

F. Judson,

Horseshoe Calk.

N^o 54,918.

Patented May 22, 1866.

Fig. 1.

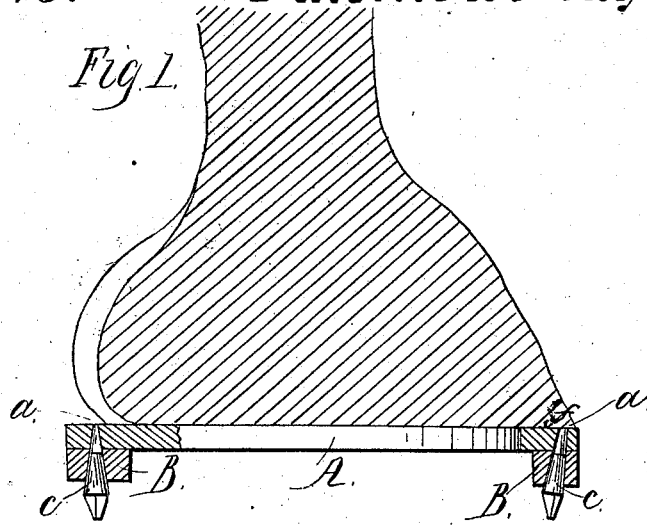
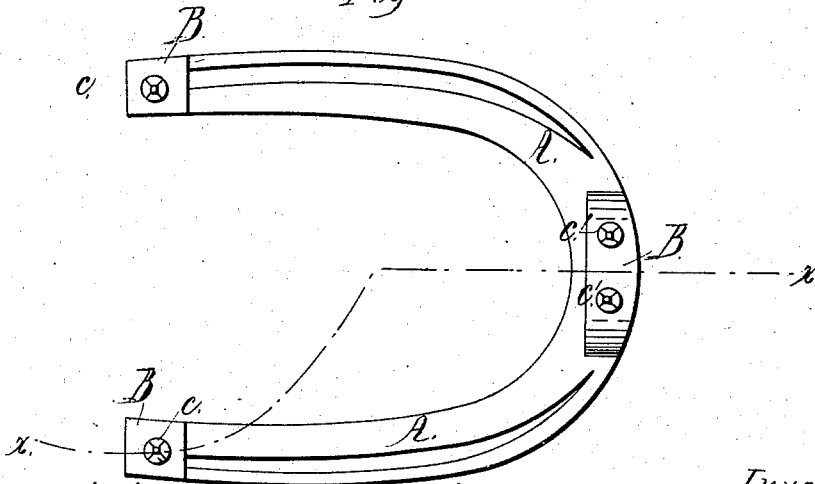


Fig. 2.



Witnesses;

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Per [Signature]
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UNITED STATES PATENT OFFICE

FREDERICK JUDSON, OF JERSEY CITY, NEW JERSEY.

IMPROVED CALKS FOR HORSESHOES.

Specification forming part of Letters Patent No. 54,918, dated May 22, 1866.

To all whom it may concern:

Be it known that I, FREDERICK JUDSON, of Jersey City, Hudson county, State of New Jersey, have invented new and Improved Adjustable Calks for Horseshoes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 in the accompanying drawings is a vertical longitudinal section taken in the line *v*, Fig. 2. Fig 2 is a bottom view of a shoe provided with my improved calks.

Similar letters of reference in the different figures indicate corresponding parts.

The object of this invention is to provide an adjustable calk for the shoes of horses or other animals, which is simple in construction and operation, and which may be readily adjusted to the shoe or removable therefrom while the shoe is fastened to the foot.

My invention consists in providing a shoe-plate with holes or sockets at the toe and heels, which pass vertically entirely through the plate and taper gradually upward from the lower face of the plate or shoe, and providing calks with tapering heads or upper terminations to correspond to the shape of the sockets, so that when the calks are placed in their sockets and forced in they become jammed or wedged therein, and are thereby attached to the shoe-plate, and in making the smaller or upper end of the sockets accessible by cutting slight notches in the edge of the hoof, and by placing the sockets as near the edge of the hoof as practicable, so that the calks may be drifted out from above with a punch and hammer and readily renewed at any time without removing the shoe from the foot of the animal.

Having described the nature of my invention, I will proceed to describe its construction and operation.

A, Fig. 1, is a shoe having vertical holes or sockets *a a* through the plate and tapering gradually upward, and *c c'* are the calks, which have a gradual taper upward to correspond

with the shape of the sockets, as shown by calks *c c'*. The shoe-plate is made thicker at the toe and heels, as shown by the downward projections B B, so that a deeper seat or socket is afforded for the calks, giving them a longer and more firm bearing in the shoe.

The toe-calks *c'* have their heads a little inclined to the front, so as to bring the upper terminations of the sockets *a* near to the edge of the hoof, and also to give the calk a good angle for taking hold in the ground. The calks are made of steel or other suitable metal.

The calks are attached to the shoe by forcing them into the tapering sockets *a a*, and the thrashing of the foot upon the ground and upon hard roads tends to keep them driven snug and securely in place. But when they are to be removed they are readily drifted out with a punch and hammer, the upper mouths, *a*, of the sockets being made accessible at the toe by cutting a slight notch, *f*, in the edge of the hoof, (shown in red outline,) and are accessible at the heels by the projection of the shoe beyond the foot, so that the calks are speedily detached at any time by driving them out from above and while the shoe is fastened to the foot.

For use on pavements of cities and on hard roads, where calks are worn out rapidly, this calk will be found especially useful, it being so simple and so easily renewed, and it will also be useful as a temporary calk held in reserve for use on icy and slippery roads and for such like emergencies.

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

The tapering calks *c c'*, constructed as described, in combination with the projections B B and tapering sockets *a a* of the shoe A, arranged and operating in the manner and for the purpose herein described.

The above specification of my invention signed by me this 27th day of January, 1866.

FREDERICK JUDSON.

Witnesses:

M. M. LIVINGSTON,
ALEX. F. ROBERTS.