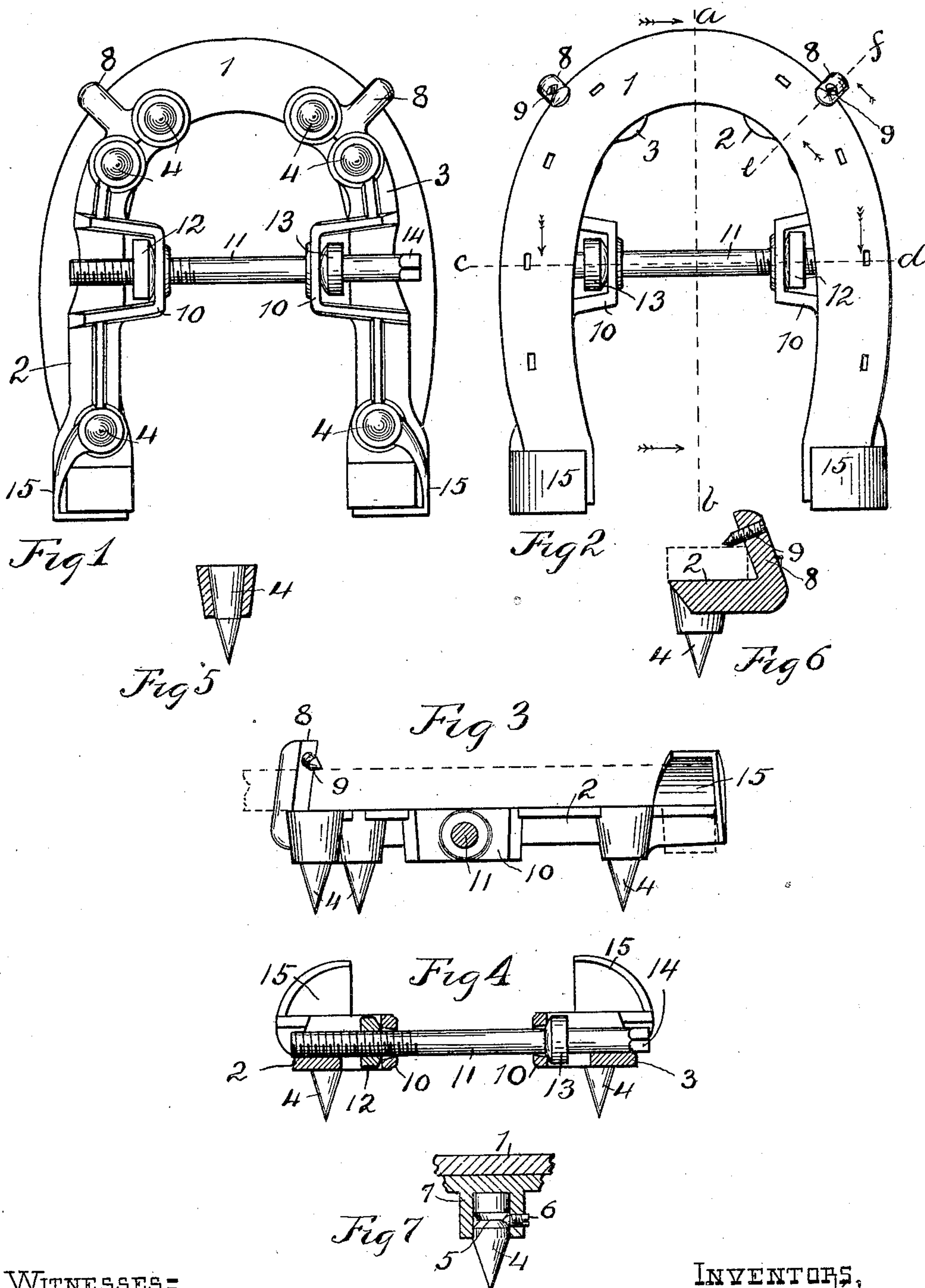


No. 836,807.

PATENTED NOV. 27, 1906.

J. H. FINK & R. ANDLAUER.
HORSESHOE ATTACHMENT.
APPLICATION FILED JAN. 29, 1904.



WITNESSES:

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Their Attorney

UNITED STATES PATENT OFFICE.

JOSEPH H. FINK, OF KANSAS CITY, MISSOURI, AND RAYMOND ANDLAUER, OF KANSAS CITY, KANSAS, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, OF FIVE-EIGHTHS TO SAID FINK, TWO-EIGHTHS TO SAID ANDLAUER, AND ONE-EIGHTH TO HENRY CHICK AND ANTHONY L. CLARK, OF KANSAS CITY, MISSOURI.

HORSESHOE ATTACHMENT.

No. 836,807.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed January 29, 1904. Serial No. 191,153.

To all whom it may concern:

Be it known that we, JOSEPH H. FINK, residing in Kansas City, county of Jackson, and State of Missouri, and RAYMOND ANDLAUER, residing in Kansas City, county of Wyandotte, and State of Kansas, citizens of the United States, have invented a new and useful Improvement in Horseshoe Attachments, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

Our invention relates to improvements in horseshoe attachments.

Our invention relates particularly to attachments used on horseshoes for preventing slippage on icy pavements.

The object of our invention is to provide a construction employing two side members provided with suitable calks and adapted to be secured upon the under side of the shoe, the members being adjustably connected together by a transverse bolt, means being provided by which the members will not be tipped at an angle by the pressure of the clamping-bolt.

Our invention provides, further, novel means for securing the forward ends of the members to the shoe.

Our invention provides, further, a construction in which the clamping-bolt cannot be turned accidentally in use, thus avoiding loosening of the attachment on the shoe.

Other novel features are hereinafter fully described and claimed.

In the accompanying drawings, illustrating our invention, Figure 1 is a bottom view of a shoe having an attachment of our invention secured thereto. Fig. 2 is a top view of the same. Fig. 3 is a cross-section taken on the dotted line *a b* of Fig. 2, the shoe being removed, its position being indicated by dotted lines. Fig. 4 is a cross-section taken on the dotted line *c d* of Fig. 2, the shoe being removed. Fig. 5 is an elevation view of a calk, a portion of the body of the attachment being shown in vertical section. Fig. 6 is a cross-section taken on the dotted line *e f* of Fig. 2, the shoe being shown in dotted lines. Fig. 7 is an elevation view of another form of calk, a portion of the attachment and a portion of the shoe being shown in vertical section.

Similar characters of reference indicate similar parts.

1 denotes the shoe, 2 and 3 the side members, respectively, of our attachment. The side members are provided each with a flat upper side adapted to be placed upon the under side of the shoe. In the forward and rear ends of each attachment are provided conical calks 4, the calks in the form shown in Fig. 5 being mounted in conical holes, the shoe forming a bearing for the upper ends of the calks. In the form shown in Fig. 7 the upper ends of the calks are cylindrical and fitted in correspondingly-shaped recesses in the under side of the members 2 and 3. The upper ends of the calks in this form bear upon the attachment instead of on the shoe, thus causing the members 2 and 3 to be more tightly forced against the shoe when the weight of the horse is placed on the calks. The upper part of the cylindrical portion of the calk is provided with an annular groove 5, adapted to receive the inner end of a securing-screw 6, mounted in a transverse threaded hole in the socket portion 7 of the member to which the calk is fitted. Each member 2 and 3 is provided at its forward end with an upwardly and inwardly extending projection 8, which engages the forward part of the shoe. Each projection 8 is provided at a point above the top of the shoe with a downwardly-inclined hole which is threaded and has fitted to it a securing-screw 9, adapted to bear upon the top of the shoe when properly adjusted. The inner end of the screw 9 is preferably pointed, so that when a thin shoe is used the screw will enter the forward side of the hoof. The rear end of each member 2 and 3 is provided with a socket portion 15, comprising an upwardly and inwardly inclined side wall adapted to bear upon the upper and outer edge of the rear end of the shoe and a vertical rear wall adapted to bear against the rear of the heel of the shoe. This socket portion of the member engages the top, side, and rear end of the heel of the shoe and firmly holds the rear end of the member to the shoe.

The inner side of each member 2 and 3 is provided near its center with an inwardly-extending recessed portion or bracket 10, each provided with a transverse hole disposed

below the under side of the body of the member, and in which is mounted a horizontal transverse bolt 11, rotatively mounted in said holes, which holes are tapered so as to permit the side members to swing on the bolt to correspond with the contour of the shoe. In the recessed portion formed by the extension 10 of the member 2 and upon the outside thereof lies a nut 12, mounted on the threaded end of the bolt 11. The other end of the bolt is provided with an enlarged portion 13, preferably cylindrical, which lies in the recess formed by the extension 10 of the member 3. This end of the bolt is preferably squared, as shown at 14, to permit the seizing of it with a wrench. Within the portions 10 each member is flattened on its under side, and the bolt 11 lies outside the brackets 10 against this flattened portion. By this construction tipping of the members 2 and 3 on the bolt 11 is prevented when the bolt is turned so as to draw the members toward each other, bearings being formed on each member for the bolt 11 on the under side of the member and in the inner end of the projection or bracket 10.

In operating our invention the bolt 11 is first slipped through the hole of projection or bracket 10 on member 3, then inserted through the corresponding hole in member 2, the nut 12 being placed outside the bracket in the recess of the portion 10 of member 2, and the bolt screwed into it. The members are then applied to the bottom of the shoe with the heels of the shoe placed in the socketed rear ends of the members. The bolt is then turned, tightening the members on the shoe, after which the screws 9 are adjusted so as to clamp the upper side of the shoe. The bolt lying upon the flat under sides of the members 2 and 3 outside the brackets 10 and being held by projections 10 on said members prevents turning upwardly and inwardly of the members when tightly clamped to the shoe. The inner sides of the nut 12 and the enlargement 13 are preferably rounded so as to permit the ready swinging in a horizontal plane of the members, so that they may adapt themselves to the outside shape of the shoe.

In the form of calk shown in Fig. 7 whenever it is desired to replace a calk the screw 6 is screwed outwardly and the calk removed, another being inserted in its place, after which the screw 6 is turned so as to enter the groove 5, thus preventing the calk coming out. In this form of our invention the calks may be replaced without removing the attachment from the shoe. Other modifications may be made without departing from the spirit of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a horseshoe attachment, the combi-

nation with two side members provided each in its inner side with an inwardly-extending bracket having a transverse hole therethrough the said members being provided each at its rear end with a socket for engaging the heel of the shoe and at its forward end with means for engaging the forward end of the shoe, of a bolt rotatively mounted in said holes, the ends of the bolts outside the brackets bearing upon the under sides of the members, the bolt at one end outside the adjacent bracket being threaded, the other end having an enlarged portion bearing upon the outside of the other bracket, and a nut mounted on the threaded part of the bolt and bearing upon the outside of and prevented from turning by the first-named bracket.

2. In a horseshoe attachment, the combination with two side members provided each with a socket at its rear end for engaging the heel of the shoe and having each at its forward end an upwardly-extending projection having a threaded hole therethrough, each member having on its inner side a bracket having a hole therethrough, of a bolt rotatively mounted in said holes in said brackets and bearing at its ends respectively upon the under sides of the members outside the brackets, the bolt having an enlargement bearing upon the outer side of one bracket, a nut mounted on the bolt and bearing upon the outside of and prevented from turning by the other bracket, and two screws mounted respectively in said holes in said projections and adapted to bear upon the upper side of the shoe.

3. In a horseshoe attachment, the combination with two side members provided each on its inner side with an inwardly-extending bracket having a transverse hole therethrough disposed below the under side of the body of the member, each member having at its rear end a socket for engaging the rear end, side and top of the heel, the forward end of each member having an upwardly-extending projection having an inclined screw-threaded hole therethrough, of two screws mounted one in each of said screw-threaded holes and adapted to bear upon the upper side of the shoe, a bolt rotatively mounted in said holes in said bracket and having an enlarged portion bearing upon the outside of one bracket, the bolt outside the said brackets bearing upon the under sides of the bodies of the side members, and a nut mounted on the bolt outside of and embraced by the bracket opposite the one having bearing upon it the enlarged portion of the bolt.

4. In a horseshoe attachment, the combination with two side members adapted to be placed upon the under side of the shoe and provided with means for engaging the outer edges thereof, each member being provided on its inner side with a bracket extending below the body of the member and having a re-

cess between its inner end and the inner edge
of the body, each bracket having a trans-
verse hole therethrough, a bolt rotatively
mounted in said holes and provided with an
5 enlarged portion disposed in one recess and
bearing upon the outside of the adjacent
bracket, the other end of the bolt being
threaded, and the bolt bearing upon the un-
der side of said members outside said brack-
10 ets, and a nut mounted in the other recess on
the threaded part of the bolt and bearing

upon the outside of and embraced by the ad-
jacent bracket.

In testimony whereof we have affixed our
signatures in the presence of two subscribing 15
witnesses.

JOSEPH H. FINK.
RAYMOND ANDLAUER.

Witnesses:

WARREN D. HOUSE,
ANTHONY L. CLARK.