

(No Model.)

J. D. BILLINGS.

HORSESHOE.

No. 249,573.

Patented Nov. 15, 1881.

Fig. 1.

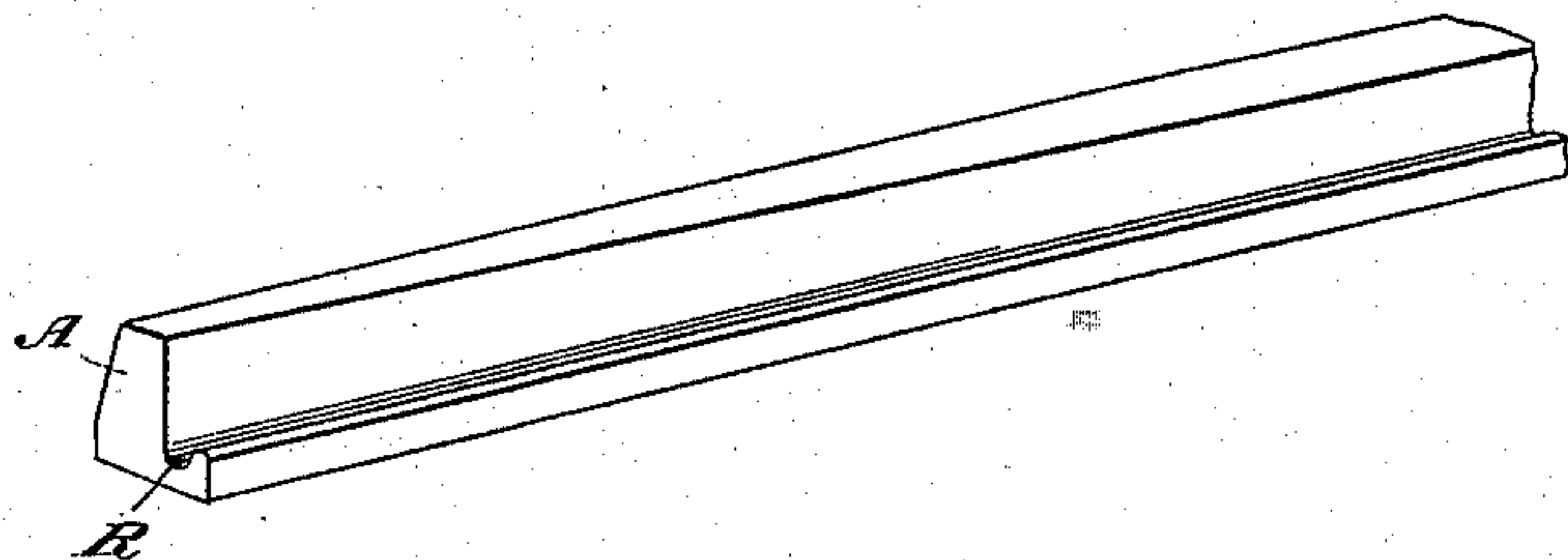


Fig. 2.

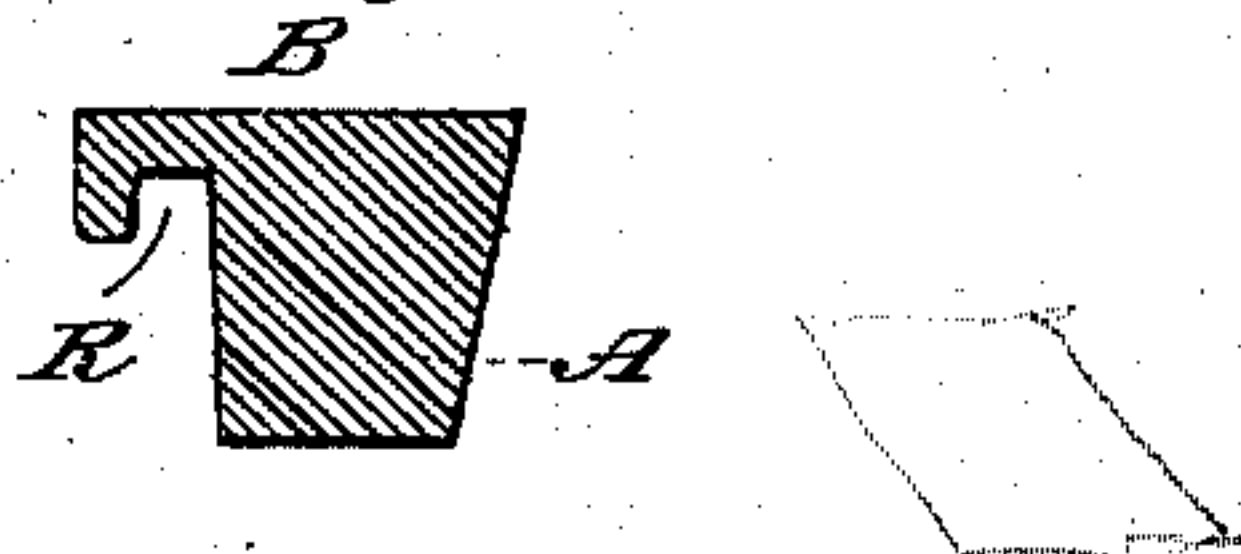


Fig. 3.

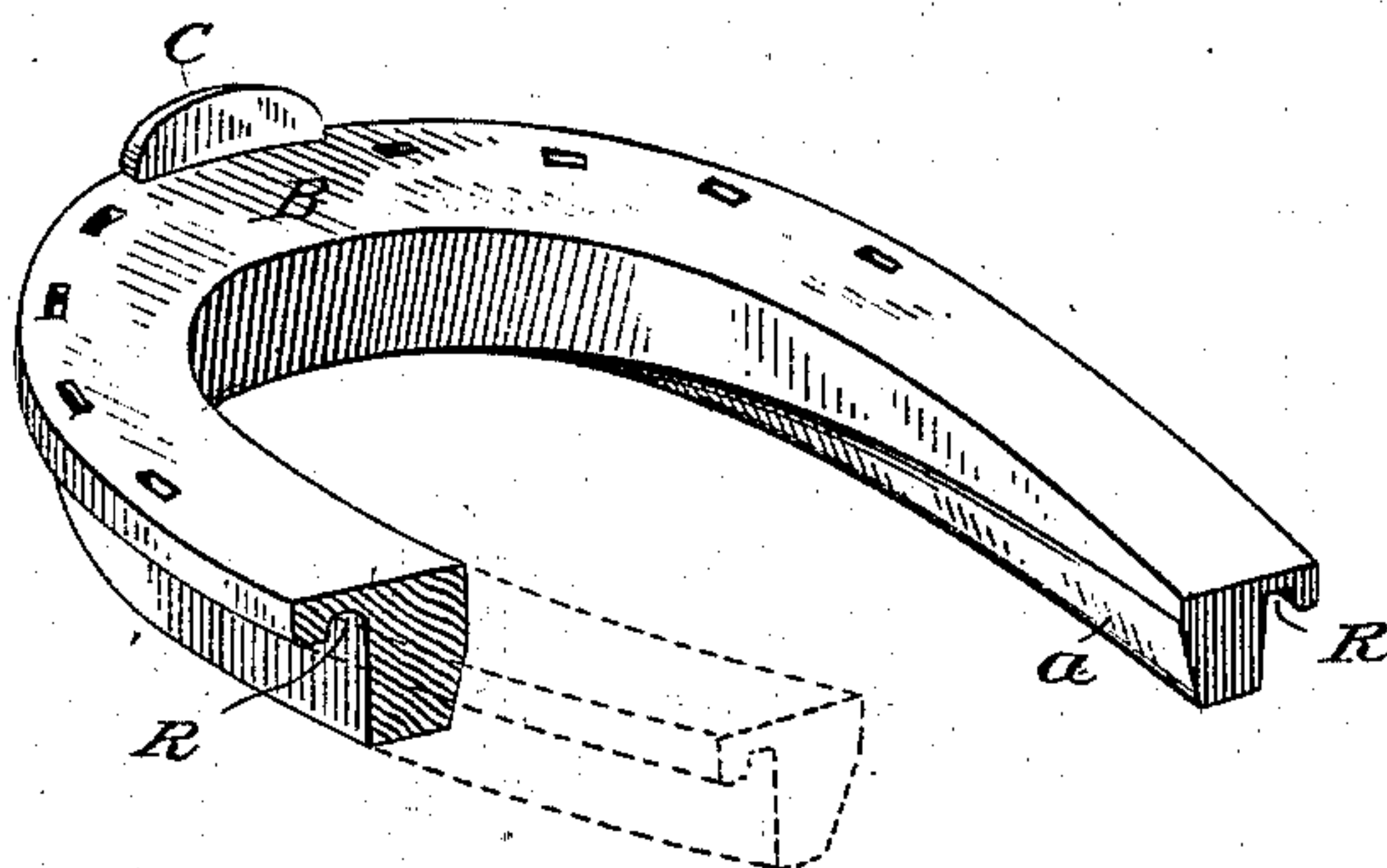
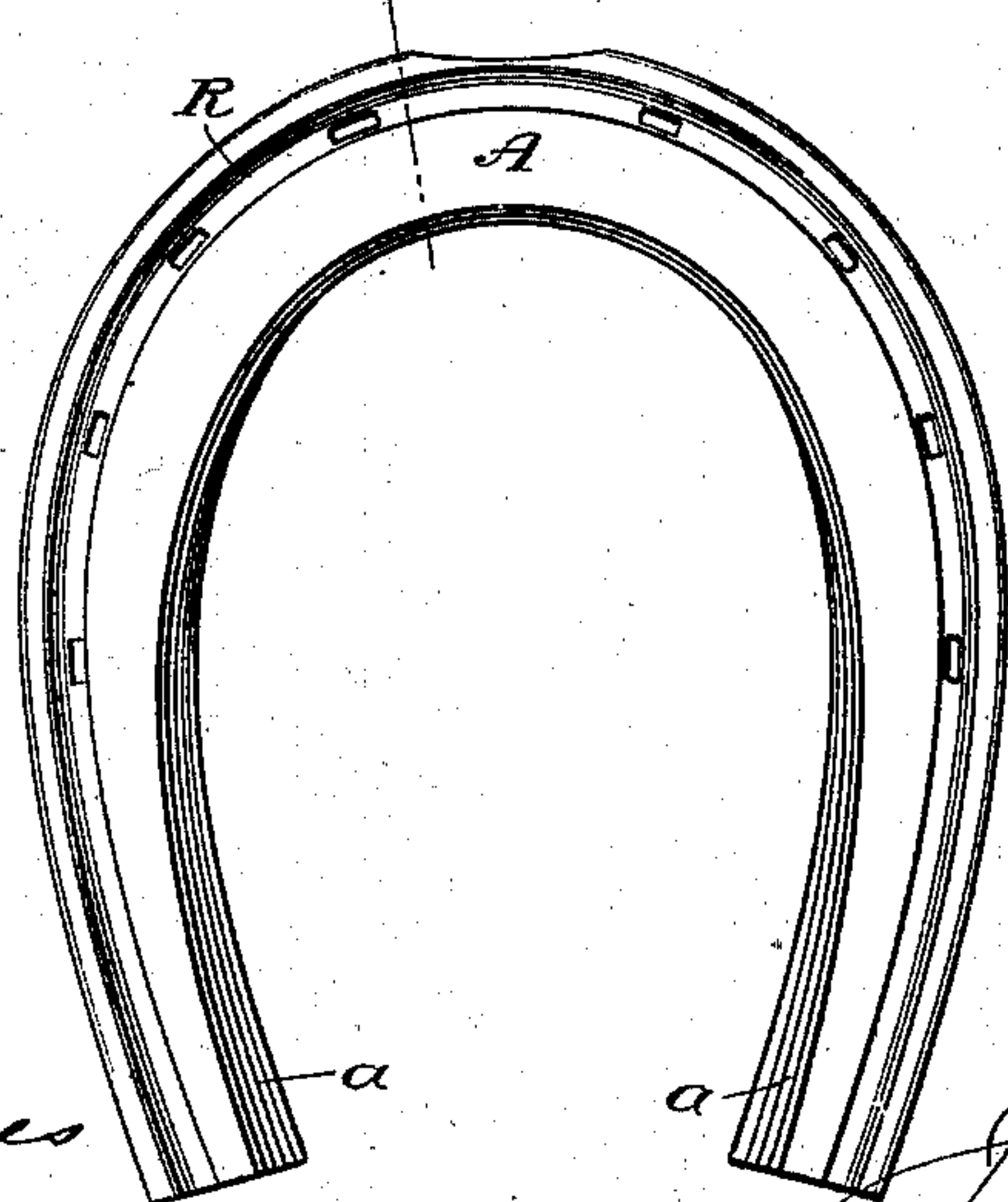


Fig. 4.



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UNITED STATES PATENT OFFICE.

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HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 249,573, dated November 15, 1881.

Application filed April 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. BILLINGS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to a horseshoe having a continuous calk extending from heel to heel, and is an improvement on my patent of the United States, No. 228,974, dated June 22, 1880. That patent describes a T-shaped bar, the body of the T serving as a continuous calk when the bar is bent into a shoe; but the calk being uniform in width on its face, it wears down more rapidly at the toe, where the friction is greatest, than at the quarters and heels, so that the shoe becomes uneven before it is worn out.

The object of this invention is to furnish a horseshoe with a continuous calk which will wear evenly over its entire face. To this end the continuous calk is made of varying width, being widest at the toe and tapering thence to the heels, whereby it is adapted to sustain the varying friction incident to the different parts of the shoe.

Figure 1 of the drawings is a perspective view of a portion of a horseshoe-bar adapted to form a shoe of this character. Fig. 2 is a transverse section through the center of the bar. Fig. 3 is a perspective view of the completed shoe, showing a portion of one side broken off. Fig. 4 is a view of the bottom side of the shoe.

The bar, of proper length and size, is rolled from bar iron or steel in the form approximately of the letter L inverted, the body A being provided on one side with a grooved

flange, R, and beveled and tapered on the opposite side. When bent into a shoe the body A becomes a continuous calk extending around the shoe from heel to heel, the beveled side forming the inner edge and the flanged side the outer edge of the shoe. The upper face, B, is of uniform width and level, forming a smooth foundation for the crust and sole of the hoof. The flange and inner edge may, however, be trimmed off somewhat at the heels. The clip *c* is swaged up at the front of the shoe. The groove in the flange R serves as the fullering-groove, and is of such form and depth as to prevent the heads of the nails from becoming loose by the concussions of the shoe against the pavement. The bevel of the inner edge, as shown at *b*, prevents the accumulation of snow and ice. The lower face or calk is about half an inch broad at the toe and about a quarter of an inch broad at the heels, being tapered, as shown at *a*, from points about one inch and a half distant from the center on either side to the heels. These dimensions may vary as the quality of the material or size of the shoe may require.

By this construction the quantity of material is so apportioned to the friction as to equalize the wear and prevent the shoe from becoming uneven, thus greatly increasing the durability of the shoe without increasing its weight.

What is claimed as the invention is—

1. A horseshoe having a continuous tapered calk diminishing in width from near the toe to the heels, substantially as described.

2. A horseshoe having a continuous tapered calk diminishing in width from near the toe to the heels, and beveled on its inner edge from the upper face of the shoe to the lower face of the calk, substantially as described.

3. A horseshoe having a flat upper face and a continuous beveled and tapering calk, substantially as described.

JOHN D. BILLINGS.

Witnesses:

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