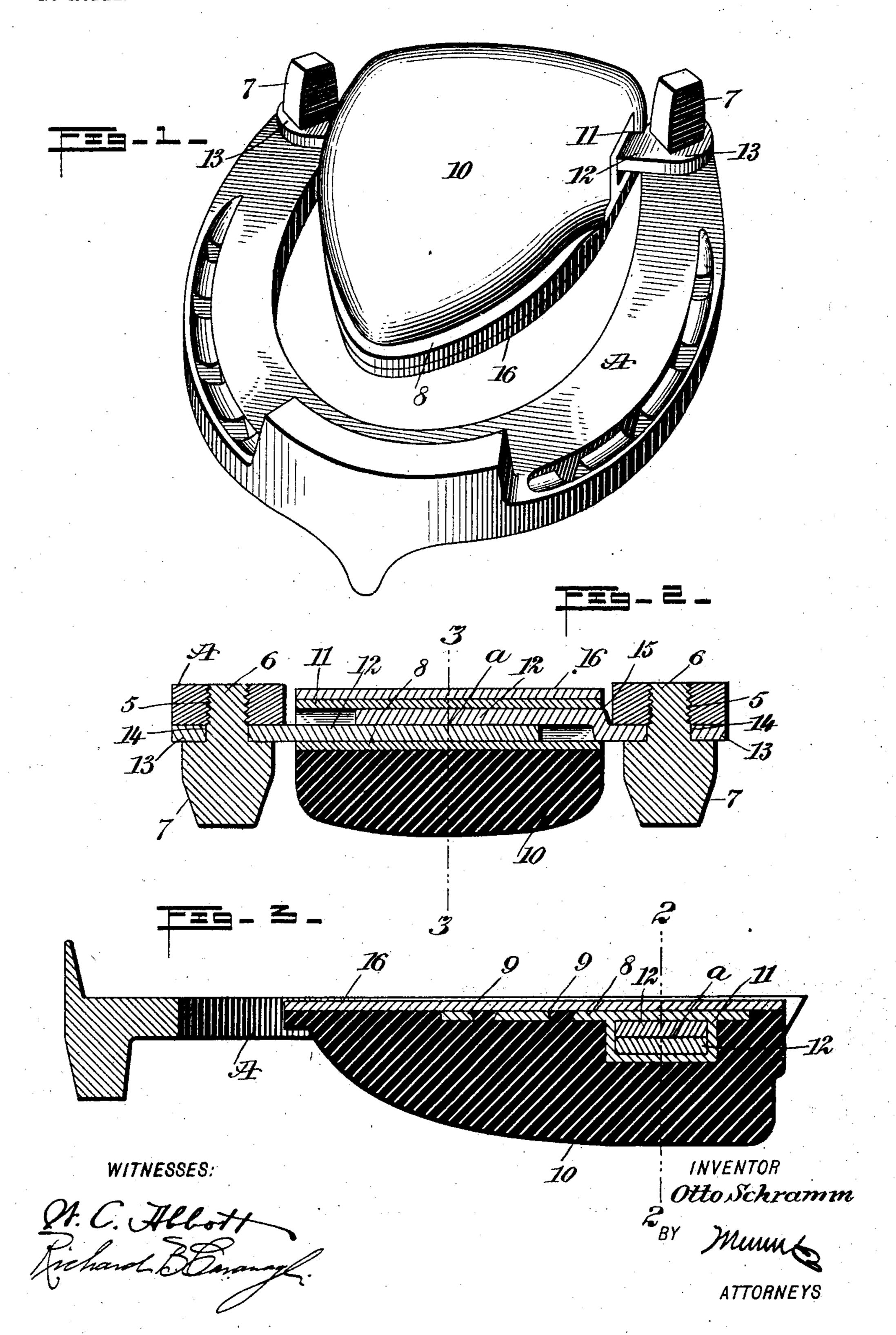
## O. SCHRAMM.

## HORSESHOE.

APPLICATION FILED OUT. 31, 1903.

NO MODEL.



## United States Patent Office.

OTTO SCHRAMM, OF NEW YORK, N. Y.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 753,638, dated March 1, 1904.

Application filed October 31, 1903. Serial No. 179,306. (No model.)

To all whom it may concern:

Be it known that I, Otto Schramm, a citizen of the United States, and a resident of the city of New York, borough of the Bronx, in the county and State of New York, have invented a new and Improved Horseshoe, of which the following is a full, clear, and exact description.

This invention relates to certain novel and useful improvements in horseshoes; and it consists in forming the shoe with a removable

and adjustable frog.

In this instance I have particularly in view to provide a horseshoe with a resilient removable frog, the latter being designed to be held in position through the medium of a plurality of retaining bars or plates, these in turn being secured to the shoe by the removable calks with which the ends of the shoe are fitted.

A further object of my invention is to provide a shoe which will eliminate or lessen the jars, shocks, and the like ordinarily borne

by the horse.

A still further object of my invention is to provide an improved shoe in which the frog may be removed and another of relatively different size substituted without in any way changing the construction of the shoe or removing it from the animal.

With the above-recited objects and others of a similar nature in view my invention consists in the construction, combination, and arrangement of parts, as is described in this specification, delineated in the accompanying drawings, and set forth in the appended

claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a shoe embodying my invention looking at the bottom or under side of the same. Fig. 2 is a transverse vertical sectional view taken through a shoe such as is shown in Fig, 1, such view being taken on the line 2 2 of Fig. 3; and Fig. 3 is a longitudinal vertical sectional view of the same, taken on the line 3 3 of Fig. 2.

Referring now to the accompanying draw-

ings in detail, A designates a horseshoe of an ordinary and well-known type having the rear end portions thereof provided with a plurality of apertures or holes 55, through which are designed to pass the shanks 6 of the calks 557, said calks being normally retained in position by threads on the shanks thereof engaging with threads cut in the walls of the apertured portions of the ends of the shoe.

My improved frog comprises, essentially, a 60 metallic base-plate 8, substantially of the shape or contour of the frog of a horse's foot and provided with a plurality of apertures 9 9, designed to assist in retaining the rubber frog portion 10, which is molded upon the plate 8. 65 The plate 8 is provided near its widened or rear end portion with a sleeve portion 11, extending transversely thereof, said sleeve being somewhat rectangular in shape. As will be seen by reference to the drawings, the 70 rubber frog or pad portion 10 is cast in such manner that it rests upon the plate and covers the sleeve thereon. In order to removably secure the rubber frog and the plate to the shoe. I provide a plurality of bars or plates 12, each 75 having an enlarged rounded end portion 13 apertured at 14 to permit the passage therethrough of the shanks 6 of the calks 7, the construction being such that the plates 12 are secured to the shoe by said calks. As will be 80 seen, particularly upon reference to Figs. 2 and 3, the bars or plates 12 are of such length that when inserted within the sleeve 11 each plate extends considerably more than half way through such sleeve, so that the adjacent end 85 portions of the plates overlap near the central part of the sleeve, as is indicated at a. This insures the firm retention of the bars or plates 12 within the sleeve 11 and will prevent any tendency on the part of the frog to loosen 90 or change its position on the shoe. It will also be observed that in order to permit the bars or plates 12 to overlap within the sleeve the widened apertured end of one of said bars or plates is offset from the general plane of 95 the remainder of the body portion by forming a shoulder 15, and by so forming the bar or plate it will be seen that it can be readily reversed to bring the calks higher from the ground should the rubber frog become too 100 much worn. If preferred, both of the bars or plates may be formed with a shouldered portion 15, or they both may be made approxi-

mately straight.

When it is desired to apply the frog to a shoe, it is only necessary to first insert the plates or bars 12 into the sleeve 11, as is clearly shown in Fig. 1, until the apertured end portions 13 of the plates register or rest in alinement with the apertures 5 formed in the ends of the shoe. The calks 7 are then screwed in, and the entire frog will be held firmly and securely in place.

It is to be noted that I have provided an exceeding simple yet durable frog, for, as will be seen, it is impossible for the rubber surface and the calks to wear unevenly, and, as shown in Fig. 2, the rubber frog portion and the top ends of the calks 7 are in substantially the same

20 horizontal plane.

For many purposes I have found it expedient to provide a pad of some character between the flat surface of the metal plate 8 and the frog of the animal's hoof, and I have found it preferable to use a leather pad 16, as shown in Fig. 1, the said pad being cut similar in size and shape to the plate 8. It will further be noted that when the frog is worn or otherwise damaged or when the calks have been broken or distorted the parts may be removed and new ones substituted without purchasing an entirely new shoe or removing the shoe from the horse's foot.

While I have shown and described one preferred embodiment of my invention, it is of course to be understood that I do not confine myself to all the details shown herein, as there may be modifications in certain respects without departing from the invention or sacrific-

40 ing any of the advantages thereof.

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

1. The combination of a shoe, calks therefor, a removable frog and means for securing the frog to the shoe, said means including a sleeve carried by said frog, and a plurality of plates, each of said plates having one end inserted within the sleeve, the opposite end of each plate being secured to the shoe by one of the calks.

2. The combination of a shoe, a frog therefor, and means for removably securing the frog to the shoe, said means comprising a plurality of bar-plates having one end inserted within a portion of the frog and the opposite

ends of said plates being secured to the shoe through the medium of the calks of the shoe.

3. The combination of a shoe, calks therefor, a frog comprising a metallic base-plate, and a sleeve extending transversely of said 60 plate, a resilient portion cast upon the plate and extending over the sleeve, and means secured to the shoe by the calks and entering said sleeve for securing the frog to the shoe.

4. The combination of a shoe, a frog there- 65 for, a sleeve portion formed transversely of the frog, and plates or bars secured to the shoe and extending into the sleeve for attaching the frog to the shoe, the free ends of the bars or plates overlapping within the sleeve. 7°

5. The combination of a shoe, a frog portion therefor, including a metallic plate, a sleeve carried by said plate and a rubber body portion mounted upon the plate, means for securing the frog to the shoe, said means including 75 a plurality of bars or plates designed to be inserted within the sleeve, but having portions projecting therefrom and provided with apertures, and calks designed to pass through the apertured portions of the plates and through 80 the shoe, for securing the plates and the frog to the shoe.

6. The combination of a shoe, a frog comprising a base-plate and a resilient body portion mounted thereon, a sleeve extending states are said plate and body portion, a plurality of bars or plates removably securing the frog to the shoe, and a leather pad secured to the opposite side of the base-plate from that carrying 9° the resilient body portion, substantially as set forth.

7. The combination of a shoe, calks therefor, a frog, and a plurality of overlapping plates for securing the frog to the shoe, said 95 plates being secured to the shoe through the medium of the calks.

8. The combination of a shoe, calks therefor, a frog, and means for securing the frog to the shoe, said means including a straight plate and a shouldered plate overlapping the straight plate, said plates being secured to the shoe through the medium of the calks.

In testimony whereof I have signed my name to this specification in the presence of two sub- 105

scribing witnesses.

OTTO SCHRAMM.

Witnesses:

RUDOLF KUTSCHERA, REINHOLD BILZ.