E. D. SMITH, C. C. MATSON & P. R. MARTIN.

Toe-Weights for Horses.

No. 209,840. Patented Nov. 12, 1878.

Fig. 1.

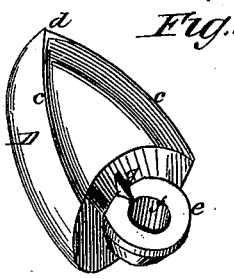


Fig. 2

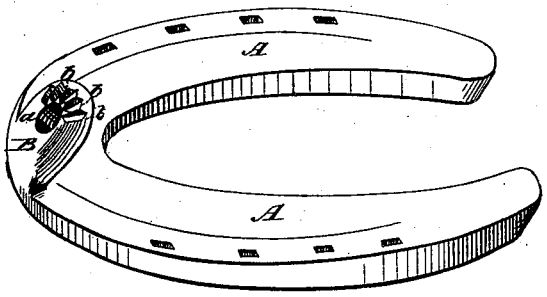
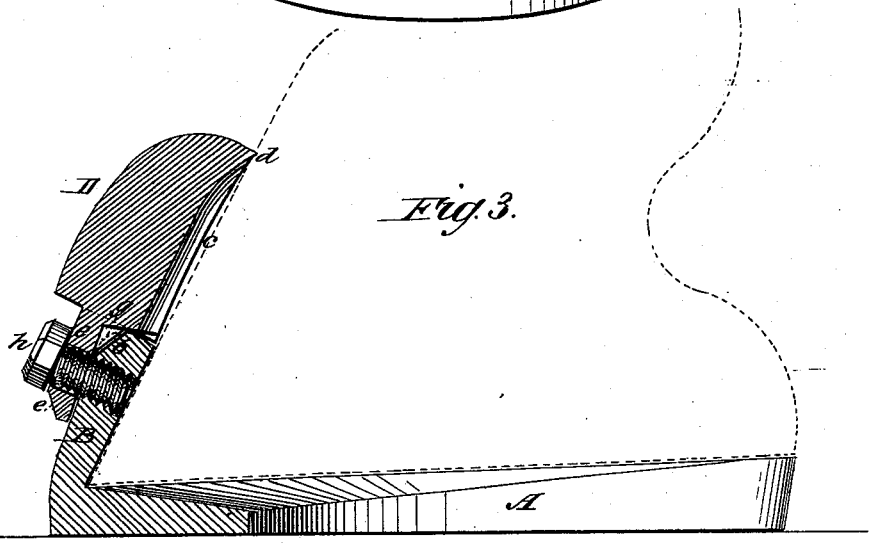


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWIN D. SMITH, CHARLEY C. MATSON, AND PHILIP R. MARTIN, OF UTICA, ILLINOIS.

IMPROVEMENT IN TOE-WEIGHTS FOR HORSES.

Specification forming part of Letters Patent No. **209,840**, dated November 12, 1878; application filed October 11, 1878.

To all whom it may concern:

Be it known that we, EDWIN D. SMITH, CHARLEY C. MATSON, and PHILIP R. MARTIN, of Utica, in the county of La Salle and State of Illinois, have invented a new and Improved Toe-Weight for Horseshoes, of which the following is a specification:

The object of this invention is to furnish a device that will assist the horse in developing his speed, and can also be arranged to accomplish this object in connection with regulating the throw of the feet in those cases where they are moved too close together or too far apart, and thus interfere with the movement of the horse.

It consists of a weight adapted to rest on the hoof, pivoted to the toe at an angle coincident to that of the hoof, which can be adjusted to the middle of the hoof or to either side, as may be desired.

In the accompanying drawings, Figure 1 is a perspective view of the toe-weight, showing the under side thereof. Fig. 2 is a view of the shoe with the stud to which the toe-weight is pivoted. Fig. 3 shows a hoof with a sectional view of the shoe and toe-weight applied.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a horseshoe, to the upper side of the toe whereof is fixed an inclined stud, B, provided with a threaded hole, *a*, and above the hole are V-shaped scores *b b b*, &c. This stud is made at an angle to the plane of the shoe suitable to the angle of the hoof to which it is to be applied, and is, of course, determined when the shoe is made.

The toe-weight is designated by the letter D. It is an ovoid piece of metal, flattened on one side and the flattened side made concave, so that sharpened edges *c c* will be provided, which join at the toe in a slightly-projecting point, *d*. The butt of the toe-weight is cut away, so as to leave a projection, *e*, in which is a bolt-hole, *f*. At the junction of the projection *e* with the shoulder of the toe-weight, in the under side, is a V-shaped projection, *g*. The toe-weight is applied to the shoe by placing the projection *e* on the outside of the stud B, with the V-shaped projection *g* entered into one of the similar shaped scores *b*, and then passing the screw-bolt *h* through, so that the toe-weight and shoe will occupy the relative positions shown in Fig. 3.

The operation of my improvement is as follows: The shoe is fastened to the hoof in the usual manner, and the toe-weight is applied and fastened by the screw-bolt *h*. If it is used merely to assist the horse in developing his speed, it is placed in a line with the vertical middle line of the hoof, and secured in that position by screwing the bolt in until the edges *c c* and point *d* rest on the hoof, and this, in connection with the bolt and engaged V-shaped scores and projections, prevent it from changing its position. If it is desired to change the throw of the feet, the toe-weight is moved from a vertical to an inclined position, either outward or inward, as the case may be, and secured in a similar manner.

As will be observed, this invention enables us, without changing the shoe, to either use the weight as a speed-developer or as a means of changing the movement of the feet, or both at the same time.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The toe-weight D, provided with biting-edges *c*, point *d*, projection *e*, having the eye *f*, and the V-shaped projection or lug *g*, in combination with the inclined stud B of the shoe A, and with the bolt *h*, substantially as and for the purpose described.

2. The shoe A, provided with the inclined stud B, having the threaded hole *a* and V-shaped scores or recesses *b*, in combination with the toe-weight D and with the bolt *h*, substantially as and for the purpose described.

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Witnesses:
IRA CANNON,
JOHN DELBRIDGE.