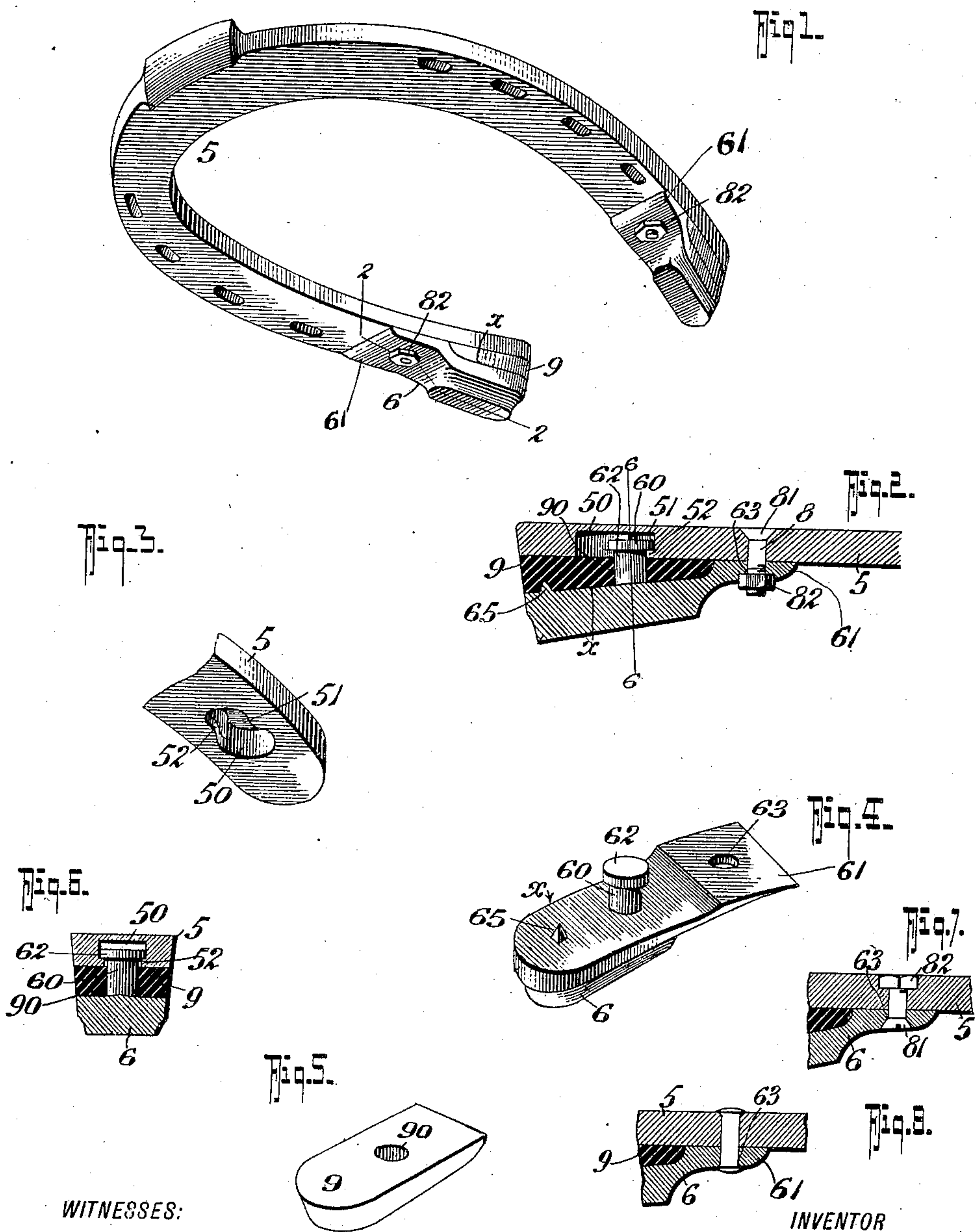


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PATENTED MAY 12, 1908.

F. B. GARDNER.
HORSESHOE CALK.

APPLICATION FILED AUG. 27, 1907.



WITNESSES:

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FRANK B. GARDNER, OF LIMA, OHIO.

HORSESHOE-CALK.

No. 887,246.

Specification of Letters Patent.

Patented May 12, 1908.

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To all whom it may concern:

Be it known that I, FRANK B. GARDNER, residing at Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Horseshoe-Calks, of which the following is a specification.

My present invention seeks to provide a new and improved construction of cushion horse-shoe calks, and it more particularly relates to that type of heel calks shown in my Patent No. 769,071 granted August 30, 1904, and it comprehends certain improved features of construction, especially a means for connecting the calk and the cushion member to the shoe in such manner that a positive holding of the outer end of the calk and the cushion against the shoe is provided for.

In its more complete nature, my invention also embodies certain details of construction and combination of the several parts, and particularly the means for detachably interlocking the calk with the shoe ends and whereby the cushion member when worn, may be readily removed and a new cushion piece substituted therefor, all of which will be hereinafter fully described in detail and pointed out specifically in the appended claims and illustrated in the accompanying drawings, in which,—

Figure 1 is a perspective view of a horse-shoe with my improvements applied. Fig. 2 is a longitudinal section of one heel end of the shoe, taken on the line 2—2 on Fig. 1. Fig. 3 is a perspective view of the heel end of the shoe without the calk and cushion members. Fig. 4 is a detail view of one of the heel calk pieces. Fig. 5 is a detail view of one of the cushion members. Fig. 6 is a cross section on the line 6—6 of Fig. 2. Figs. 7 and 8 are detail views hereinafter referred to.

The horse-shoe 5, which may be of the ordinary flat shoe type in my present construction or invention, has its heel ends formed with a socket 50 having a longitudinally extended contracted entrant portion 51 whereby to form opposing locking flanges 52, for cooperating with a headed stud 60 integrally formed with a calk piece 6, as clearly shown in Fig. 2.

In my present construction, the calk 6 has a forwardly extended flat portion or tongue 61 that is disposed in a plane above the calk portion proper whereby to form an off-set

between the shoe and calk to provide the space x for receiving the cushion block 9 of rubber or other yielding material.

The block 9 has a wedge shape to fill the wedge shape space x , which is provided for by having the calk member inclined downwardly from the front to the rear end, and the said cushion block 9 also has an aperture 90 of less diameter than the head of the stud 60, it being understood that in applying the cushion block, its aperture 90 expands sufficiently to readily slip over the head 60.

The front end of the tongue 61, in practice, is secured to the shoe end 5 in any suitable manner. For example, it may be detachably secured by a screw 8 that extends down through the shoe end, through an aperture 63 in the tongue and made fast by a nut, as shown in Figs. 1 and 2, or it may be secured by passing the screw up through aperture 63 through the shoe end and securing same by the nut 82 countersunk in the upper face of the shoe end 5, as shown in Fig. 7, or it may be riveted to the said shoe end, as shown in Fig. 8. To prevent the cushion 9 being crowded rearwardly over the end of the calk, the said calk end has one (or more) spurs 65 near its outer end that projects up into the cushion, as shown in Fig. 2.

By reason of constructing the several parts as described, to fit the calks onto the shoe ends, it is only necessary to pass the heads 62 of the studs into the circular or wide entrant portion of the sockets in the shoe heels, and then slip the calk forward in the longitudinal direction of the shoe end to bring the head 62 under the lock flanges of the contracted entrant extension of the socket and thereby positively lock the rear end of the calk to the shoe and prevent the same from wobbling laterally or longitudinally. After the calk has been thus fitted on the shoe, the rear end of member 61 is fixedly secured to the shoe.

From the foregoing, taken in connection with the drawings, the advantages of my invention will be readily understood.

By reason of the calk being connected to the shoe in the manner stated, the cushion, when worn, can be replaced by removing the calk and substituting a new cushion for the old one and replacing the calk and securing it back on the shoe.

The arrangement of parts is such that no especial construction of shoe is necessary, since the calk device can be readily fitted to

any ordinary type of shoe by simply providing the shoe ends with the socket 50 for receiving the head 62.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

1. The combination of a horse-shoe having sockets in the heel portion thereof, a calk plate detachably secured at its front end to each heel portion, an off-set at its rear end therefrom, a cushion between the shoe and off-set portion of the plate, a stud on each plate, for extending through the cushion, the said studs having head portions for extending into and detachably interlocking with the sockets in the shoe heel portions, as set forth.

2. The combination with the heel portion of a horse-shoe, said portion having an elongated socket extending lengthwise thereof

and having a portion of its entrant end contracted whereby to form opposing locking flanges and having an aperture in advance of the contracted portion of the socket; of a calk having a forwardly projected tongue member and a headed stud adapted to slip into the socket in the heel portion and to be moved into an interlocked engagement with the locking edges thereof, a yielding cushion member, apertured to slip over the said headed stud, and means for connecting the front end of the calk to the shoe heel portion, all being arranged substantially as shown and described.

FRANK B. GARDNER.

Witnesses:

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