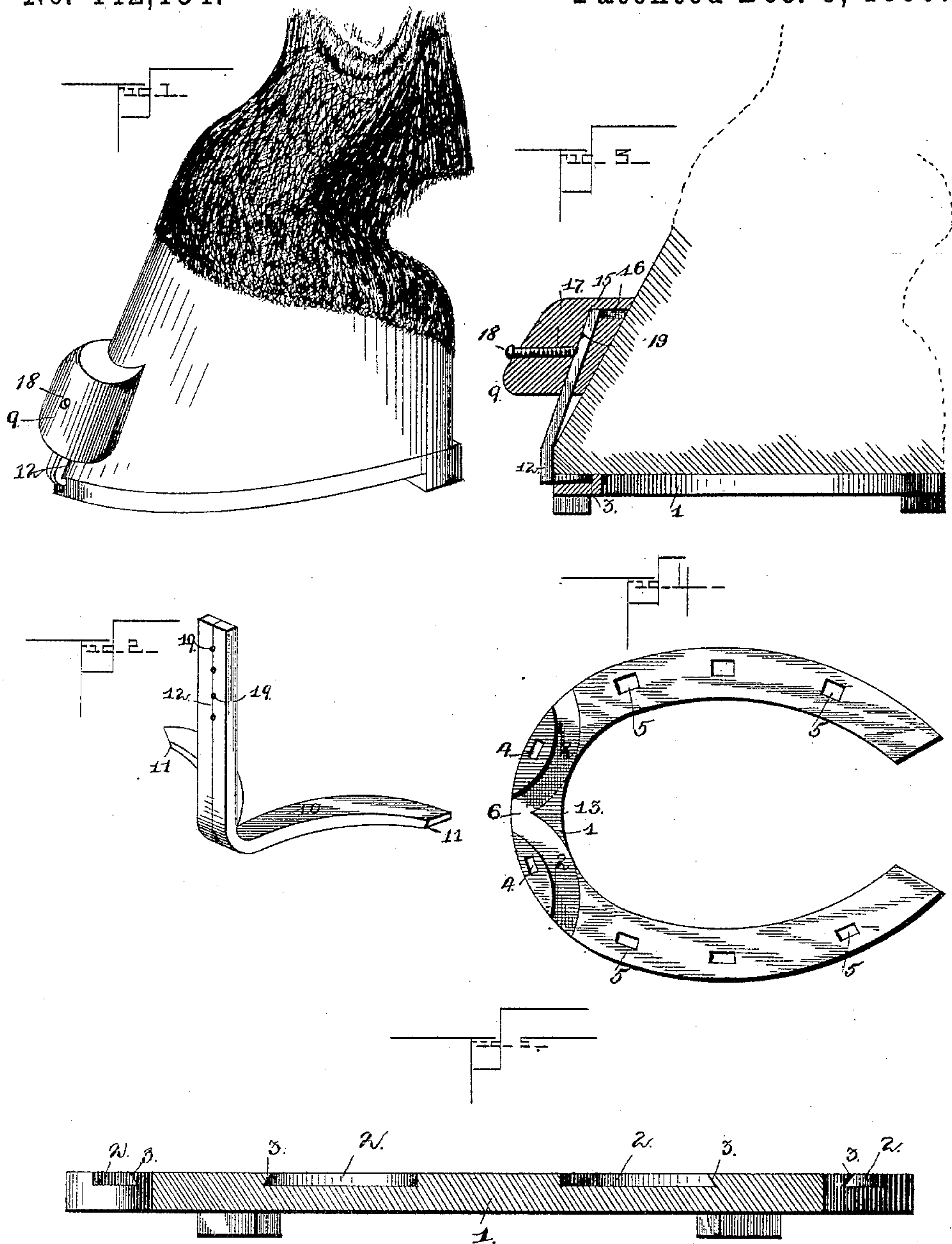


(No Model.)

H. H. TURNER.  
TOE WEIGHT FOR HORSES.

No. 442,154.

Patented Dec. 9, 1890.



Witnesses:

*Horace S. Seitz*

Inventor

*Henry H. Turner*

*W. S. Duval*

By his Attorneys,

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

HENRY H. TURNER, OF WHITEHALL, MICHIGAN.

## TOE-WEIGHT FOR HORSES.

SPECIFICATION forming part of Letters Patent No. 442,154, dated December 9, 1890.

Application filed April 4, 1890. Serial No. 346,515. (No model.)

### *To all whom it may concern:*

Be it known that I, HENRY H. TURNER, a citizen of the United States, residing at Whitehall, in the county of Muskegon and State of Michigan, have invented a new and useful Toe-Weight for Horses, of which the following is a specification.

This invention has relation to toe-weights for horses, and has particular reference to the means for attaching the toe-weight-supporting standards or stem to the hoof or shoe of the horse.

Among the objects in view are to obviate the employment of any extraneous fastening devices or any devices unusual to an ordinary shoe and to so secure said standards to the hoof or shoe that they may be readily removed and applied to the hoofs or shoes of other animals.

With the above general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a view of a hoof provided with a toe-weight secured to the shoe of the same in accordance with my invention. Fig. 2 is a perspective of the weight-supporting standards detached. Fig. 3 is a vertical longitudinal section of the view shown in Fig. 1. Fig. 4 is a plan of the shoe detached. Fig. 5 is a transverse section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I provide the upper surface of the shoe 1 at its toe portion with oppositely-diverging curved recesses 2, the outer edges of which are dovetailed, as at 3. Within the curved recesses are located the front nails 4 and in rear of the same the side nails 5, as shown. The recesses are formed upon the same-sized circle, and the front ends of the same merge into one another, forming an opening 6 at the toe of the shoe. If desired, the curved recesses may be formed in the bottom of the hoof itself, though I prefer to form the same in the upper surface of the shoe.

The standard for supporting the toe-weight 9 is formed in opposite standard-sections, each of which is of L shape, the lower portion or base of the L being flattened and curved, forming

a securing-plate 10, the curvature of the plate exactly agreeing with that of the recesses formed in the hoof or shoe. The inner peripheries of the plates are beveled, as at 11, to take under the inclined or dovetailed shoulder or side wall of the recesses. The upper or stem portions of the L-shaped sections are reduced and form rectangular stems 12, which combine to form the standard proper. By reason of the curvature of the securing-plates and the recesses it will be apparent that when in position in said recesses the adjacent edges of the plates near their forward ends or directly in rear of the stem portions will bind upon each other, as shown at 13, so that when in position they each act to lock the other in place, and it is impossible to withdraw both sections from their respective recesses at a single withdrawal; but to effect such withdrawal it is necessary to remove first one section and then the other. In inserting the sections it is necessary also to replace one before the other, then press both firmly into place so as to bind. By this construction it will be apparent that a most efficient means has been provided for securing the sections in place, and this without the aid of any extraneous fastening devices. The front and side nails passing through the shoe at the front and rear sides of the grooves serve to strengthen the shoe at those portions occupied by the sections and obviate any liability of the shoe becoming loose by the jarring of the weight, which, as is well known, sometimes causes the shoes to loosen.

The toe-weight 9 is provided with a vertical socket 15 for the reception of the two stem-sections forming the standard, and communicating with the socket at the rear upper end of the weight is a recess 16, by which mud and other accumulations may be picked out of the weight. The front of the weight has a transverse threaded opening 17, in which is mounted a set-screw 18, the inner end of which is designed to take into any pair of a series of pairs of notches 19, formed upon the adjacent inner edges of the stems of the sections. From this it will be apparent that not only may the weight be removed for the purpose of substituting a heavy or lighter weight, but said weight may be readily adjusted to or from the toe of the horse.



From the above description it will be apparent that I have provided an extremely simple, efficient, and rigid connection between the weight-supporting standard and the hoof or shoe, as desired, one in which no extraneous fastening devices are employed, liable to extend out from the hoof and into the horse, or to have, if set-screws, their heads worn, so as to render a withdrawal of the same difficult, and also means for removing the weight and adjusting the same to the various requirements of the different animals to which the weight is to be applied. In this manner one set of weights and standards may be employed for a stable of horses, if necessary, and when the horse is stabled or pastured nothing remains upon the hoof in any way connected with or forming a part of the toe-weight and its support.

By reason of the curvature of the standards, as before mentioned, it will be observed that the mere mounting of the weight in position locks the standards in position, so that any means may be provided for locking the weight upon the standards.

Having thus described my invention, what I claim is—

1. A toe-weight-supporting standard formed in opposite sections or halves, the lower portions of the sections being bent at an angle to the upper portions thereof, laterally diverged and curved, and adapted for insertion into a pair of correspondingly-curved recesses formed in the shoe, and the upper portions of the sections combining to form a weight-supporting stem, substantially as specified.

2. The combination, with a horseshoe the upper surface of which is provided at its toe with diverging curved recesses, the front ends of which meet at the toe of the shoe to form an opening, of a weight-supporting standard formed in opposite substantially L-shaped sections, the lower portions of which

are oppositely curved and diverged and adapted to fit within the recesses of the shoe and to have their adjacent faces bind against each other at the front ends of the recesses, the upper portions of the sections combining to form a stem, and a removable weight mounted upon the stem, substantially as specified.

3. The combination, with a horseshoe the upper surface of which at its toe portion is provided with opposite curved recesses, one of the walls of each of which is undercut or dovetailed, the ends of the recesses meeting and forming an opening at the front of the shoe, of a toe-weight standard formed of opposite sections of L shape, the lower portions of the sections being curved to agree with the recesses and having one of their edges beveled to take into the dovetailed walls of the recesses and the sections at their angles meeting and binding against each other, thereby forming a lock against a simultaneous withdrawal of the sections, and a toe-weight having a socket mounted on the stems, substantially as specified.

4. The combination, with the two opposite standard-sections terminating in securing-plates mounted in the shoe and at their opposite ends forming a stem, of a toe-weight having a socket for the reception of the stem and a set-screw mounted in an opening in the weight and having its point adapted to take into opposite notches, a series of which is formed in the adjacent front edges of the stems, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY H. TURNER.

Witnesses:

J. J. GEE,

MARTIN R. CARR.