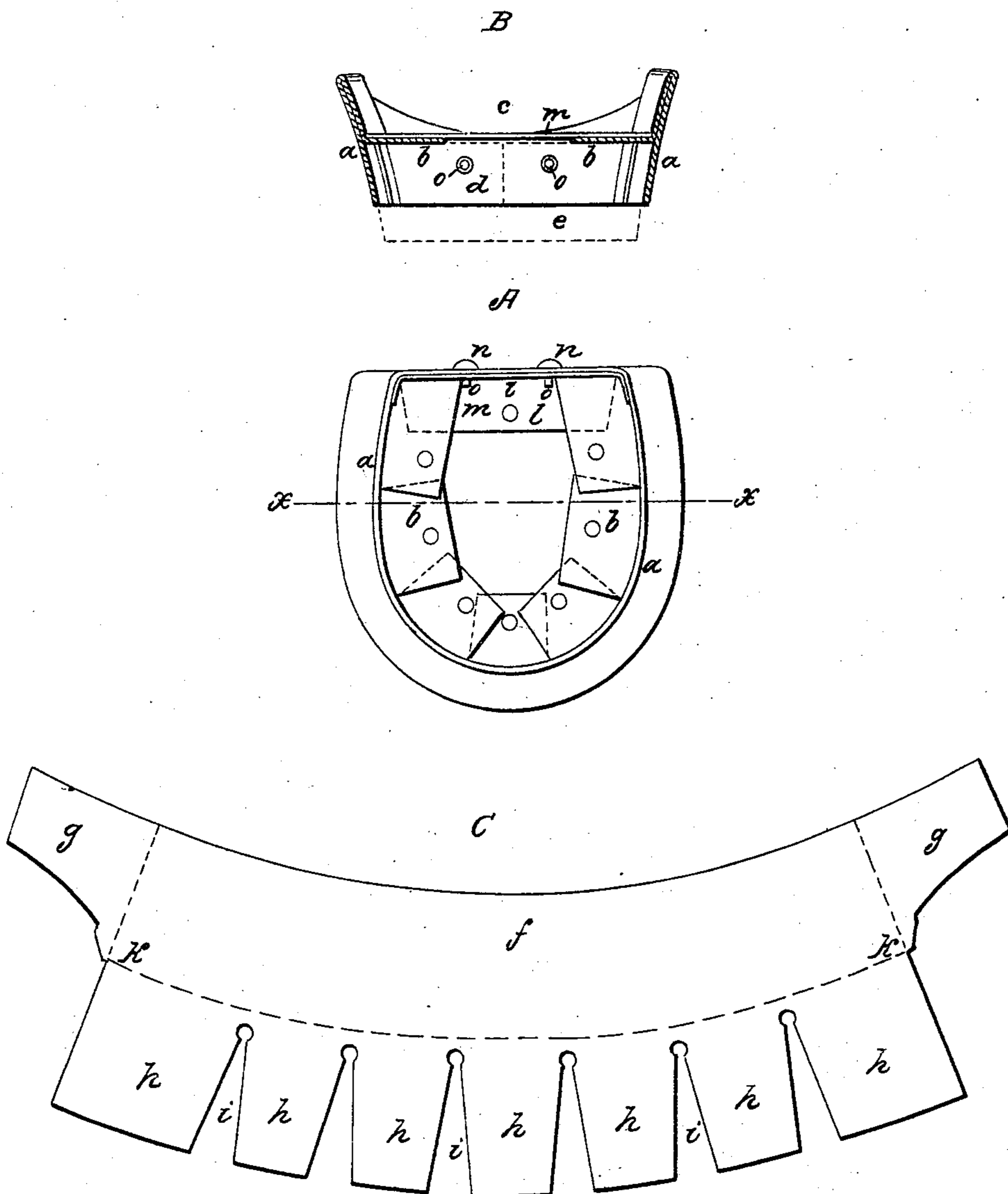


J. R. MOFFITT.

Heel Casing.

No. 76,794.

Patented April 14, 1868.



Witnesses:
M. W. Frothingham.
J. B. Kidder.

J. R. Moffitt.
by his Atty:
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United States Patent Office.

JOHN R. MOFFITT, OF CHELSEA, MASSACHUSETTS.

Letters Patent No. 76,794, dated April 14, 1868.

IMPROVED HEEL-CASING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN R. MOFFITT, of Chelsea, in the county of Suffolk, and State of Massachusetts, have invented an Improved Metal Heel-Casing; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

My invention relates to the construction of that class of metal heel-casings designed particularly to hold rubber boot and shoe-heels, such a casing consisting of an outer plate conforming to the general shape of a boot-heel, having, projecting from and all around its inner surface, (about midway of the depth thereof,) a seat-piece, designed to support the leather heel of the boot on its upper surface, and the upper surface of the rubber heel against its lower surface, the rubber heel being made with flaring edges, which press against flaring surfaces of the inside of the casing, thereby holding the rubber heel within the casing.

Heretofore such metal casings have been made of cast metal, and as the metal must, of necessity, be quite thin, for the purpose of lightness, it is difficult to obtain perfect castings, and the object of my invention is to form such casings of plate metal, in contradistinction to casting them.

My invention consists, primarily, in a heel-casing, having its curved and flared boundary plate, its plate or plates across the front of the casing, and its fin or seat-piece formed of plate metal, bent into the proper shape for reception and securement of the rubber heel, and the heel of a boot or shoe.

The drawings represent, at A and B, a heel-casing embodying my improvement. A shows a bottom view; B, a section on the line *x x*. *a* denotes the outer plate, forming the wall or boundary of the casing, this wall flaring, as seen at B, and having a central fin, *b*, extending from its inner surface, and dividing the casing into the upper and lower sections *c d*, the upper for receiving the heel of the boot, to which the casing is to be secured, and the lower for receiving the rubber heel *e*.

In forming the casing, I first punch from plate metal a blank, of the shape (or approximating thereto) shown at C, this blank having a long curved upper part, *f*, two end-pieces, *g*, and a series of tail-pieces, *h*, the latter being formed by punching out the metal, as shown at *i*. Having the blank thus punched out, I fold the metal on the line *k k*, bending the metal adjacent to such line, and about half way to the outer edge of the pieces *h*, down against the inner surface of the piece *f*, (as seen at B,) and I also bend the ends of the pieces *h*, so as to stand at a right angle, or nearly so, to the piece *f*, and the inner ends of *h*. I then bend the piece, thus folded and bent, in the direction of its length, and into the general form of outline of the heel it is to case, bending the pieces *g* in, so that they will meet, as seen at A. This brings the pieces *h* to the position shown at B, each side of each being lapped by or lapping the adjacent side of the next, thereby giving strength and rigidity to the fin *b*, thus formed.

An auxiliary end-piece, *l*, extends across the joint formed by the abutting edges of the two pieces, *g*, its top, *m*, being bent over upon the tops of the adjacent pieces, *h*, as denoted at A, a pin or rivet, *n*, securing each piece *g* to the piece *n*, and thus keeping the casing in shape.

Although the casing may be formed as described, by successive and distinct operations, I prefer to form them by mechanism designed for such purpose, which mechanism shall take the blank, C, and automatically bend and work its parts up into the form shown at A and B, at one or by a continuous operation.

Heel-casings thus made are much stronger than the cast ones, and as they can be formed without failure, (such as results in attempting to cast them,) they are much cheaper.

As the strain in treading upon the rear end of the rubber heel tends to throw the heel from the casing, I make the inner end with two inwardly-projecting spurs, *o*, which penetrate the rubber, and thus confine it in position at this point.

The casing is confined to the boot-heel by nails, driven through nail-holes, *p*, into the leather, and clinched on the inside of the boot, and these holes, and those for reception of the pins *n*, may be punched by or in connection either with the mechanism which forms the blank, or with the mechanism which bends the blank, or subsequent to these operations.

I claim a heel-casing, formed of sheet metal, substantially as described.

I also claim, in combination with a metal heel-casing, spurs *o*, substantially as and for the purpose set forth.

J. R. MOFFITT.

Witnesses:

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