

(No Model.)

M. S. HESS.  
BICYCLE SHOE.

No. 468,223.

Patented Feb. 2, 1892.

Fig 1.

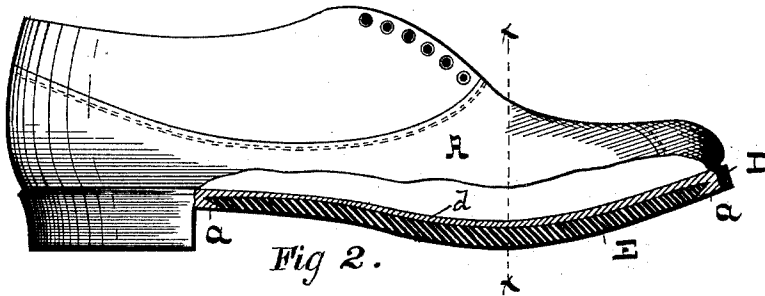


Fig 2.

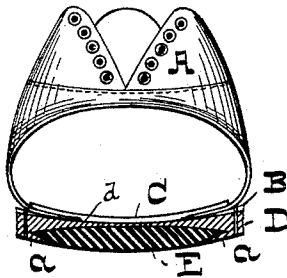
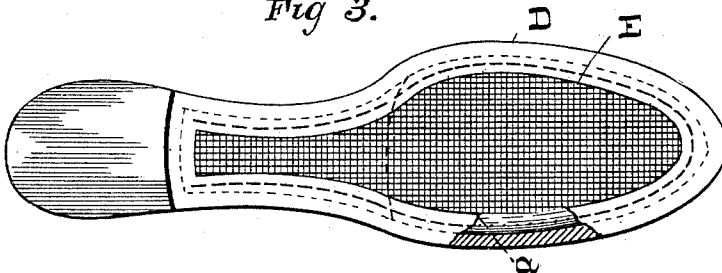


Fig 3.



-WITNESSES-

✓ Dan'l Fisher  
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-INVENTOR-

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# UNITED STATES PATENT OFFICE.

MYER S. HESS, OF BALTIMORE, MARYLAND.

## BICYCLE-SHOE.

SPECIFICATION forming part of Letters Patent No. 468,223, dated February 2, 1892.

Application filed July 30, 1891. Serial No. 401,163. (No model.)

### *To all whom it may concern:*

Be it known that I, MYER S. HESS, of Baltimore, Maryland, have invented certain improvements in Bicycle-Shoes, of which the following is a specification.

This invention relates to certain improvements in that class of shoes in which the sole thereof is of composite construction—that is to say, the sole is formed of leather and rubber, the rubber constituting the tread or outer surface, and the leather the backing to which the rubber is attached.

The ultimate object of the invention is the construction of a shoe especially adapted to the use of bicycle-riders, in that it has a stout but extremely flexible sole. To effect this result, the outer leather sole or the larger portion of it is provided with a cove or curved recess, and within this recess is secured a piece of rubber, which constitutes the tread of the shoe. This tread not only fills the cove or recess, but completes the original contour of the sole as seen from either a longitudinal or a transverse section of the same. The edge of the rubber tread, which is brought to practically a feather-edge, is preferably secreted under a small flap formed by undercutting the leather, and after the tread is cemented to the leather the flap is drawn over the edge and the whole secured by means of stitches or pegs.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a partly sectional side view of a shoe made in accordance with the present improvement; and Fig. 2, a cross-section of the same, taken on the dotted line *xx*. Fig. 3 is an under side view of the shoe with a portion of the flap torn away to show the edge of the tread.

Similar letters of reference indicate similar parts in all the figures.

Referring to the drawings, A represents the upper; B, the welt; C, the insole, and D the outer sole, which is of leather. A recess is formed in the sole D by removing a portion of the body of the leather from its tread-

surface in such manner as to leave a thickness of leather *d* the full outline of the sole on its upper side. The surrounding edge of the recess is undercut to form an overhanging flap *a*, and a marginal flange, the full thickness of the leather, is thus left around the recess.

E designates the rubber filling-piece or tread inserted in the recess formed in the sole and bearing against the thin portion *d* thereof. The circumferential edge of the rubber filler is beveled to adapt it to fit under the flap *a*, and the leather sole and rubber filler are fastened together and to the upper in any suitable manner, but preferably by stitching.

The principal reason for using the flap is that rubber is liable to tear when sewed, the stitches cutting the spaces between the holes made by the needle. By having the covering-flap of leather the tearing of the rubber is entirely prevented. The flap construction also produces a better finish, as the feather-edge of the rubber is not exposed, and, further, a rubber tread with an exposed edge is more easily torn off than when the edge is covered, as shown in Figs. 1, 2, and 3.

In some cases the rubber tread may stop at the dotted line, Fig. 3, which would give a shank entirely of leather.

I claim as my invention—

In a shoe, a leather sole having a portion of the body on its tread-surface removed, leaving a thickness of leather on the upper side of said leather sole the full outline thereof, and formed with a beveled or undercut recess, leaving a marginal flange the full thickness of the sole, and a rubber filling-piece provided with a circumferential beveled edge inserted in the cut-away portion of the leather sole and extending into the beveled or undercut recess thereof, the whole being united to an upper, substantially as and for the purpose set forth.

MYER S. HESS.

Witnesses:

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