A. D. HAMLIN. HOOF PAD.

No. 411,745. Patented Sept. 24, 1889. Fig.2. Fig.1.Fig.3.Fig.4. Fig.6.Fig.5.Inventor Arthur D. Homlins Witnesses Hersehers M.Redman By his Attorney

United States Patent Office.

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

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 411,745, dated September 24, 1889.

Application filed January 26, 1887. Serial No. 225,568. (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 Snow-Plates for Horse-Shoes; 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 perspective view of this invention on the inside. Fig. 2 is a perspective of the invention on the inside, showing some modifications in structure. Fig. 3 is a perspective of the device, showing the outside. Fig. 4 is a perspective of the inside of the device, showing the felt in position. Fig. 5 is a central cross-section of Fig. 4. Fig. 6 is a detail showing the bent end of the main plate.

This invention is in most respects an improvement on that shown and described in my application for a patent filed December 27, 1886, Serial No. 222,554; and the points of novelty mainly consist in the guide and retaining-rivet and slot near the lower ends, whereby the plates are so secured to and upon each other that they cannot spring apart at the bottom or separate the one from the other; also, in the construction and combination of the several parts, all as will now be more fully set out and explained, reference being had to the accompanying sheet of drawings.

35 In the drawings, A denotes the main plate and B a much smaller and sliding or movable plate, both made of metal and imperforate, except at the bolt-holes. The plate A is the outer one and is about equal in size to the 40 space inside the hoof, and thus presents a smooth and unbroken surface under the hoof, so that there is no opportunity for the snow to gather or clog. The two are pivoted together at the top by the bolt C, so that the 45 plate B may be readily moved upon and over the plate A when fitting the device to the horse's foot inside the shoe or removing it therefrom. When so fitted in position, the plate A fills the space bounded by the inside 50 of the horseshoe. On the outer edge of each plate is a flange, as shown at a and b, bent 1

upward and outward and at its edge fitting between the hoof and shoe to hold the device in place. These edges are forced and held in this position by the spring D, which is 55 made to clasp the rivet or bolt C, and thence extends outwardly, its end or ends acting against the inside of one or both of the flanges,

according as it has one or two arms. Toward the lower end of the plate B is a 60 curved slot b', in which the headed bolt b^2 fits, which bolt is firmly headed on the opposite end on the plate A, through which it passes. Thus there is afforded not only a guide to insure the movement of the one plate 65 on the other, but they are so held together here that they cannot separate from each other. This construction enables the spring to act with certainty and prevents the displacement of its arms; but for such construc- 7° tion it would be necessary to have flanges or other devices over the springs to hold them in position. The spring may be of the wishbone shape shown in Fig. 1, where its central part is simply close upon the rivet or bolt C, 75 its arms or outer ends thence extending against the inside of the flanges a and b, or in the form shown in Fig. 2, where there is but one extension of the spring. In this construction the lip b^3 , near the top and at the 80 right side of the plate B, may be bent over and upon it to hold it down.

The finger-piece b^4 , at the lower end of the plate B, is bent up a little and moves over the downwardly-bent lower end a' of plate A, beyond which it projects very slightly. Of course when the device is in use the portion a' will be inclined upward and in toward the hoof, and the piece b^4 in like manner. This detail of structure will prevent the hoof hitting it where a horse overreaches in traveling.

In some seasons of the year it will be desirable to use a piece of felt E or its equivalent on the inside of the plates, between them 95 and the hoof, for packing.

This device has in practice proved a success, and is not only simple in structure, but durable and cheap.

The slot b' is on the arc of a circle of which 100 the center is in the axis of the pivot C. As the spring, the smaller upper section,

and the lower section filling the interior of a horseshoe are shown, described, and claimed in my application now pending and of earlier date of filing than this, I can make no broad 5 claim to said features.

Having now described my invention, what

I claim to be new and patentable is—

1. The herein-described snow-plate or protector comprising the imperforate larger lower 10 plate A, of suitable size to fill the entire space within a horseshoe and having the flange b and the curved rear edge a', the smaller upper plate B, provided with the flange a, the slot b', concentric with the pivot, the lip b^3 15 to hold down the spring, and the curved ex-

tension b^4 , lying upon the curved edge a' and moving thereon, the bolt b^2 , the pivot or bolt C, connecting said plates near their front ends, and the spring D, attached to said pivot and with its free ends bearing against the 20 flanges a b, substantially as and for the pur-

poses specified.

2 The imperforate plate A, of suitable size to fill the space inside the horseshoe, and having its lower end bent at a', and a headed 25 bolt b^2 , combined with the smaller plate B, pivoted to and moving over said plate A and slotted at b' and having the bent finger-piece b^4 resting on and moving over the end a' of the larger plate, and the spring D, substan- 30 tially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

ARTHUR D. HAMLIN.

Witnesses:

LAUGHLIN O'DONNELL, CHARLES P. HATCH.