V. SLANINKA.

ANTISKID HORSESHOE CALK.

APPLICATION FILED FEB. 16, 1916.

1,187,666. Patented June 20, 1916.

Fig. 1.

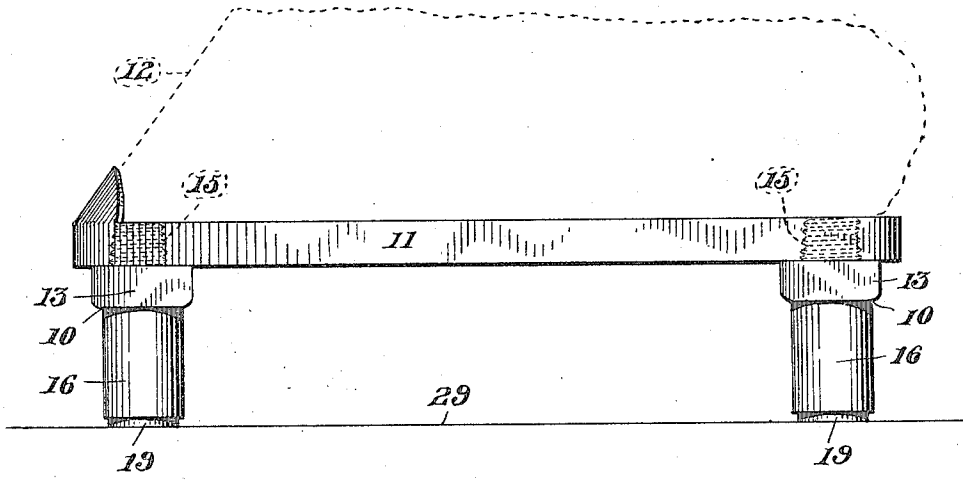


Fig. 2.

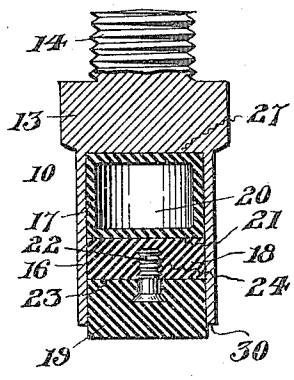


Fig. 4.

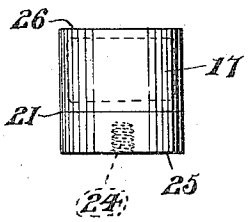


Fig. 5.

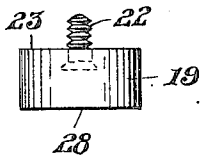
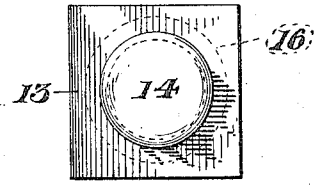


Fig. 3.



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UNITED STATES PATENT OFFICE.

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ANTISKID HORSESHOE-CALK.

1,187,666. Specification of Letters Patent. Patented June 20, 1916.

Application filed February 16, 1916. Serial No. 78,648.

To all whom it may concern:

Be it known that I, VENCEL SLANINKA, a citizen of United States, residing at Swanton, in the county of Fulton and State of Ohio, have invented certain new and useful Improvements in Antiskid Horseshoe-Calks, of which the following is a specification.

This invention relates to certain new and useful improvements in anti-skid horseshoe calks.

The primary object of the invention is the provision of a calk especially adapted for employment with horseshoes and being readily removably attached thereto, a combined cushion and pneumatic member being carried by the calks and held thereto by suction.

A further object of the device is to provide a removable horseshoe calk having a hard rubber bodily depressible bearing surface member and a pneumatic foundation or base for the said member.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and then claimed.

In the drawings forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views:—Figure 1 is a side elevation of a horseshoe provided with the present form of calks, a portion of the hoof being illustrated in dotted lines mounted upon the shoe. Fig. 2 is a central longitudinal sectional view through one of the calks detached, the shank or tang thereof being shown in side elevation. Fig. 3 is a top plan view thereof. Fig. 4 is a side elevation of the pneumatic cushion employed with the device, and, Fig. 5 is a resilient tread block arranged therewith. The present device consists of a removable horseshoe calk 10 which is illustrated in Fig. 1 in connection with the usual form of horseshoe 11, the shoe being illustrated as operatively positioned upon the bottom of an animal's hoof 13 shown by dotted lines.

The calk 10 consists of a metallic head 13 of substantially cubical form having a threaded tang or shank 14 projecting therefrom and adapted to be shiftably positioned within screw-threaded openings 15 of the shoe 11.

A tubular container or socket 16 is carried by the head 13 upon the opposite face thereof from and in axial alinement with the aforementioned tang 14. The socket 16 is adapted to receive a resilient or cushioning member of substantially cylindrical form and comprising a pneumatic cushion 17, a hard rubber base 18 and a resilient tread block 19. The said pneumatic cushion 17 is cylindrical in form having an inflated central chamber 20 and the base 18 formed of hard rubber and being cylindrical of the same diameter as the cushion 17 is secured thereto by vulcanization as at 21, the said cushion and base being arranged in axial alinement with each other.

The tread block 19 is provided with a centrally positioned projecting screw 22 vulcanized in the face 23 thereof and adapted to be detachably secured through a threaded recess 24 centrally arranged in the free face 25 of the base 18.

It will thus be evident that the pneumatic cushion 17 and the base 18 are permanently secured together while the resilient tread block 19 is removably attached to the base 18 and that when the said three members 17, 18 and 19 are thus assembled, they constitute a resilient or cushioning member of cylindrical form.

The cushion 17 with its base 18 is adapted to be forcibly seated within the socket 16 with the free face 26 of the pneumatic cushion in engagement with the inner end 27 of the socket, it being possible to so insert the said members 17 and 18 by projecting a rod, tube or similar member into the socket at one side of the cushion and base for allowing the air within the socket to escape therefrom and thus allow the cushion to seat therein. The resiliency of the cushion and base will permit the seating operation of the elements as described and as the said members 17 and 18 closely fit the side walls of the socket 16, they will be prevented from accidental removal by reason of the suction due to a vacuum which would be formed upon an attempt to

withdraw the cushion and base from the socket.

The tread block 19 may be attached to the base 18 prior to the insertion of the latter within the socket 16 or the said block may be readily attached to the base thereafter, the block being also easily removed and replaced when found desirable.

When the calk 10 is operatively positioned, it will be seen that the tread block 19 will have its free face 28 in engagement with the road bed, such as 29, which will impart a resilient or cushioning effect to the shoe 11 upon which the calk is carried, thus absorbing shocks and jars and inuring to the comfort of the wearer. By reason of the resiliency of the members 17, 18 and 19 and the fact that the same may be slightly compressed, the tread block 19 will move bodily inwardly of the socket 16 to a slight degree and as cushioned by the pneumatic member 17, it being desirable however, that the face 28 of the tread block 19 be never retracted within the socket 16 sufficiently to permit the free edge 30 of the said socket to come in contact with the road bed 29.

While the form of the invention herein shown and described is what is believed to be the preferred embodiment thereof, it is nevertheless to be understood that various forms, modifications and arrangements of the parts may be made without departing from the spirit and scope of the invention as claimed.

What I claim as new is:—

1. A calk comprising a solid head, an attaching means for the said head, a socket upon the said head, a pneumatic cushion closely fitted within the said socket and seated at the inner end thereof, a base vulcanized to the outer face of the said cushion, and a resilient tread block removably attached to the said base.

2. A calk comprising a substantially cubical solid head, an attaching means upon one side of the said head, a tubular socket projecting from the other side of the said head, a closely fitting cylindrical pneumatic cushion seated within the said socket contacting the inner face thereof, a resilient cylindrical face tightly fitted within the said socket and vulcanized to the said cushion, the said base having a threaded recess in its outer face, a cylindrical resilient tread block positioned in the outer open end of the said socket and having its outer engaging face projecting therefrom, and a securing screw vulcanized within the said tread block and positioned in removable engagement with the said recess.

In testimony whereof I affix my signature.

VENCEL SLANINKA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."