No. 774,031. PATENTED NOV. 1, 1904.

P. T. BERTHOLF.

HORSESHOE CALK.

APPLICATION FILED MAR. 9, 1903.

NO MODEL.

Fig. 1.

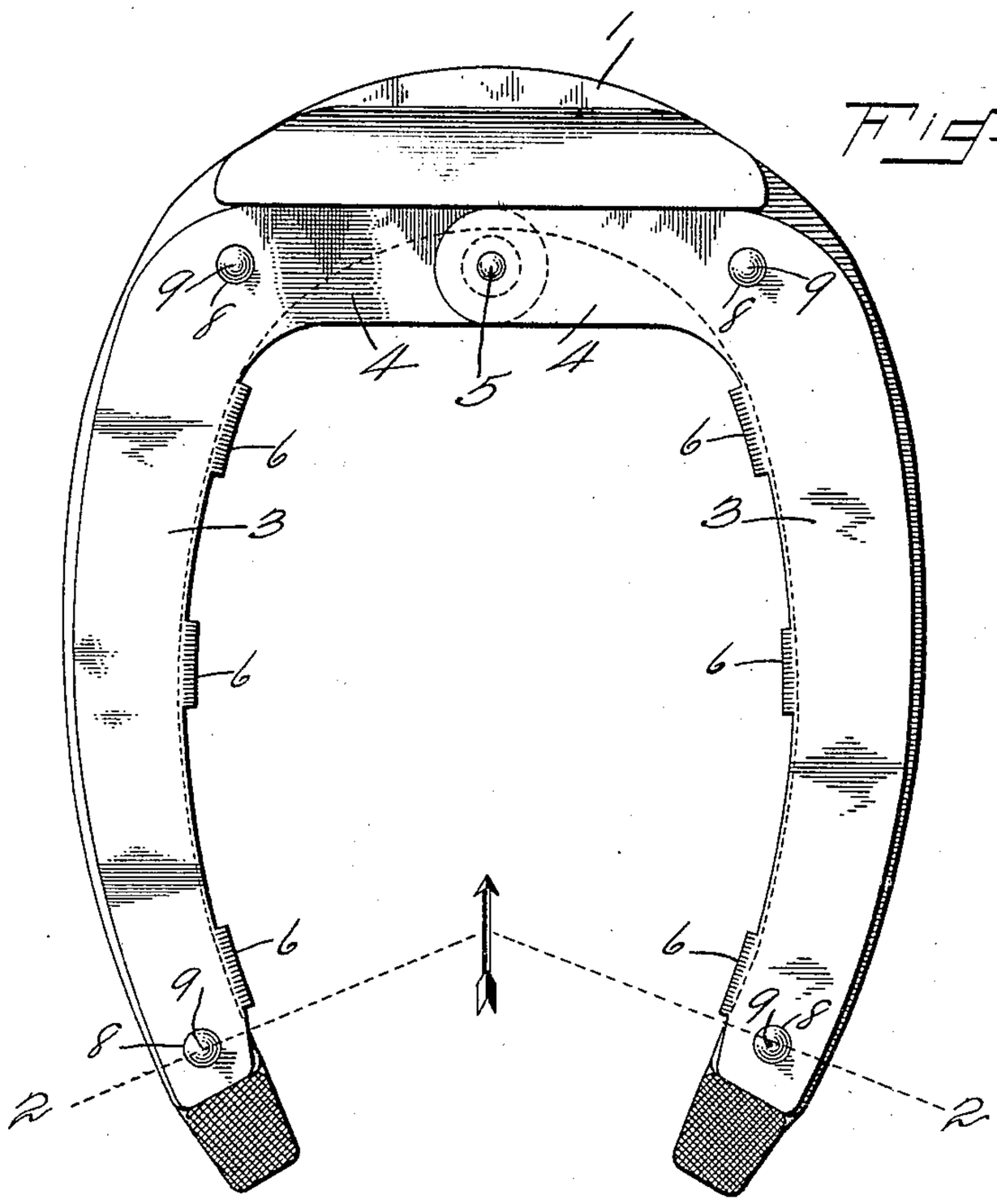
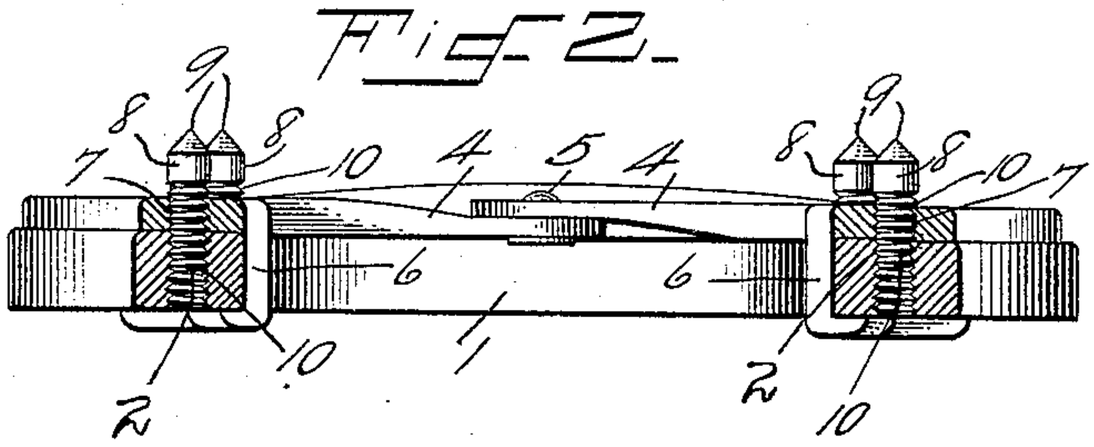


Fig. 2.



Witnesses.

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No. 774,031. Patented November 1, 1904.

UNITED STATES PATENT OFFICE.

PSALM T. BERTHOLF, OF LOCH SHELDRAKE, NEW YORK.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 774,031, dated November 1, 1904.

Application filed March 9, 1903. Serial No. 146,949. (No model.)

To all whom it may concern:

Be it known that I, PSALM T. BERTHOLF, a citizen of the United States, residing at Loch Sheldrake, in the county of Sullivan and State of New York, have invented certain new and useful Improvements in Horseshoe-Calks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to horseshoe-calks; and it consists of the novel features of construction and combination of parts hereinafter fully described, and particularly pointed out in the claim.

The object of the invention is to provide improved calks and a holder therefor which are readily applicable to any shoe and to shoes of different sizes.

In the accompanying drawings, Figure 1 is a bottom plan view of my invention, and Fig. 2 is a cross-section of the same on line 2 2 of Fig. 1.

Referring now more particularly to the drawings, the numeral 1 represents a horseshoe of ordinary construction which is provided with the usual toe piece or calk 11 and for purposes of application of my improved calk with threaded openings 2 at the toe and heel portions.

In carrying my invention into practice I provide a calk-holder consisting of a pair of bars 3 3, curved to conform to the quarters and heel portions of the shoe and provided at their forward ends with toe-pieces 4, which are pivotally connected by a pin 5. By this construction the bars may be readily adjusted to suit the size of horseshoe to which the calks are to be applied. Each bar is provided with a series of integral clips 6 to engage the shoe and at the toe and heel with threaded apertures 7 to receive the calks 8. Each calk has a conical end 9 to prevent slipping and a threaded shank 10, which fits within the threaded opening in the bar provided for its reception and is also screwed into one of the said threaded holes in the shoe, by means of which the calks are not only detachably secured to the arm, but also hold the parts in position thereon. The clips 6 are bent up on the inside of the shoe 1 and then outwardly over upon the top surface of the shoe.

The forward end of the calk-holder is preferably flattened transversely, so that when it is secured in position the flattened or straight portion will abut against the rear face of the toe-piece and the rear ends of the bars 3 will lie in front of the calks at the heel of the shoe. As the greatest strain exerted by the horse in pulling is to force the shoe backward, which will cause the toe-piece 11 to press against the forward end of the device, it is very desirable that said end be held firmly against said piece, which is accomplished by locating the holes through the shoe and the bars in the proper relative position to the toe-piece of the shoe to effect that result. As the strain upon the bars at the front or pivoted end is edgewise, the ends of the bars may be reduced in thickness to form the joint without destroying their utility and will permit of the main portions of the bars being thick enough to afford a substantial seat for the screw-threaded portions of the calks 8. It also permits of the pivot 5 being located to the rear of the inner edge of the shoe, whereby a head may be formed upon each side of the joint without having to recess the inner one to prevent the head of the rivet resting upon the face of the shoe, as would otherwise be the case.

The function of the holder formed by the two curved bars is to provide a reinforce for the calks, which if fitted alone in the threaded openings in the shoe would be liable to break too easily under strain. By mounting them upon the holder, however, a double connection is afforded, by means of which the calks are prevented from breaking under ordinary conditions of service.

The device is susceptible of application to any ordinary construction of horseshoe by simply forming the threaded openings in the shoe and applying the calks and holder thereto in the manner shown.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily apparent, it is thought, without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The combination, with a horseshoe provided with a toe-calk and having screw-threaded perforations formed in its main portion, of a removable calk-holder comprising two curved bars pivotally secured together at their forward ends, the bars being perforated to correspond with the perforations in the shoe and the forward end of the holder being straight or flattened transversely and resting against the rear face of said toe-calk when the perforations in the bars register with the perforations in the shoe, and a screw-threaded calk in each pair of registering holes, the outer end of which is sharpened.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PSALM T. BERTHOLF.

Witnesses:
JOHN REGAN,
JOSEPH MATZINGER.