

No. 808,626.

PATENTED JAN. 2, 1906.

J. T. BELL.
HORSESHOE.

APPLICATION FILED JAN. 4, 1905.

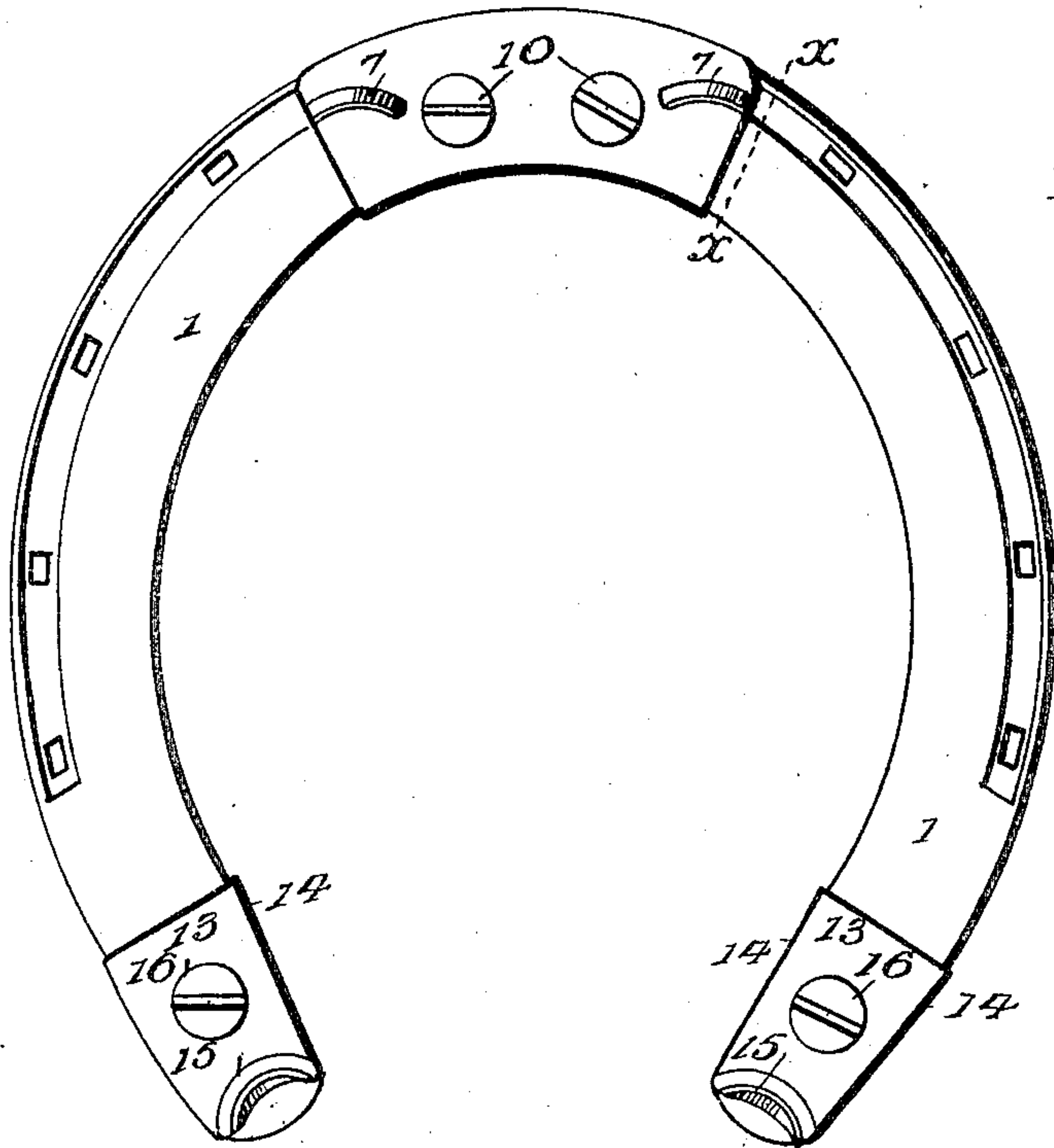


Fig. 1.

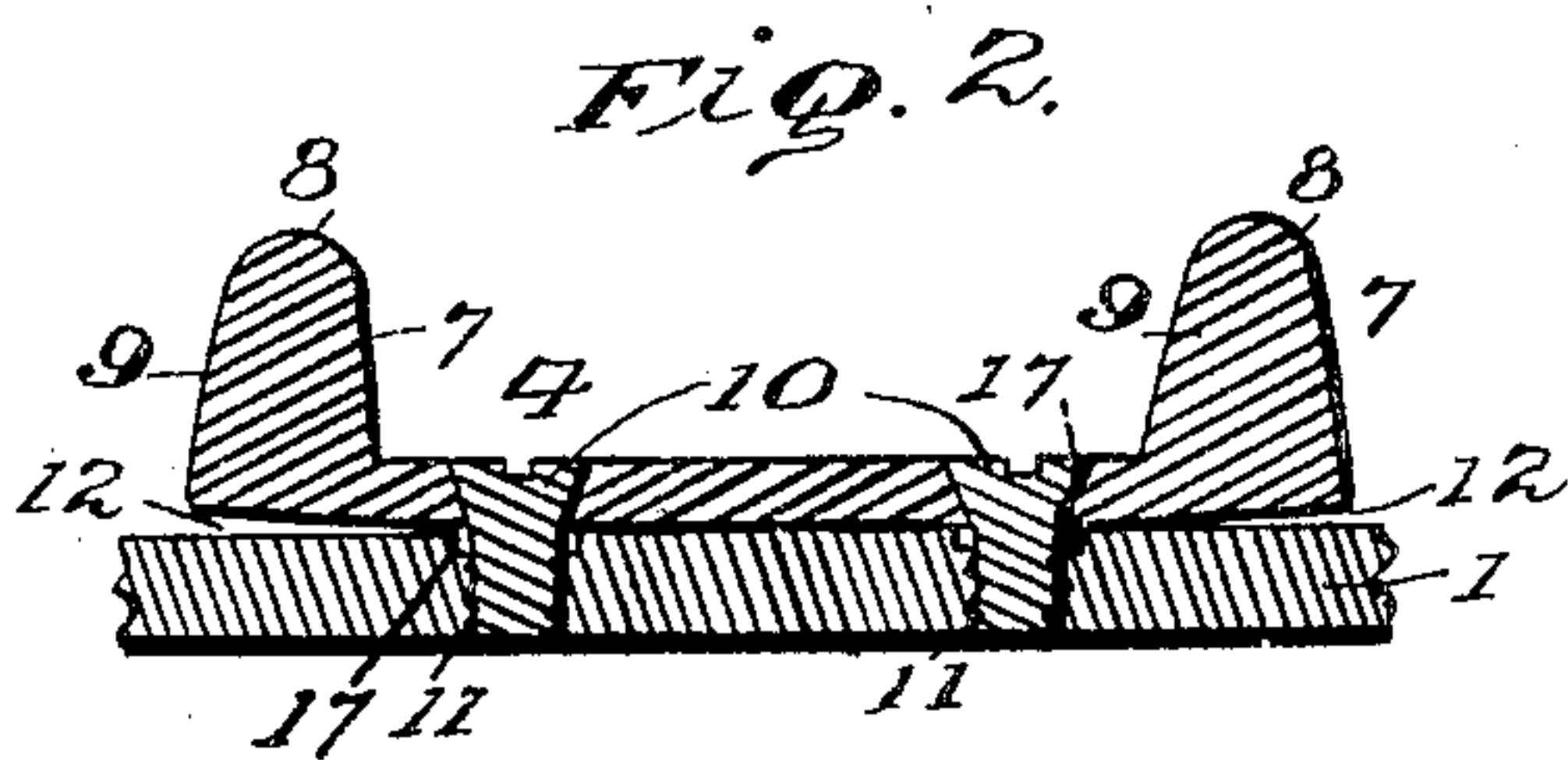


Fig. 2.

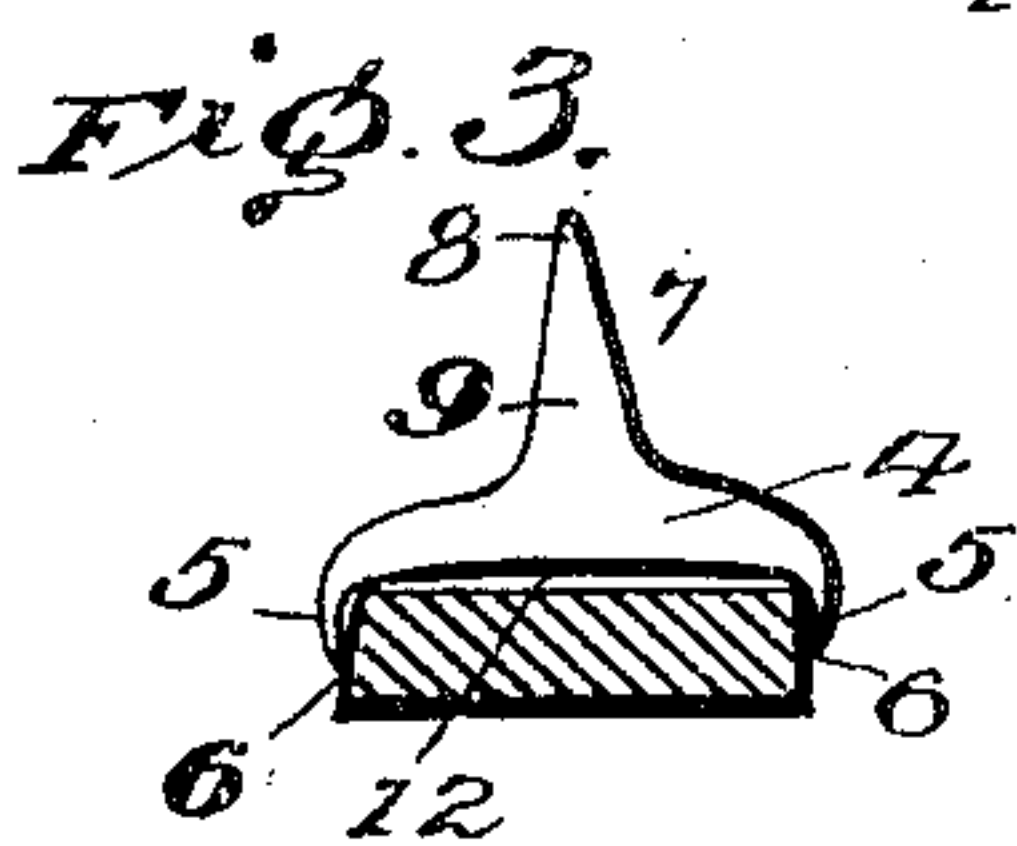


Fig. 3.

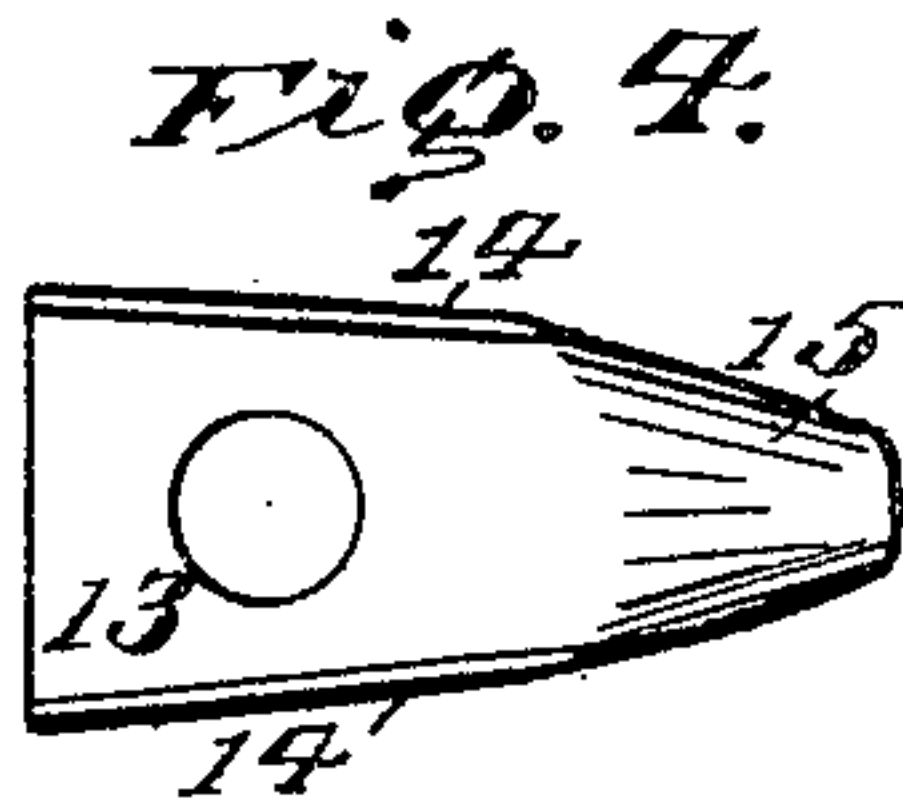


Fig. 4.

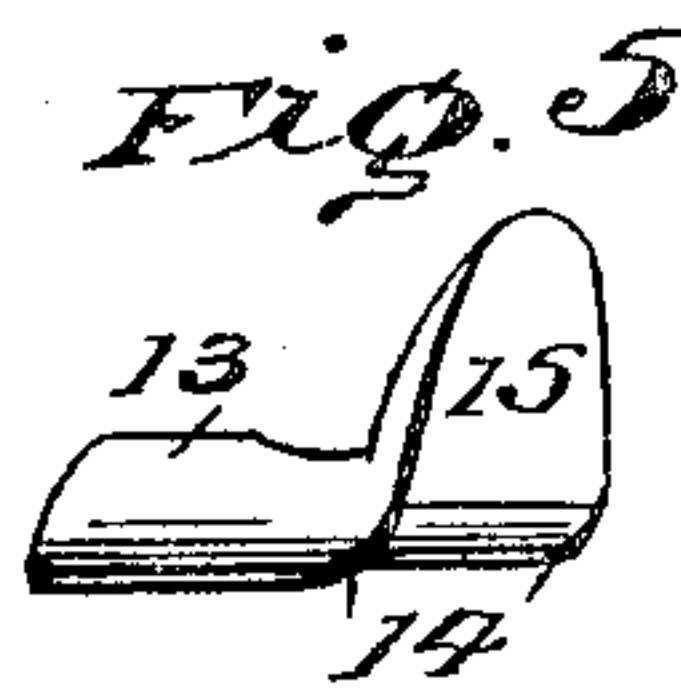


Fig. 5.

Inventor
Jesse T. Bell,

Witnesses

Harry L. Gould.
C. M. Catlin

By David W. Gould.

Attorney

UNITED STATES PATENT OFFICE.

JESSE T. BELL, OF WASHINGTON, NEW JERSEY.

HORSESHOE.

No. 808,626.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed January 4, 1905. Serial No. 239,559.

To all whom it may concern:

Be it known that I, JESSE T. BELL, a citizen of the United States, residing at Washington, in the county of Warren and State of New Jersey, have invented new and useful Improvements in Horseshoes, of which the following is a specification.

The invention relates to an improvement in horseshoes, and particularly to removable heel and toe calks therefor.

The main object of the invention is the provision of calks designed to be removably secured to the shoe and to be somewhat yieldingly arranged, so as to avoid the wear incident to the usual permanent calk.

The invention further provides a double toe-calk the calk-spurs of which are arranged in a line at right angles to the length of the shoe, the outer edge of each toe-calk being in direct longitudinal alinement with the inner edge of the heel-calk, so that the strain on the calks incident to the use of the shoe is in a direct line lengthwise the shoe.

The invention in its detailed construction is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a horseshoe provided with the calks of my invention. Fig. 2 is an enlarged transverse section through the toe-calks. Fig. 3 is a section on line $x-x$ of Fig. 1. Fig. 4 is a bottom plan of a heel-calk prior to the upbending of the spur. Fig. 5 is a perspective of a completed heel-calk.

Referring to the drawings, 1 represents a horseshoe, 2 the toe-calk, and 3 the heel-calks. The toe-calk comprises a plate 4, shaped on its edges to conform to the shape of the shoe, thickest at its central longitudinal portion, with its free edges terminating in knife-edges 5, arranged to snugly engage the side edges of the shoe-body, as at 6. The plate 4 is provided with spurs or calks proper, 7, two in number and positioned adjacent the respective side edges of the plate. These calks, which are the usual curved shape, having knife-edge ends 8 and thicker body portions 9, are arranged in a line at right angles to a line drawn longitudinally through the shoe—that is, the toe-calks are at right angles to the length of the shoe and in direct transverse alinement with each other. The plate 4 is secured to the shoe-body by screws 10, seating in the plate and taking into a threaded opening 11, formed in the shoe. For a greater portion of its transverse length the plate 4 rests squarely upon and is supported directly by the

shoe-body; but that portion of the plate directly underlying the calks proper is cut away to provide a narrow space 12 between the plate 4 and the shoe-body. This space is material, as it permits a slight yield in the plate 4 when the calks are brought into contact with the ground, thus saving a large portion of the wear of the calk incident to the initial contact of the calk with the ground.

The heel-calks comprise plate 13, having depending edges 14, one end of which plate is reduced to provide the heel-calk proper, 15. The edges 14 snugly embrace the side edges of the shoe, the plate being held in place on the shoe by screw 16, as described in connection with the toe-calk.

The toe-calk and heel-calks are each constructed of a single piece of wrought material, the calks proper of the toe-calk being drawn up from the material, while the heel-calk is preferably formed, as shown in Fig. 4, with the projecting end 15 bent downwardly to provide the calk proper. It will be noted that the outer edge of each calk 7 is in longitudinal alinement with the inner edge of each respective heel-calk 15, so that the strain incident to the use of the calks is in a direct line longitudinally of the shoe, whereby each calk in a measure reinforces the others and acts to distribute the strain. Furthermore, it will be noted that the arrangement of the toe-calks in a line transverse or at right angles to the longitudinal dimension of the shoe will materially prevent direct rearward slipping, while the arrangement of the heel-calks at an angle to the line of position of the toe-calks will tend to prevent lateral slipping. It will be noted that the mouth of the opening 11 in the shoe is enlarged at 17 and that this mouth portion is not threaded. This serves as a protection to the threads in opening 11 when the shoe is used without the calks.

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

1. A horseshoe comprising a body portion and a toe-calk secured thereto, said toe-calk comprising a plate conforming in curvature to the curvature of the body portion and provided with side flanges to snugly fit the edges of the body portion throughout the length of the plate, calks projecting in spaced relation from said plate and arranged in alinement at right angles to the longitudinal dimension of the body portion, and duplicate securing means for attaching the plate to the body por-

tion, the surface of the plate next the body portion being cut away at an incline from each securing means to the free end of the plate.

- 5 2. A horseshoe comprising a body portion and a toe-calk secured thereto, said toe-calk comprising a plate conforming in curvature to the curvature of the body portion and provided with side flanges to snugly fit the edges
10 of the body portion throughout the length of the plate, calks projecting in spaced relation from said plate and arranged in alinement at right angles to the longitudinal dimension of the body portion, and duplicate securing

means for attaching the plate to the body por- 15
tion, the surface of the plate next the body portion being cut away at an incline from each securing means to the free end of the plate, the surface of the plate between the securing means resting squarely against the 20
surface of the body portion.

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

JESSE T. BELL.

Witnesses:

WILLIAM H. MOWDER,
DAVID N. WEISE.