

(No Model.)

C. W. BOLTON.
ICE AND SNOW SHOE FOR HORSES.

No. 431,868.

Patented July 8, 1890.

fig. 1.

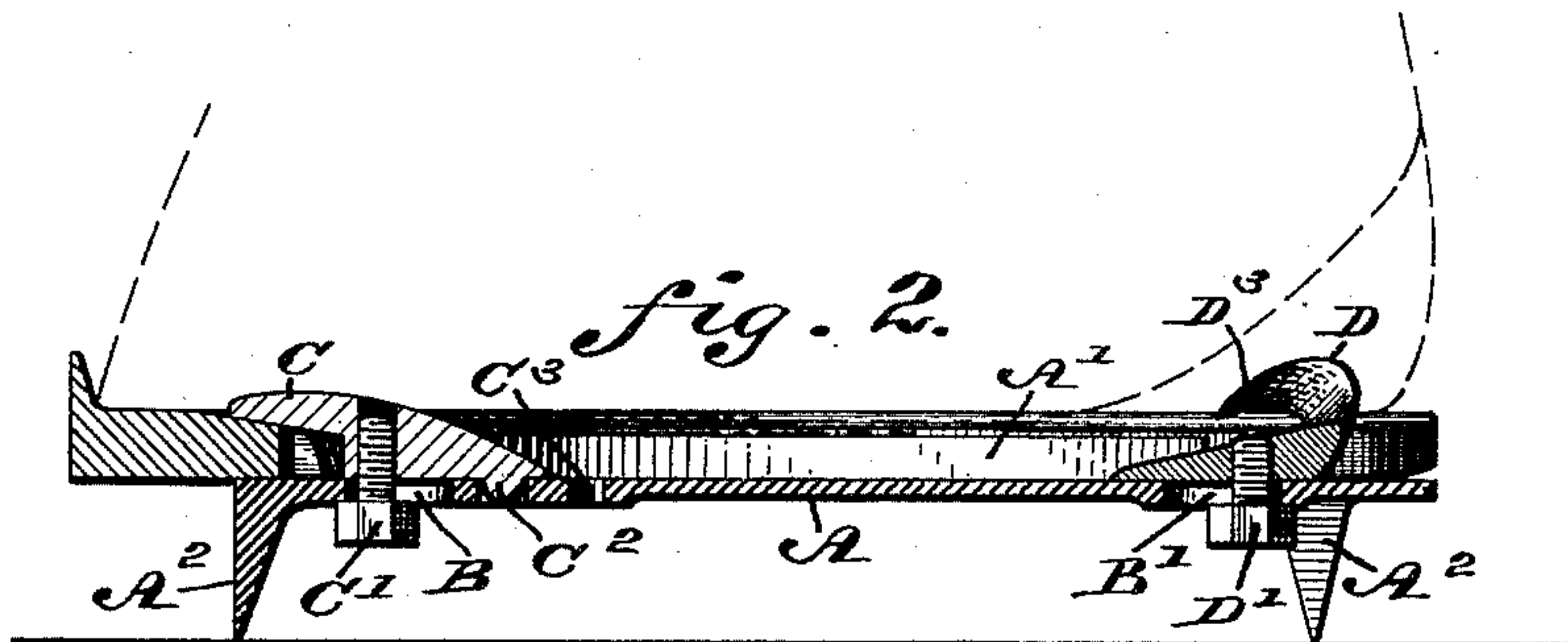
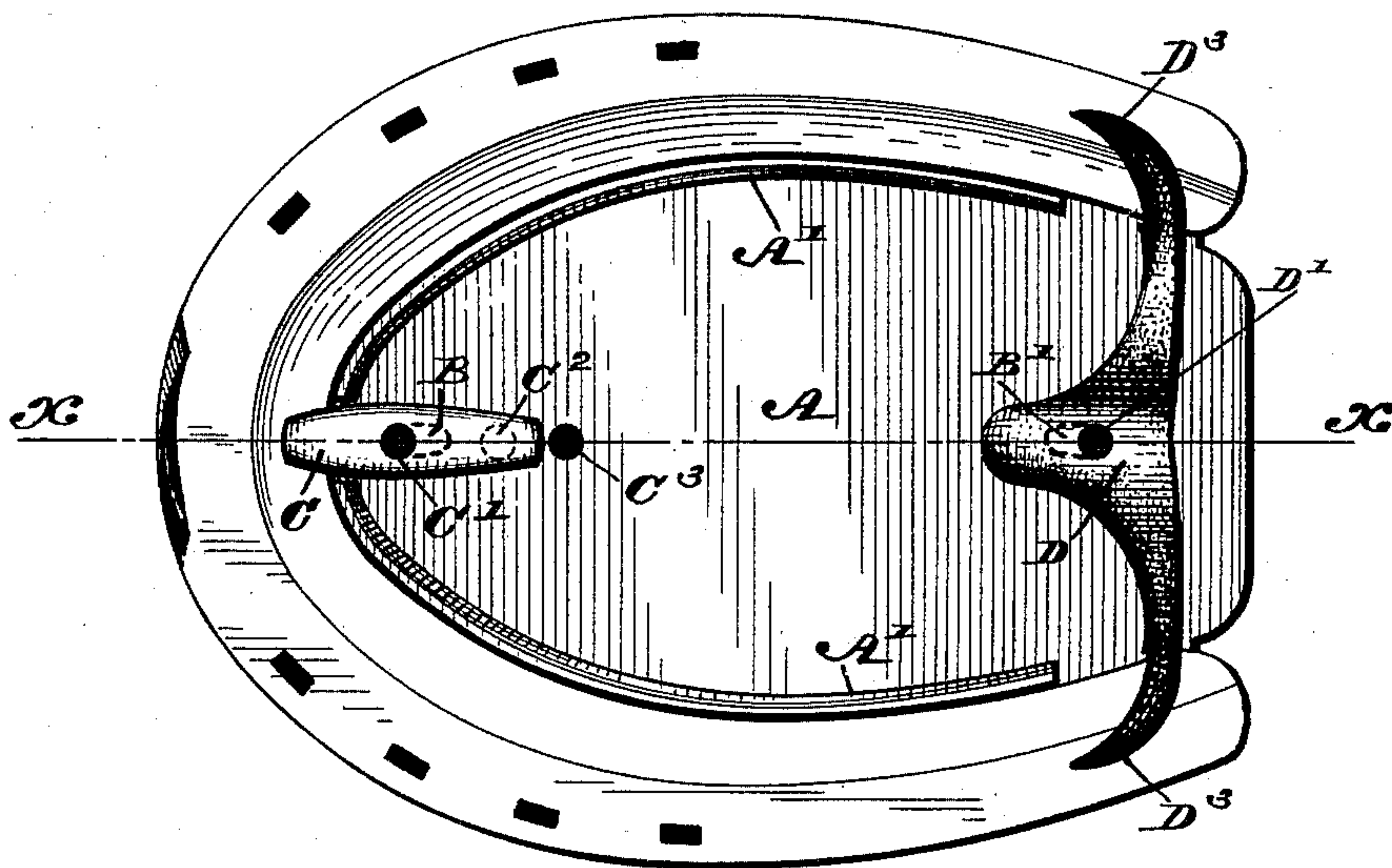
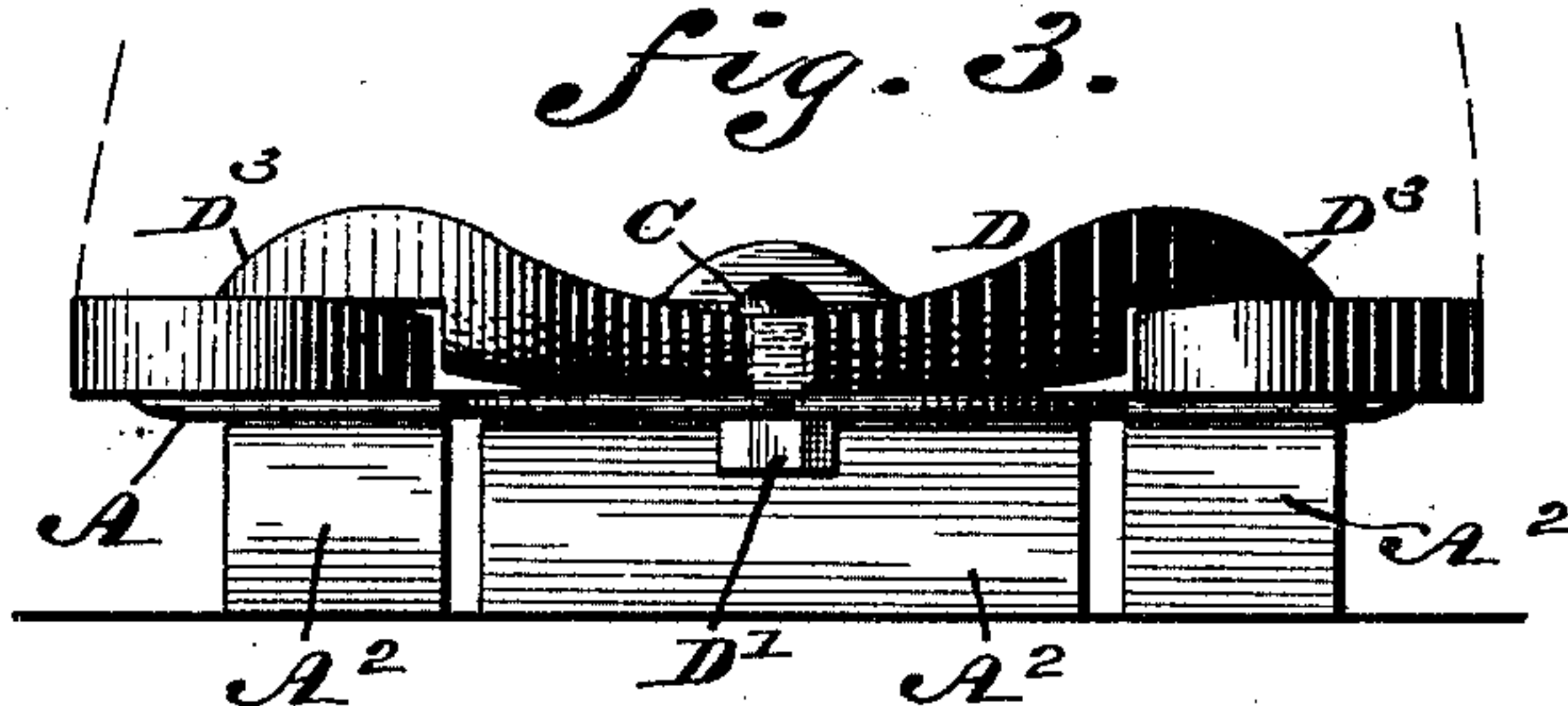


fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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ICE AND SNOW SHOE FOR HORSES.

SPECIFICATION forming part of Letters Patent No. 431,868, dated July 8, 1890.

Application filed April 4, 1889. Serial No. 305,965. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. BOLTON, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ice and Snow Shoes for Horses, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in horseshoes, and has special reference to a shoe to be used on slippery streets or pavements, or what may be termed an "ice-shoe."

The object of the invention is to provide a shoe of the character named adapted to be secured in place upon the ordinary shoe to prevent the animal from slipping, and which can be readily and easily removed when desired.

A further object is to provide a shoe adapted to be secured to an ordinary shoe, which will be thoroughly efficient for the purpose intended and of simple and cheap construction. For this purpose the invention consists of the construction and combination of parts, as herein set forth and claimed.

Figure 1 represents a top or plan view of a horseshoe embodying my invention. Fig. 2 represents a longitudinal section on line $x x$, Fig. 1. Fig. 3 represents a rear view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a plate adapted to fit within a shoe and guard the frog of the animal. The plate A is provided on its upper side or face with the flange or rim A', adapted to contact or rest against the inner side of the shoe and serve to retain the plate in place, and the plates are also provided with toe and heel calks A², for the purpose well known. The plate is provided in the toe portion with a slot B and in the heel portion with a slot B'.

C designates a clamp, which is connected with the plate A on the upper side thereof by means of a bolt C', which passes through the slot B. The forward end of the clamp C engages with the shoe, and thereby secures the plate A to the shoe at that point, said clamp being also capable of adjustment, owing to the slot B and bolt C'.

D designates the heel-clamp, which is secured to the plate A by means of a bolt D', which passes through the slot B', said clamp conforming substantially to the frog and be-

ing provided on its ends with lips D, adapted to engage the heel ends of the shoe and retain the plate in place. From this construction it will be seen that the plate is securely fastened at the heel, and also that the fastening device is adjustable.

In order to prevent shifting of the clamp C, the rear end thereof is provided with a depending teat C², which is adapted to enter either of the openings C³ of the plate A.

I am aware that it is not new to fasten a detachable shoe having calks thereon to the under side of a fixed shoe, nor is it new to fasten a soft-ground shoe to the hoof of a horse or to the shoe thereof, and such is not claimed; but I am not aware that the particular device herein described and claimed is new, wherein a plate having calks thereon and having a ridge adapted to retain said plate in place and openings in which clamping-pieces are seated, said clamping-pieces being secured to said plate by bolts, as described, and one of said clamping-pieces having a central part adapted to be inserted between the sides of the shoe and wings adapted to rest on the sides, as shown.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A plate with heel and toe calks, an internal flange bearing against the inner edge of the shoe, an elongated slot, and recesses in the line of said slot in the toe portion, the clamp with a teat resting in either of said recesses, and a bolt passing through said slot into the clamp, a slot in the heel portion, a heel-clamp conforming substantially to the frog having lips adapted to engage the heel ends of the shoe, and a bolt connecting said heel-clamp with the plate through the relative slot, said parts being combined substantially as described.

2. A plate with heel and toe calks and an internal flange, in combination with the toe-clamp having a teat and a heel-clamp with laterally-projecting lips and a bolt, said plate having in its heel portion a slot for the fastening-bolt of the heel-plate, and in its toe portion a slot with recesses in a line with the same, substantially as described.

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Witnesses:

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