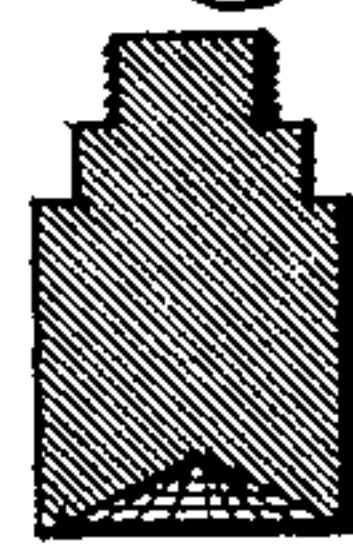
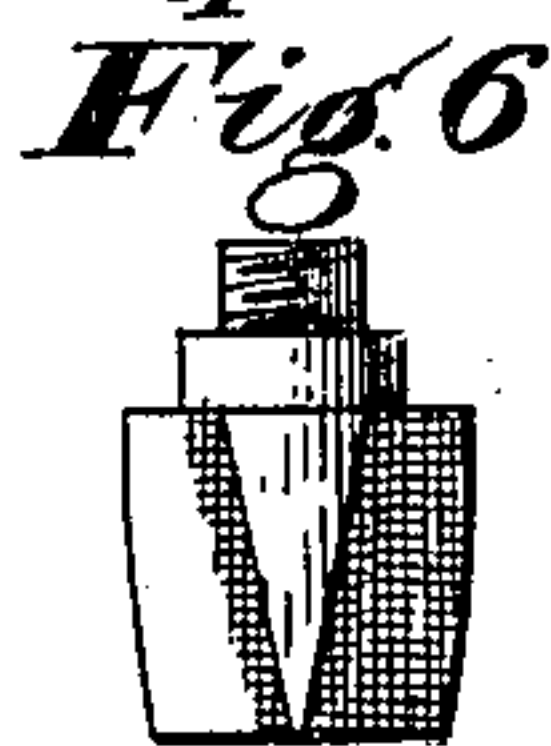
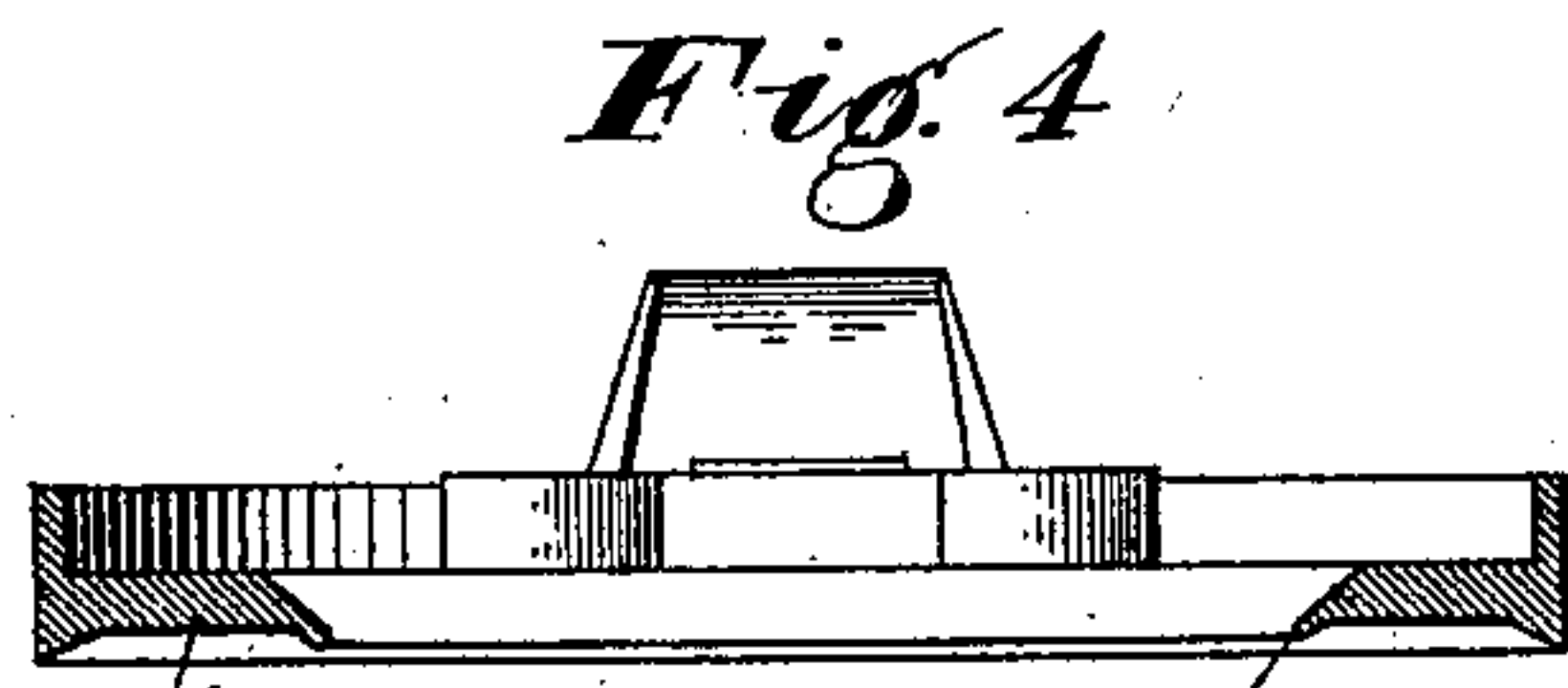
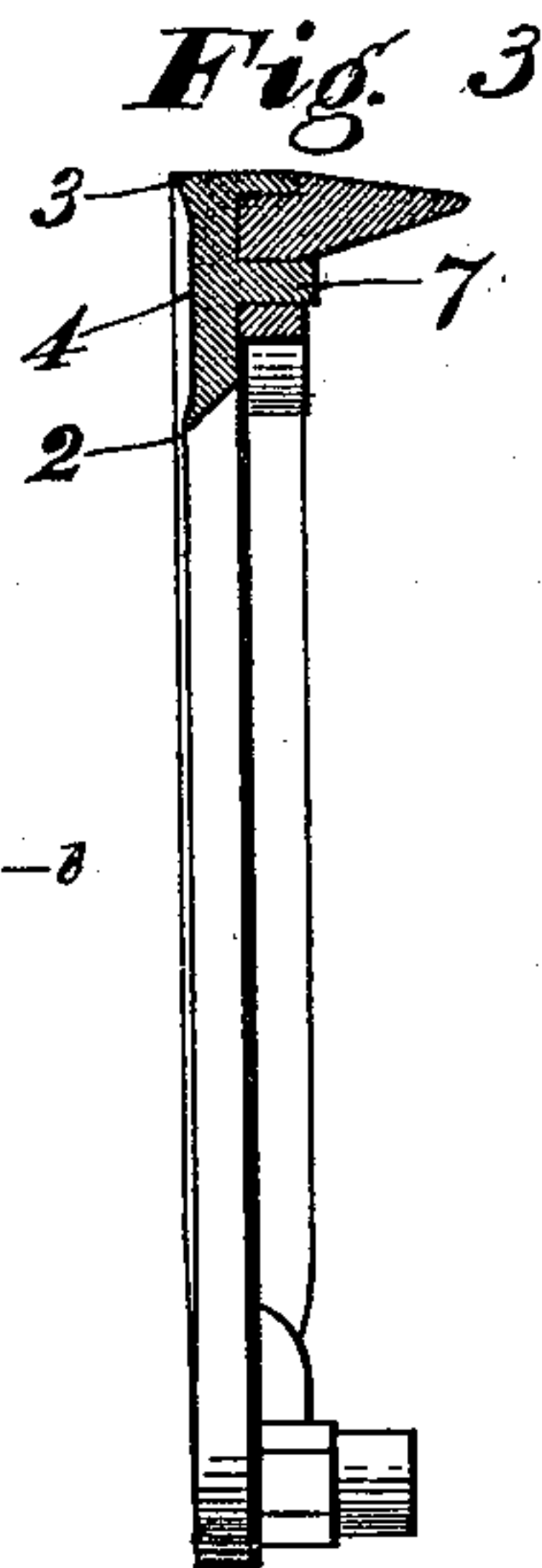
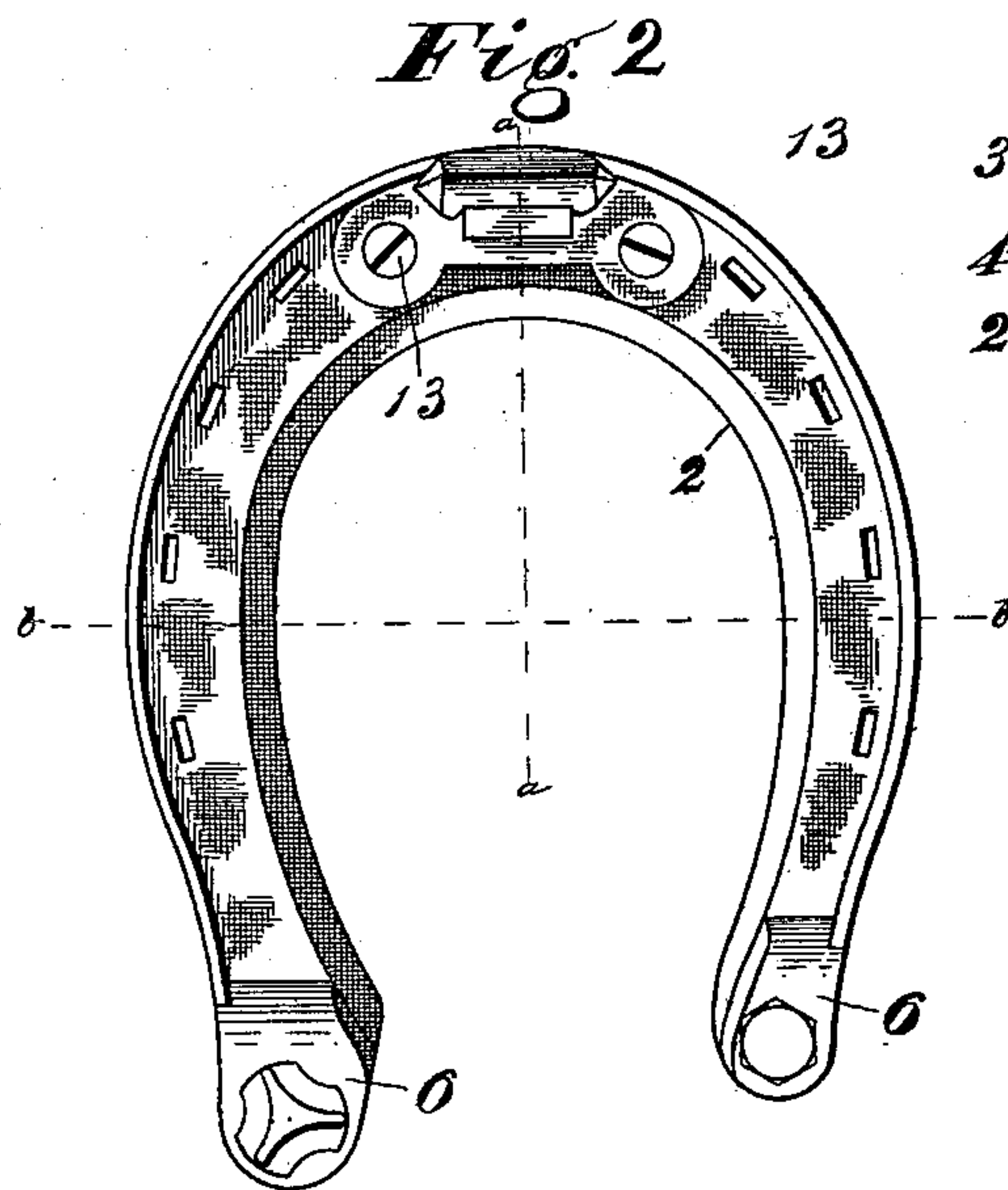
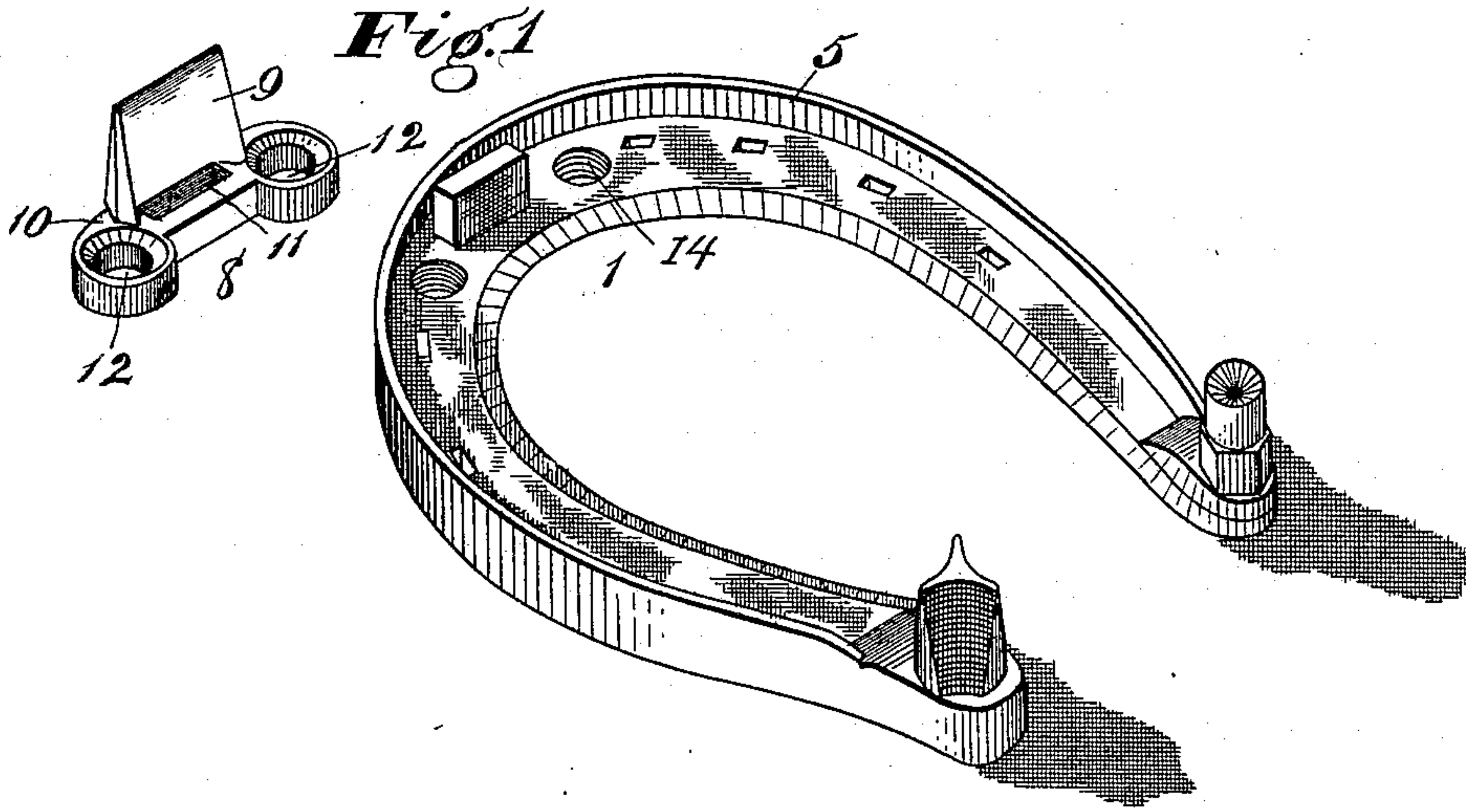


(No Model.)

J. KASS.
HORSESHOE.

No. 592,651.

Patented Oct. 26, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN KASS, OF MENOMINEE, MICHIGAN.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 592,651, dated October 26, 1897.

Application filed March 26, 1897. Serial No. 629,420. (No model.)

To all whom it may concern:

Be it known that I, JOHN KASS, a citizen of the United States, residing at Menominee, in the county of Menominee and State of Michigan, have invented certain new and useful Improvements in Horseshoes; and I do hereby 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 10 is appertains to make and use the same.

My invention has relation to horseshoes; and the object thereof is to provide the lightest and most durable shoe consistent with the use of a minimum amount of material.

15 It will be observed from the following description, taken in connection with the accompanying drawings, that I have so formed the body of the shoe that the wearing parts thereof have been reinforced, while that portion of the shoe not subject to much wear or strain has been proportionately lightened.

A further object of my invention is to provide a construction which will enable the toe or heel calks to be readily removed or replaced, a reliable seat for said calks being provided.

25 In the accompanying drawings, Figure 1 is perspective detail of my improved shoe and toe-calk, the latter being ready to drop into its operative position. Fig. 2 is a bottom plan view of the shoe, showing all the parts in position. Fig. 3 is a section of Fig. 2 on line *a a*. Fig. 4 is a cross-section of Fig. 2 on line *b b*. Fig. 5 is a longitudinal sectional view of a preferred form of calk, while Fig. 6 is a side view of a modified form thereof.

Reference to the various details will be had by figures, the same figure being applied to the same part throughout the views.

40 Briefly stated, my invention may be said to consist in providing that the body proper, 1, of the shoe shall be comparatively very thin, as indicated by the sectional views of the drawings, while upon the upper side and inner edge thereof I prefer to form the annular rim 2, while upon the outer edge is provided the annular retaining-wall 3, both of which are preferably integrally formed with the body. By this construction it will be 45 seen that a seat 4 is provided between the outer and inner edges of the upper surface, designed to receive and retain a cushion

formed of any suitable yielding material, as felt or the like. The object of thus providing a cushion is to take up or partly nullify 55 the blows incident to the use of the shoe, thus cushioning the foot and producing desirable results.

Upon the outer edge of the lower face of the shoe I form the downwardly-extending 60 annular wall or rim 5, designed to receive the greater amount of wear upon the shoe, thus making it possible to leave the body-section 1 very thin. Said wall 5 is also preferably formed with the body, thus becoming an integral part thereof. Said wall, in addition 65 to receiving the greater amount of wear, also provides a means for causing the shoe to take a reliable grasp upon the surface of the ground.

70 The heel of the shoe is preferably thickened or reinforced, providing the calk-seats 6, in which the heel-calks of any preferred construction may be seated. The seats 6 are preferably so formed that their lower faces 75 will lie in the same plane occupied by the lower edge of the wall 5, which merges into and becomes part of said seat.

In order to securely lock the toe-calk in position, I provide the post 7, integrally formed 80 with or otherwise secured to the body, and designed to fit over said post is the toe-calk 8, having the point 9 and the base-plate 10, substantially as shown. Said base-plate is provided with a suitable aperture or mortise 85 11, designed to receive the post 7, and is also provided upon either end with the apertures 12, through which extend the retaining-screws 13, the threaded ends of which take into the threaded apertures 14, provided in the body. 90 I prefer that the toe or point proper, 9, shall project slightly over the front edge of the plate, thus providing a recess between the plate and toe designed to receive the contiguous section of the wall 5, thus leaving the 95 front face of the toe-calk and the outer face of said wall preferably flush or on a line with each other.

In Figs. 5 and 6 I have illustrated preferred forms of calks, Fig. 5 showing a calk the body 100 of which is preferably cylindrical, though it may be of any suitable shape, while the inner portion is hollowed out, causing the end thereof to present a concavity. By this con-

struction an annular rim is provided for the bottom of the calk, which will reliably hold it against slipping. A reliable form of calk is also illustrated in Fig. 6, which is shown
5 as triangular in general outline, presenting a cutting edge and retaining-points.

By the construction herein presented it will be seen that I have provided a horseshoe of great strength and rigidity, although a
10 comparatively small amount of material is employed in its construction. By the arrangement shown the retaining-screws employed to hold the toe-calk in position may be readily removed from their seats, thus permitting said
15 calk to be withdrawn from its seat when it is not deemed necessary to use the same. Said calk may readily be replaced in position by entering the same over the post 7 and replacing said screws. This operation, it will be un-
20 derstood, may be performed while the shoe is securely nailed in the usual manner to the hoof. The heel-calks, being held in position in their seats by the threaded shanks formed integrally therewith, may also be easily re-
25 moved and replaced as circumstances may indicate as desirable.

Believing that the advantages, use, and construction of my improved horseshoe will be made fully apparent from the foregoing de-
30 scription, considered in connection with the accompanying drawings, further reference to the details involved is dispensed with.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described horseshoe, consisting of the body; annular rims formed integrally with said body and located upon the inner and outer edge of the upper surface thereof, said body being further provided
40 with an integrally-formed downwardly-extending outer rim; a retaining-post for the toe-calk; threaded apertures upon either side of said post; a toe-calk consisting of a point and base-plate, the latter having a mortise to
45 receive said post; retaining-screws passing through said base-plate and into said threaded apertures, and calk-seats formed integrally with the ends of the shoe designed to receive the threaded shanks of the heel-calks, sub-
50 stantially as described and for the purpose set forth.

2. In a horseshoe, the combination with a body having an integral outer rim, and an integral retaining-post, of a toe-calk having a
55 recess on its outer side to receive the outer rim of the shoe; and further provided with an aperture in the inner part of the base-plate to receive said post, substantially as set forth.

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

JOHN KASS.

Witnesses:

C. PORTERFIELD,
A. L. SAWYER.