J. W. FINK.

HORSESHOE.

APPLICATION FILED MAR. 30, 1914.

1,099,351. **Patented June 9, 1914.**

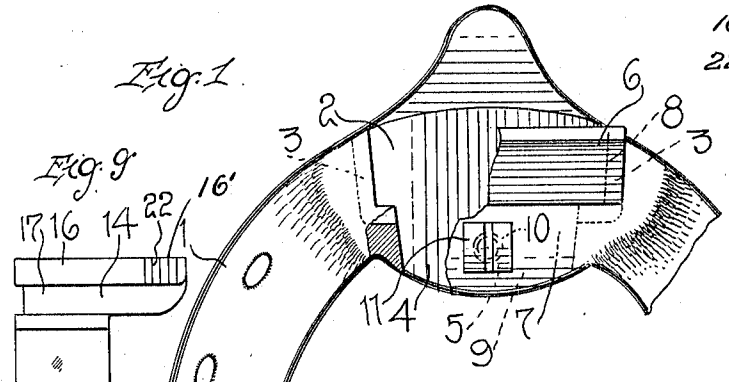

Fig. 1.

Fig. 9.

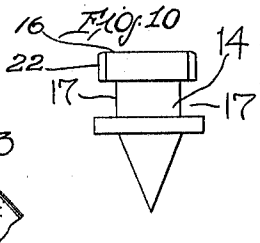

Fig. 10.

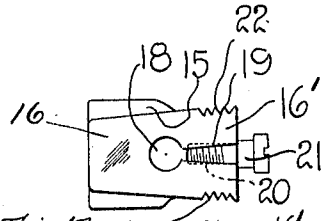

Fig. 6.

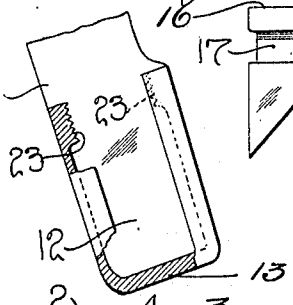

Fig. 5.

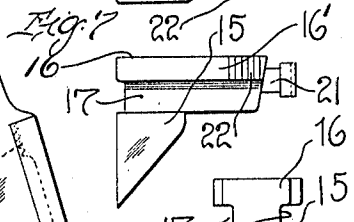

Fig. 7.

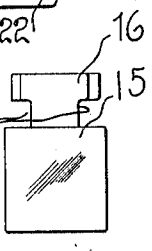

Fig. 8.

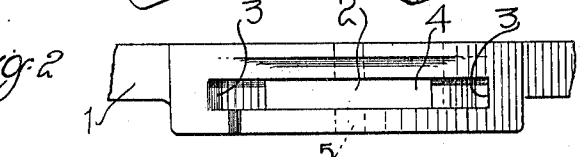

Fig. 2.

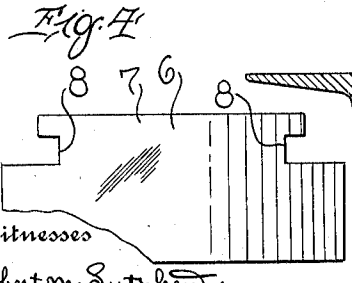

Fig. 4.

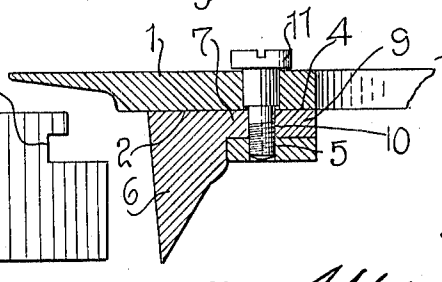

Fig. 3.

Witnesses

Robert M. Sutphen.

A. J. Reid

Inventor

J. W. FINK

By Watson E. Coleman.

Attorney

UNITED STATES PATENT OFFICE.

JACOB W. FINK, OF SHAMOKIN, PENNSYLVANIA.

HORSESHOE.

1,099,351. Specification of Letters Patent. Patented June 9, 1914.

Application filed March 30, 1914. Serial No. 828,338.

To all whom it may concern:

Be it known that I, JACOB W. FINK, a citizen of the United States, residing at Shamokin, in the county of Northumberland and State of Pennsylvania, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, reference being had to the accompanying drawings.

This invention comprehends certain new and useful improvements in horseshoes and relates particularly to horseshoes of the detachable calk type.

The invention has for its primary object a simple, durable and efficient construction of horseshoe of this character, the parts of which may be very easily made and whereby the calks at both heels and toe, can be very easily secured in place and detached whenever necessary and without the use of special tools.

A further object of the invention is a device of this character in which the heel calks may be easily interchanged, one of them preferably having its sharpened point or engaging edge extended longitudinally and the other transversely. And the invention also aims to generally improve devices of this class so as to render them more useful and commercially desirable.

With these and other objects in view, as will more fully appear as the description proceeds, the invention consists in certain constructions, combinations and arrangements of parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which—

Figure 1 is a bottom plan view of a portion of a horseshoe embodying the improvements of my invention, parts being broken away. Fig. 2 is an edge view of the toe portion of the shoe. Fig. 3 is a transverse section through the toe portion and the toe piece or calk connected thereto. Fig. 4 is a detail view of the toe calk. Fig. 5 is a fragmentary view of one of the sockets at the heel ends of the shoe. Figs. 6, 7 and 8 are detail views of one of the heel calks, and Figs. 9 and 10 are views of another heel calk which, taken in connection with the heel calk shown in Figs. 6, 7 and 8, show that one of the heel calks has its edge extending longitudinally and the other transversely, the two heel calks being interchangeable, as hereinafter specified.

Corresponding and like parts are referred to in the following description and designated in all of the views of the accompanying drawing by like reference characters.

Referring to the drawing, the numeral 1 designates my improved horseshoe, the same being of any desired construction or design, except as hereinafter noted, and being formed at the toe with a forwardly opening socket 2 having undercut side walls 3. The shoe is also formed at the toe with a longitudinally disposed and laterally extended slot 4 which opens rearwardly from the socket 2 and which is intersected by an aperture 5, as clearly illustrated in the drawing.

6 indicates the toe piece or toe calk. This is formed with an attaching bar 7 having end recesses 8 whereby it is adapted to interlock with the undercut side walls 3 of the socket 2 when slipped into place, said toe calk being also formed with a web 9 adapted to fit into the slot 4, said web having an aperture 10 extending therethrough and adapted to register with the aperture 5 whereby a set screw or pin 11 inserted through these registering apertures will securely hold the toe piece or calk in place but in a manner rendering its detachment and replacement a very easy operation.

The heel ends of the shoe 1 are each formed with a forwardly opening socket 12 having undercut side walls and closed ends 13, said sockets being designed to receive the heel calks 14 and 15, these being of similar formation and construction with the exception that one of them has its point or sharpened edge extending longitudinally and the other transversely, the heel calks being interchangeable, right and left, as desired. Each of the heel calks is formed with an attaching block 16 having longitudinally extending side recesses or grooves 17 formed therein, whereby the calk, is arranged for interlocking engagement with the undercut side walls of the socket 12. Openings 18 are extended transversely through the forward extensions 16′ of the attaching blocks 16, said transverse openings 18 being intersected by longitudinal slots 19 which divide or split the forward extremities of the attaching blocks, said slots being formed with longitudinally disposed counter-bores 20 the walls of which converge toward the transverse openings 18,

said counter-bores being designed to receive driving pins or set screws 21 encircleable therein from the forward end of the attaching blocks and adapted to spread apart the split and resilient forward extensions or extremities of the attaching blocks 16. Preferably, the side walls of the extensions 16′ are nicked or formed with serrations as indicated at 22, and the undercut side walls of the sockets 12 are correspondingly formed at registering points with notches or serrations 23, whereby, when the driving pins or set screws 21 are inserted in place and the forward ends of the attaching blocks 16 spread apart, they will securely interlock with the walls of the sockets and firmly hold the detachable heel calks in place as long as required. It is of course to be understood that the heel calks may be either blunt or sharp, according to the season of the year when the same are used and to comply with any other particular requirements of the case.

While the accompanying drawing illustrates what I believe to be the preferred embodiment of my invention, it is to be understood that the invention is not limited thereto but the various changes may be made in the construction, arrangement and proportions of the parts without departing from the scope of the invention as defined in the appended claims.

What is claimed, is:

1. A horseshoe, provided at its heel ends with forwardly opening sockets closed at the rear and having their side walls undercut, heel calks provided with attaching blocks adapted to be slipped into said sockets from the forward open ends thereof, the side walls of said blocks being adapted to interlock with the undercut walls of the sockets, and said blocks being split at their forward ends, and fastening devices adapted to be driven into the split ends of the blocks from the forward ends thereof rearwardly in a longitudinal direction whereby to spread the blocks apart laterally into locking engagement with the side walls of the socket.

2. A horseshoe, provided at its heel ends with forwardly opening sockets closed at the rear, heel calks provided with attaching blocks receivable in said sockets, said blocks being formed at their forward extremities with slots forming split portions and with longitudinally disposed counter-bores in said slots, and fastening devices adapted to be forced into said counter-bores in a rear direction from the forward extremities of the blocks whereby to spread the latter into engagement with the side walls of the socket.

3. A horseshoe, provided at its heel ends with forwardly opening sockets, heel calks provided with attaching blocks receivable in said sockets, said blocks being formed at their forward extremities with transverse openings extending from the bottom and with slots extending forwardly from said openings and forming split portions and with longitudinally disposed counter-bores in said slots intersecting said openings, and fastening devices adapted to be forced into said counter-bores from the forward ends of the blocks whereby to spread the latter into engagement with the side walls of the socket.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JACOB W. FINK.

Witnesses:
ABE L. SNYDER,
ETHEL M. ZIMMERMAN.