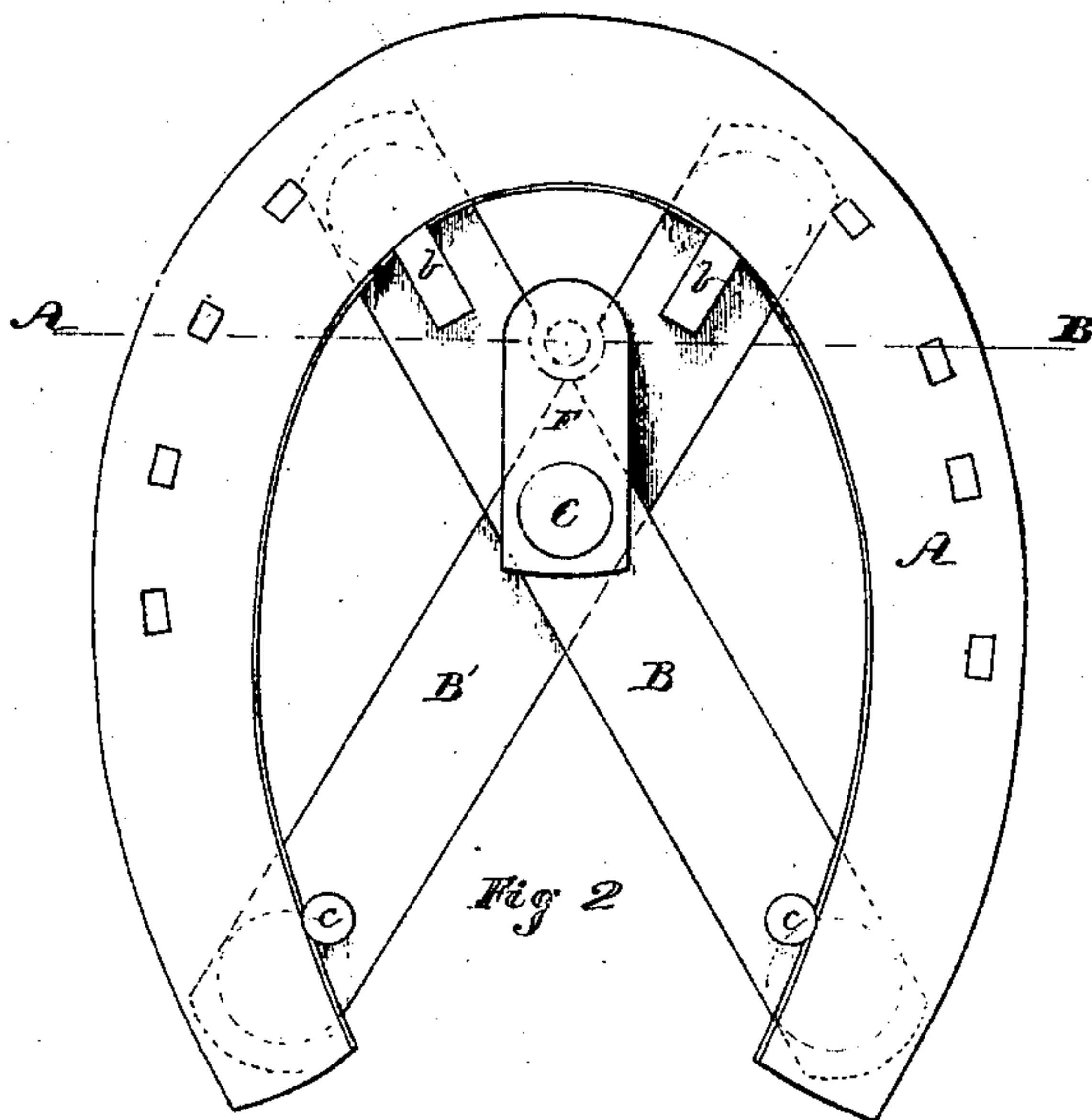
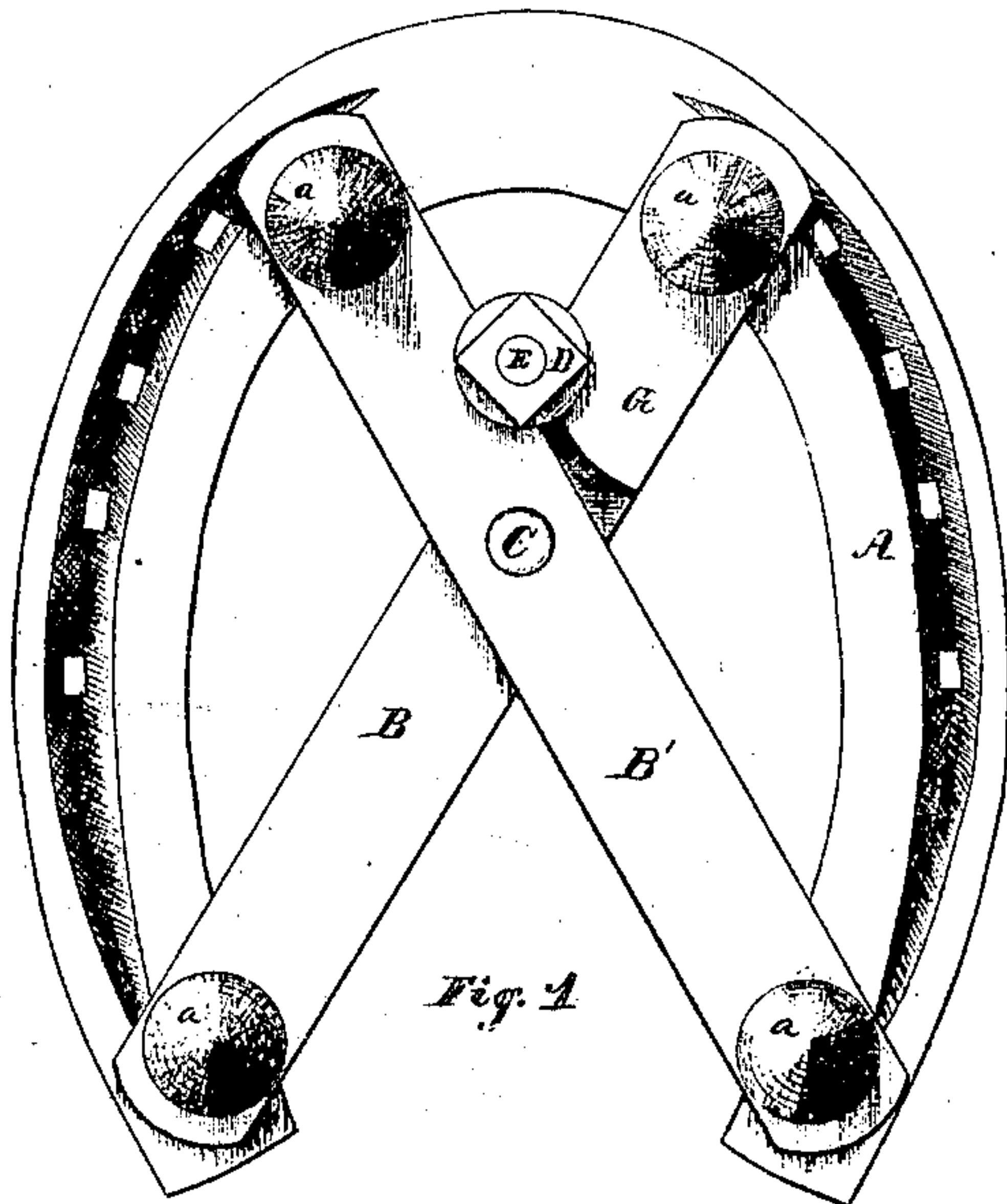


*P. Laflin,*

*Horse Shoe.*

*No. 97,525.*

*Patented Dec. 7. 1869.*



*Witnesses*

*J. H. Chassey*  
*W. B. Chassey*

*Inventor*

*P. Laflin*



# United States Patent Office.

PERLEY LAFLIN, OF WARREN, ASSIGNOR TO HIMSELF AND Z. E. CARY,  
OF WEST BROOKFIELD, MASSACHUSETTS.

*Letters Patent No. 97,525, dated December 7, 1869.*

## IMPROVEMENT IN ATTACHING CALKS TO HORSESHOES.

The Schedule referred to in these Letters Patent and making part of the same.

*Know all men by these presents:*

That I, PERLEY LAFLIN, of Warren, county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a bottom view of my improved horseshoe;

Figure 2 represents a top view; and

Figure 3 represents a section on line A B, fig. 2.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists—

First, in the combination, with the shoe, of hinged cross-braces, for supporting the calks, substantially as hereafter explained;

Second, in the combination, with the cross-braces for supporting the calks, of the clamping-lugs, as hereafter described;

Third, in the combination, with the cross-braces of a conical clamping-nut, as hereafter described;

Fourth, in the combination, with the cross-supporting braces, of a hinged bolt-arm, substantially as hereafter described; and

Fifth, in the combination, with the hinged cross-supporting braces, of a conical clamping-nut and bolt-support, as hereafter described.

In the drawings—

A represents the shoe, which may be made in the ordinary manner of making smooth shoes.

Combined with the shoe A are two cross-calk supporting braces, B B'.

These braces are hinged together by a centre-bolt or rivet, C, and are provided at their ends by calks, *a*, which calks project from the lower sides of the cross-braces, leaving the upper sides smooth, which fit against the under side of the shoe, as fully indicated in the drawings.

Projecting from the upper sides of the cross-braces B B' are clamping-lugs, *b b* and *c c*, which fit against the inner edge of the shoe, and are pressed against the same by the conical clamping-nut D, which is fitted to screw upon the bolt E, in the end of the hinged arm F, which, in turn, is secured by a hinged joint to the upper side of the cross-brace B, by means of the rivet or journal-piece C, which holds the cross-braces B B' together, as indicated in the drawings.

The ends of cross-brace B' are bent up slightly, so as to obtain a bearing under the face of the shoe, the same as the ends of the cross-brace B.

The calks *a* are made, in this instance, in conical form, and are riveted to their supporting-braces, but they may be made in different forms, and may be secured to their braces by screw-threads, or welding, or in any other proper manner.

A lip or lag-piece, G, is fastened to the forward under side of the cross-brace B, for the purpose of giving the conical clamping-nut an even bearing near its base on both sides, as indicated in fig. 3.

To secure the braces B B', to which the calks are attached to the shoe, the horse's foot is raised, and the clamping-lugs *b b* and *c c* are slipped inside of the shoe, as shown in fig. 2, after which the conical clamping-nut C is turned on to bolt E, thereby forcing or spreading the ends of the cross-braces away from each other, and pressing the lugs *b b* and *c c* against the inner edge of the shoe with great force.

I prefer to make the lugs with an outward inclination or bevel, thus insuring a more secure and firm hold upon the shoe.

From the foregoing description it will be seen that by my invention, the calks can be removed from and attached to the shoe of a horse in a very convenient and easy manner.

Then, again, the cross-braces prevent "balling," while at the same time the strain upon the shoe is such as to keep the heel part from contracting about the frog of the foot, thus insuring an easy fit of the shoe.

By having the bolt E supported by a hinged arm, it adjusts itself readily when the conical nut D is turned up, thereby insuring a uniform bearing at each side of the nut D against the braces.

Having described my improved horseshoe,

What I claim therein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the shoe, of the hinged cross-braces which carry the calks, and means, substantially such as herein described, for spreading the ends of said braces, or projections on the same, against the shoe, substantially as shown and set forth.

2. The combination, with the cross-supporting pieces B B', of a hinged bolt-arm, F, substantially as set forth.

3. The combination, with the cross-supporting braces B B', of a conical clamping-nut and hinged-bolt support, substantially as and for the purposes set forth.

PERLEY LAFLIN.

Witnesses:

J. W. CHADSEY,  
N. B. CHADSEY.