

A. J. PACKARD & C. P. HARRIS.
 Toe-Weight for Horseshoes.

No. 217,547.

Patented July 15, 1879.

FIG. 1

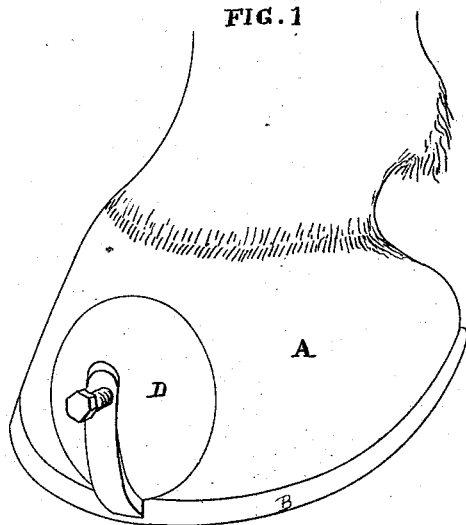


FIG. 2.

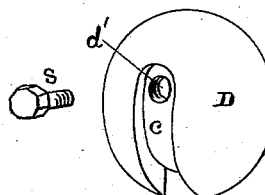
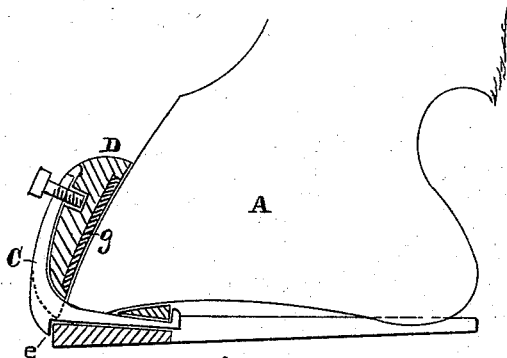
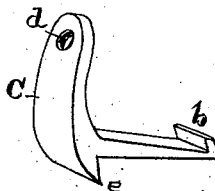
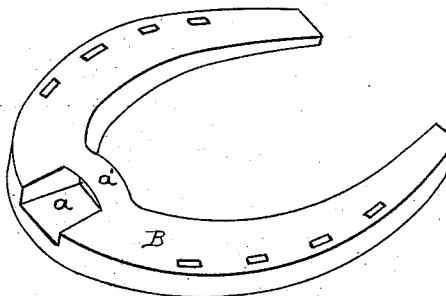


FIG. 3



Witnesses

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UNITED STATES PATENT OFFICE.

ADONIRAM J. PACKARD AND CHARLES P. HARRIS, OF HILLS' FERRY, CAL.

IMPROVEMENT IN TOE-WEIGHTS FOR HORSESHOES.

Specification forming part of Letters Patent No. **217,547**, dated July 15, 1879; application filed May 20, 1879.

To all whom it may concern:

Be it known that we, ADONIRAM J. PACKARD and CHARLES P. HARRIS, of Hill's Ferry, county of Stanislaus, and State of California, have invented an Improved Toe-Weight; and we hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to an improved toe-weight for horses, such as are used to reduce their gait to a measured pace.

Our improvements consist in providing a weight of such a shape as to adapt itself to any form of hoof, to be used in combination with a removable clamp, of peculiar shape, so that the weight and clamp are, when combined, self-binding, and no supplementary strap is necessary to keep it in place, nor is it necessary to injure the hoof by cutting to fix the clamp and weight to the hoof. In going from place to place, or when it is not desired to use the weight, not only the weight, but the clamp also, may be removed, and the foot left free, with nothing but an ordinary recessed shoe upon it. Thus the shoes used with this clamp and weight are not obstructed by fixed attachments, which are in the way when the weight is not in use, but the whole can be removed without taking off the shoe.

In the accompanying drawings, Figure 1 is a perspective view of a hoof with the toe-weight attached. Fig. 2 is a vertical section of the same. Fig. 3 shows the parts in detail.

Let A represent the hoof of a horse, and B the shoe, said shoe having a slot, *a*, cut at its center, as shown, on the upper side, so as to be between the shoe and hoof.

The clamp C is formed in a peculiar shape, with its upper front portion curved and its lower horizontal portion beveled off, as shown, and provided with a lip, *b*.

On the lower end of the front part is formed a toe or shoulder, *e*, which is curved, as shown, so as to fit down over the front of the shoe, for the purpose hereinafter described.

The weight D is made perfectly circular in form, and has its back hollowed or rounded, so as to correspond to the shape of the hoof. In front is formed a curved slot, *c*, with its face beveled or curved, as shown, to correspond with the shape of the front part of the clamp, which fits into said slot.

A threaded hole, *d*, is formed in the clamp, and a corresponding socket, *d'*, is made in the weight, at the upper end of the slot, so that a bolt, *s*, may be screwed in to hold the weight and clamp together.

The slot at the toe of the shoe is cut through its upper portion, while at the rear the iron is separated, as shown, so as to form a socket by the band *a'* coming over the top of the slot. This band is on the upper side of the shoe, and fits up into the hollow of the hoof.

In the circular depression at the back of the weight is placed a piece of rubber, *g*, so as to protect the foot from jar and the hoof from contact with solid substances.

The screw that passes through the clamp and enters the socket in the weight does not pass through the weight, but only goes far enough to hold the weight in position.

To secure the weight in position, the beveled lipped portion of the clamp is inserted through the slot until the lip comes out of the rear end of the socket. The weight is then dropped down between the upward-projecting portion of the clamp and the hoof, and the clamp fits into the beveled curved slot *c*. The weight is thus made self-binding, no matter at what angle the horse's foot may be, as the rubber on the back will be more or less compressed, according to the shape of the foot. When the weight is dropped in behind the clamp the upper part of the clamp is thrown forward, and this throws the lip *b* up behind the offset or band *a'*, so that one part binds the other. The bolt is then screwed in, and a turn more or less will compress the rubber properly so as to accommodate the weight to the shape of the horse's foot, and it cannot get free of the clamp. Being self-binding, there will be no rattle or jar to the weight, which is firmly held in place by the peculiarly-shaped clamp and the screw. The weight is solid, safe, and strong, and not readily displaced, while no supplemental straps are necessary to hold it in position.

The weight may be instantly removed without disturbing the shoe, thus enabling the driver to use the same weight for several horses. The shape and construction of the weight is specially designed for this, as it accommodates itself to any shaped hoof, as herein described. As the end of the clamp passes

through a hole punched in the shoe, there is less cutting or burning of the hoof necessary than with common toe-weights, and no possible chance to injure the foot in shoeing. As the weight and clamp are readily removed they are not worn out in traveling, but can be put in place in a moment when necessary.

Weights of different sizes may be used with the same clamps, if desired. Weights weighing more or less, but with the same beveled curve in front, will fit to any clamp. Being secured in the manner described, the weight cannot fly off the foot.

It will be noticed that the clamp has a bearing nearly the entire length of the weight and holds it firmly, the weight not being merely secured at one point alone—a feature which would be objectionable in such devices.

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

1. The weight D, having the hollowed back, provided with the rubber facing *g* and the curved slot *c*, in combination with the clamp C, having a curved upper portion, corresponding to the slot in the weight, and the horizon-

tal portion, with its lip *b*, whereby the weight is made adjustable and self-binding, substantially as herein described.

2. The removable clamp C, turned at right angles, with a lip, *b*, toe *e*, and bolt or nut *s*, fitted to hold the self-wedging weight D, in combination with the slotted shoe B, with its band *a'*, whereby the clamp is joined to the shoe and foot, but made removable, substantially as and for the purpose herein described.

3. The weight D, with its hollowed back and rubber facing *g*, curved slot *c*, and socket *d'*, in combination with the clamp C, with its hole *d*, bolt *s*, toe *e*, and having the lip *b*, to engage with the band *a'* in the slotted shoe, whereby the weight and clamp are secured to the foot of the horse, substantially as and for the purpose herein described.

In witness whereof we have hereunto set our hands.

ADONIRAM JUDSON PACKARD.
CHARLES PARSONS HARRIS.

Witnesses:

J. W. ROBISON,
J. GORHAM.