

(No Model.)

A. D. HAMLIN.
HOOF PAD.

No. 410,093.

Patented Aug. 27 1889.

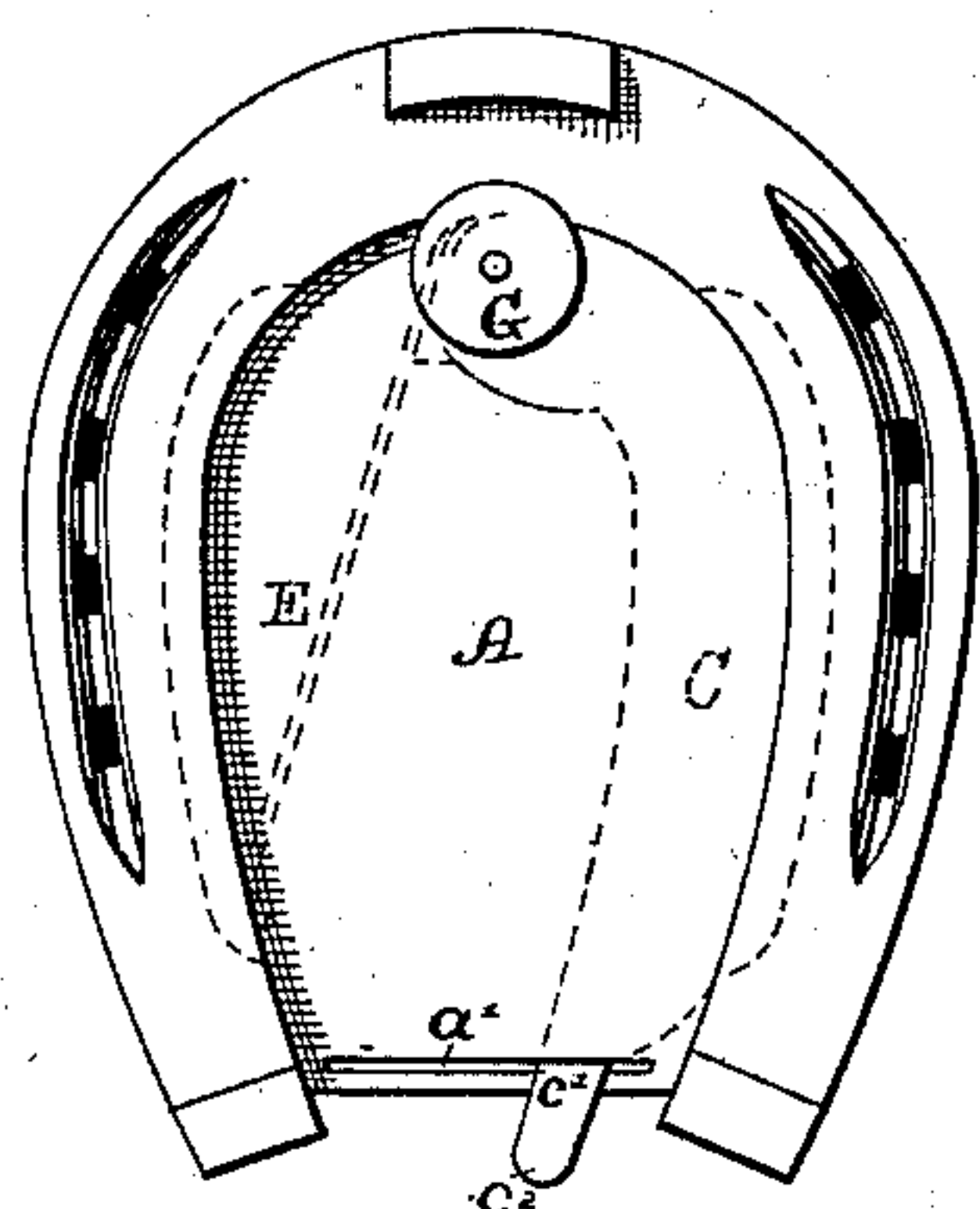


Fig. 1.

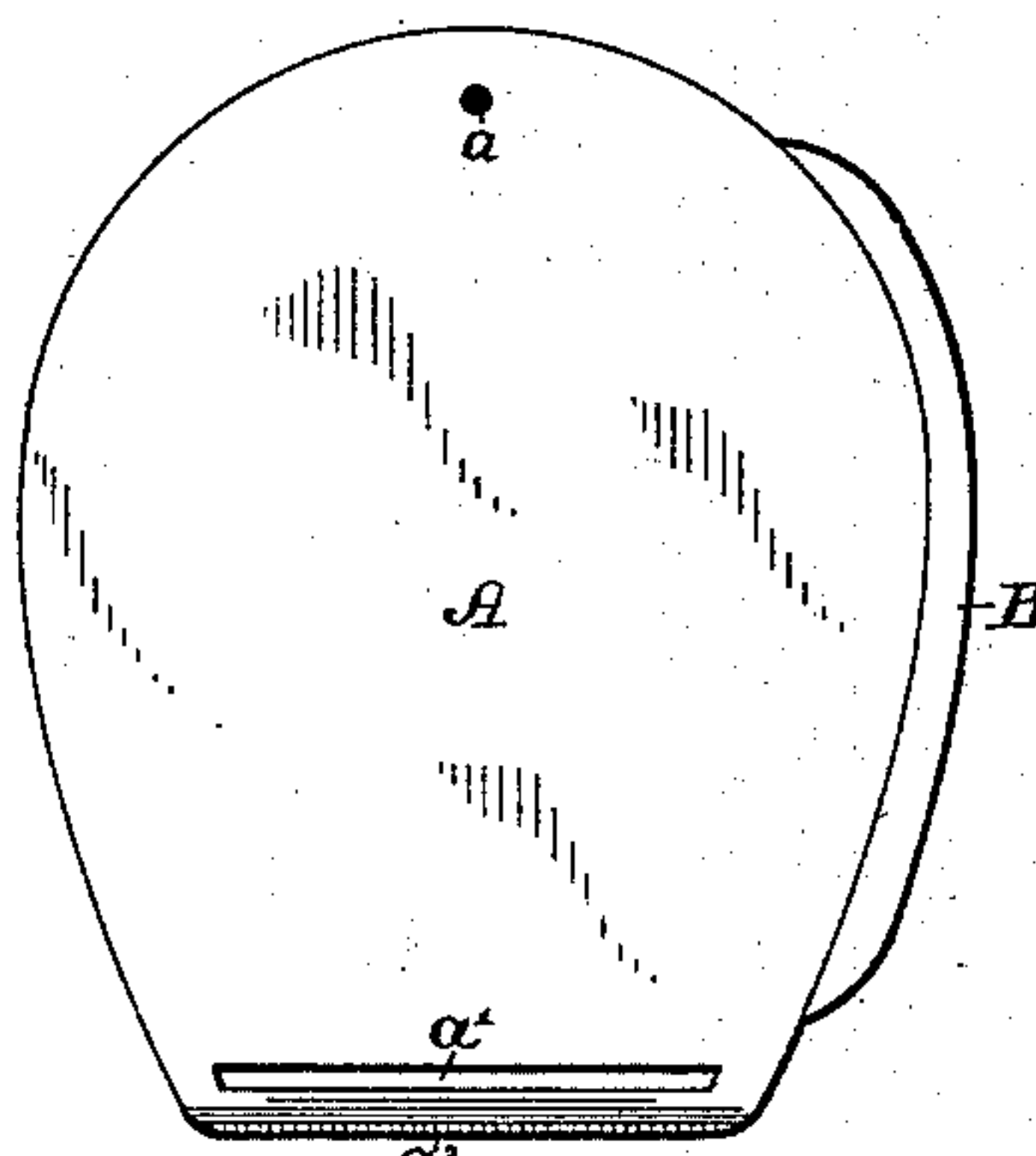


Fig. 2.

Fig. 3.

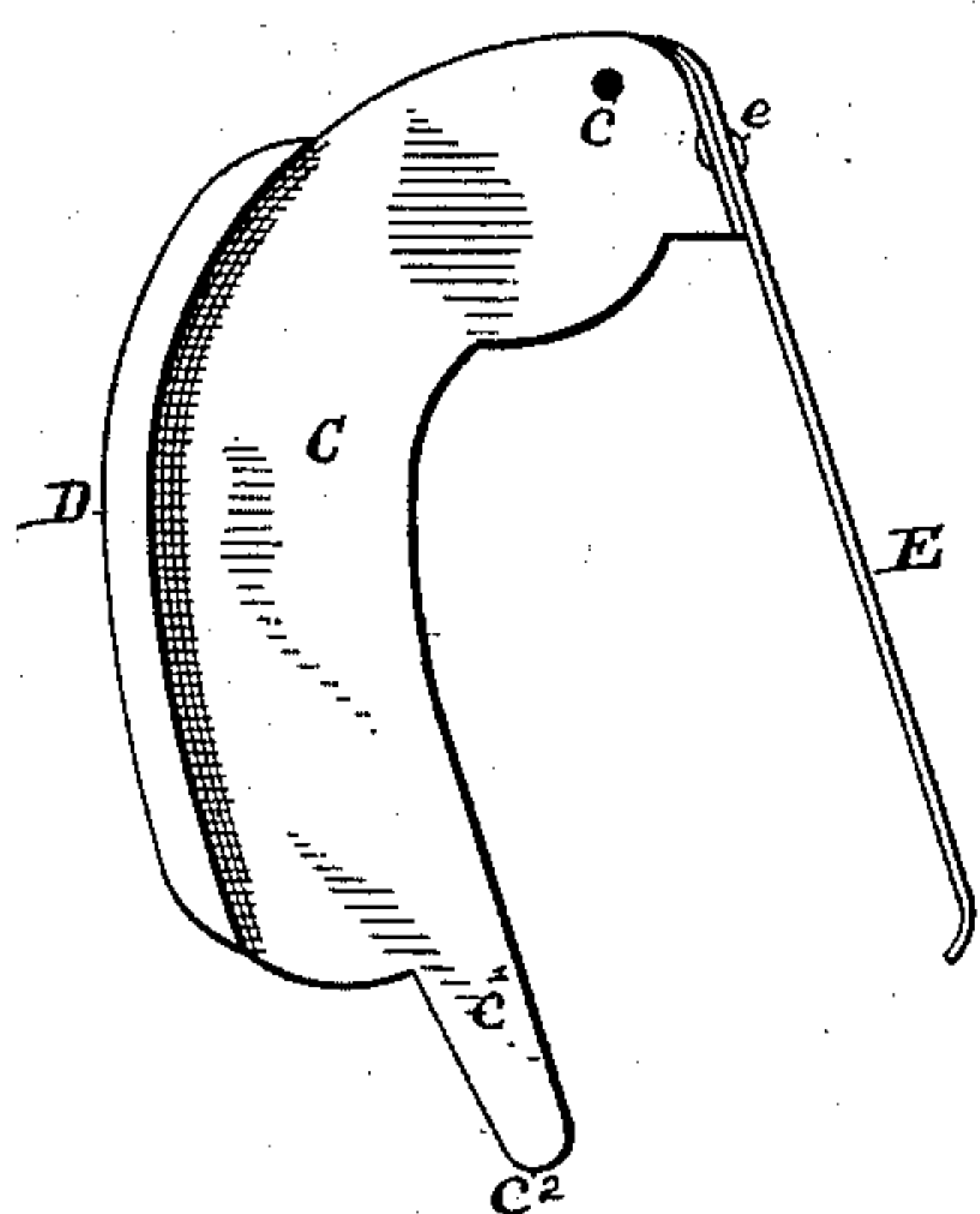


Fig. 4.

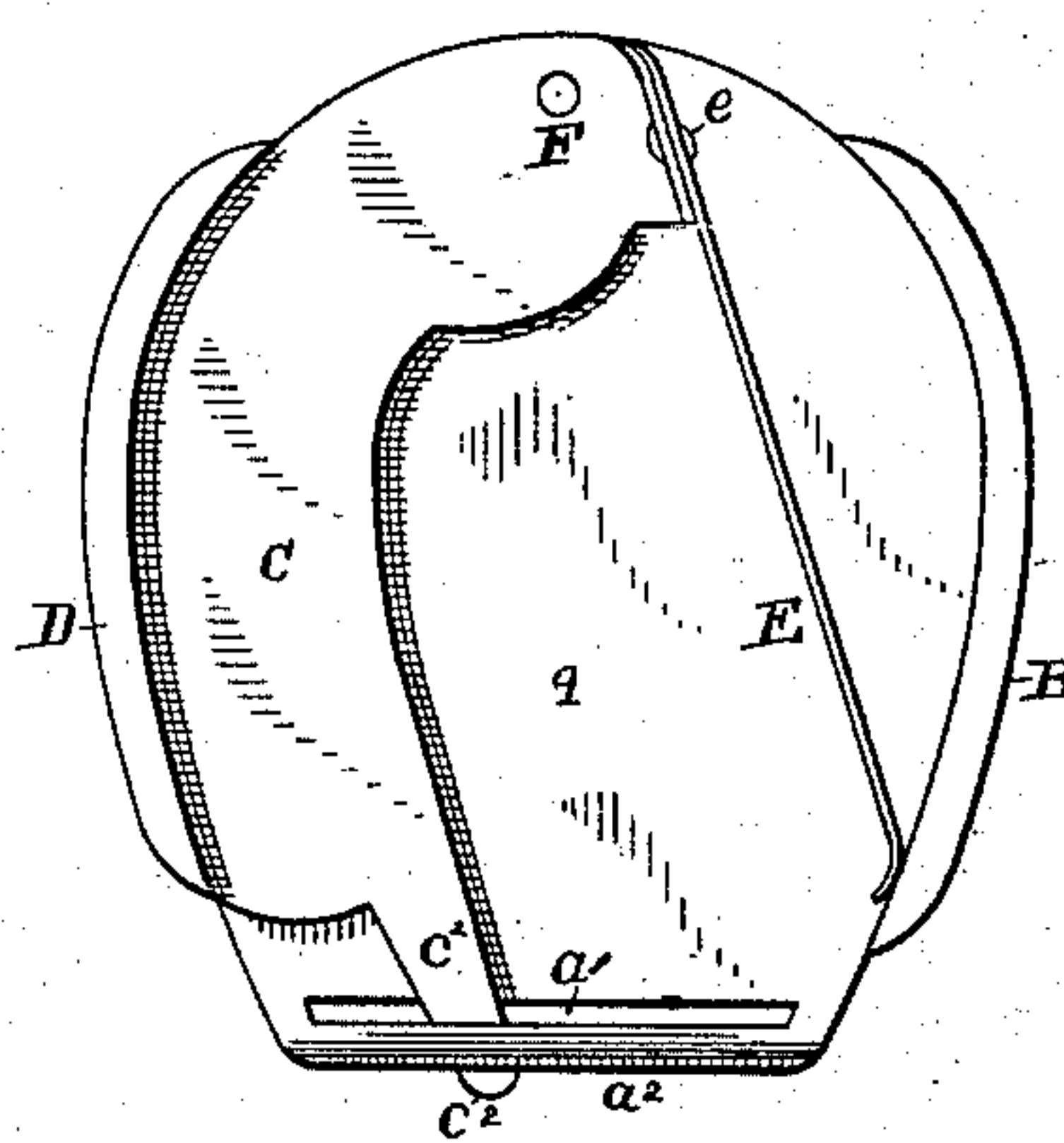


Fig. 5.

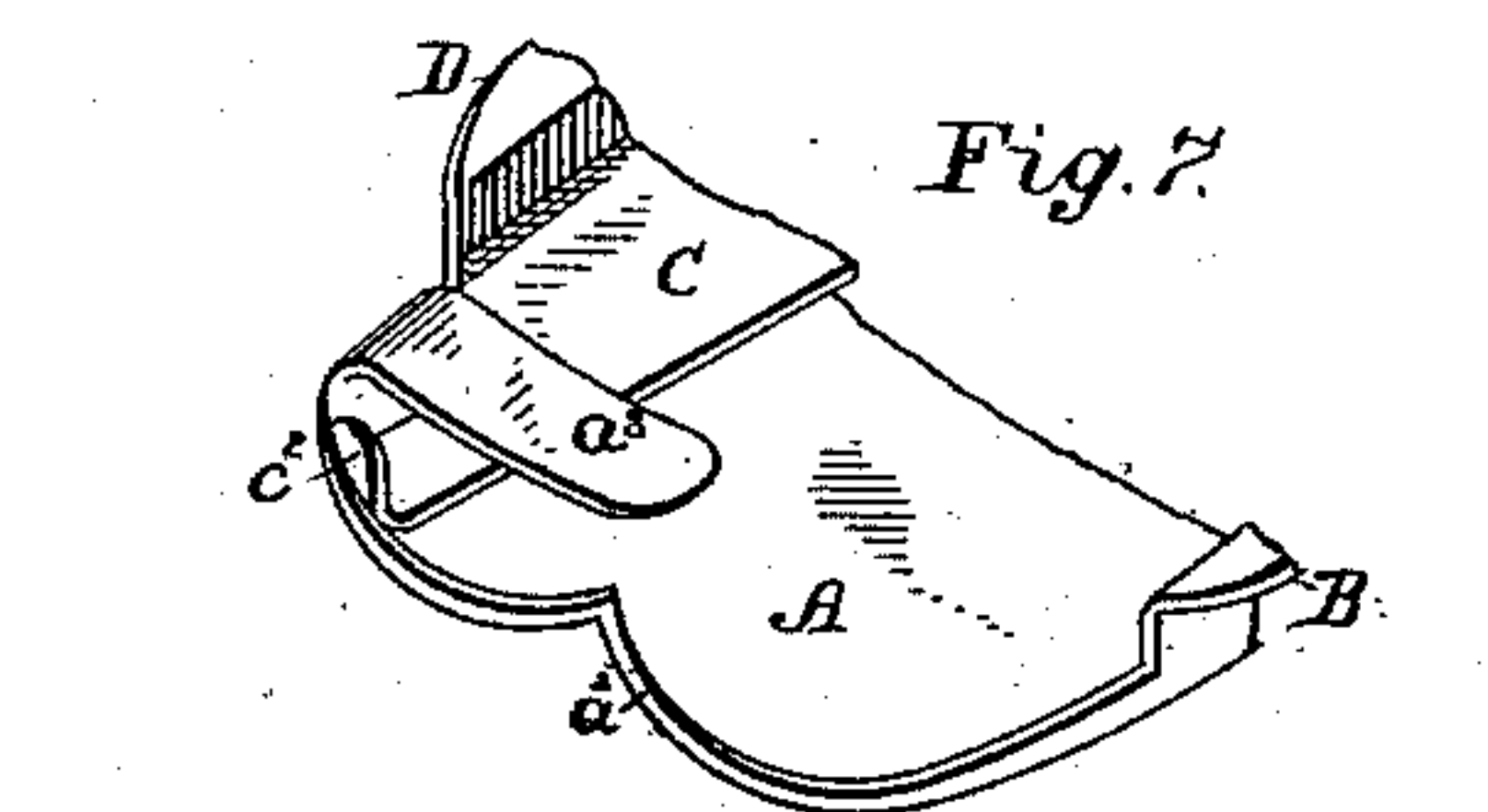
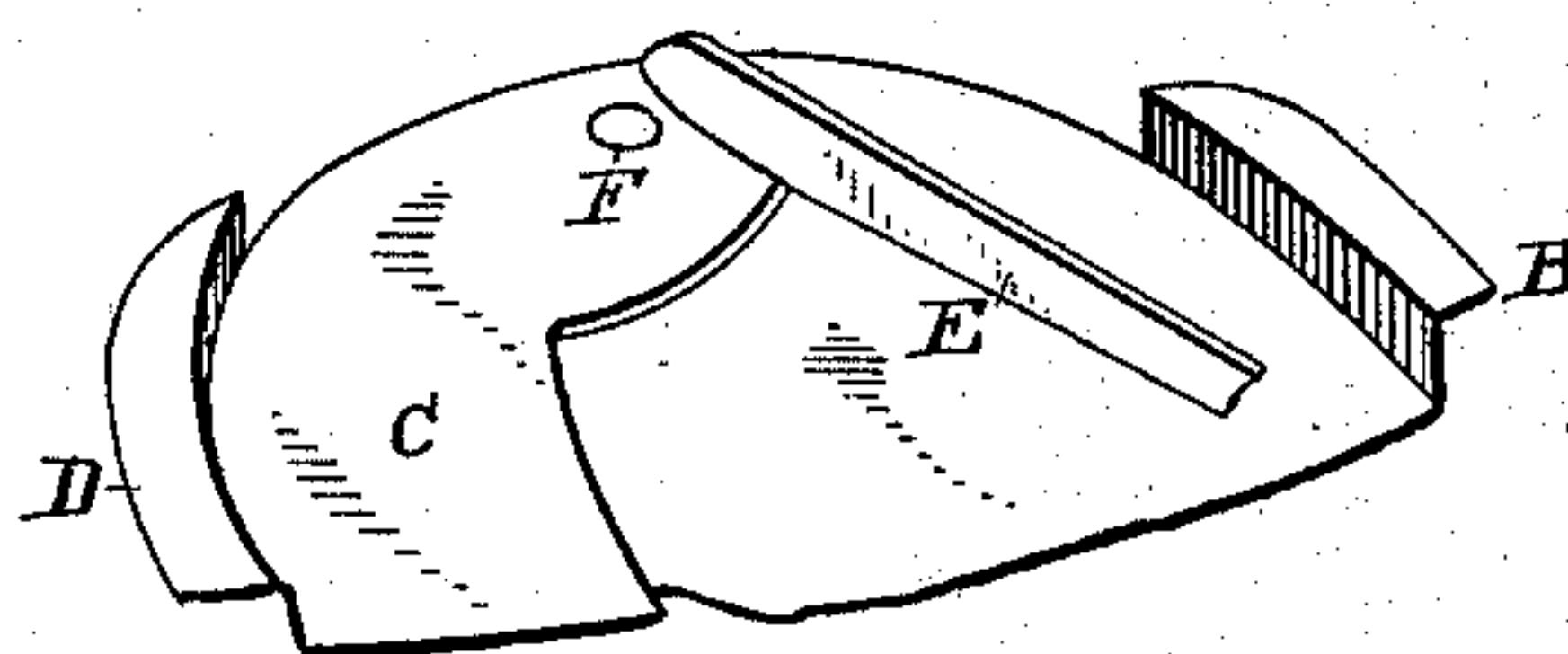


Fig. 6.



Witnesses

T. B. Tucker
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Inventor

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By his Attorney *L. Deane*

UNITED STATES PATENT OFFICE.

ARTHUR D. HAMLIN, OF PORTLAND, MAINE, ASSIGNOR OF ONE-HALF TO
DENNIS A. MEAHER, OF SAME PLACE.

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 410,093, dated August 27, 1889.

Application filed December 27, 1886. Serial No. 222,554. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. HAMLIN, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in a Device for Preventing Snow from Balling on the under Side of a Horse's Hoof; 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.

Figure 1 is a plan view representing the snow-ball plate applied to a horse's hoof and inside the shoe. Fig. 2 shows in plan view one member of part of the device. Fig. 3 shows in plan view the other member. Fig. 4 shows in plan view the parts put together and ready to be applied to the hoof and shoe; Fig. 5, a detail in section showing the double flange; Fig. 6, a detail in perspective to show modification in the construction of the spring. Fig. 7 is a detail in perspective to show a modification of means for guiding the latch end of one of the plates.

The invention relates to devices to prevent snow from packing on the hoofs of horses within the horseshoe; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

Devices of the kind are frequently called "snow-ball plates" or "hoof-pads."

Referring to the drawings by letter, A designates a metal plate, preferably of steel, having the contour of a horseshoe and of sufficient size to fit closely within and entirely cover or fill the space within the shoe. The said plate has the pivot-opening a near its front edge and is provided with the transverse slot a' near and parallel to its rear edge a^2 , which is curved upward, as shown in Figs. 2 and 4. In the modification shown in Fig. 7 the said slot is dispensed with and the guide and retaining-arm a^3 substituted therefor. This arm extends from one edge of the plate. On the edge opposite said arm the plate A is provided with the flange B, which, as shown in Fig. 5, is bent longitudinally at right

angles upon itself, for a purpose hereinafter explained.

C is a plate of less size than the plate A and provided near its front end with the pivotal opening c , through which and the opening a passes the pivotal pin or bolt F, connecting the two plates together, as shown, the plate A being the lower. The rear end c' of the plate C is extended to form a small handle c^2 , which passes through the slot a' , or, in the modification shown in Fig. 7, under the guide and retaining-arm a^3 . The plate C is provided on its convex edge with the flange D, similar to the flange B, and on the opposite side of the device therefrom.

E is a stiff spring, secured at its front end e to the front end of the plate C and with its free rear end bearing against the flange B in such manner as to force the plate C outward on the plate A and spread the device. The spring therefore constitutes the means by which the two plates or pad can be secured in position with the shoe. The plate C is preferably of steel, and when so the spring E is made integral therewith, as shown in Fig. 6. If desired, a washer or support G may be attached to the front portion of the device, which support will tend to prevent the latter from bending downward and becoming loose. When the device is in place, the flanges B and D rest between the hoof and the arms of the horseshoe, the spring keeping the plates A C extended on each other or spread.

The advantages of the described construction are as follows: The device can be quickly and easily put in position by moving the plates inward on each other by means of the handle c^2 against the action of the spring, placing them within the shoe, with the edges of the flanges opposite the space between the shoe and hoof and permitting the device to expand so that the spring will force the flanges between the shoe and hoof. Obviously it can be as quickly and easily removed by means of the said handle and without the use of a tool. As the plate A fills in the whole interior of the shoe, the plate C must lie entirely thereabove when the device is in place. By this construction the separation

of the meeting edges, which permits snow to enter and which is so common in similar devices composed of equal or nearly equal sections, is avoided. Moreover, the plate C is held down on the plate A by the handle c^2 passing through the slot a' or under the arm a^3 .

It should be observed that the device presents a flat surface for the entire space within the shoe, there being no creases for snow to creep between the plates; that the plates held down on each other by the arm and slot, and that by the extension of the arm the device can be quickly and easily attached and removed by hands, thus obviating the use of a tool, which might be lost at the most important moment.

I am aware that devices similar to mine have been made of two equal or nearly equal sections spread apart and held in place by the action of a spring, and such I do not claim, broadly, as mine is especially designed to avoid the defects thereof.

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

1. A snow-ball plate or hoof-pad consisting of an outer section of sheet metal having the contour of the interior of a horseshoe and adapted to fit in said interior and fill the entire space therein when in place, an inner and smaller section of sheet metal having an outer convex edge to fit against the adjacent edge of the shoe and pivoted near its front end upon the outer section, and a spring secured to one of the sections and forcing it outward on the other, substantially as specified.

2. The combination of the plate A, having the contour and adapted to fill the interior of a horseshoe and provided on one edge with the flange B, bent longitudinally upon itself at right angles, the plate C, pivoted upon the plate A near its front end and provided on its convex edge with the flange D, similar and opposite to the flange B, and the spring E, having its front end secured to the front end of the section C and its free rear end bearing on the flange B, substantially as specified.

3. A snow-ball plate or hoof-pad consisting of the flanged plate A, having the slot a' and filling the entire space within the shoe when in place, and the flanged plate C, having the spring E and the handle c^2 , whereby the device can be attached and removed by hand, substantially as specified.

4. In a snow-ball plate or hoof-pad, an outer section of sheet metal having the contour of the interior of the horseshoe and adapted to fit snugly therein and cover or fill the space within and having a slot a' in its lower end, combined with and pivoted to an inner and smaller section of sheet metal having a handle or end c^2 , and a spring secured to a smaller section, the handle c^2 extending through said slot, substantially as and for the purposes set forth.

5. A snow-ball plate or hoof-pad composed of two plates pivoted to and movable on each other and a spring whereby they can be held within the horseshoe, and a finger-piece projecting from one plate, whereby the plates or pad can be removed from the hoof without a tool, substantially as described.

6. A snow-ball plate or hoof-pad in which are combined the following elements, viz: a flanged plate wholly covering the inside of the hoof, a smaller plate pivoted to and movable under the first plate, also flanged, and a handle on its end whereby the pad can be adapted to or removed from the shoe.

7. A hoof-pad composed of two plates, each flanged at one side, pivoted together, and movable on each other, the one slotted at its end and the end of the other projecting through said slot, whereby not only are said plates held singly together against the entrance of snow or water, but a handle on which to move one of said plates on the other is afforded, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR D. HAMLIN.

Witnesses:

WILLIAM W. GRAVES,
CHARLES P. HATCH.