T. W. MURPHY.

HORSE-SHOE.

No. 172,150. Patented Jan. 11, 1876.

Fig. 1.

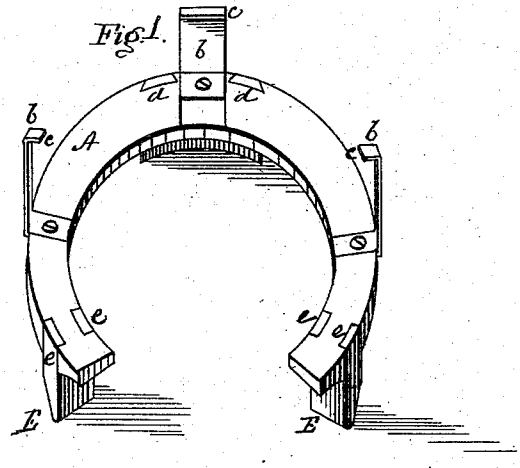


Fig. 2.

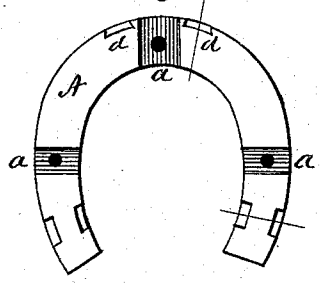


Fig. 3.

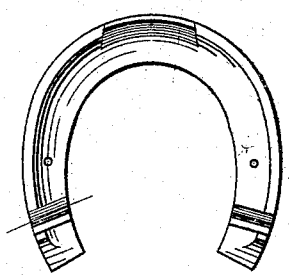


Fig. 4.

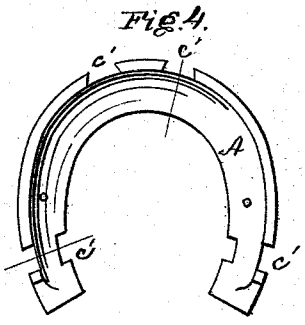


Fig. 5.

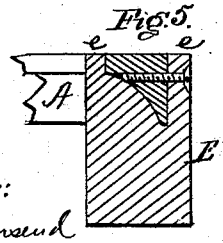
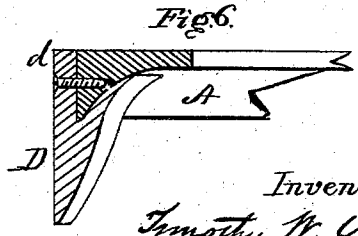


Fig. 6.



Witnesses:
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D. G. Weems.

Inventor:
Timothy W. Murphy
per Atty's,
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UNITED STATES PATENT OFFICE.

TIMOTHY W. MURPHY, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **172,150**, dated January 11, 1876; application filed November 29, 1875.

To all whom it may concern:

Be it known that I, TIMOTHY W. MURPHY, of Washington, District of Columbia, have invented a new and useful Improvement in Horseshoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view of shoe with my improvements attached. Fig. 2 is a plan view of the shoe with clamps removed. Fig. 3 represents the bottom of the shoe with the improvements attached. Fig. 4 shows the bottom with the toe and heels removed. Figs. 5 and 6 are details referred to.

My invention relates to that class of horseshoes which are designed to be secured to the hoof without nailing; and it consists in the combination of devices for securing the toe-calks of the shoe.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents a horseshoe-plate, a cross-section of which is shown in Fig. 6. The upper face of the shoe is provided with the grooves *a a a*, into which fit the detachable bent clamps *b b b*. The upper or longer ends of these clamps are bent, as shown in Fig. 6, with the hook *c*, which enters a suitable recess in the hoof, and serves to fasten the shoe in position. The lower or bent end of the clamp *b* fits into the grooves *a a a*, and are secured in position by means of screws passing through from the bottom of the plate A. Instead of the grooves, horizontal slots may be made through the shoe for the reception of the bent end of the clamps. On the front edge of the plate A is made a vertical dovetail groove, *c'*, for the reception of the beveled arms *d d* of the toe-calk D, as shown in Figs. 1 and 2. At the heels of the plate similar dovetail grooves are made on the outer and inner side of the shoe, to receive the beveled arms *e e* of the heel E, which are made to inclose the plate, as shown in Fig. 5.

If desired, the heels may also be let slightly into a cross-slot in the face of the shoe.

The heels and toes are retained by screws through the arms.

From the above description it will be evident that the toe and heels of a shoe may be readily removed or changed to suit the weather, and that, too, by any person desiring the change, without the expense and loss of time involved in sending the animal to a smith-shop; or the shoes themselves can be readily removed from the animal's foot, and again replaced, by simply removing the screws holding the side clamps.

I am aware that the means shown and described for attaching the shoe to the hoof, and also the means for attaching the heel-calks, are not new, and these I do not claim.

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

In combination with the plate A, curved as shown in cross-section, and provided with the dovetail grooves *c' c'*, the toe-calk D, having the corresponding tenons *d d*, and provided with an inner lip fitting into the curve of the plate, substantially as and for the purpose set forth.

T. W. MURPHY.

Witnesses:
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WILL H. MOXON.