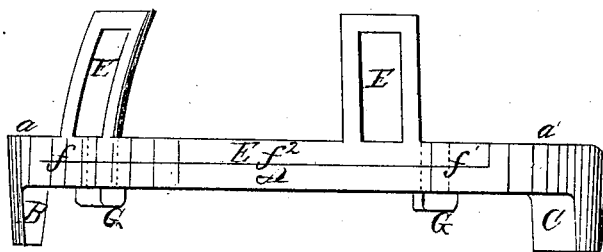
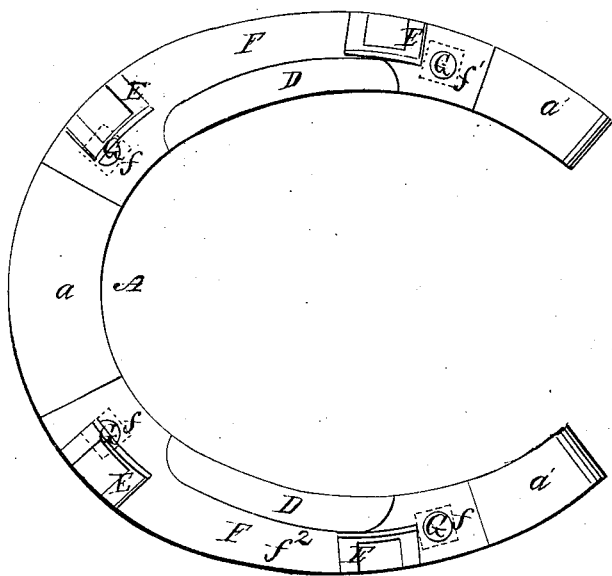


*C. M. Werner,*

*Horseshoe.*

*N<sup>o</sup> 53,930.*

*Patented Apr. 10, 1866*



*Witnesses:*  
*J. J. Peyton*  
*Theodore Lang*

*Inventor:*  
*C. M. Werner*  
*by his Atty*  
*Baldwin Dan*

# UNITED STATES PATENT OFFICE.

CASSIUS M. WERNER, OF ROCKFORD, ILLINOIS, ASSIGNOR TO HIMSELF  
AND EDWIN A. BIGELOW.

## IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. 53,930, dated April 10, 1866.

*To all whom it may concern:*

Be it known that I, C. M. WERNER, of Rockford, in the county of Winnebago and State of Illinois, 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, which make part of this specification, and in which—

Figure 1 represents a plan or top view, and Figure 2 a side view, of my improved shoe.

My invention relates to that class of horseshoes which are held upon the hoof by clasps or flanges instead of nails; and my improvement consists, first, in making the flanges or clasps in the form of an open loop, to give greater holding-surface in proportion to weight than a solid clasp; second, in confining the shoe to the hoof by two open-looped clasps on each side, said clasps being formed in one piece, but far enough apart to give the necessary pressure, as hereinafter described; third, in forming recesses in the body of the shoe to receive the flange-bars which carry the clasps, as hereinafter described.

In order to carry out my invention, I form the sole A of the shoe of one piece, and provide it with suitable calks B C. The parts *a a'* of the sole are formed of the full vertical depth of the shoe, as shown in Fig. 2, as well as the bosses or ribs D on its inner side, to increase its strength.

The clasps E are arranged in pairs on each side of the shoe, each pair being connected by a flange-bar, F, which fits into a recess provided for it on each side of the shoe, so that when united the shoe shall be flush on the upper side. The ends *f f'* of the bars are of the full width of the shoe, while their centers

*f*<sup>2</sup> are narrowed enough to fit round the ribs D. The proper degree of strength is thus secured both for the flange-bar and shoe. The clasps or flanges E are made in the form of a rectangular loop, and are bent to conform to the curve of the hoof.

The flange-bars F and sole A are united by screws G passing through them.

To apply the shoe to the hoof, the bar is removed from one side, and the shoe placed on the hoof. The other bar is then put in place and fastened by the screws. The upper parts of the clasps E are let slightly into the hoof and hold it firmly against both lateral and vertical strains, their looped form giving them a broad bearing combined with a light weight.

I prefer to use malleable iron for my shoe, and to cast the entire sole, calks, and ribs in one piece.

It will be seen that by my invention I secure a strong, light, and simple shoe, and one which admits of ready removal, adjustment, or replacement.

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

1. Forming the clasps with open loops, as and for the purpose described.

2. Casting the clasps in one piece with the flange-bar, as described, for the purpose set forth.

3. The combination of the sole, the ribs, the flange-bars, and the clasps, substantially as described.

In testimony whereof I have hereunto subscribed my name.

CASSIUS M. WERNER.

Witnesses:

ABNER SHEARMAN,  
JOHN E. HUMPHREY.