

W. J. Berne,

Horseshoe.

N<sup>o</sup> 66,780.

Patented July 16, 1867.

Fig. 3

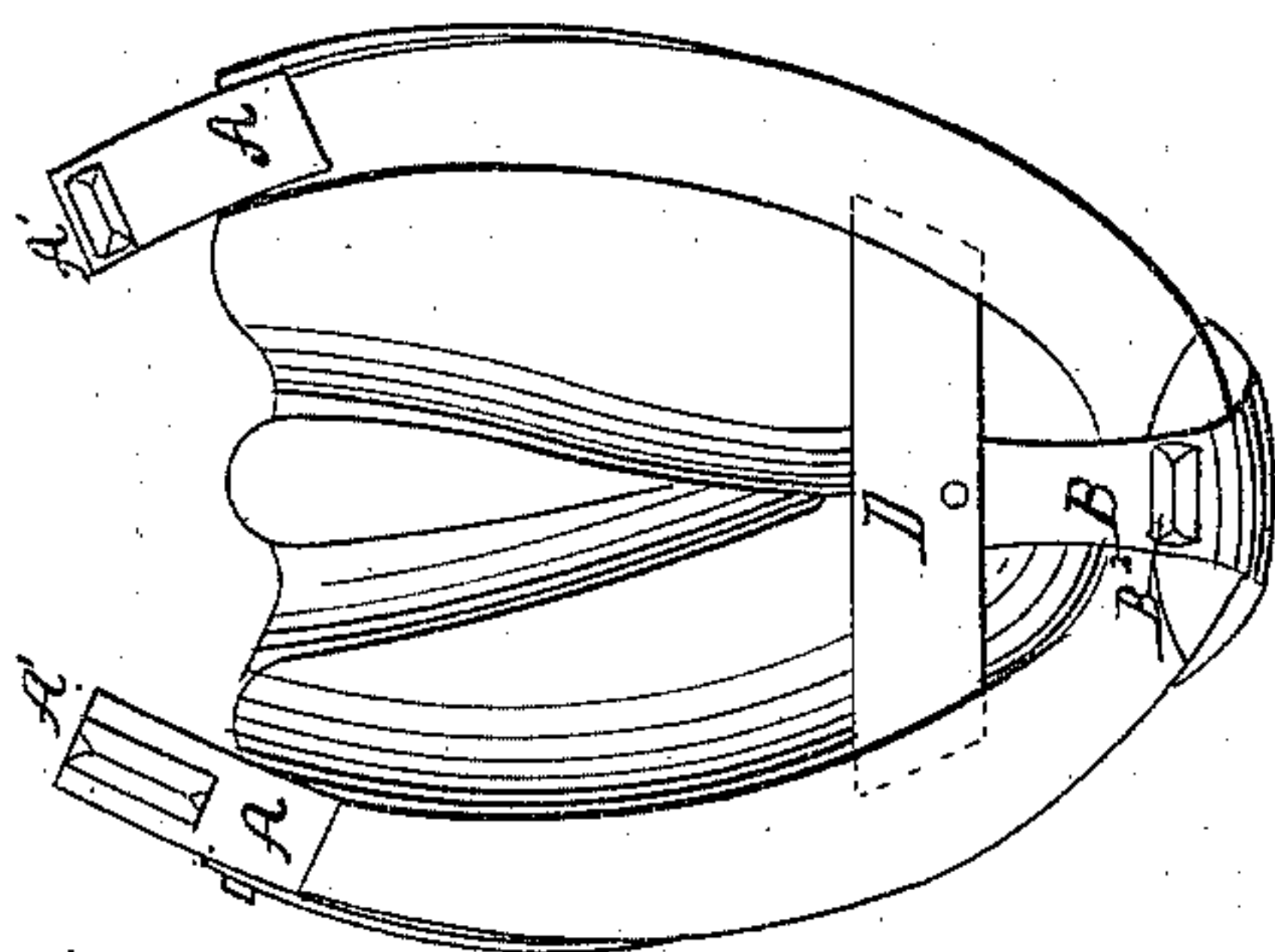


Fig. 2

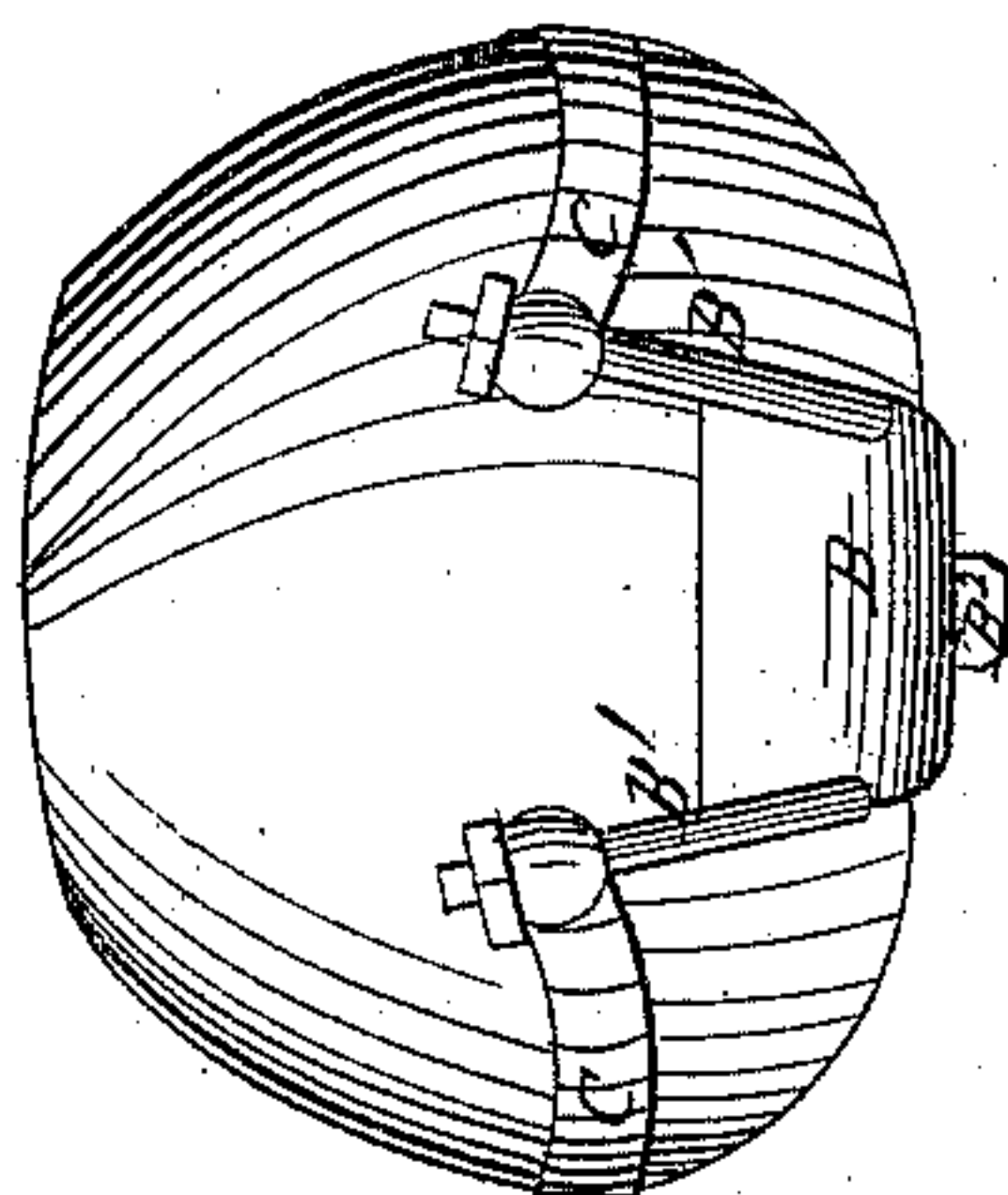
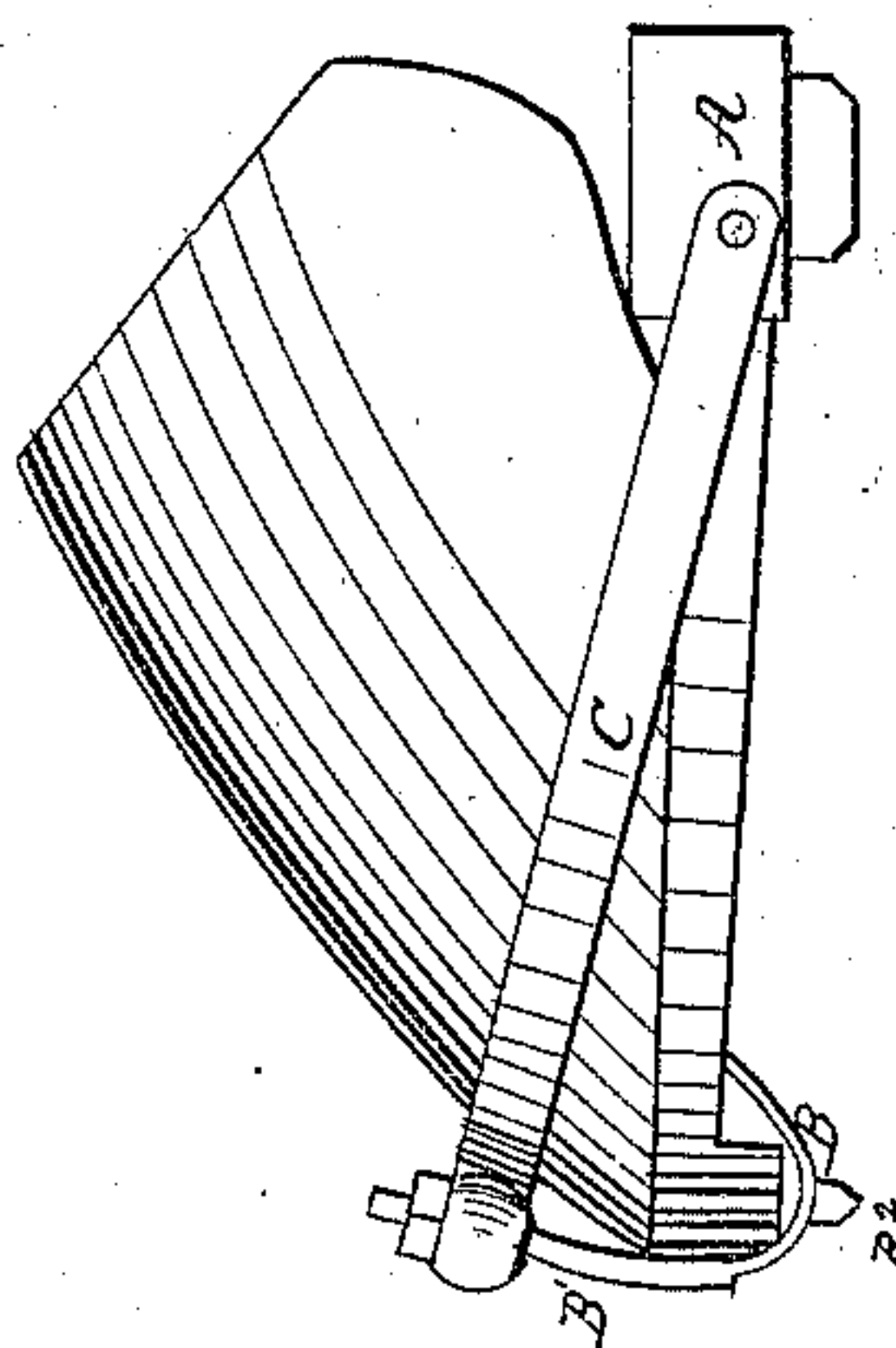


Fig. 1



Witnesses:

<sup>Witness</sup>  
L. Murphy

Inventor:  
Wm. J. Berne  
by  
D. D. Holloway  
his attys.

# United States Patent Office.

WILLIAM JONES BERNE, OF CINCINNATI, OHIO.

*Letters Patent No. 66,780, dated July 16, 1867.*

## IMPROVEMENT IN MODE OF ATTACHING CALKS TO HORSES' SHOES.

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, WILLIAM JONES BERNE, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Adjustable Calks for Horse-Shoes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a front elevation, and

Figure 3 is a bottom view.

In all the figures the same letters are employed in the indication of parts which are identical.

The object of this invention is to provide calks which may be adjustably attached to the ordinary horse-shoe without removing the shoe when the roads are covered with ice, and which may be readily removed when not needed.

A A are metallic sockets, which are so formed that they may be slipped over the heel calks of an ordinary horse-shoe. On the bottom of these sockets I place steel corks A, made sharp and of any suitable form, and of sufficient length to give the animal secure footing upon the ice. B is a metallic plate, bent around the toe of the shoe, and extending from the front of the hoof under the shoe, and carried upwards under the hoof. Rods B<sup>1</sup> are attached to the upper corners of this plate, and projecting upwards, bear threads cut upon their upper end to receive a nut. A sharp steel calk is attached underneath this plate, immediately below the toe of the shoe at B<sup>2</sup>. C C are metallic straps formed each with an eye in the front end, through which the rods B<sup>1</sup> pass. These straps are respectively attached to the sockets A by a pivot, on which they turn. The front ends of the straps may be united by a rod passing through them, with nuts on the end thereof, to draw them together, and relieve the rods B<sup>1</sup> from side strain. The lower and hindmost end of the plate B is pivoted to two parallel cross-pieces D, which are located with each end under and resting against the lower side of the shoe on each side of the hoof. The piece D may be made in a single piece, with a recess to receive the end of the plate B, or the latter may be pivoted to it.

When the adjustable calks are to be attached to the shoe the plate B is placed under the toe, and the cross-piece D turned under the shoe. The sockets A, with the straps C, are slid over the heel of the shoe, and the straps carried forward and attached to the rods B<sup>1</sup>, and the whole securely fastened to the shoe by tightening the nuts.

What I claim as my invention, and desire to secure by Letters Patent, is—

Adjustable calks, which may be applied to ordinary horse-shoes, without removing the latter, by means of the sockets A, toe-piece B, cross-piece D, and straps C, substantially as described.

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

WILLIAM JONES BERNE.

Witnesses:

NICHOLAS BIRD,

D. B. GARRISON.