No. 722,610. PATENTED MAR. 10, 1903.

T. A. McKAY.

HORSESHOE.

APPLICATION FILED FEB. 20, 1902.

NO MODEL.

Fig. 1.

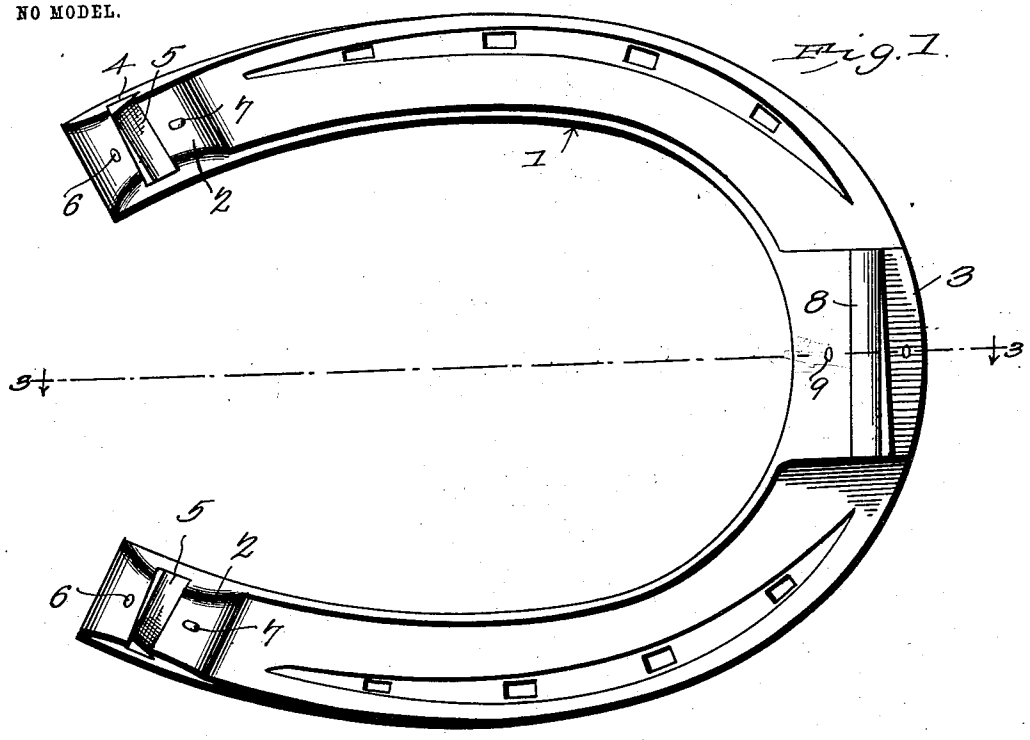


Fig. 2.

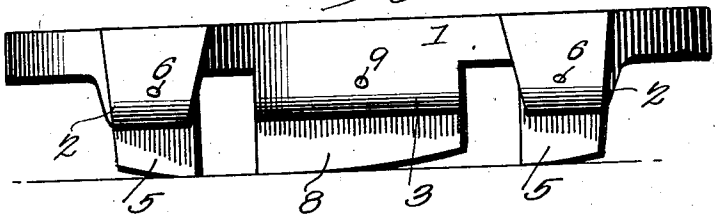
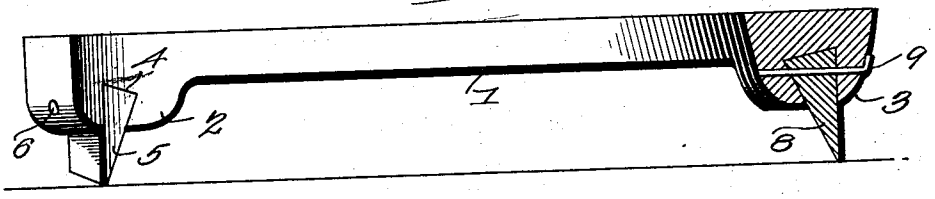


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS A. McKAY, OF OSSINEKE, MICHIGAN.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 722,610, dated March 10, 1903.

Application filed February 20, 1902. Serial No. 94,967. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. McKAY, a citizen of the United States, residing at Ossineke, in the county of Alpena and State of Michigan, have invented a new and useful Horseshoe, of which the following is a specification.

This invention relates generally to horseshoes, and particularly to a novel form of calk and the manner of assembling the same with the shoe.

The objects of the invention are so to associate the heel-calks with the shoe as positively to obviate any tendency to lateral slipping, to prevent injury or cutting of a horse that interferes should the heel-calks work loose, practically to obviate any tendency to balling, and to provide for the ready insertion and removal of the calks.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a horseshoe and calk therefor, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated a form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof, and in the drawings—

Figure 1 is a view in plan of a horseshoe calked in accordance with the present invention. Fig. 2 is a view in elevation, taken from the rear of the shoe. Fig. 3 is a view in longitudinal section taken on the line 3 3, Fig. 1, looking in the direction of the arrow thereon.

Referring to the drawings, 1 designates a horseshoe, which may be of the usual or any preferred construction and provided with heels 2 and a toe 3, which parts in this instance have their corners rounded, although, if preferred, they may be square, as usual. In each heel there is provided a dovetailed or an approximately dovetailed recess 4, disposed at right angles to the length of the shoe members, the recesses being wider on the inner side of the heel than on the outer side thereof, whereby they are approximately wedge-shaped viewed in plan, the bases or wider ends of the recesses being on the inner sides of the shoe members, and thus opposed to each other. Inserted in each of the recesses is a heel-calk 5, which is shaped to fit snugly within the recesses, the bottoms of the recesses being by preference disposed at an angle to the face of the shoe, thereby to cause the rear walls of the calks to occupy a plane at right angles to the face of the shoe, as clearly shown in Fig. 3, causing the inner or forward faces thereof to be pitched at such an angle to the face of the shoe as effectually to obviate any tendency to balling of snow or ice in the crotch or angle formed between the said faces of the calks and the bottom of the heel, thereby rendering the calks self-clearing. The calks are held within the recesses by a pin 6, passing through the heels and through the calks and having one end turned up at an angle to their length, as shown at 7, thereby to prevent accidental separation of the pins from the shoe when once positioned thereto. As will be readily understood by reference to Fig. 1, the heel-calks will have to be inserted from the inner side of the shoe members, so that in the event of one or both of the calks working loose all danger of injuring the horse, should it interfere, will be positively obviated. As will be seen by reference to Fig. 2, the contact-faces of the calks are disposed at opposite angles with relation to the face of the shoe, the higher sides being disposed on the inner sides of the shoe members, thereby obviating in a positive and certain manner any tendency to side slippage. The recess in the toe for the reception of the toe-calk 8 is shaped in the same manner as that described, the outer or forward face of the calk being thus disposed at right angles to the face of the shoe and the inner or rear face pitched at an angle thereto, thereby to cause the toe-calk to be self-clearing. The contact-face of the toe-calk is also disposed at an angle to the face of the shoe, thereby always to insure positive engagement of the calk with the snow or ice, and thus effective operation of the calk. A further advantage of having all of the calks

wedge-shaped in plan is that the outer sides of the heel-calks will be thinner than the inner sides thereof, so that as the calks wear down a sharp biting edge will be presented to the surface with which the shoe contacts, the same result being attained with the toe-calk, the latter being held in place in the recess of the toe by a pin 9 in the same manner as the heel-calks.

It will be seen from the foregoing description that by the manner in which the calks are associated with the shoe they will be rendered thoroughly effective in performing the function for which they are designed and, further, that when it is desired to remove the calks this may be effected in a ready manner and with the expenditure of but a small amount of labor.

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

1. A horseshoe having its heels provided with dovetailed, wedge-shaped recesses, and calks secured within the recesses, the bottoms of the recesses being disposed at an angle to the face of the shoe, thereby to cause the rear walls of the calks to occupy a plane substantially at right angles to the face and causing the inner or forward faces thereof to be pitched at an angle to the face, substantially as and for the purpose specified.

2. A horseshoe having its heels and toe each provided with a dovetailed, wedge-shaped recess, the bottoms of the recesses being disposed at an angle to the face of the shoe, and longitudinally and transversely wedge-shaped calks secured in the recesses, the contact-faces of the calks being disposed at an angle to their backs, thereby presenting a sharp biting edge as the calks wear down, substantially as and for the purpose specified.

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

THOMAS A. McKAY.

Witnesses:
JOHN G. MARTINDALE,
F. D. SCOTT.