C. FERRIER.
Toe-Weight for Horses.

No. 201,339. Patented March 19, 1878.

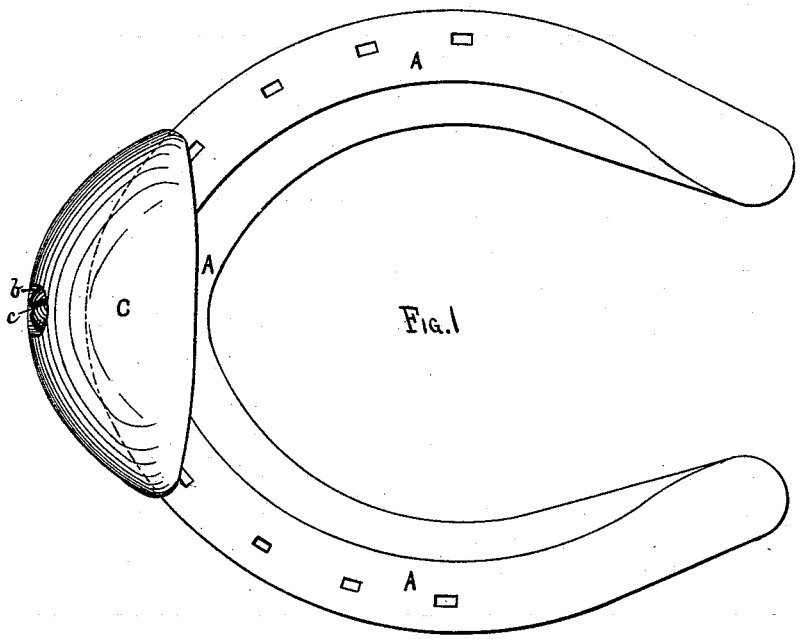


Fig. I

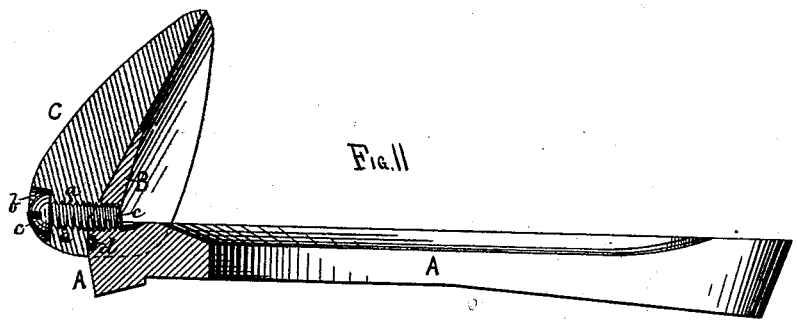
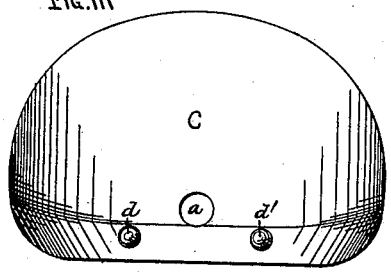


Fig. II

Fig. III



Witnesses.
C. N. Woodward
John T. Halsted.

Charles Ferrier,
Inventor, By
Louis Fraser & Geo.
Atty's.

UNITED STATES PATENT OFFICE.

CHARLES FERRIER, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN TOE-WEIGHTS FOR HORSES.

Specification forming part of Letters Patent No. **201,339**, dated March 19, 1878; application filed October 30, 1877.

To all whom it may concern:

Be it known that I, CHARLES FERRIER, of Minneapolis, in the county of Hennepin and State of Minnesota, have made certain new and useful Improvements in Horseshoe Toe-Weights, which invention is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan view of a horseshoe with my device attached thereto. Fig. 2 is a sectional side elevation of the same, and Fig. 3 a rear elevation of the weight detached.

This invention relates to metal weights attached to horses' shoes to govern the motion of the feet; and consists in the manner of securing them to the shoe, whereby they may be more easily attached and detached, as hereinafter described.

A is the shoe; B, the usual clip, struck up from the shoe when it is made; and C, the toe-weight. This weight is provided with a screw-hole, *a*, and a countersink, *b*, for the reception of the screw *c*, which passes through it, and is tapped into the clip B, as shown in Fig. 1. *d d'* are two or more burrs cast upon the inside of the weight C, and which set into corresponding cavities in the side or front of the shoe, and serve to prevent any oscillating motion of the weight C, should the screw become loosened, as well as to relieve the screw of a portion of its strain.

By this simple arrangement I produce a fastening that is at once simple, cheap, and secure, at the same time enabling the weight to be very easily attached or detached, without in any manner affecting the shoe or hoof, as no extra cutting is required to apply it as a toe-weight, and but very little when applied as a side weight.

When applied as a side weight to the hind feet, the clip B will be formed upon the side of the shoe; but its position and form will be such as to cause all the cutting of the hoof to fit the clip to come at the points where the wall is thickest, so that no bad effect will result, the lugs entering depressions in the shoe, the same as when applied to the toe.

I am acquainted with the patent of S. Griffin, March 21, 1876, No. 174,906, which shows a toe-weight secured to the shoe by means of a perforated lug attached to the weight and resting upon top of the shoe, while a screw is tapped into the lug through the shoe from below.

In many cases the sole is so thin that it is impossible to apply these weights; but by my arrangement no more cutting is necessary than in putting on the ordinary shoe, except in the heel-weights, and then the cutting all occurs upon the side, where there is always a sufficient thickness of hoof.

I am aware that it is not new to secure the toe-weight to the shoe by means of two securing-screws passing into the toe-clip of the shoe, and that toe-weights with a single vertically-oblique screw and two lugs, designed to rest between the top surface of the shoe and the edge of the wall of the hoof, have been patented. In the former an unnecessary expenditure of time and labor is an incident of the construction, and in the latter the wall of the hoof has to be cut away to form recesses for the reception of the lugs. My invention is designed to overcome these objections, and provide a weight which, while it is readily and quickly secured in place, avoids all the ill effects resulting from the mutilation of the hoof.

Rivets or bolts may be used in place of the screw *c*, if desired; but I prefer the screw arranged as shown.

Leather or rubber cushions may be placed between the hoof and weight, in many cases, to advantage.

The weight may be made hollow, and filled with lead or other substance, to increase its weight, if desired.

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

1. A toe-weight for horseshoes, provided with a horizontal, or nearly horizontal, securing-screw, and two or more short spurs, adapted to enter correspondingly-shaped depressions in the shoe, for the purpose of preventing any vibratory movement of the weight when secured in position.

2. In combination with a horseshoe having a screw-hole in its front end or clip, and two or more depressions below the plane of the screw-hole, a toe-weight provided with a securing-screw and two or more spurs, the whole arranged and coacting substantially in the manner and for the purposes described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES FERRIER.

Witnesses:
C. N. WOODWARD,
JOHN T. HALSTED.