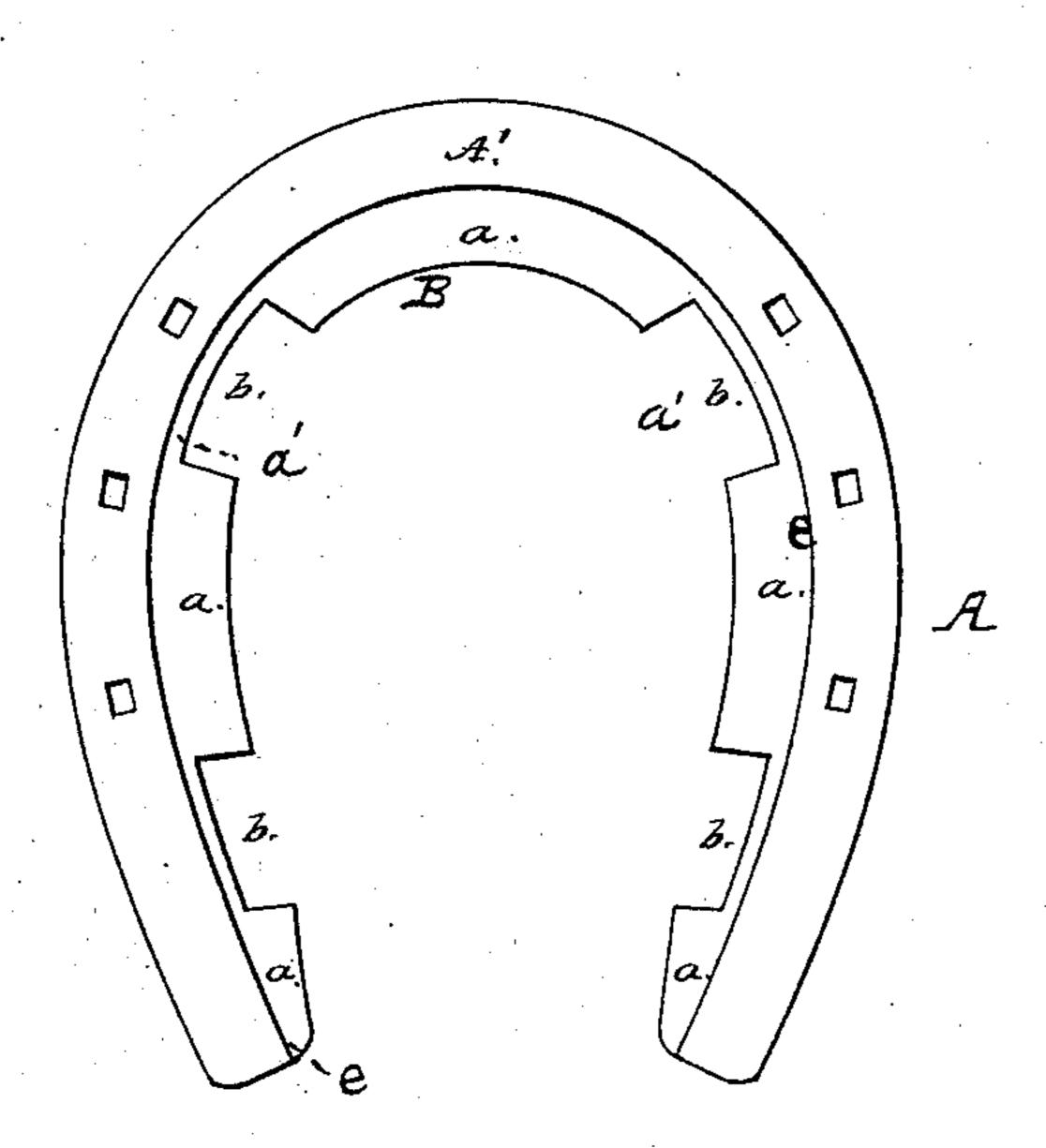
T. B. BISHOP.

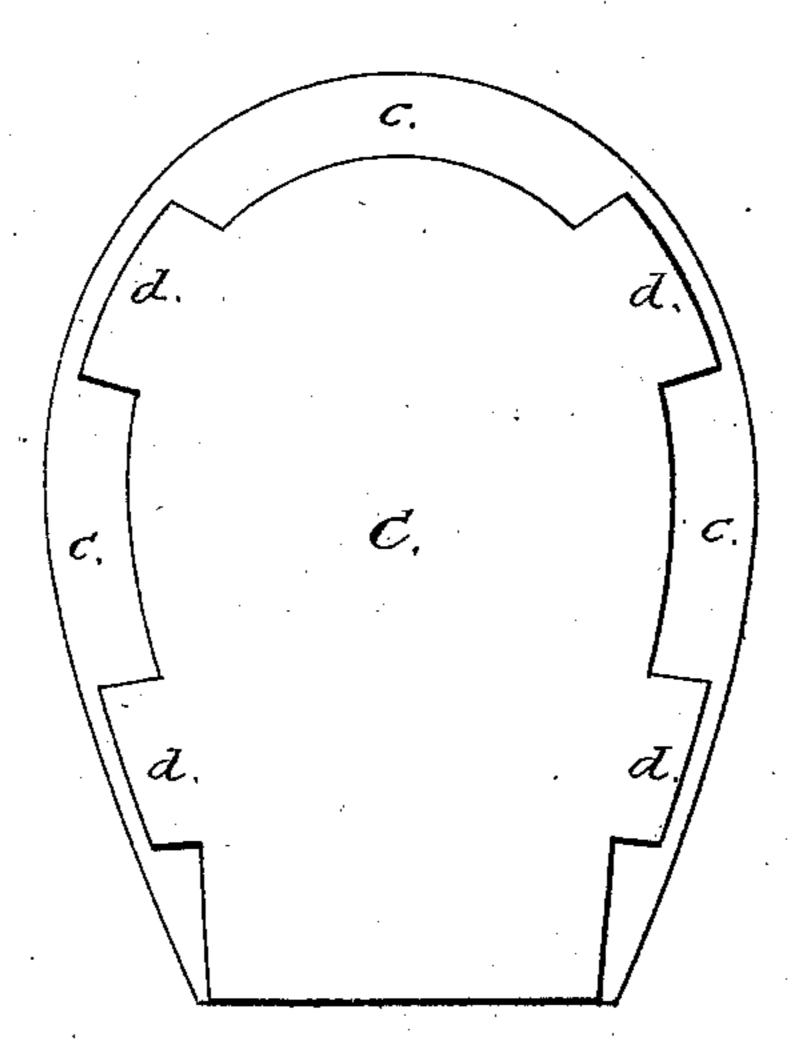
ELASTIC SOLE AND HORSESHOE.

No. 176,733.

Patented May 2, 1876.

Fig.1.





Witnesses: OH. Maoward W. Rens

Inventor:

J. B. Bushop

UNITED STATES PATENT OFFICE

THOMAS B. BISHOP, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN ELASTIC SOLES AND HORSESHOES.

Specification forming part of Letters Patent No. 176,733, dated May 2, 1876; application filed January 17, 1876.

To all whom it may concern:

Be it known that I, Thomas B. Bishop, of Washington city, in the county of Washington and District of Columbia, have invented a new and Elastic Sole and Shoe for Horses' Feet; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top view of my improved horseshoe with the elastic sole removed, and Fig. 2 is a top view of the elastic sole with its

bottom face uppermost.

The object of my invention is to prevent injury to the sensitive parts of horses' feet, and thus avoid diseases which arise from this cause, by interposing between the sole of the foot and the shoe a cushion of india-rubber, which will afford an elastic bearing to the foot, allow a natural expansion thereof, the frog of the foot being covered to pretect it from injurious contact with hard substances, and to prevent "balling" with snow or soft earth, and at the same time to make the iron shoe as light, and that part of it which comes in contact with the horse's hoof as narrow, as possible, so that the shoe will be in effect a close resemblance to a shoe made entirely of indiarubber, the latter being made to extend nearly over the entire sole of the foot, the iron being employed mainly as a means of supporting the elastic sole and attaching it to the foot.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, A (see Fig. 1) represents my improved horseshoe, that part, A', which comes in contact with the horse's foot being made narrower than in an ordinary shoe, and provided in forging it with a flange, B, extending entirely around the opening in the shoe. The continuous flange B is depressed below the upper face A' of the shoe, forming an abutting shoulder, e, against which the marginal web of the elastic sole, hereinafter described, impinges, affording a stop and support thereto, and confining the elastic sole in its seat. Recesses b b are then cut out of the flange, leaving projections a a' for the support of the elastic sole.

The flange B and its projections a a' are made as thin as possible, consistent with their function of supporting the elastic sole, so as to render the shoe as light as possible, the main object of my invention being to approach as near as possible an entire rubber shoe, the iron shoe being employed merely as an instrument to support the elastic sole, and as a means of attaching it to the horse's foot.

C represents the elastic sole, made preferably of vulcanized rubber, which can be made of the proper form by means of molds in the usual manner of manufacturing rubber articles. The elastic cushion or sole consists of a thin marginal web, which is interposed between the sole of the foot and the thin flanges $a \ a'$, the entire top surface of the elastic sole being in contact with the sole of the horse's foot. Recesses $c \ c$ are made in the thick portion of the rubber, forming projections $a \ a'$, which fit into the corresponding recesses $a \ b'$ in the iron shoe, the projections $a \ a'$ in the shoe fitting into the recesses $a' \ c'$ in the rubber sole.

By this construction, the elastic sole is securely attached to the shoe, while at the same time it can readily be detached therefrom, and an extremely light shoe, with a large rubber surface in contact with the sole of the horse's foot, is obtained, the thick portion of the rubber forming an artificial frog, projecting, preferably, below the face of the iron shoe.

What I claim as new, and desire to secure

by Letters Patent, is—.

The iron shoe A, provided with a thin continuous flange, extending inwardly entirely around said shoe, and depressed below its upper face A', and having a continuous shoulder, e, recesses b b, and projections a a, in combination with the elastic sole C, having a continuous marginal web extending entirely around said sole, and provided with recesses c c and projections d d, substantially as described and for the purpose set forth.

THOMAS B. BISHOP.

Witnesses:
HUBERT HOWSON,
FRANK MUNDY.