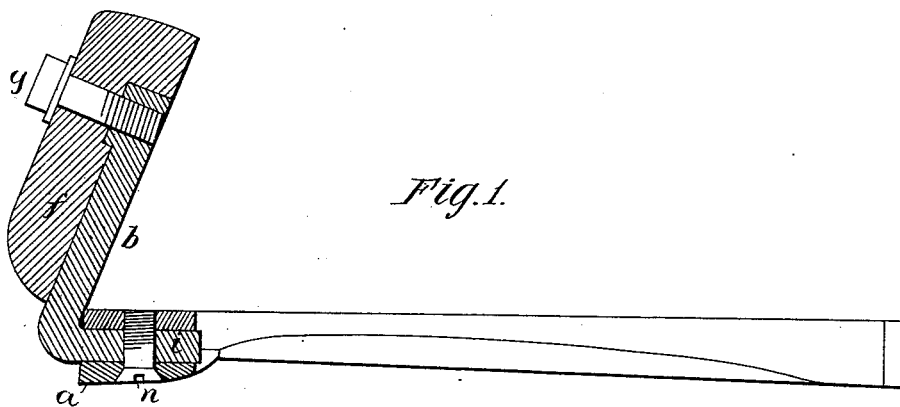


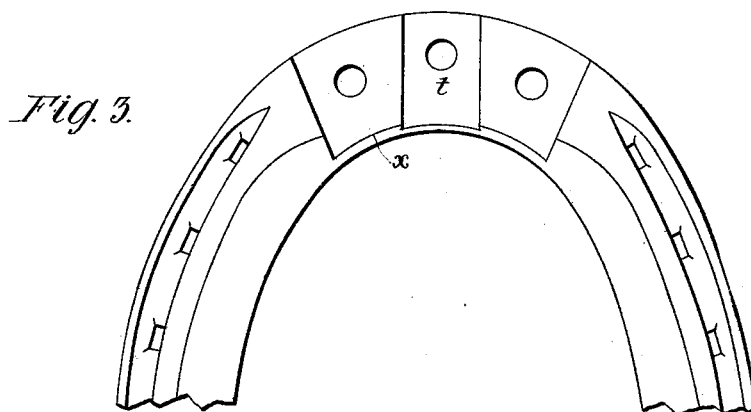
J. E. HENSON.  
 Toe-Weight for Horses.

No. 220,919.

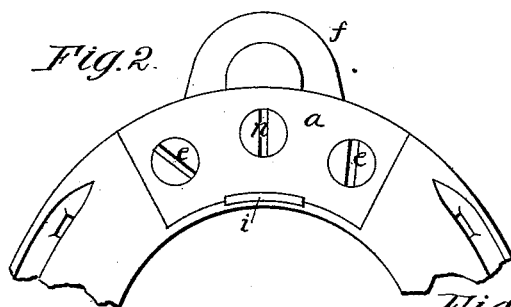
Patented Oct. 28, 1879.



*Fig. 1.*

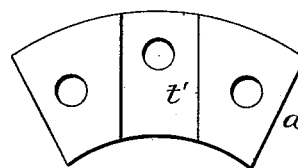


*Fig. 3.*

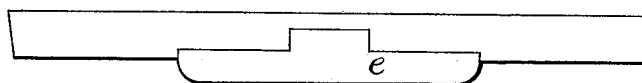


*Fig. 2.*

*Fig. 4.*



*Fig. 5.*



Attest:  
 Courtney A. Cooper.  
 William Paxton.

Inventor:  
 Jas. E. Henson  
 By his attorney  
 Charles E. Foster

# UNITED STATES PATENT OFFICE.

JAMES E. HENSON, OF CYNTHIANA, INDIANA.

## IMPROVEMENT IN TOE-WEIGHTS FOR HORSES.

Specification forming part of Letters Patent No. **220,919**, dated October 28, 1879; application filed April 15, 1879.

*To all whom it may concern:*

Be it known that I, JAMES E. HENSON, of Cynthiana, Posey county, Indiana, have invented Improvements in Toe-Weights for Horses, of which the following is a specification.

My invention is an improvement in weighted horseshoes; and it consists in constructing the shoe and attachments so that the weight may be applied or removed without detaching the shoe or cutting the hoof, and so that a calk may be substituted for the weight or combined therewith when desired.

In the drawings forming part of this specification, Figure 1 is a section of my improved shoe and weight; Fig. 2, an inverted plan, shows part of the shoe with the weight; Fig. 3, an inverted plan, the weight and fastener detached; Fig. 4, a detached view, showing the fastener; Fig. 5, an edge view of the shoe, with the detachable calk applied.

It is common in the application of toe-weights to either cut the hoof for the insertion of the weight-bracket between the shoe and hoof, or to secure the bracket rigidly to the shoe. The first mode is objectionable, as the cutting in some cases will irritate and inflame the foot. The second mode is open to the objection that the shoe must be removed to detach the weight, and for the reason that the bracket, if stationary, must be removed with the shoe in order to recalk.

My improved shoe is provided with a recess, *x*, at the under side, to which is fitted a detachable fastening-block, *a*, secured by bolts *e e*, or otherwise.

Between the block *a* and the shoe, in coinciding sockets *t t'*, is clamped the heel *i* of the

bracket *b*, which extends upward in front of the hoof and supports the weight *f*. The weight is secured to the bracket by a screw-bolt, *g*, and the heel is firmly attached by means of a screw, *n*, passing through both the block *a* and the shoe, as shown. The weight and its bracket may be removed at any time by withdrawing the screw *n* and loosening the screws *e e*, the block *a* remaining to protect the socket of the shoe from being battered, while it further serves as a calk, which may be renewed and replaced as it wears away; or the block may be withdrawn on the renewal of the toe-piece and replaced by another block, *c*, as shown in Fig. 5, formed to constitute a calk.

It will be apparent that this attachment may be made at the side instead of the center, or at both the toe and side. The cutting of the hoof is thus avoided, while the weight may be attached or removed at pleasure.

I claim—

The combination of the shoe having a recess, *x*, and socket *t* at the under side, the detachable block *a*, its recess *t'*, and the bracket *b*, carrying the weight *f* and having a heel, *i*, adapted to be clamped in the coinciding sockets between the shoe and block, and perforated for the passage of the screw *n*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES E. HENSON.

Witnesses:

G. W. LOWE,  
R. D. VINT,  
A. C. WILKINSON.