No. 796,912. PATENTED AUG. 8, 1905.

A. S. HOVANDER.

HORSESHOE CALK.

APPLICATION FILED MAR. 29, 1905.

Fig. 1.

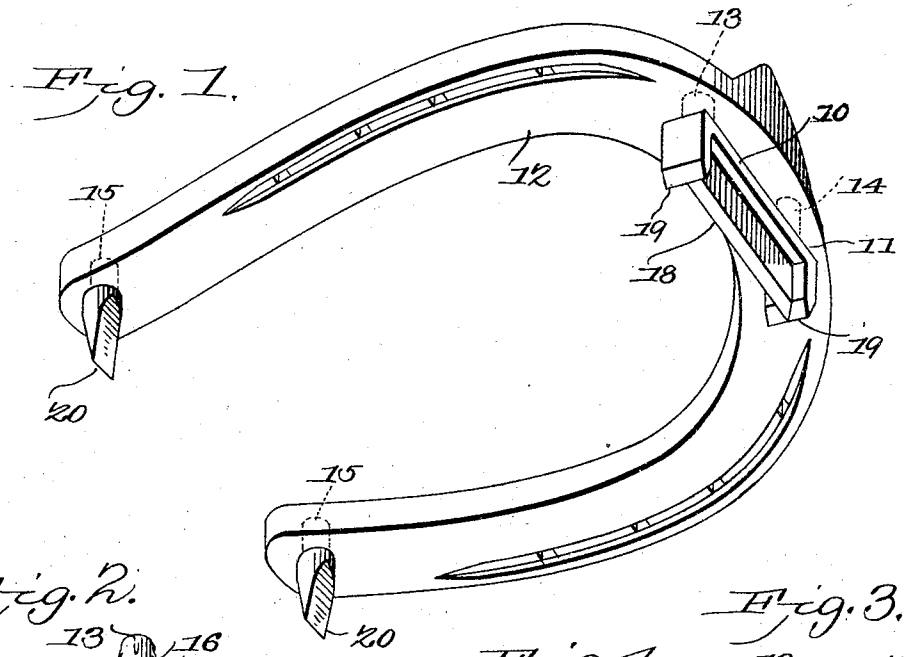


Fig. 2.

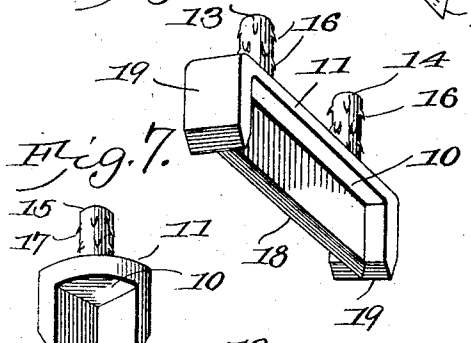


Fig. 3.

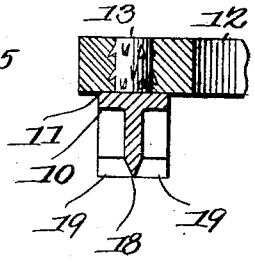


Fig. 4.

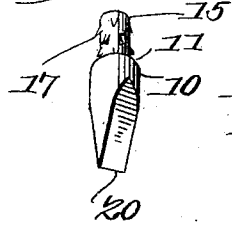


Fig. 7.

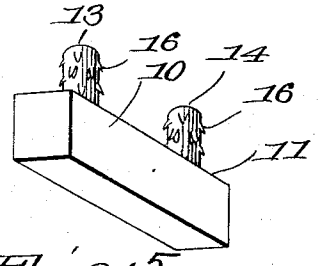


Fig. 5.

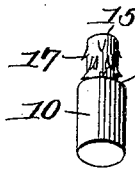


Fig. 6.

Witnesses

E. F. Stewart

C. M. Woodward.

August S. Hovander, Inventor.

by Cushman & Co

Attorneys

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AUGUST SVENSON HOVANDER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO OSCAR STRAND, OF CHICAGO, ILLINOIS.

HORSESHOE-CALK.

No. 796,912. Specification of Letters Patent. Patented Aug. 8, 1905.

Application filed March 29, 1905. Serial No. 252,731.

To all whom it may concern:

Be it known that I, AUGUST SVENSON HOVANDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Horseshoe-Calk, of which the following is a specification.

This invention relates to horseshoes, and has for its object to provide a simply-constructed and efficient calk for the same which may be attached and detached when required to replace worn or broken calks or to change from sharp to dull calks, or vice versa, as required, without removing the shoes from the hoofs of the horse.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages.

In the drawings thus employed, Figure 1 is a perspective view of a horseshoe from beneath with the improved calks attached. Fig. 2 is a detached perspective view of the improved toe-calk. Fig. 3 is a longitudinal section through the toe portion of the horseshoe and the improved toe-calk. Fig. 4 is a detached perspective view of one of the improved "heel-calks." Figs. 5 and 6 are detached perspective views of the modified form of the calk required for summer use. Fig. 7 is a perspective view illustrating another modified form of the calk.

The improved calk comprises a base member 10, having a shoulder 11 for bearing upon the body of the horseshoe, (represented at 12,) and with "sharpened" or "dull" bearing-ribs extending downwardly therefrom, as the case may be, or accordingly as the device is used in winter or summer.

The base portion of the toe-calk is provided with spaced studs 13 14 for entering corresponding cavities in the body of the shoe 12, and the base portion of the heel-calk is provided with a single stud 15 also for entering corresponding cavities in the heel portions of the shoe. The several studs are provided, respectively, with lateral spurs 16 17, inclined to the longitudinal plane of the stud for bearing against the walls of the cavities in the shoe and reversely to the line of movement which it is necessary to impart to the studs in removing them from the cavities, so that the spurs offer a constant resistance to the accidental removal of the calks.

The studs and their inclined spurs will fit the cavities in the shoe so closely that they will require considerable force to insert them and will not work loose while the shoes are in use, as the strains exerted upon them will at all times tend to hold them in the shoe, as will be obvious.

When the calks are to be detached, a light lateral blow upon the side of the shoe opposite the studs will loosen the calks sufficiently to permit of their withdrawal. Thus when in use the calks will remain rigidly in position and will not become loosened or detached by any strains to which they may be subjected, while at the same time they can be readily detached when required for renewal or repairs or when it is desired to change from the sharp to the dull form, or vice versa.

The sharp form of the toe-calk is clearly shown in Figs. 1, 2, and 3 and comprises a central longitudinal rib 18 and transverse end ribs 19, the latter intersecting the central rib at the ends and forming braces thereto, while at the same time effectually preventing lateral slipping of the hoofs of the horse.

The heel-calks are wedge-shaped, as indicated at 20 in Figs. 1 and 4, for winter use and in cylindrical form, as in Fig. 6, for summer use, and the toe-calk will also be made oblong in shape, as in Fig. 5, for summer use.

The form of toe-calk shown in Figs. 1 and 2 is an important feature of the device, as its compound form effectually prevents slipping both forwardly and backwardly and sidewise or laterally and without increasing the weight or cost of construction.

In Fig. 7 another modified form of the calk is shown, which may be employed either as a heel or toe calk, as preferred. In this form

two sharpened ribs 21 22 are disposed at right angles depending from the base 10 and effectually prevent slipping both forwardly and laterally, as will be obvious. When the modified structure shown in Fig. 7 is employed at the toe end of the shoe, two or more of said calks will be used.

The device is simple in form, efficient in action, and can be readily adapted to any size or form of horseshoe in common use.

Having thus described the invention, what is claimed is—

1. As a new article, a horseshoe-calk having a stud for entering a corresponding cavity in the body of the horseshoe and provided with a plurality of lateral spurs for bearing against the walls of the same said spurs being inclined to the longitudinal plane of the stud.

2. As a new article, a horseshoe-calk having a stud for entering a corresponding cavity in the body of the horseshoe and provided with a lateral shoulder at the juncture of the calk and stud for bearing upon the horseshoe adjacent to the cavity, said stud being provided with a plurality of lateral spurs inclined to the longitudinal plane of the stud and adapted to engage the walls of said cavity.

3. As a new article, a horseshoe-calk formed with a base portion for bearing upon the body of the horseshoe and having a central longitudinal rib with transverse ribs intersecting the longitudinal rib at opposite ends of the latter, and spaced studs extending from said base portion for entering cavities in the body of the shoe said studs being provided with a plurality of lateral spurs inclined to the longitudinal plane of the stud and adapted to engage the walls of said cavity.

4. As a new article, a horseshoe-calk formed with a base portion for bearing upon the body of the horseshoe and having a central longitudinal rib with transverse ribs intersecting the longitudinal rib at opposite ends of the latter, said ribs being provided with cutting edges disposed at an angle to each other, and means for detachably connecting said base member to the body of the shoe.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AUGUST SVENSON HOVANDER.

Witnesses:
OTTO STRAND,
E. LAGERSTEDT.