J. BOVAIR & D. RIECKHOFF.

HORSESHOE.

APPLICATION FILED OCT. 30, 1909.

968,116. Patented Aug. 23, 1910.

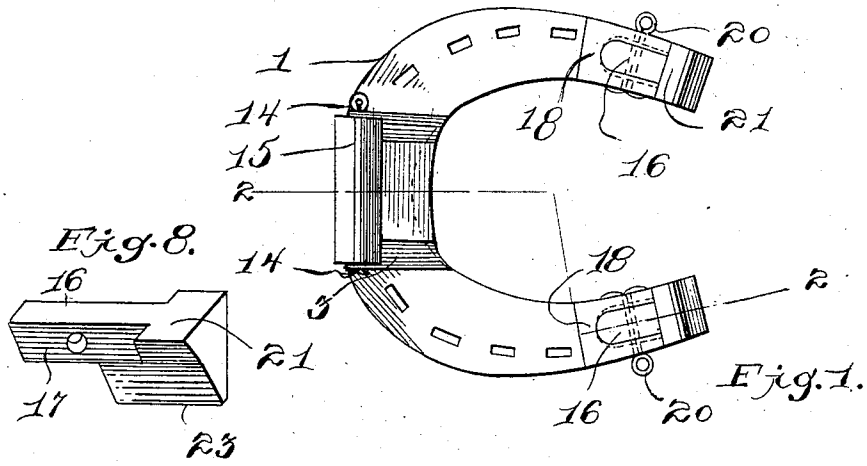

Fig. 1.

Fig. 8.

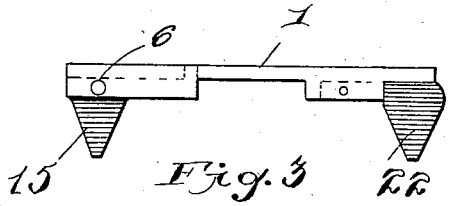

Fig. 3

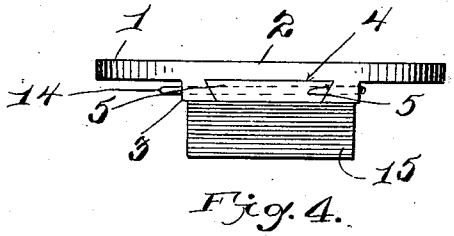

Fig. 4.

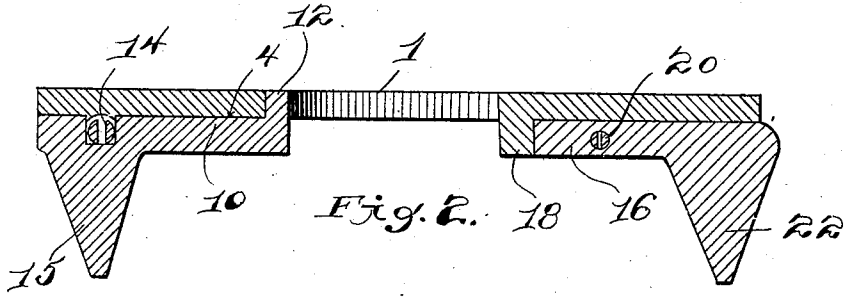

Fig. 2.

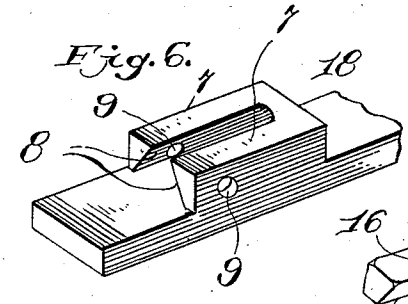

Fig. 6.

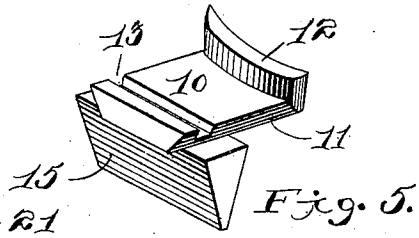

Fig. 5.

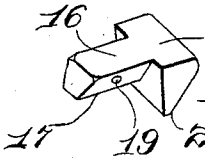

Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

JOHN BOVAIR AND DANIEL RIECKHOFF, OF NIAGARA FALLS, NEW YORK.

HORSESHOE.

968,116. Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed October 30, 1909. Serial No. 525,511.

To all whom it may concern:

Be it known that we, JOHN BOVAIR and DANIEL RIECKHOFF, citizens of the United States, residing at Niagara Falls, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to horse shoe calks and has for its object to provide an improved horseshoe calk.

The invention consists in an improved horseshoe calk and horseshoe constructed and arranged as hereinafter set forth in the claim.

Figure 1 is a bottom plan view of the improved horseshoe. Fig. 2 is a vertical sectional view thereof taken on the line 2—2, Fig. 1. Fig. 3 is a view in side elevation. Fig. 4 is a view in front elevation. Fig. 5 is a detail perspective view of a toe calk used in connection with the improved horse shoe. Fig. 6 is a detail fragmentary perspective view of one of the heels for one of the shoes. Fig. 7 is a detail perspective view of a heel calk. Fig. 8 is a similar view of another heel calk adapted for preventing side-slipping of the shoe.

Referring to said drawings by numerals, 1 designates the body of the shoe, the toe 2 of which is provided with a central thickened pendent portion 3, which is provided with a central transverse recess 4, the sides 5 of which are inclined. An opening 6 is formed through the sides of said groove 4.

The heels of the body 1 are provided with pendent longitudinally arranged oppositely disposed guard flanges 7, the inner surfaces of which are inclined as indicated at 8. Said guard flanges of the heels as well as the thickened portion 3 of the toe are on the under surface of the body 1. A transverse opening 9 is formed through the flanges 7 of the heels. As will be observed by reference to Figs. 3–6, the heels project slightly beyond the outer ends of the guard flanges 7.

The improved toe calk comprises a flat body 10 having inclined longitudinal sides 11 adapted for a sliding engagement within the groove 4, the inner end of said body being provided with an upstanding end flange 12 which is curved to conform to the contour of the inner edge of the body 1 and projects up to the plane of the upper surface of said body. The body 10 is provided with a transverse groove 13 which alines with the opening 6, formed through the sides of the pendent portion 3 of the toe 2 so that said body may be retained in rigid but detachable engagement with the groove 4 by means of the cotter pin 14. The under surface of the body 10 is provided with a calk 15 which is preferably sharpened. Said calk preferably extends well beyond each longitudinal side of said body 10 to provide an elongated gripping surface.

The heel calks have their body 16 provided with inclined sides 17 adapted for a snug sliding fit between the guard flanges 7 of the heels with their inner ends abutting the end walls 18 which close the space between the inner ends of said flanges 7. Said body 16 is provided with a transverse opening 19 which alines with the opening of the guard flanges 7 so that the said body may be retained in rigid but detachable engagement by a cotter pin 20. The calk for the body 16 has an angular end 21 which abuts the outer end of said flanges 7 to limit the inward movements of said body. Said calks may have their gripping surface transversely arranged relatively to their body as indicated at 22 in Fig. 7, or arranged parallel as indicated at 23 in Fig. 8.

It will be seen from the foregoing that the manner of fitting the bodies of the calks within their grooves prevents relative vertical movement of the calks to the body, and longitudinal relative movement of said parts is prevented by the cotter pins which rigidly but detachably retain said calks in interlocking engagement with said body.

What we claim as our invention:—

A horseshoe formed with an enlarged depending portion on the under side of the toe of the shoe provided with a central transverse recess having tapering sides, and transverse holes in said sides alining with each other, and a toe calk comprising a flat body portion having longitudinal sides adapted for sliding engagement with the transverse groove in the toe portion of the horseshoe, the inner end of said flat portion being provided with an upstanding curved flange adapted to fit over the inner edge of the front portion of the shoe and the outer end of said flat portion being provided

with a transverse groove, and having depending therefrom a tapering calk, said calk having its ends projecting beyond the sides of said flat body portion, and a removable pin adapted to extend through said holes in the shoe and said groove in the body portion of the calk and secure the latter to the shoe.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

JOHN BOVAIR.
DANIEL RIECKHOFF.

Witnesses:
RUTH E. ELSHEIMER,
H. A. CONSTANTINE.