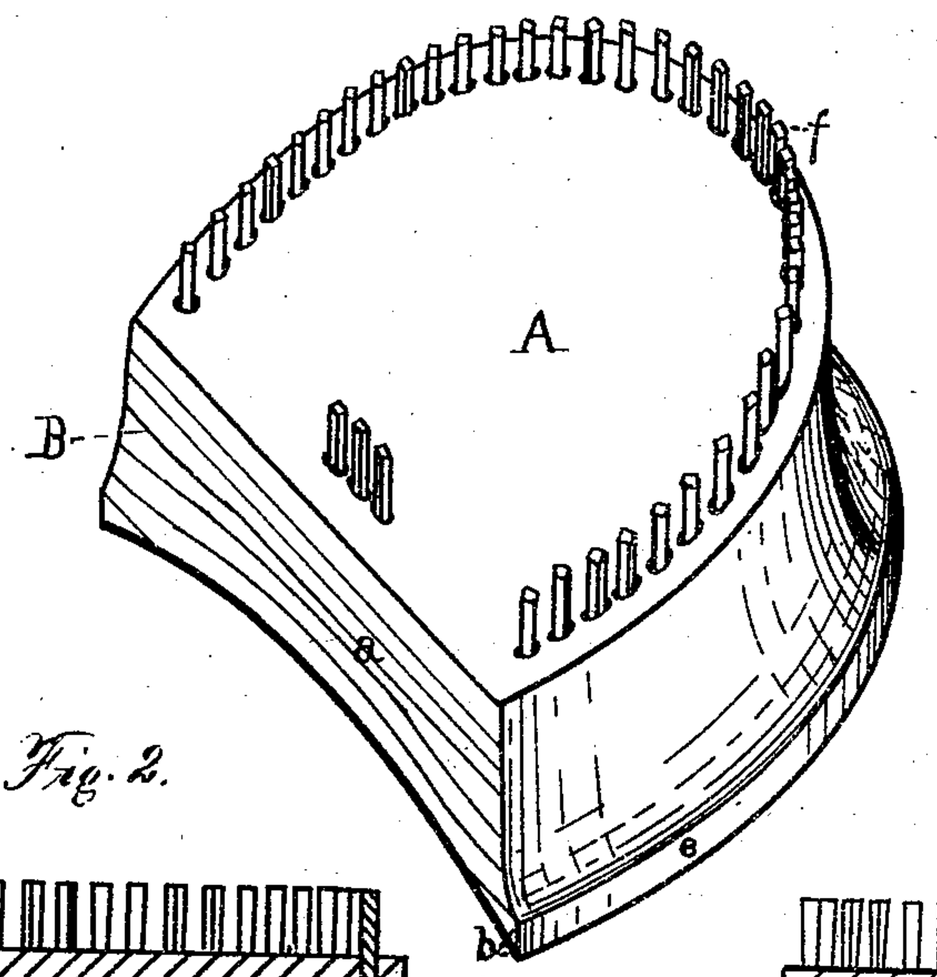


Fig. 2.

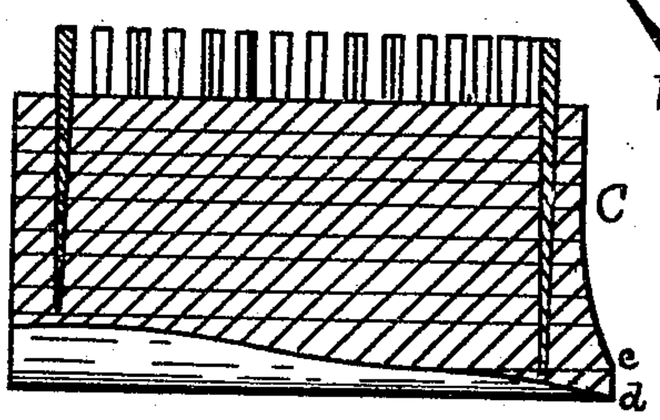


Fig. 3.

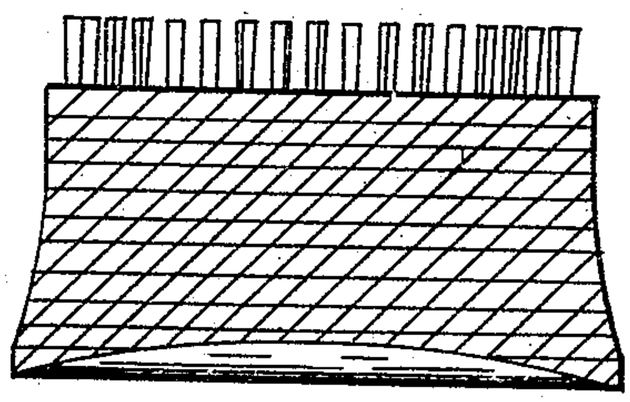


Fig. 4.

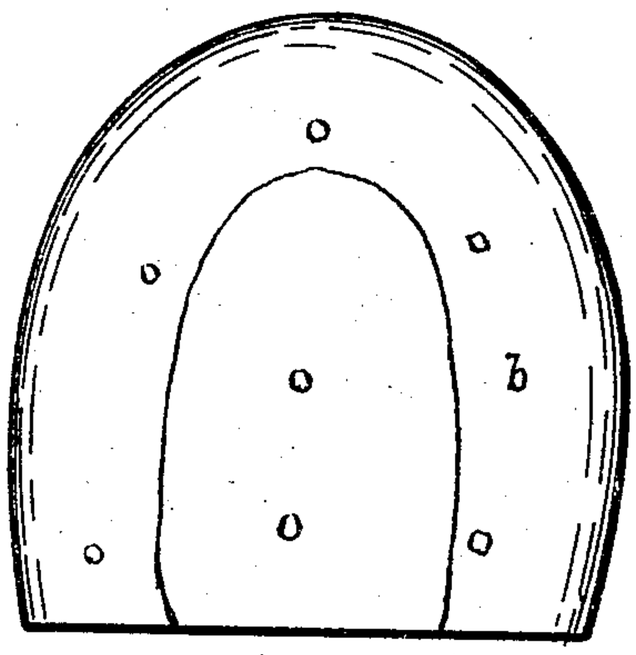
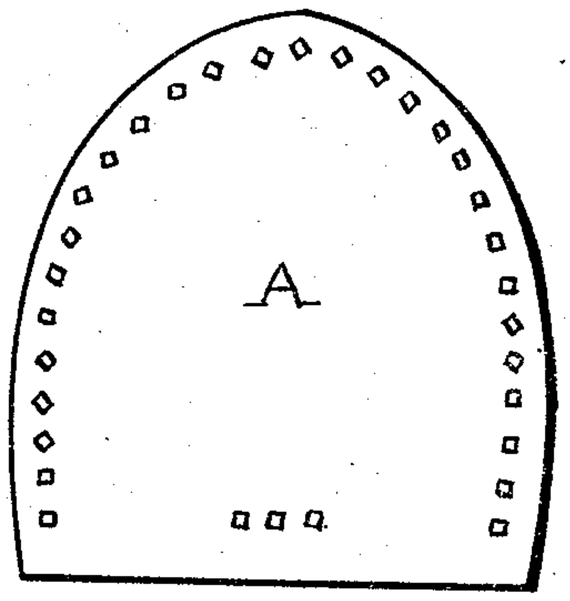


Fig. 5.



WITNESSES

Thos. H. Dodge

Edwin E. Moore

INVENTOR

Horace H. Bigelow

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

HORACE H. BIGELOW, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN HEELS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **153,306**, dated July 21, 1874; application filed July 2, 1874.

To all whom it may concern:

Be it known that I, HORACE H. BIGELOW, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Blank Heels for Boots and Shoes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification, and in which—

Figure 1 represents a bottom view, in perspective, of my improved blank heel for boots and shoes, with the holding-nails inserted and partially driven. Fig. 2 represents a vertical central section from the back of the heel through to the breast. Fig. 3 represents a vertical central section through the heel from side to side, cut at right angles to the section shown in Fig. 2. Fig. 4 represents a top view, showing the rand in position after the heel has been pressed; and Fig. 5 represents a bottom view.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, A represents a blank heel, made up from layers or lifts of leather *a*, and a rand, *b*, after the heel has been subjected to pressure on all sides, to give it the necessary solidity, and proper form and shape. The breast B of the blank heel is pressed perpendicularly, while the sides and back C are pressed, in this instance, somewhat in a tapering form, until the point *c* is reached, and from there to the edge *d* the surface is pressed perpendicular, as fully indicated at *e*, Fig. 1.

In preparing the heel for the compressing-mold, the lifts *a*, whether whole or composed of pieces, are first piled up and tacked together, so as to resemble somewhat the form of a finished heel, after which a rand, *b*, is tacked upon the heel-seat side (when one is used) of the blank, and the blank heel is then placed in a mold, the interior surface of which is so formed as to give to the heel, after it has been pressed, the form shown in Fig. 1 of the drawings.

Of whatever form the sides and back of the heel are to be made, a portion of the mold, in which about one-eighth of the heel-seat edge is encircled at the time of its final compression, is to be made perpendicular, whereby a smooth and perfect finish is obtained on that part of the outer surface of the heel which comes next to the upper, so that after the heel has been applied to the boot or shoe the operator can, with a suitable tool, easily and quickly remove the corner *c*, thus leaving the heel-seat edge nicely and perfectly finished. Another advantage resulting from making the blank heel with a portion, *e*, of the heel-seat edge perpendicular is that, as the follower presses against the heel seat and rand, thereby forcing the heel into the mold, the perpendicular edge of the mold, which forms the surface *e*, and which the follower very nearly fits, prevents the rand from being drawn off or down upon the sides of the heel, as is the case when the blank heel is pressed in a mold, which leaves the surface of its sides and backs taper form throughout. The same is also true in pressing heels when the heel-seat is formed by pressure alone, without the aid of a rand, *b*, being first tacked on.

By making and compressing a heel in this way the rand is compressed and consolidated upon the heel-seat, and left in the most perfect manner.

That portion of the sides and back of the heel between the bottom of the tread-lift and the edge *c* of the perpendicular part *e* may be made in any desired tapered or curved form.

The holding-nails *f* may be inserted before the blank heel is removed from the mold, as described in my patent of July 5, 1870.

Having described my improved blank heel for boots and shoes, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. A blank heel for boots and shoes, compressed on all sides, and having a perpendicular edge, *e*, left upon the outer surface of the heel-seat edge above the tapered part, substantially as and for the purposes set forth.

2. A compressed blank heel, having a rand, *b*, compressed thereon, with its outer edge perpendicular, substantially as and for the purposes set forth.

HORACE H. BIGELOW.

Witnesses:

THOS. H. DODGE,

EDWIN E. MOORE.