F. H. HALL.

Horseshoe.

No. 204,968. Patented June 18, 1878.

Fig. 1.

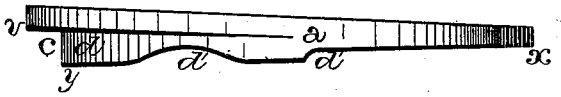


Fig. 2.

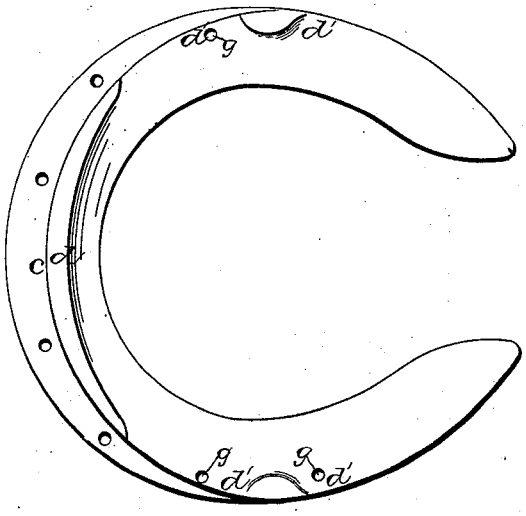


Fig. 3.

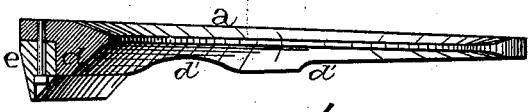
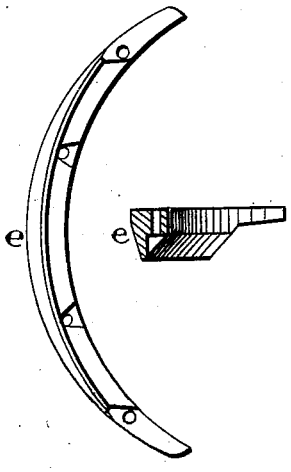


Fig. 4.



Witnesses.

J. W. Garner

Jos. F. DuHamel

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F. H. Hall,

per

J. A. Lehmann,

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UNITED STATES PATENT OFFICE.

FRANK H. HALL, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **204,968**, dated June 18, 1878; application filed April 13, 1878.

To all whom it may concern:

Be it known that I, FRANK H. HALL, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in horseshoes; and it consists in the formation of a rib or elevation around the central portion of the front part of the shoe, so as to raise the shoe upward at this point and form a fulcrum, upon which the foot turns, as will be more fully described hereinafter.

Figure 1 is a side elevation of my shoe. Fig. 2 is an inverted view of the same. Fig. 3 is a vertical cross-section, and Fig. 4 shows detail views of the calk alone.

a represents a horseshoe of any desired shape or size, and which is made flat upon its top, around its outer edge, where it comes in contact with the shell of the hoof, but is beveled away from about its center down to its inner edge, as shown. The extreme front face of the shoe, back to almost one-half of the width of the shoe, is cut away, so as to form a shoulder or offset, *c*, in which the removable calk is placed. Back of this cut-away portion the shoe is made thick enough to form a permanent calk, *d*, which extends back a little more than half-way around the shoe. In order to protect the nails which pass through the shoe alone, depressions are made in this permanent calk at *d'*, so that the nail-heads will not come in contact with the ground to be worn away. By thus forming the depressions the usual groove in ground-face of the shoe is done away with.

The heels of the shoe are left thin and plain. The removable toe-calk *e* is made of the shape shown, and is just thick enough to fill the shoulder upon the front edge of the shoe. From the first nail-holes made in each end of the calk the thickness of the calk is increased, so as to present a sharp edge around the extreme front edge of the shoe, and this edge projects some distance farther down than the permanent calk *d*. The shoe is first secured to the foot by means of the nails, which pass through the holes *g*, and then the calk is placed in position, and the nails driven both through it and the shoe into the hoof.

It will be seen that the permanent calk *d* is placed nearer the center of hoof, thus enabling the foot to be raised more quickly from the ground, and with less exertion than when the calk is placed at the extreme point of the toe. This calk, constructed and arranged as herein shown, gives shorter leverage, which necessarily gives greater strength, and thus enables the foot to be raised more rapidly. This permanent calk answers all ordinary uses, and hence the removable calk will be used only for icy or slippery roads or streets.

Raised projections or flanges which project all around the lower face of the shoe, from heel to heel, are old; and this I do not claim.

My invention consists in forming the flange around the toe of the shoe only, so as to form a fulcrum, upon which the foot turns, thus shortening the stay of the horse's foot on the ground, and causing it to be lifted more rapidly. By making the shoe flat and thin behind, and high in front only, a rolling motion is given to the foot, which gives the horse a shorter leverage and greater power, as the foot then stays on the ground from the point *x* to the point *y*, instead of from *x* to *v*, as with the common shoe. Of course, the shorter the distance from the heel to the toe the shorter time the foot rests on the ground, and the less effort the horse has to make to rise on the toe in trotting.

Having thus described my invention, I claim—

A horseshoe, *a*, provided with a stationary calk, *d*, extending around the inner edge of the toe, around the quarters, and leaving at the outer edge a space for the attachment of a removable toe-calk, *e*, said stationary calk *d* being tapering on both sides toward the heel, and leaving the heel of the shoe flat and thin, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of April, 1878.

FRANK H. HALL.

Witnesses:

CHARLES SHERWOOD,

AMOS S. TREAT.