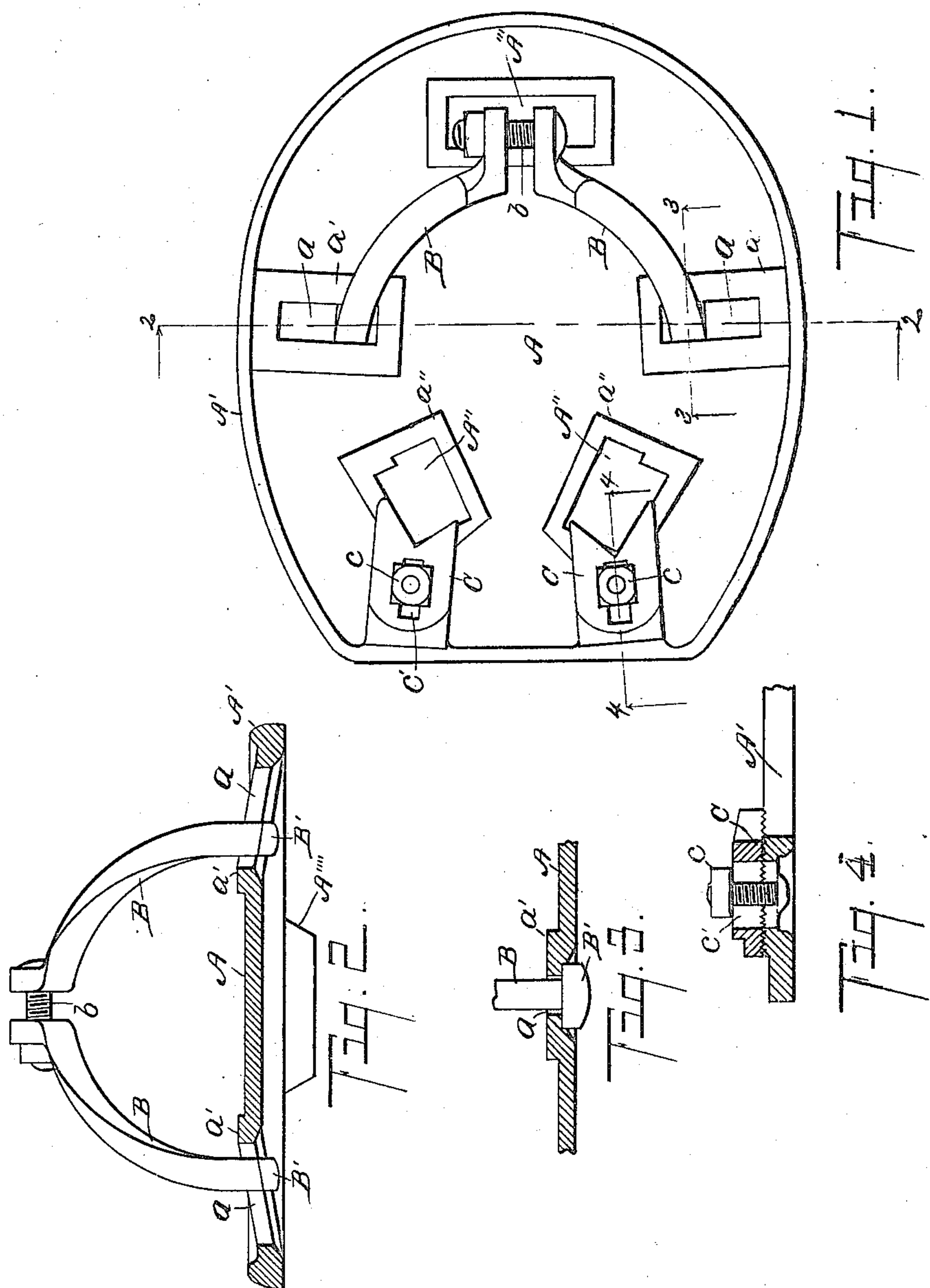


No. 875,257.

PATENTED DEC. 31, 1907.

M. GATES.
HORSESHOE.

APPLICATION FILED MAY 12, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

MICHAEL GATES, OF DECATUR, MICHIGAN.

HORSESHOE.

No. 875,257.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed May 12, 1905. Serial No. 260,084.

To all whom it may concern:

Be it known that I, MICHAEL GATES, a citizen of the United States, residing at the village of Decatur, county of Van Buren, State of Michigan, have invented certain new and useful Improvements in Horse-shoes, of which the following is a specification.

This invention relates to improvements in soft ground horseshoes.

It relates particularly to an improvement in soft ground horseshoes such as is shown in Letters Patent, issued to M. Gates, June 18, 1889, No. 405,470, and is an improvement thereon.

The main object of this invention is to provide an improved soft ground horseshoe which may be very quickly and easily attached and adjusted.

Further objects and objects relating to the structural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:—

Figure 1 is a plan view of my improved soft ground horseshoe. Fig. 2 is a transverse sectional view taken on a line corresponding to line 2 2 of Fig. 1, the hoof clamp being shown in full lines. Fig. 3 is a detail sectional view taken on a line corresponding to line 3 3 of Fig. 1, showing the structural details of the parts. Fig. 4 is a detail sectional view taken on a line corresponding to line 4 4 of Fig. 1, showing structural details.

In the drawings, sectional views are taken looking in the direction of the little arrows at the ends of the section lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the drawing, my improved soft ground horse shoe consists of a concavo-convex plate A, the concave side being the under side of the plate. A raised flange or rib A' is provided at the edge of the plate for strengthening the same. A pair of holes A'' are provided toward the rear of the plate to receive the rear calks of a common shoe, and a hole A''' is provided toward the for-

ward end of the plate to receive the forward calk thereof. The plate is provided with ribs or bosses a'' about these holes to strengthen the same. The plate is provided with a toe calk A''' arranged in substantially the same relation as the forward calk of a common horseshoe.

The shoe is secured to the hoof by a clamp made up of curved members B which are secured together at their upper ends by a suitable bolt as b. These clamp members are curved to fit over the front of the hoof. The clamp members B are provided with forwardly projecting perforated ears through which the clamping bolt b is secured, as clearly appears in the drawings. The lower ends of the clamp members, which are provided with heads B', are arranged through slots a in the plate provided therefor. These slots a are transversely arranged in the plate. The plate is countersunk to receive the heads B' of the clamping members, so that the clamp may be adjusted with the shoe resting upon the floor or ground. The plate is preferably strengthened by bosses or ribs a' about the slots a.

A pair of heel clamping blocks C are provided to engage the rear ends of the common shoe. These blocks are adjustably secured to the plate A by means of the bolts c which are arranged through suitable slots c' therein. The engaging ends of the blocks C are preferably notched to better engage the shoe. I desire to remark in this connection that while my improved soft ground shoe is particularly adapted for attachment to shod animals, it may be secured to unshod animals although not with such satisfactory results.

By constructing the plate A as I have described, the same may be comparatively light in proportion to its diameter and still be strong and not likely to become broken which is, of course, a very great advantage in shoes of this class. Same may be applied and the clamp adjusted and secured in position very readily as it is not necessary to lift the hoof of the animal from the ground while this is being done as the heads B' of the clamp members are countersunk into the plate so that they do not engage the floor or ground. The concaving of the plate A also facilitates the adjustment of the clamp members so that they readily slide toward the hoof, it being only necessary to tighten the clamping bolt b to secure the proper adjustment to the hoof. The heel

clamping blocks C are also quickly and easily adjusted.

I have illustrated and described my improved soft ground shoe in detail in the form preferred by me on account of its strength and convenience in use. I am aware, however, that it may be varied somewhat in structural detail of parts without departing from my invention.

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

1. A soft ground shoe, comprising a concavo-convex plate having a pair of transverse slots therethrough, with countersinks in its under face about said slots; a clamp consisting of a pair of curved bars adapted to embrace the front of a hoof, arranged through said slots in said plate, having heads on their lower ends adapted to fit into said countersinks so that the heads of said clamping-bars are above the plane of the circumference of the shoe; a clamping-bolt for said bars; a pair of slotted clamping blocks adapted to engage the heel of a shoe; and bolts arranged through slots in said plate and through said slotted clamping blocks for securing them adjustably in position, said plate being counter-sunk on its under side to receive the heads of said bolts, for the purpose specified.

2. A soft ground shoe, comprising a concavo-convex plate having a pair of trans-

verse slots therethrough, with countersinks in its under face about said slots; a clamp consisting of a pair of curved bars adapted to embrace the front of a hoof, arranged through said slots in said plate, having heads on their lower ends adapted to fit into said countersinks so that the heads of said clamping-bars are above the plane of the circumference of the shoe; and a pair of clamping-blocks adapted to engage the heel of the shoe, adjustably mounted on said plate, for the purpose specified.

3. A flat ground shoe comprising a concavo-convex plate having a pair of transverse slots at each side thereof; a clamp consisting of a pair of curved bars adapted to embrace the front of a hoof, arranged through said slots in said plate, having heads on their lower ends adapted to engage under the convex surface of the plate, the heads of said clamping-bars being within the plane of the circumference of the shoe; a clamping-bolt for said bars; and a pair of clamping-blocks adapted to engage the heel of a shoe, adjustably mounted on said plate.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

MICHAEL GATES. [L. s.]

Witnesses:

BENJ. F. HECKERT,
E. A. WILDEY.