

C. W. MORRISON.
HORSESHOE.
APPLICATION FILED JULY 25, 1906.

920,366.

Patented May 4, 1909.

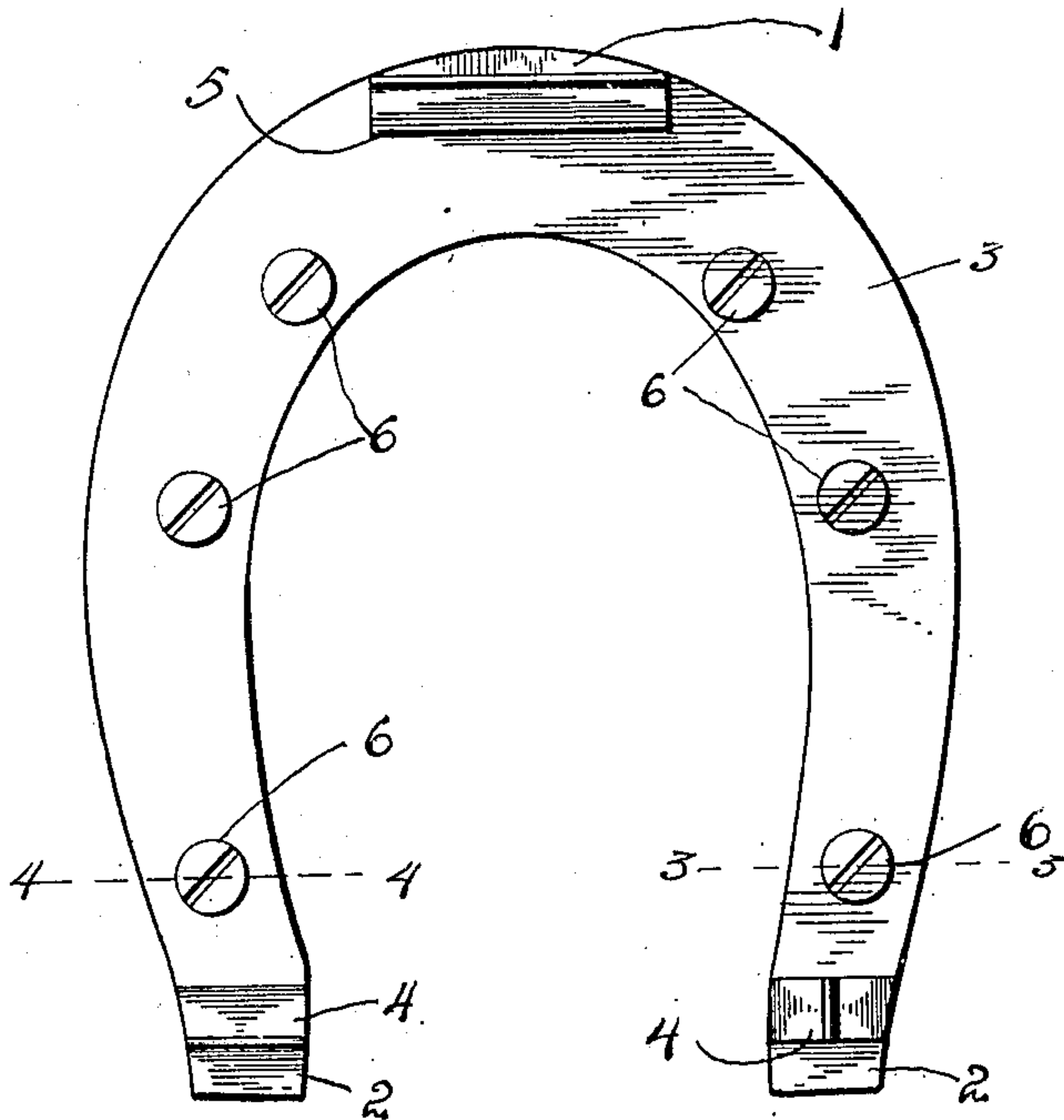


FIG. 1

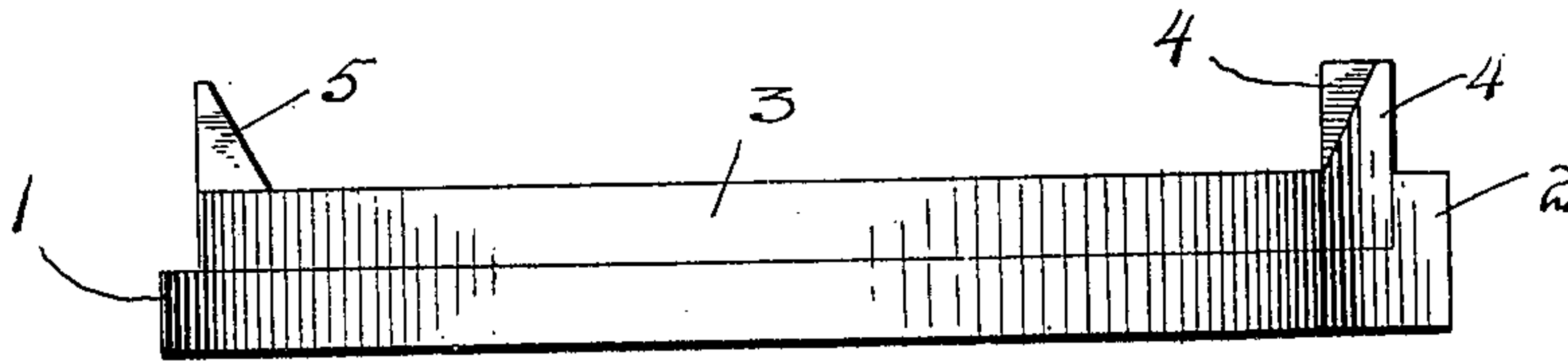


Fig. 2.

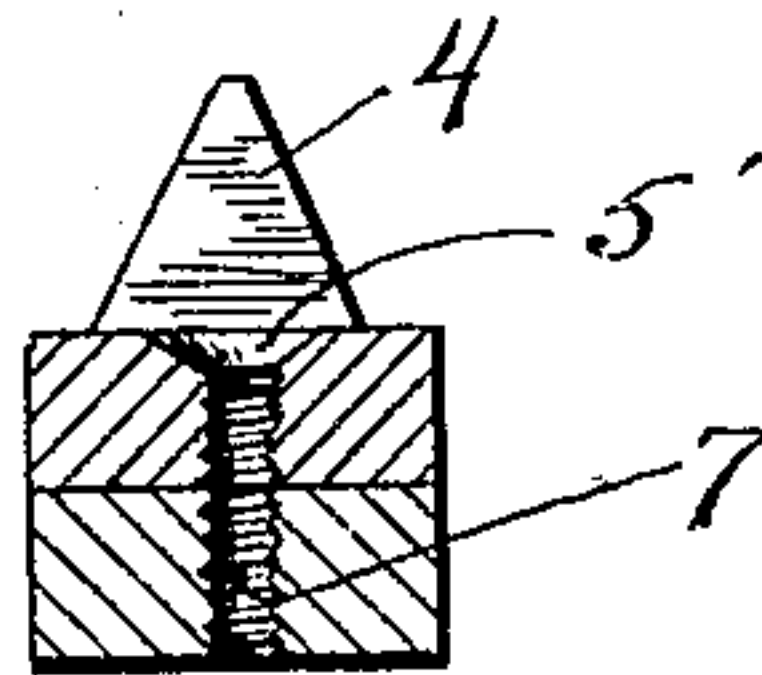


FIG. 3

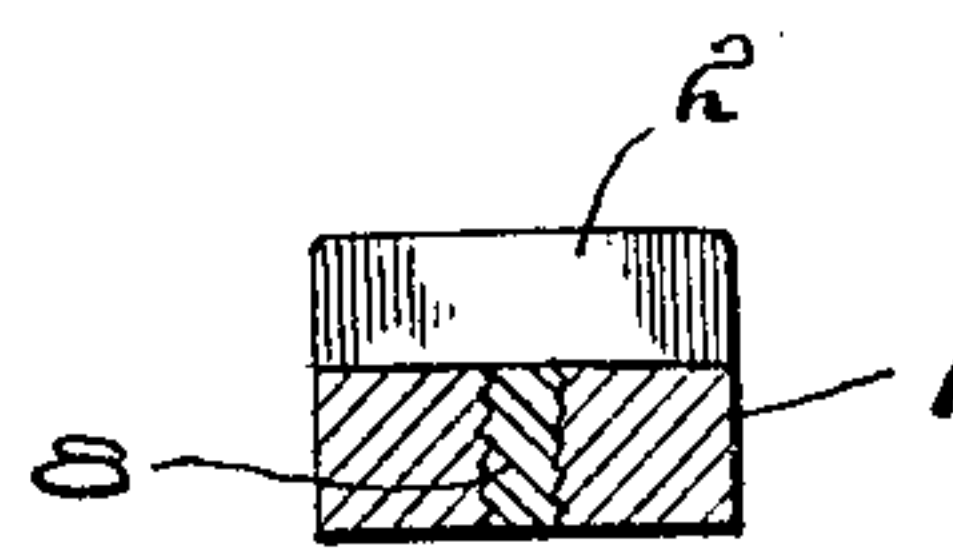


FIG. 4

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HORSESHOE.

No. 920,366.

Specification of Letters Patent.

Patented May 4, 1909.

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To all whom it may concern:

Be it known that I, CHARLES W. MORRISON, a citizen of the United States, residing at Pearl, in the county of Nicholas, State of West Virginia, have invented certain new and useful Improvements in Horseshoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to horse shoes and more particularly to attachments therefor to prevent slipping of the horse wearing the shoe in icy weather.

The object of the invention is to provide an attachment which may be secured to the under face of the shoe and provided with toe and heel calks, the peculiar arrangement of the heel calks being such that slipping of the shoe will be prevented not only forwardly and rearwardly but also laterally.

In the drawings,—Figure 1 is a bottom plan view of an ordinary horse shoe equipped with the device of the present invention. Fig. 2 is a side elevation with the shoe inverted. Fig. 3 is a cross sectional view on the line 3—3 of Fig. 1. Fig. 4 is a section on line 4—4 of Fig. 1 with the calk attachment removed.

Similar characters of reference indicate corresponding parts in each of the several figures of the drawing.

To illustrate the application of the present invention an ordinary horse shoe 1 has been shown in the accompanying drawings, said shoe being flat upon its under side and provided with the usual integral heel calks 2.

The attachment of the present invention has been designated in general by the reference character 3, and has the form of an ordinary horse shoe, that is to say, it is in the nature of a substantially U-shaped plate having a flat upper face to fit flat against the under face of the shoe. The general dimensions of the attachment are substantially the same as that of the shoe so as to have its inner and outer edges flush with the corresponding edges of the shoe, the sides of the attachment being slightly shorter than the sides of the shoe and of a length to abut against the front sides of the heel calks 2. At the rear extremities of the sides of the attachment, there are integral calks 4 which project below the calks of the shoe proper,

while at the forward end of the attachment there is a transverse toe calk 5, the front end of the attachment being terminated short of the front extremity of the shoe, so as to prevent projection of the toe calk beyond the shoe. One of the calks 4 extends longitudinally of the plate, and the other transversely thereof. An annular series of threaded countersunk openings 5 are provided through the attachment for the reception of headed screw-threaded fastenings 6, which take into threaded openings 7 formed in the shoe proper prior to the application of the attachment.

From the foregoing description it will be understood that the present attachment is capable of being conveniently applied to any ordinary horse shoe without alteration therein beyond the formation of the threaded openings 7, and the attachment may be applied and removed without removing the shoe proper from the hoof of the animal, which is a very important advantage as it provides for the application and removal of the calks without damaging the hoof of the animal by repeated applications and removals of the shoe proper. When the attachment is removed, the shoe proper presents an ordinary smooth shoe, the openings 7 therein being filled by threaded plugs, one of which has been indicated at 8 in Fig. 4 of the drawings. It will here be explained that each opening 7 in the shoe proper is countersunk at its lower end in order that the head of each plug may be flush with the under side of the shoe when the attachment is removed therefrom.

While the shoe and the attachment may be manufactured and sold jointly, it is also proposed to place the attachment upon the market as an article of manufacture complete in itself and capable of being fitted to a shoe of any size. It will, therefore, be understood that the attachment will be manufactured in different sizes in accordance with standard sizes of shoes, the lengths of the sides of each attachment being proportioned in accordance with the lengths of the sides of corresponding standard shoes, so as to enable the fitting of the rear ends of the attachment snugly against the front faces of the heel calks of the shoes.

It is to be understood that both the toe and heel calks of the plate are made integral therewith, and that the heel calks extend in

opposite directions with respect to the shoe in order to prevent the latter from slipping either longitudinally or laterally.

From the above description it will be readily seen that not only is the horse shoe prevented from slipping rearwardly, but also pivotal movement of the horse shoe upon the front calk is prevented. This is by reason of the fact that one of the heel calks has its edge running longitudinally of the shoe while the other heel calk has its edge running transversely of the shoe.

In referring to the drawings it will be noticed that the plate 3, is of a length less than said shoe, to expose the forward tip of the shoes, as shown in Fig. 1, this tip portion being forged inward to form a toe stop. The plate 3, it will be noticed, is of a thickness equal to the height of the calks 2.

Having thus described the invention, what is claimed is:—

The combination with a horse shoe, having two upstanding heel calks the rear faces of which are flat, said horse shoe having a series of threaded openings, an attachment consist-

ing of a flat plate of a thickness equal to the height of said heel calks and against which it abuts and which serve as stops for said plate, said plate having a series of countersunk threaded openings registering with said threaded shoe openings, two sharp edged heel calks secured to said plate, one calk having its edge disposed longitudinally of said plate, the other having its edge disposed transversely of said plate, a sharp edged toe calk secured to said plate of a length greater than the combined length of said heel calks, said calk having its edge disposed longitudinally of said plate, and a series of flat headed screws threaded into said shoe and plate openings, the forward portion of said shoe being exposed, said plate being of a length less than said shoe, as and for the purpose set forth.

In testimony whereof, I affix my signature, in presence of two witnesses.

CHARLES W. MORRISON.

Witnesses:

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J. H. JOHNSON.