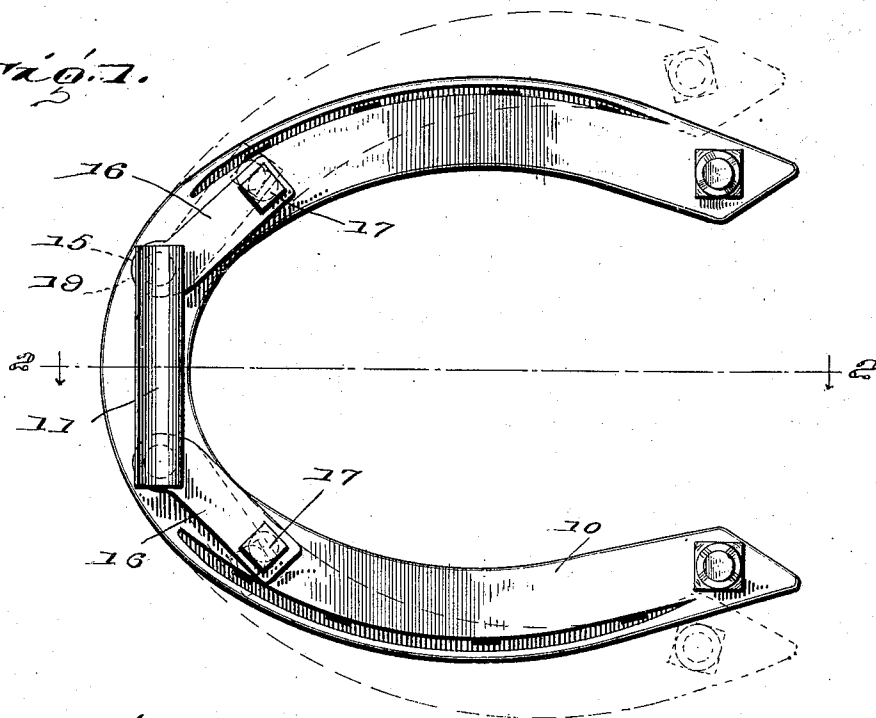


**1,066,097.**

Patented July 1, 1913.



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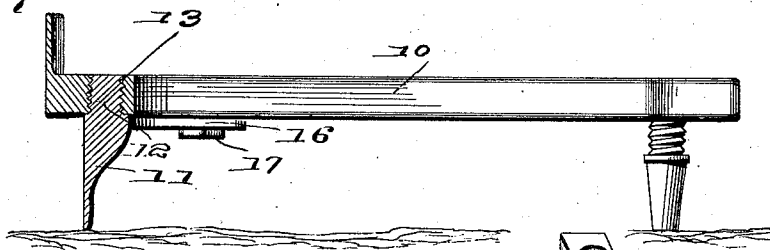
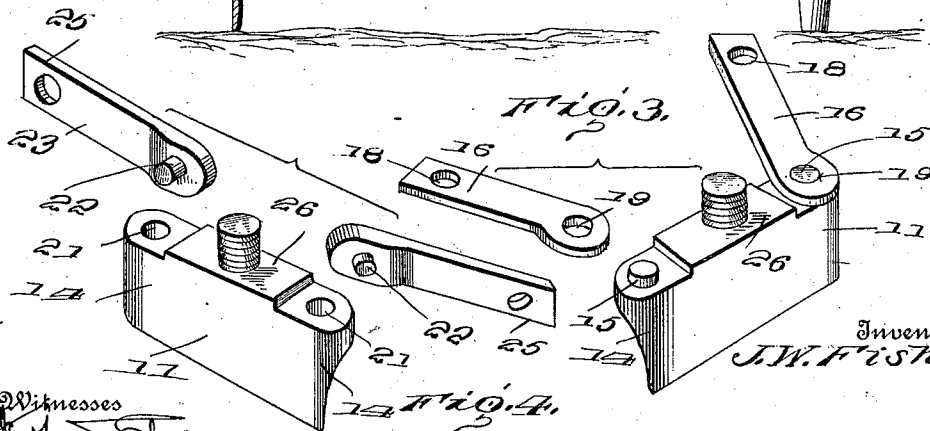


Fig. 3.



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Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN W. FISHER, OF NEWBERRY, PENNSYLVANIA.

## HORSESHOE-CALK.

1,066,097.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed August 16, 1912. Serial No. 715,445.

*To all whom it may concern:*

Be it known that I, JOHN W. FISHER, citizen of the United States, residing at Newberry, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Horse-shoe-Calks, of which the following is a specification.

This invention relates to an improvement in horseshoe calks.

The primary object of the invention is to provide a horseshoe with anti-slipping means which will not be displaced or distorted by the sizing of the shoe.

A further object of the invention is to provide a construction which will allow the shoe to be bent in sizing and which will at all times rigidly support the calk on the shoe.

In the drawings forming a part of this specification: Figure 1 is a bottom plan view, the shoe being shown as expanded in dotted lines; Fig. 2 a section on the line 2-2 of Fig. 1; Fig. 3 a disassembled perspective of the calk and its securing devices removed from the shoe, one of the links being shown as detached from the calk; Fig. 4 is a disassembled perspective of a modified form of the calk supporting structure, the links being shown as detached from the calk.

In the drawings 10 designates a horseshoe which is of the usual construction. The toe calk 11 in the form shown in Fig. 1 of the drawing is provided with the threaded extension 12 which is received by the threaded opening 13 formed in the shoe. The calk 11 is reduced in width adjacent its ends 14, and in the preferred form a stud 15 is formed integral with the calk adjacent both of its ends. It has been found in practice that when a toe calk is placed on a shoe prior to the sizing of the same and the shoe in sizing is bent to any great extent the calk will either be displaced or so distorted as to be rendered useless, the securing devices being loosened, weakening the connection between the calk and the shoe.

The present invention contemplates a construction in which the calk while at all times rigidly secured on the shoe will allow for the sizing of the shoe, the means which supports the end portions of the calk being such as to participate in the movement of the shoe in bending without affecting the calk.

In the preferred form, a link 16 which is formed of spring metal is supported at either side of the calk by a set screw 17, the set screw 17 passing through the apertured terminal 18 of the link, the aperture in said terminal being of such a diameter that the link may rotate freely on the screw 17, the shoe being provided with threaded openings which receive the set screws 17. The terminal of the link remote from the set screw is off-set, said terminal being formed with an aperture 19 which receives the stud 15 of the calk. When the set screws have been tightened until their heads contact with the links 16, the calk 11 will be supported against rotation, the links co-acting to maintain the same fixed with respect to the shoe.

When the shoe is sized it will be noted that the bending of the same will not affect the calk, the links 16 rotating on the studs 15 of the calk, and being disposed to rotate also with respect to the set screws when the shoe is bent to any great extent. It will also be noted that this movement of the links will occur when the shoe is sized after the calk has been positioned on the same.

It will be noted that when the calk is applied after the shoe has been sized, the links will adjust themselves to the shoe as bent, the calk being readily attached regardless of the degree to which the shoe is bent in sizing.

It will be seen that where the calk is provided with securing devices which pass through either end of the same it is necessary to place additional threaded openings in the calk to compensate for the bending of the shoe, it being also necessary to either bend the calk or place other apertures in the same to receive the securing devices. In the present construction the same apertures properly aline with the securing devices whether the shoe be widened or narrowed. In the form shown in Fig. 4, the calk is formed with sockets 21 which receive studs 22 carried by the links 23, the links being free to rotate with respect to the calk, and maintaining the calk against movement on the shoe as in the preferred form, set screws passing through the apertured terminals 25 of the links. In both forms it will be noted that the terminals of the links which are connected to the calk rotate within the recesses formed by reducing the width of the calk, the intermediate portion 26 disposed

adjacent the threaded extension 12 contacting with the shoe.

The links 16 are formed of spring metal, the same preventing the displacement of the set screws 17, the links exerting a downward pressure on the upper face of the heads of said screws, overcoming the tendency of the screw to rotate, the contact being such that the link may rotate with respect to the screw.

10 The set screws may be removed by means of a suitable tool when it is desired to replace the calk. It will be noted that the links are not subjected to wear and that the same may be used in connection with more than one

15 calk, the calk when worn being removed and replaced without the necessity of providing new links.

Having thus described my invention, what I claim is:

20 1. In a horseshoe, a calk formed with a threaded extension, the shoe adjacent the toe being provided with a threaded aperture to receive said extension, and links formed of spring metal having a pivotal connection

25 with the shoe and said calk.

2. In a horseshoe, a calk formed with a threaded extension, the shoe being formed with a threaded aperture adjacent the toe portion to receive said extension, said calk

adjacent its ends being reduced and provided with studs, and a link pivotally supported by the shoe adjacent each end of the calk, said links being formed with apertures to receive said studs.

3. In a horseshoe, a calk formed with a threaded extension, the shoe being formed with a threaded aperture adjacent the toe portion to receive said extension, said calk adjacent its ends being reduced and provided with studs, a link pivotally supported by the shoe adjacent each end of the calk, said links being formed with apertures which receive said studs, and set screws passing through said links, said screws entering threaded apertures in the shoe.

4. In a horseshoe, a calk, said calk being supported at the toe of the shoe, links pivotally supported by the shoe, the terminals of said links being off-set, and a pivotal connection between said off-set terminals and said calk.

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

JOHN W. FISHER. [L. S.]

Witnesses:

EDW. C. MILLER,  
ELEANOR TRANT.