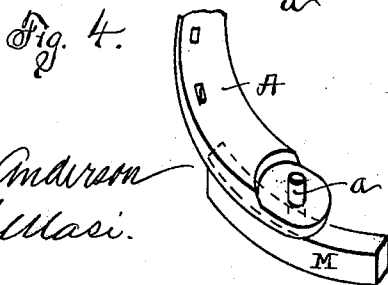
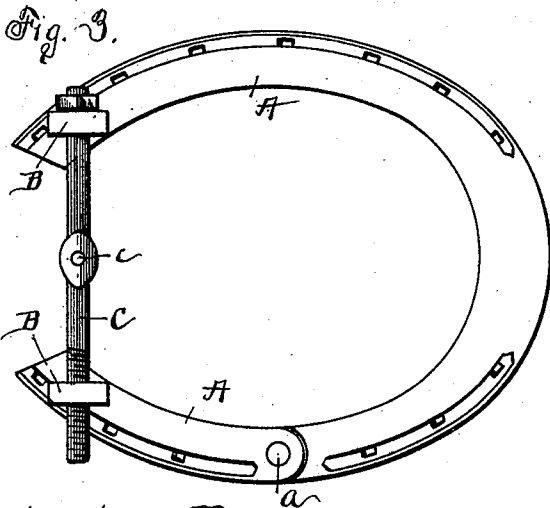
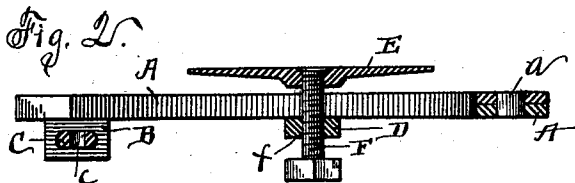
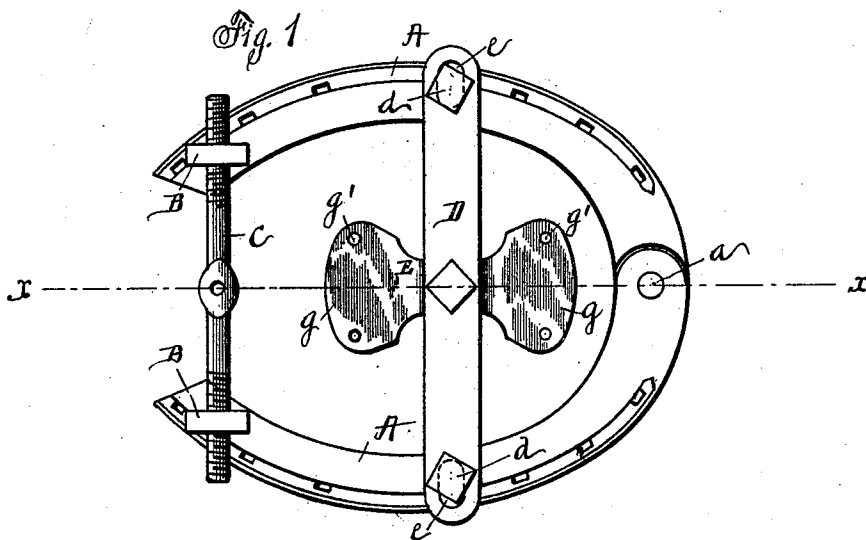


(No Model.)

J. H., J. R. & W. E. SMITH.
HORSESHOE.

No. 522,126.

Patented June 26, 1894.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN HENREY SMITH, JAMES ROBERT SMITH, AND WILLIAM EMMIT SMITH,
OF SNOHOMISH, WASHINGTON.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 522,126, dated June 26, 1894.

Application filed December 30, 1893. Serial No. 495,275. (No model.)

To all whom it may concern:

Be it known that we, JOHN HENREY SMITH, JAMES ROBERT SMITH, and WILLIAM EMMIT SMITH, citizens of the United States, and residents of Snohomish, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Horseshoes; and we 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a bottom plan view of the invention. Fig. 2 is a vertical section of same taken on line $x-x$, Fig. 1. Fig. 3 is a modification of the invention; and Fig. 4 is a view in detail showing the application of a toe calk.

This invention has relation to certain new and useful improvements in horse shoes, and has for its object the provision in an article of this character of means whereby it is especially adapted for use on the feet of horses affected with contracted hoofs, pumice feet, and lameness of the navicular joints, and kindred troubles; and the invention consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the appended claims.

Referring to the accompanying drawings illustrating the invention, the letters A, A, designate the two sections of which the body of the shoe is composed, said sections being of similar form and connected at the toe by a pivot a . The joint portions of said sections are reduced each to about one-half thickness, and overlap each other as shown, their bearing ends being of interfitting convex and concave form, as indicated.

B, B designate heel calks which are secured in the sections A, A in such a manner as to be capable of a limited rotary movement. Said calks have each a horizontal, screw-threaded aperture therethrough, said apertures form bearings for the screw-threaded portions of a transverse expansion rod C. By means of this rod the shoe may be expanded or contracted to the desired extent, the calks,

owing to their rotary movement, adjusting themselves so that the said rod will not bind. The central portion of the rod C is formed with an opening c for engagement with a suitable tool to facilitate turning.

A second feature of the invention consists in the provision of a transverse bar D about midway of the length of the shoe, said bar forming a support for a foot plate E. The bar D is secured to the lower surfaces of the sections A, A by means of removable screw-calks or lugs d, d , engaging threaded bearings in the said sections and passing through oval slots e in the bar, to permit the necessary adjustment of said bar as the shoe is expanded or contracted. At the central portion of said bar D is a threaded, vertical opening f which forms a bearing for a screw-bolt F, which carries the foot plate E. Said foot plate is formed with opposite wings g , having therein perforations g' .

In cases of pumice foot the shoe is applied to the hoof in the usual manner, and the screw-bolt F is turned to press the plate E firmly against the foot, holding it there until the trouble is relieved by nature.

In cases of lameness of the navicular joint, (the foot being very hollow and shrunken, crowding the navicular bone against the pedal bone and the latter against the frontal wall of the foot,) the horse-shoer fits the plate E nicely to the bottom of the foot, and secures it thereto by means of screws through the perforations g' . The screw-bolt F is then turned to retract said plate, this action drawing the foot down with it, and relieving the trouble. This feature of the invention may be readily applied to the common forms of shoes.

In Fig. 3 is shown a modification of the invention designed for use with horses having contraction upon one side of the foot only. In this modification the two sections are of unequal form, the joint a being in one side of the shoe about midway of its length, as shown. The expansion rod C is threaded only at that end which engages the shorter section, the other end being held in calk B.

Fig. 4 shows the manner in which a toe calk M may be applied.

While wearing the shoes herein described, the horse should not be used and should be

allowed to stand upon a soft or yielding surface.

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

1. In a horse shoe, the transverse bar secured thereto about midway the length of the shoe, the screw bolt having a bearing at the central portion of said bar, and the foot plate carried by said screw-bolt, substantially as specified.

2. In a horse shoe, the combination with the shoe formed in two sections pivotally jointed, the transverse bar D, the removable screw-bolts securing said bar to the shoe, said bar having enlarged bearing slots for said bolts, the central bearing in said bar, the screw-bolt engaging said bearing, and the foot plate car-

ried by said last named screw-bolt, substantially as specified.

3. In a horse shoe, formed in two sections jointed, the heel calks capable of a rotary movement, the expanding rod engaging bearings in said calks, the transverse bar D removably secured to the shoe about midway the length thereof, the screw-bolt carried thereby, and the foot plate carried by said screw-bolt, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN HENREY SMITH.
JAMES ROBERT SMITH.
WILLIAM EMMIT SMITH.

Witnesses:

GEO. W. ROLL,
J. V. BOWEN.