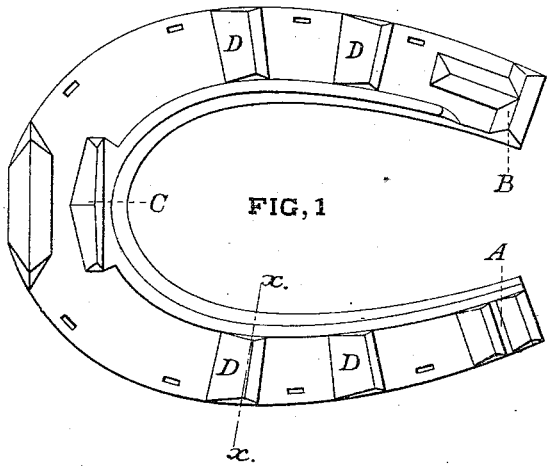
J. D. FELTHOUSEN.

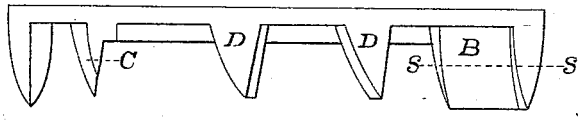
Horseshoe.

No. 162,280. Patented April 20, 1875.

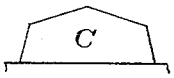


FIG, 1

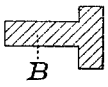
FIG, 2



FIG, 3



FIG, 4



FIG, 5

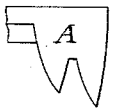
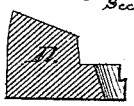


Fig. 6.
Section x.x.



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UNITED STATES PATENT OFFICE.

JACOB D. FELTHOUSEN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **162,280**, dated April 20, 1875; application filed September 24, 1874.

To all whom it may concern:

Be it known that I, JACOB D. FELTHOUSEN, of Chicago, Illinois, have invented an Improvement in Horseshoes, of which the following is a specification:

The object of my invention is to so make and arrange calks on a horseshoe that when parts of the sharp calks have become dull by wear the other calks then come into use and take the wear, and prevent the foot of the horse from slipping, and also making the said other calks with inclined sharp edges, so that the wear only comes upon their longer parts, and when said longer parts have become worn the other and shorter sharp parts of the calks come into use and wear; also, making one of the heel-calks of such a T shape that it will hold the foot of the horse from slipping either backward or sidewise, and give more surface for wear.

The invention is illustrated more in detail in the plan, Figure 1, and in the vertical section, Fig. 2.

I make my shoe of what is known as malleable iron.

Around the inside of the shoe I put a rib, projecting downward about one-fourth of an inch, and one-fourth of an inch in thickness, to strengthen the shoe and assist in supporting the calks. I make one of the heel-calks, A, double, the inside a little shorter than the outside calk, and with an inclined sharp edge, so that when the outside part becomes worn and dull from use the inside part of the calk comes into use and takes the wear; and also, as the highest part of the inside part of the calk become dull, the lower part of the inclined edge comes into use and takes the wear. The other heel-calk B I make in the shape of a T. This shape allows the calk to be made much thinner and sharper, and has at the same time much more strength. It assists the horse in drawing a load, and also prevents the foot of the horse from slipping sidewise, and will wear longer than the single flat calk.

The front toe-calk is also double. The outside is made in the usual form. Immediately in the rear of it I arrange an inner part or another toe-calk, C, with inclined sharp edges toward the center of the calk. This double inclined-edge calk is about one-fourth of an inch shorter than the outside toe-calk, and consequently, when the front toe-calk has become worn and dull, the inside inclined-edge toe-calk comes into use and wear; and as the longest part of it becomes worn and dull the the other and lower parts of the inclined edges come into contact with the road, and perform their functions in holding the foot of the horse.

Upon each side of the shoe I arrange the inclined-edge calks D D, and connect them to the rib which goes around the inside of the shoe. These side calks are about one-eighth of an inch shorter than the outside parts of the heel and toe calks. They are made about three-eighths of an inch in thickness at their base, and the width of the shoe. Their edges are sharp, and decline toward the center of the shoe, where they are about one-quarter of an inch shorter than on the outside. The object of these side calks is to prevent the foot of the horse from slipping while turning or while going on the side of an incline or hill. They also prevent the foot of the horse from twisting over on stepping on uneven surfaces, and also assist in the draft of the load. They also being made with inclined edges, the outer part comes into wear as the heel and toe calks become worn; and as their outer part becomes worn the inner part of their inclined edges comes into use and wear upon the same principle as is fully explained in the description of the inside heel and toe calk.

It will be perceived that the wear of the calks is divided into some seven different parts, and consequently they will remain sharp a much longer time than the old-fashioned shoe of three calks, having more wearing-surface.

I claim—

1. A horseshoe provided with supplementary calks shorter than the toe and heel calks, and having their edges inclined to the plane of the shoe, substantially as and for the purposes specified.

2. Having a projecting rib around the inside of the shoe, in combination with the supplementary calks C and D D, substantially as and for the purposes set forth.

JACOB D. FELTHOUSEN.

Witnesses:

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