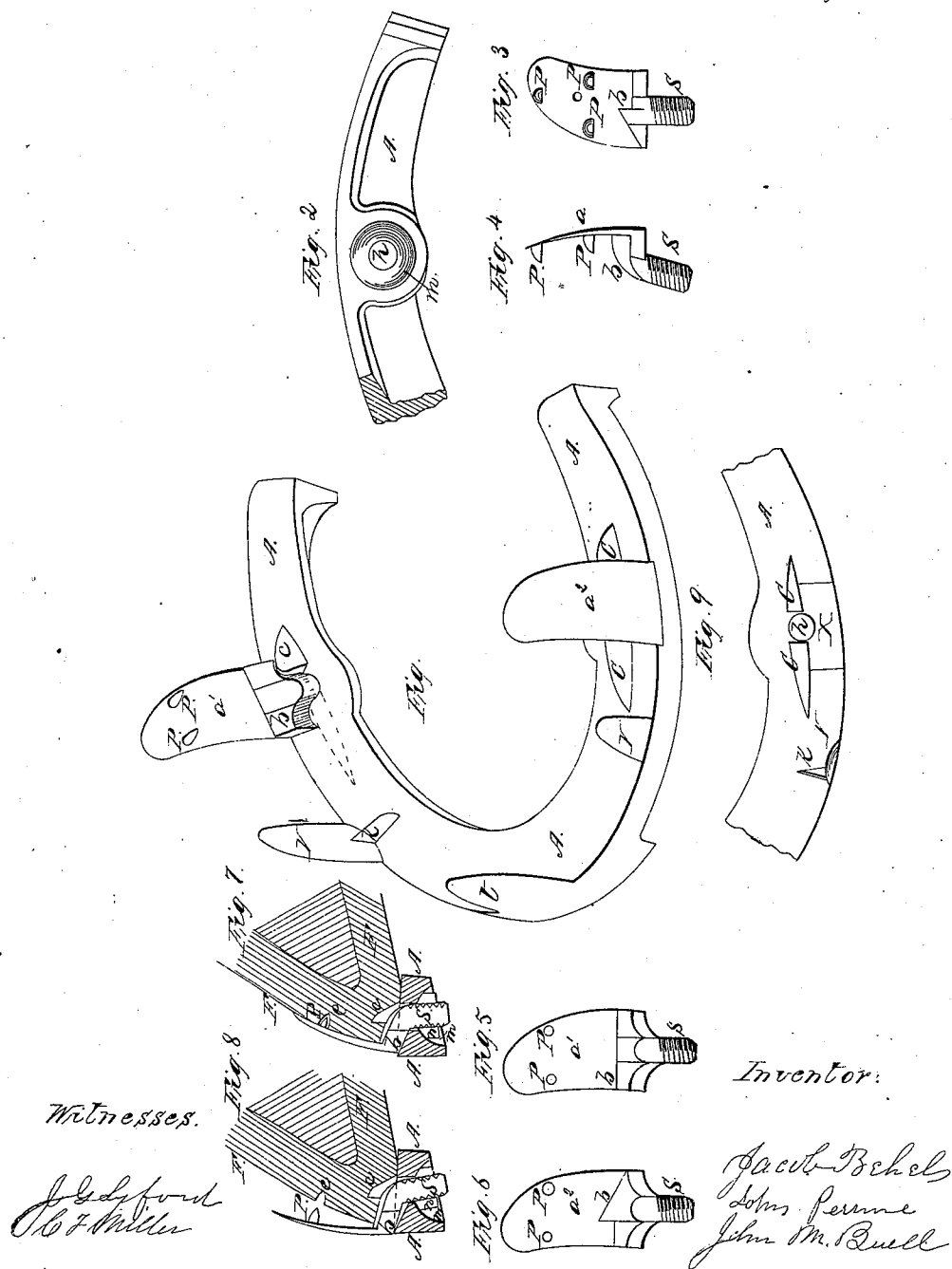


*J. Behel, J. Perrine, & J. M. Buell,*  
*Horseshoe.*

*N<sup>o</sup> 70,783.*

*Patented Nov. 12, 1867.*



*Witnesses.*

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# United States Patent Office.

JACOB BEHEL AND JOHN PERRINE, OF ROCKFORD, AND JOHN M. BUELL,  
OF OGLE COUNTY, ILLINOIS.

Letters Patent No. 70,783, dated November 12, 1867.

## IMPROVEMENT IN HORSE-SHOES.

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

Be it known that we, JACOB BEHEL and JOHN M. BUELL, of the city of Rockford, county of Winnebago, and State of Illinois, and JOHN PERRINE, of Ogle county, in the same State, have made a new and useful Improvement in Horse-Shoes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification.

Figure 1 is a view of the upper side of the shoe, with all of its various parts in position substantially as they are when in use. In this figure, as in all the others, A is the main body of the shoe; *t*, the toe-clip; *y*, fixed side-clips; *k*, a transverse spur, projecting inward from *y*, and rising from the top of A; *a' a'*, movable clips; *c c*, longitudinal projections rising from the top of A.

Figures 2 and 9 are sections of the shoe, with the movable clips *a' a'* taken out; fig. 2 showing the under and fig. 9 the upper side. *h* is the hole or opening through which the threaded arm or bolt *s* passes when in use, and as shown in fig. 1. *x* is the bevelled or inclined seat for the base of the clips *a' a'*.

Figures 4 and 5 are the movable clips *a' a'*, with square base *b b* rising above the shoe, and into a notch cut into the edge of the crust of the foot, as shown in figs. 1, 7, and 8.

Figures 3 and 6 are the same movable clips, with compound projection rising from the base, as shown at *b b*.

Figures 7 and 8 are section views through all of the parts when the shoe is applied to the foot; F representing the foot.

It will be observed that the hole or opening *h* terminates in a hollow or cup, *m*, on the under side of the shoe, and forms the seat of the nut *n*, and the walls of this cup protect nut *n* from being moved when in use.

The operation of clips *a' a'* is seen by reference to figs. 7 and 8; fig. 8 showing its position when first inserted and nut *n* applied. The outer and lower edge of the base *b* rests down on the outer edge of the bevelled or inclined seat *x*. As the nut is turned on, it rotates upon this bearing until it is brought forward against the foot; the projections P P, &c., entering punctures previously made for them in the crust. Now, by turning nut *n* up firmly, the shoe and foot are drawn firmly and securely together. The base or projection *b* will stand above the shoe, as seen in fig. 1, and fit nicely into a notch in the lower edge of the hoof. This will secure the shoe from being moved backward or forward; the spur *k* being auxiliary to the same end. Projection *b* will only rise above the upper surface of the shoe, and be inserted into the crust of the foot as much as would be naturally paired off in reshoeing. In using the projection *b*, as shown in figs. 3 and 6, in resetting, the square part of the notch will be pared off, and the shoe will naturally be moved back, so that the square part of the notch in the foot will occupy the place before occupied by the higher or triangular part of *b*, and the triangular part will be seated in a new part of the hoof. Projections *c c* are inserted between the outer shell of the foot and the sole, and should press outward against the inside of the crust. These projections counteract any inward pressure of the clips *a' a'*, which otherwise would tend to contract or injure the foot.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The movable clips *a' a'*, when constructed and attached substantially as set forth.
2. The combination of the movable clips *a' a'* and shoe A, having bevelled recesses *x* to receive the same, substantially as described.
3. The combination of the movable clips *a' a'* and the shoe A, constructed with corresponding recesses *x*, and projections *c c*, substantially as described.
4. The combination of the movable clips *a' a'* and shoe A, constructed with stationary clips *y*, and projections *c* and *k*, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

Witnesses:

J. G. LYFORT,  
CYRUS F. MILLER.

JACOB BEHEL,  
JOHN PERRINE,  
JOHN M. BUELL.