

J. E. WOODRUFF.
Combined Horseshoe and Pad.

No. 211,289.

Patented Jan. 7, 1879.

Fig. 1.

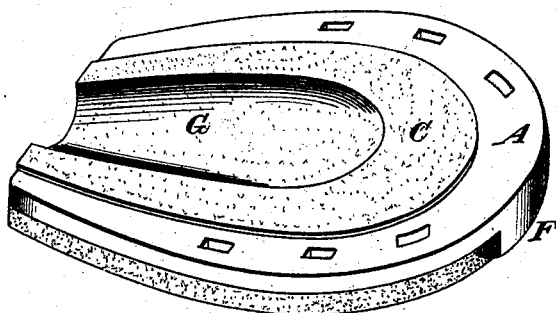


Fig. 2.

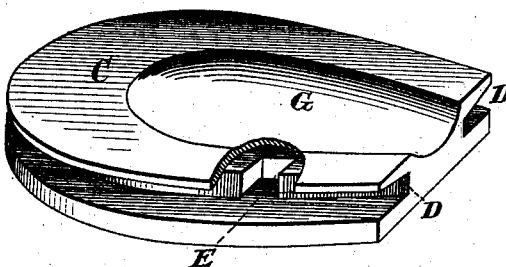
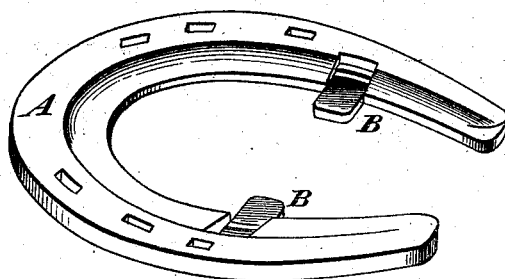


Fig. 3.



Witnesses.
A. Ruppert,
W. N. Swanson

Inventor:
James E. Woodruff,
By Theodor Mungen,
Attorney.

UNITED STATES PATENT OFFICE.

JAMES E. WOODRUFF, OF WASHINGTON, D. C., ASSIGNOR OF ONE-THIRD
HIS RIGHT TO MATTHEW GODDARD, OF SAME PLACE.

IMPROVEMENT IN COMBINED HORSESHOE AND PAD.

Specification forming part of Letters Patent No. **211,289**, dated January 7, 1879; application filed
December 9, 1878.

To all whom it may concern:

Be it known that I, JAMES E. WOODRUFF, of the city of Washington, in the District of Columbia, have invented certain new and useful Improvements in Combined Horseshoe and Pad; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a view, in perspective, of a horseshoe embodying the improvements in my invention. Fig. 2 is a view, in perspective, of the elastic pad detached from the shoe; and Fig. 3 is a view, in perspective, of the shoe itself having the pad removed.

This invention has relation to combined horseshoes and pads; and it consists in the improvements in the construction of the same, hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawing similar letters of reference indicate corresponding parts in the several figures.

In the horseshoes heretofore used with an elastic pad or cushion for protecting the sole of the foot an upper flange on the pad has intervened between the horse's foot and the shoe; but the portion of the pad intended to protect the sole of the horse's foot has projected downwardly inside of the curvature formed by the shoe itself, and consequently every step taken by the horse has caused the pad within the curvature of the shoe to be pressed upwardly against the sole of the foot, and as this action is repeated at every step the animal takes, lameness ensues. Pebbles, stones, and other unevenness of the ground aggravate the defect. To overcome this and to produce a better combined shoe and pad are the objects of my invention; and to this end I provide an elastic pad recessed in its edge to produce an upper and a lower elastic flange, and within this recess I provide secondary or auxiliary recesses to receive spurs near the heel of the shoe. These spurs are of peculiar construction, being drawn out from the inner upper face of the shoe near the heel. I may use more than two; but I find in practice that two spurs are suffi-

cient. The upper flange on the elastic cushion is similar to those already in use, and of itself is not new. The lower flange is made heavier and extends to the fullering, and leaves just room enough to drive the nails in the shoe. By extending the lower flange in this manner I cause the pressure to be distributed between the lower face of the shoe and the sole of the foot, so that the action of the pad upon the sole of the foot breaks the concussion incident to travel on the hard street, and has an effect upon the foot similar to that produced by travel upon a dirt road. A calk is placed in front of the pad at the toe to prevent the lower flange from being stuck down by accident, as might occur in stumbling if the calk were omitted. A ventilating-recess is made in the upper face of the elastic pad, as usual, to prevent sweating of the foot. The upper face of the shoe should be beveled inwardly, as shown, to receive the upper flange on the elastic pad. The spurs, drawn out from the shoe itself, as before described, project inwardly and enter the auxiliary recesses in the recess surrounding the elastic pad, for the purpose of retaining the pad in place within the shoe.

A represents the shoe, provided with the inwardly-projecting spurs B B, drawn out from the shoe by any of the means well known to the art. C represents an elastic pad recessed in its curved edge at D, as shown. Within this recess D are two or more auxiliary recesses, E E, for the reception of the spurs B B. F represents the calk at the toe of the shoe. G represents the recess in the upper face of the shoe for ventilation. The pad may be placed within the shoe, and the shoe then nailed to the horse's foot, or it may be applied to the shoe after the shoe has been nailed to the foot. It is therefore a removable pad.

It will be seen that by this construction the pressure of the pad is distributed so that the greater portion of the pressure comes upon the under face of the shoe, directly beneath the shell of the foot.

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

1. The combination of a horseshoe with an

internal elastic pad having a lower flange projecting to, or near to, the fullering in the under face of the shoe, as and for the purpose set forth.

2. In combination with a horseshoe having inwardly-projecting spurs drawn out from the shoe itself, an elastic pad having a recess in its curved edge provided with auxiliary recesses for the reception of the spurs on the shoe, substantially as and for the purposes set forth.

3. In combination with an elastic pad having a recess in its curved edge provided with auxiliary recesses for the reception of retain-

ing-spurs, the horseshoe having inwardly-projecting spurs drawn out from the shoe itself and a toe-calk for protecting the front portion of the lower flange of the pad, as shown and described.

In testimony that I claim the foregoing improvements as above described I have hereunto set my hand and seal this 6th day of December, 1878.

JAS. E. WOODRUFF. [L. S.]

Witnesses:

M. C. CHAMBERLAIN,
DANIEL LONG.