W. O. HARMON. HORSESHOE.

APPLICATION FILED MAR, 3, 1904. NO MODEL. INVENTOR

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NO MODEL. 2 SHEETS-SHEET 2.

United States Patent Office.

WILLIAM O. HARMON, OF SAN MARCOS, TEXAS, ASSIGNOR OF ONE-HALF TO ALBERT SMITH, OF BOWIE, MARYLAND.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 763,283, dated June 21, 1904.

Application filed March 3, 1904. Serial No. 196,357. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM O. HARMON, a citizen of the United States, residing at San Marcos, in the county of Hays and State of 5 Texas, have invented certain new and useful Improvements in Horseshoes; and Ido 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 10 to make and use the same.

This invention relates to new and useful improvements in horseshoe attachments; and the object of the invention is to produce an overshoe for attachment to an ordinary horseshoe 15 to prevent slipping, and comprises means whereby an overshoe may be provided with suitable calks and may be securely fastened to a shoe without the use of nails and so constructed as to be readily applied to and de-20 tached from a shoe.

The invention consists, further, in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically

25 defined in the appended claims.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this

application, and in which—

Figure 1 is a top plan view of a horseshoe with my overshoe attached thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical central section through the overshoe. Fig. 4 is a detail view of the heels of the shoe, 35 one being shown in section. Fig. 5 is a bottom plan view of the overshoe. Fig. 6 is a sectional view on line 6 6 of Fig. 5. Fig. 7 is a detail sectional view through the heel of the overshoe. Fig. 8 is a detail view of a toe-40 calk. Fig. 9 is a detail view of a heel-calk plate. Fig. 10 is a side elevation of a slightlymodified form of the heel of the overshoe. Fig. 11 is a bottom plan view of the modified form shown in Fig. 10, and Fig. 12 is a cross-45 sectional view of the modified form shown in Fig. 10.

Reference now being had to the details of the drawings by letter, A designates a horseshoe, which may be of any desired shape and provided with a toe-calk A', which is shown 50 only in Fig. 3 of the drawings as comprising a widened portion of the toe projecting from

the under surface thereof.

B designates the overshoe, which has an upwardly and rearwardly projecting flanged 55 portion B', which is adapted to engage over the toe of the shoe, as shown clearly in Figs. 1 and 3 of the drawings, whereby the toe of the shoe may be securely held to the overshoe. The heels of the shoe are adapted to rest be- 60 tween the flanges C, (shown in Figs. 1 and 2,) and in Figs. 1 to 3 I have shown a bolt D, which passes through registering apertures in said flanges C and engages threads formed in the wall of one of said apertures, whereby 65 the bolt may be securely held in place. The bolt engages a recess in the rear or heel ends of the shoe, whereby the same may be securely held to the overshoe.

E designates a plate having integral calks 70. E' and E' formed thereon, a detail of one of said plates being illustrated in Fig. 9 of the drawings. It will be observed that the calk E² is disposed transversely of the length of the plate, while the calk E' is longitudinally of 75 the plate for the purpose of providing means for preventing a forward and backward or lateral slipping of the shoe. Said plate is recessed over each calk, one of said recesses being shown in Fig. 7 of the drawings, and the 80 wall of the hole or recess is threaded to receive a screw F, which is passed through an aperture in the heel ends of the overshoe and its head countersunken therein. After the calk-plate is fastened to the overshoe by means 85 of the screw, as illustrated in Fig. 7, the screw is held securely in place by means of the bolt D. The upper face of the overshoe intermediate said flanges has a recessed portion therein to receive the heel-calk of a horseshoe, as 90 shown in Fig. 7 of the drawings.

K designates a toe-calk plate which is made on the arc of a circle and provided with three apertured lugs, (shown clearly in Fig. 8 of the drawings,) each aperture in said lugs adapted 95 to receive a screw K', Fig. 6 showing a sectional view through the toe-calk and illustrating the manner in which said toe-calk plate is

held to the overshoe. Projecting from the upper surface of said toe-calk is a dovetailed portion K^2 , which is adapted to engage a recess in the under surface of the overshoe, whereby the toe-calk may be more securely held to the overshoe.

In Fig. 4 of the drawings I have shown two screws D' instead of one, as illustrated in Fig. 1, whereby the overshoe may be adjusted to fit shoes of different widths, leaving the heel ends of the overshoe and shoe independent.

In case of lightening the weight of the overshoe for use on shoes of trotters, I propose to employ the forms illustrated in Figs. 10 to 12, inclusive, in which I shorten the overshoe and dispense with the rear portions of the heels thereof and pass a bolt N, Fig. 12, through the two vertical flanges at the heels of the overshoe and through a registering 20 hole in the heel-calk. In this form the bottom of the heel-calk of the shoe is flush with the bottom of the overshoe, as shown in Fig. 10 of the drawings, the dotted line in said view showing the rear end of the overshoe, while in Fig. 11 the parallel lines indicate the flanges through which the bolt passes.

By the provision of a horseshoe embodying the features shown and described it will be observed that a simple and efficient means is provided for attachment to an ordinary horseshoe to prevent the same slipping either sidewise or forward or backward, and by the provision of the detachable plates which are fastened to the overshoe the same may be easily replaced when they become worn out.

While I have shown a particular detailed

construction of apparatus illustrating my overshoe for horseshoes, it will be understood that I may make alterations as to the details of construction, if found desirable, without 4° in any way departing from the spirit of the invention.

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

1. An overshoe for horseshoes having a flange projecting from its upper face and turning rearward, flanges rising from the overshoe at the heel thereof, a bolt passing through said flanges and adapted to engage the heels of a 5° horseshoe, removable heel-calk plates, screws passing through said overshoe and engaging said plates, said screws being engaged and held in place by said bolt, as set forth.

2. An overshoe for horseshoes having an 55 upwardly and rearwardly extending toe-flange adapted to engage over the toe of a horseshoe, parallel flanges at the heel ends of the overshoe, longitudinal plates having integral calks thereon, threaded holes leading into said calks, 60 screws countersunken in apertures in said overshoe and engaging said holes, a bolt passing through said flanges and adapted to engage a recess in the heel of a horseshoe and to bear against the heads of said screws, as set 65 forth.

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

WILLIAM O. HARMON.

Witnesses:

Franklin-H. Hough, A. L. Hough.