

M. HALLANAN.
DETACHABLE HORSESHOE CALK.
APPLICATION FILED OCT. 8, 1915.

1,207,030.

Patented Dec. 5, 1916.
2 SHEETS—SHEET 1.

Fig. 1.

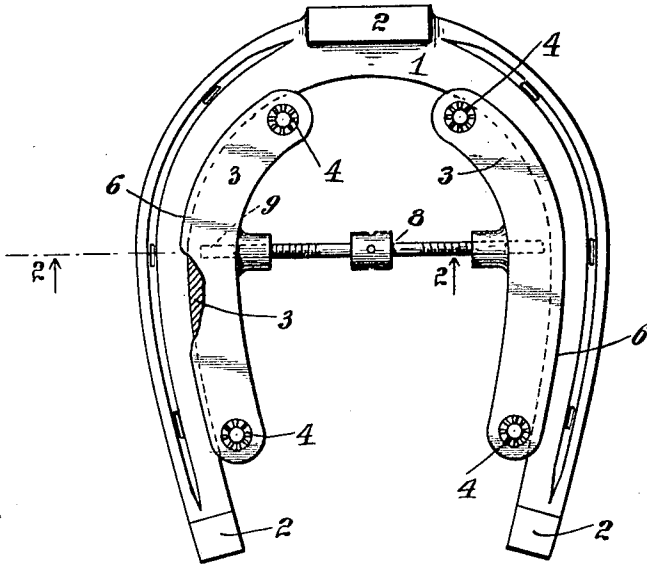


Fig. 2.

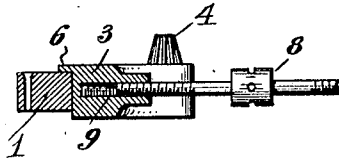
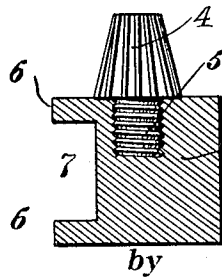


Fig. 3.



Attest:

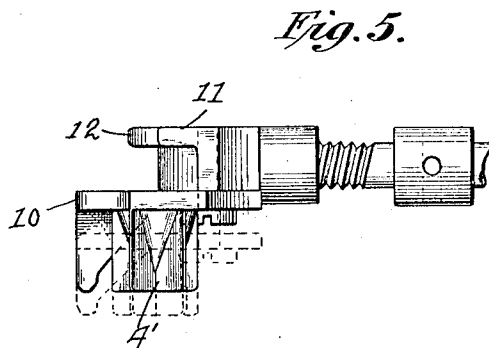
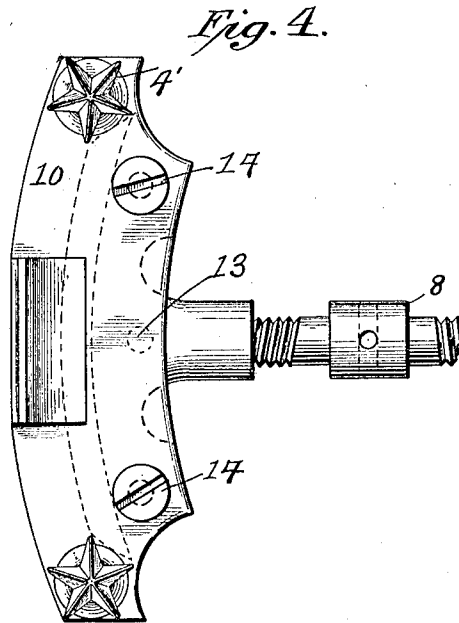
W. M. McKee
may m kpp

Michael Hallanan,
Inventor:
Robt B. Lillgo
Atty

M. HALLANAN.
DETACHABLE HORSESHOE CALK.
APPLICATION FILED OCT. 8, 1915.

1,207,030.

Patented Dec. 5, 1916.
2 SHEETS—SHEET 2.



Attest:
E. M. Johnson
May M. Lipp

Michael Hallanan
Inventor:
by *Robert B. Killgore*
Atty

UNITED STATES PATENT OFFICE.

MICHAEL HALLANAN, OF NEW YORK, N. Y.

DETACHABLE HORSESHOE-CALK.

1,207,030.

Specification of Letters Patent.

Patented Dec. 5, 1916.

Application filed October 8, 1915. Serial No. 54,778.

To all whom it may concern:

Be it known that I, MICHAEL HALLANAN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Detachable Horseshoe-Calks, of which the following is a specification.

My invention relates to devices for attachment to horseshoes to prevent slipping and my objects are the production of a detachable calk structure which will be cheap to manufacture, easy to attach to any shoe while on the horse and which will reduce the liability to slip to a minimum.

In the drawing Figure 1 is a plan view of a simple form of my invention on a horseshoe; Fig. 2 a detail, sectional view on the line 2—2 of Fig. 1; Fig. 3 a sectional view showing a method of calk attachment; Fig. 4 the preferred form of my invention; and Fig. 5 an end view of the structure of Fig. 4.

The horseshoe 1 may be flat or provided with the usual toe and heel calks 2.

In its simplest form my anti-slipping device consists of a pair of plates 3—3 carrying the sharp calks 4, which are preferably secured to the plates at 5 in such manner that they may be readily removed and replaced by new ones when dull although they may be made integral with the plates if desired. Each plate has a lipped edge 6 so that the horseshoe 1 may fit into the angle thus formed. An expansion bolt 8 enters the sockets 9 on the plates with right and left threads to force the plates apart and against the shoe 1. This bolt should be located a sufficient distance from the hoof when the calk is on a horse to clear the frog. The lipped edge of the plate 3 may be single as shown in Fig. 2 in which the lip is located on the lower or calk side of the shoe and plate, or double as shown in Fig. 3 in which event the shoe fits into the groove 7.

In order that shoes of varying thickness as well as varying width may be fitted with the same anti-slipping device, thus reducing the number of sizes which would otherwise have to be made I prefer the form of device shown in Figs. 4 and 5. The plates are made in two parts, the body 10 carrying the calks 4' and the screw block 11 with the

lip 12. A pin 13 on the body enters a hole in the block 11 to maintain the two pieces in proper relation. Screws 14—14 serve to draw the two parts of the plate together with the shoe between the body 10 and the lipped block 11 so that the plate is firmly clipped to the shoe in the groove thus formed. The expansion bolt enters a tapped hole in the block 11.

In use a pair of plates with their calks are joined by the expansion bolt and placed inside the shoe with the calks down so they will bear on the ground. On expanding by means of the bolt the plates are forced apart and into locking relation with the shoe. They cannot move upward, or inward, toward the hoof by reason of the lower lip, and, where two lips are used they cannot be pulled off the hoof. Neither can they move forward or backward by reason of the curvature of the shoe and the fact that they engage the concave portion thereof. The device may thus be quickly affixed to a horse's foot when the need arises and as quickly removed when the need has passed. As the expansion bolt may be used to separate the plates to any desired extent the same device will fit shoes of widely varying widths, and the two part plates enable shoes of different thicknesses to be fitted. As the calks may be renewed when worn the device may be used indefinitely without loss of efficiency by simply inserting new calks.

In this device the entire pressure and weight is borne by the shoe and there is nothing in contact with the horse's hoof to injure or lame it.

I claim:—

1. A detachable horseshoe calk comprising a pair of oppositely disposed plates, each plate composed of two superimposed members, calks carried by one of said members, a socket in the other member, means for securing the two members of a plate together and an expansion bolt engaging the sockets whereby the plates may be forced into locking engagement with the inside edges of a shoe.

2. A detachable horseshoe calk comprising a pair of oppositely disposed plates, each plate composed of two members, a positioning pin on one member, the other being aper-

tured to receive it, calks carried by one member, a socket in the other member, means for securing the two members of a plate together and an expansion bolt engaging the sockets whereby the plates may be forced into locking engagement with the inside edges of a horseshoe.

In testimony whereof I have affixed my signature in presence of two witnesses.

MICHAEL HALLANAN.

Witnesses:

ROBERT B. KILLGORE,
MAY M. LIPP.

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