July 22, 1924. 1,502,441

S. H. ROBERTS

HOOF PAD

Filed April 17, 1922

Fig. 1.

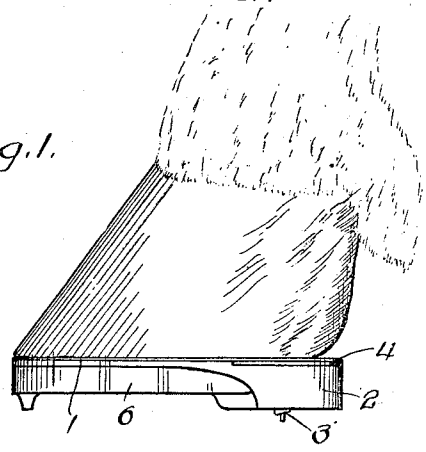


Fig. 2.

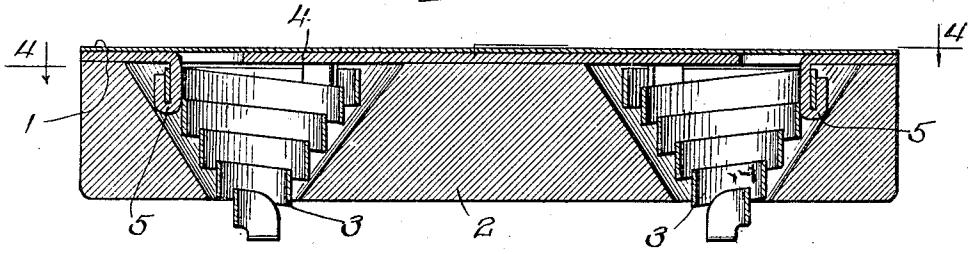


Fig. 3.

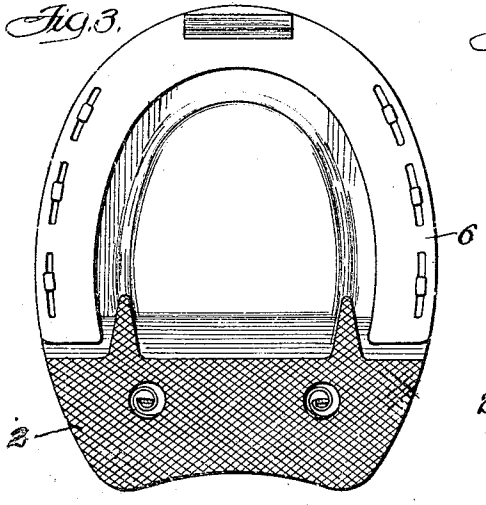
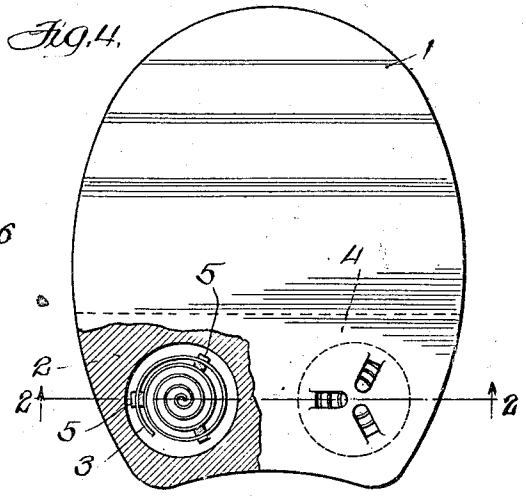


Fig. 4.



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UNITED STATES PATENT OFFICE.

SAMUEL H. ROBERTS, OF CHICAGO, ILLINOIS.

HOOF PAD.

Application filed April 17, 1922. Serial No. 553,635.

To all whom it may concern:

Be it known that I, SAMUEL H. ROBERTS, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Hoof Pads, of which the following is a specification.

This invention relates to anti-slipping means for horses' feet and more especially to hoof-pads. The main objects of the invention are to provide an improved form of hoof-pad adapted to prevent slipping; to provide hoof-pads with ground-engaging calks; to provide hoof-pads with yielding heel calks; to provide hoof-pads so formed as to be adapted for securing at their forward ends by clamping between the hoof and the shoe and having slip-preventing means at the back or heel part adapted to positively engage the ground or roadway.

An illustrative embodiment of this invention is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the foot with a pad and shoe attached,

Fig. 2 is an enlarged section on the line 2—2 of Fig. 4,

Fig. 3 is a bottom plan of the shoe and pad assembled on the hoof, and

Fig. 4 is a top plan of the hoof-pad, with one corner in section on the line 4—4 of Fig. 2.

In the construction shown in the drawings, the hoof-pad comprises mainly a backing part or base plate 1, preferably of fabricated material such as canvas or the like, whereon is cemented or otherwise permanently secured at or adjacent to its rear end a resilient cushion or heel part 2, in combination with sharp-edged positive ground-engaging means 3 of yielding character set in and to some extent housed by said heel part, being positively secured in place by means of an anchor plate 4. Said plate 4 has fingers 5 struck up thereon to positively engage the base turn of the conoidally formed and spirally coiled spring steel members 3. The spring calks 3 are positioned adjacent to the two rear corners of the pad respectively, and somewhat inwardly and back of the rear tips of the iron shoe 6, where they will be disposed under the heels of the horse's foot in use. The plate 4 is set in the rubber cushion 2 directly under the canvas 1.

The innermost turn of the calk spiral has its tip, which is at the apex of the cone, turned axially and is made sharp. Moreover, the ground edge of the whole spring may to advantage be sharp-edged, and is preferably so made, especially near the apex. The cushion 2 is preferably apertured to receive the calks 3, but the latter may be embedded more or less in the rubber.

In order that the successive turns of the spiral spring 3 may mutually support one another they are preferably set close together, with little or no space or clearance except at the base turn where held apart by the tongues 5, though in the drawing the turns are spaced slightly to more clearly show the spiral structure.

Although but one specific embodiment of this invention has been herein shown and described, it will be understood that numerous details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claims:

I claim:

1. A hoof-pad having an aperture therein adapted to house a calk, in combination with a resilient metal spiral calk set in said aperture and adapted to positively engage the ground to prevent slipping, said calk having its main axis disposed perpendicularly to the plane of the pad.

2. A hoof-pad having a pair of housing apertures formed in its rear part to register substantially with the heels of a horse's foot when in use, in combination with a pair of conical resilient spiral ground-engaging calks set apices downward in said apertures.

3. A hoof-pad having a relatively thick heel part with an aperture therein, in combination with a resilient metal calk set in the heel aperture and adapted to positively engage the ground to prevent slipping, said calk being of conoidal spiral shape with its base disposed inwardly and said pad having a metal plate closing the back side of said aperture, said plate having fingers struck up thereon to positively engage the base turn of said calk for securing the latter in place.

Signed at Chicago this 13th day of April, 1922.

SAMUEL H. ROBERTS.