EDWARD P. BRAY.

METALLIC HEEL.

No. 118,335. Patented Aug. 22, 1871.

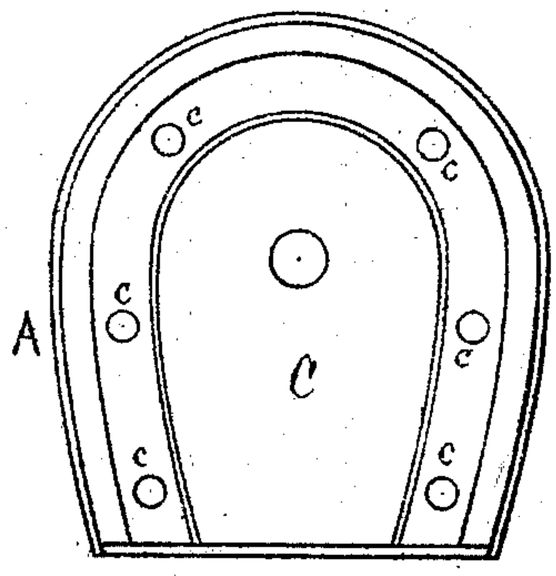

FIG: 1.

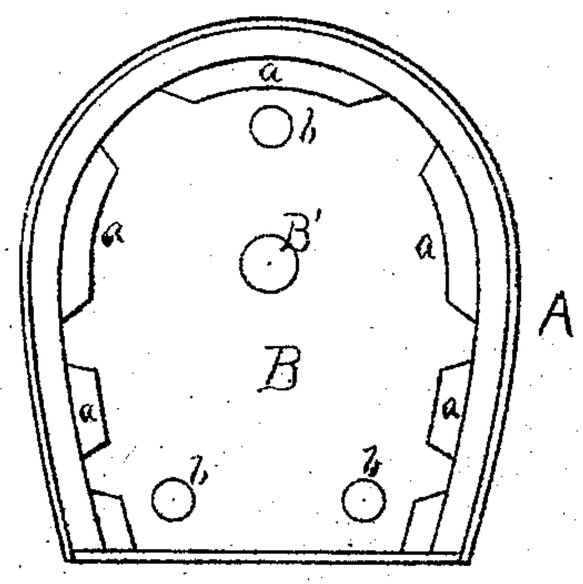

FIG: 2.

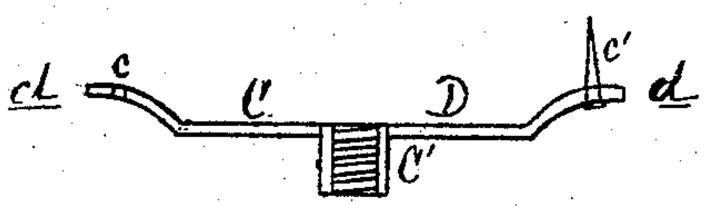

FIG: 3.

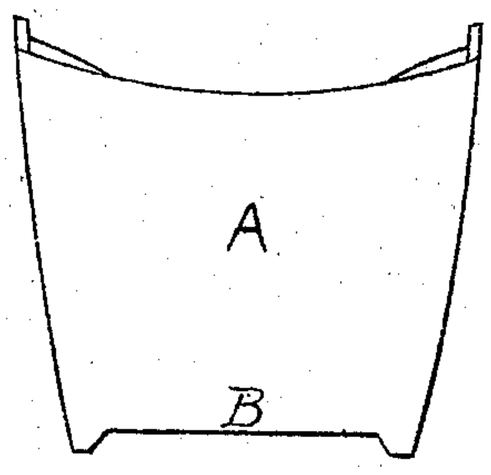

FIG: 4.

WITNESSES.

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118,335

UNITED STATES PATENT OFFICE.

EDWARD P. BRAY, OF ELIZABETH, NEW JERSEY.

IMPROVEMENT IN METALLIC HEELS.

Specification forming part of Letters Patent No. 118,335, dated August 22, 1871.

To all whom it may concern:

Be it known that I, EDWARD P. BRAY, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Metallic Heels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification, in which—

Figure 1 is a top plan view. Fig. 2 is a top plan view without the plate. Fig. 3 is a vertical sectional view through the center of the plate. Fig. 4 is a front view.

My improvement relates to that class of metallic shell heels which is secured to the sole of the boot or gaiter by means of malleable pins, or pins that are driven through the sole and then turned down and clinched on the inner face of the sole. My improvement consists in providing a plate which is to be attached directly to the heel, so formed that while it conforms to the contour of the heel when first finished, fitting closely thereon, at the same time it shall allow of the natural settling of the heel. To accomplish this, and in this my invention chiefly consists, I so form the heel-plate as to secure a flange, rim, and center recess. The rim fits the leather heel in its finished or normal condition, and is provided with a series of perforations, which permits of the plate being attached by any sized pin or tack desired, while the recess allows of the sinking of the heel, and which renders the heel comfortable during all stages of its wear. This flange-rim of the plate rests and is supported on the annular shoulder of the heel, and the heel and plate are firmly united by means of a screw passing through an opening in the base-plate and entering a hollow center-bearing stump on the under side of the plate.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

A is the metallic shell heel, which is cast of the ordinary form, in the usual manner, and of any suitable metal or composition. *a a* is a series of vertical shoulders, cast in and around the inner surface of the wall of the heel, and which serve as bearing or supporting-points for the plate C, hereinafter to be described, to rest on. B is the bottom plate of the heel. This plate is cast with an aperture or hole, B′, through which passes the screw that connects the heel and the plate C. *b b b* are three or more orifices or holes, also cast in this plate B, and through which pass suitable screws or pins to secure the pad. C is an independent plate, and is cast or otherwise formed, as distinctly shown in sectional view, Fig. 3—that is, with a curved rim or flange, *d*, and countersunk recess D at its center—which, from practical experience, has proven best adapted for the natural and comfortable settling of the foot in the metallic heel. In the curved rim of the plate C is a series of small holes, *c c*. On the under or convexed surface of this plate is a projecting stump or bearing, C′. This is cast hollow and provided with a female-screw thread, as shown in Fig. 3.

The heel is attached in the following manner: The sole being properly trimmed, the plate C is placed thereon and fastened by malleable pins *c′*, the same being inserted or driven through the openings *c c*. One of these pins or spurs is clearly shown in Fig. 3. The heel A is then applied to the plate, the shoulders *a a* resting or bearing on the same. A suitable screw is then passed through the hole B′ and secured in the stump C′, by means of which the plate C and heel A are firmly united. The pad is then secured in the usual manner.

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

The plate C, when formed with an annular rim, *d*, and recess D, as stated, and attached to the sole of the boot and to the metallic heel, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD P. BRAY.

Witnesses:
JOHN MANIEL,
JAMES RICE.