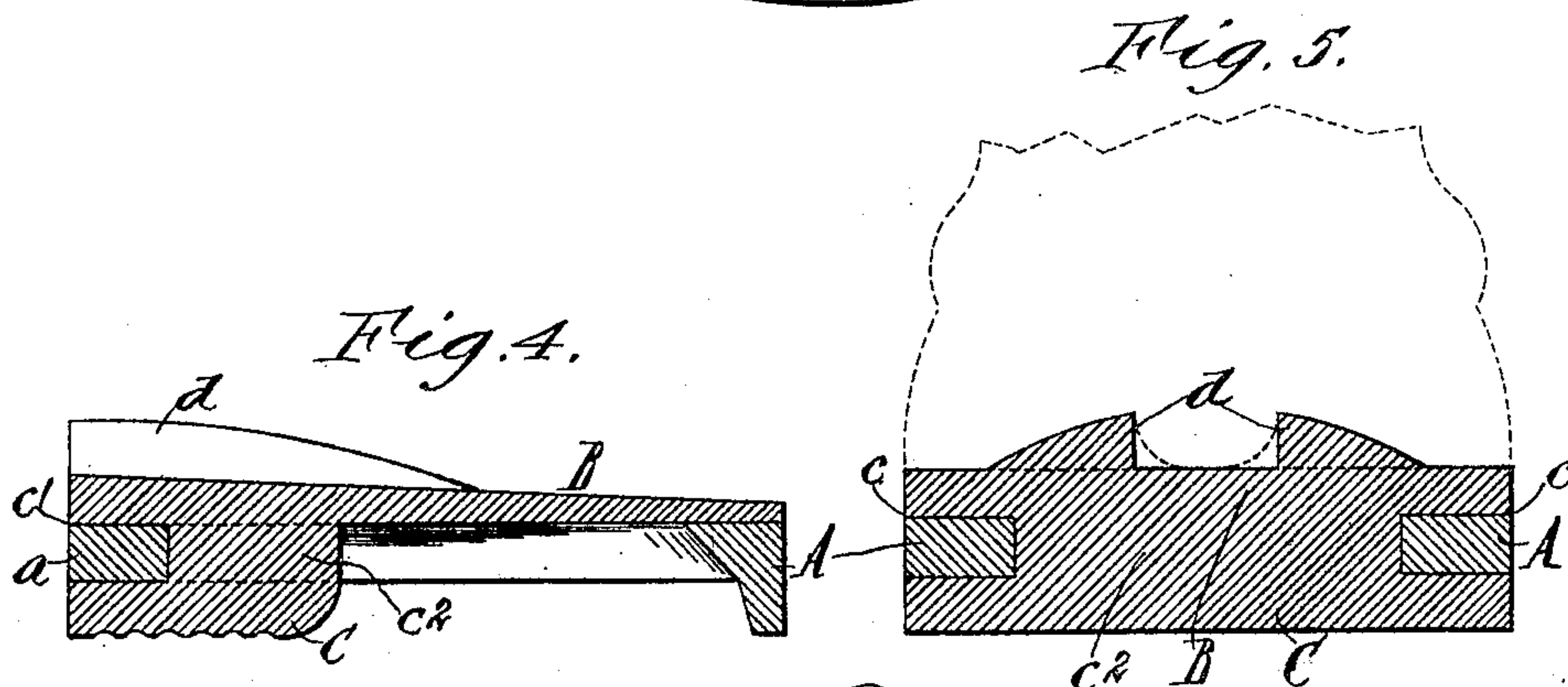
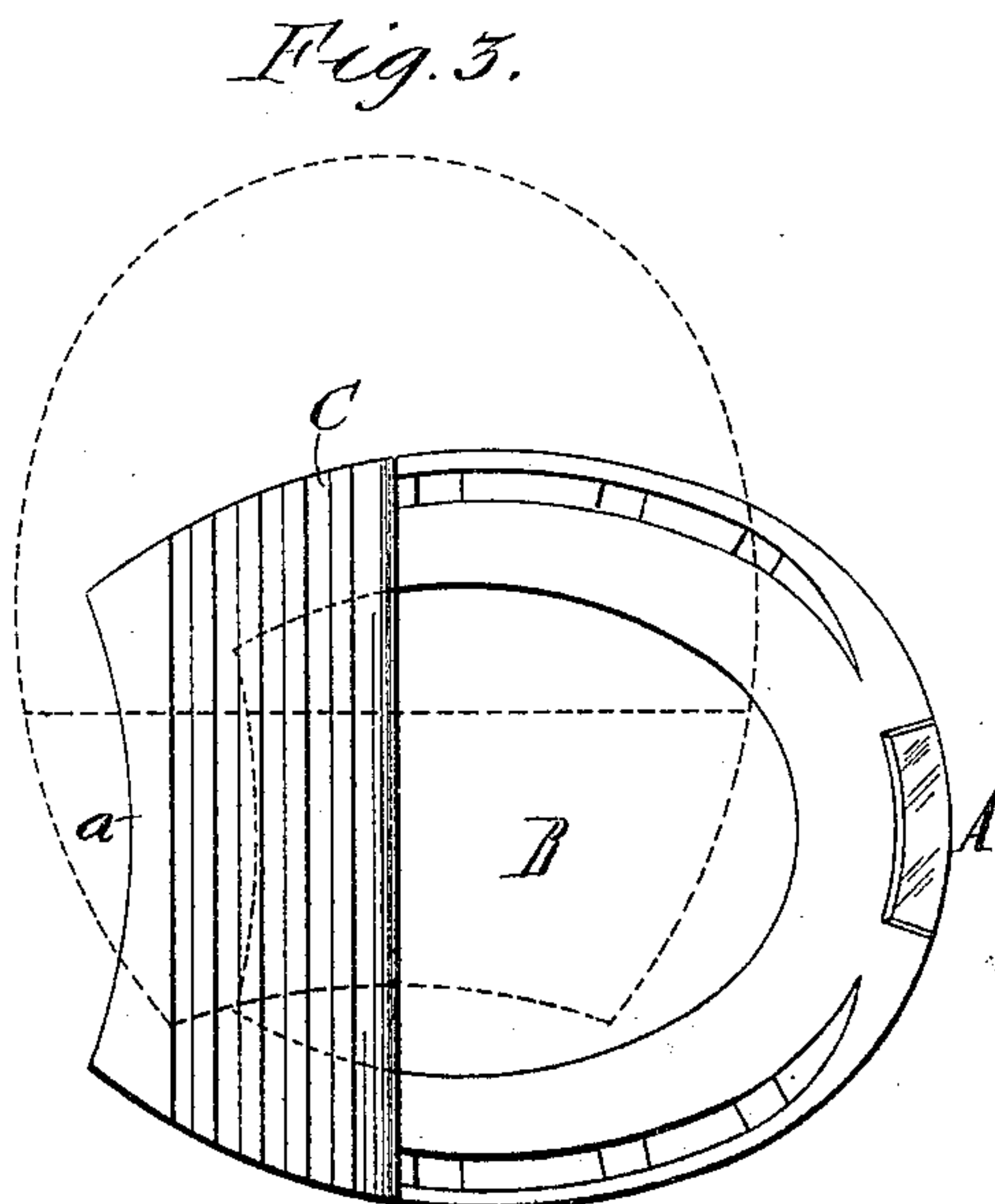
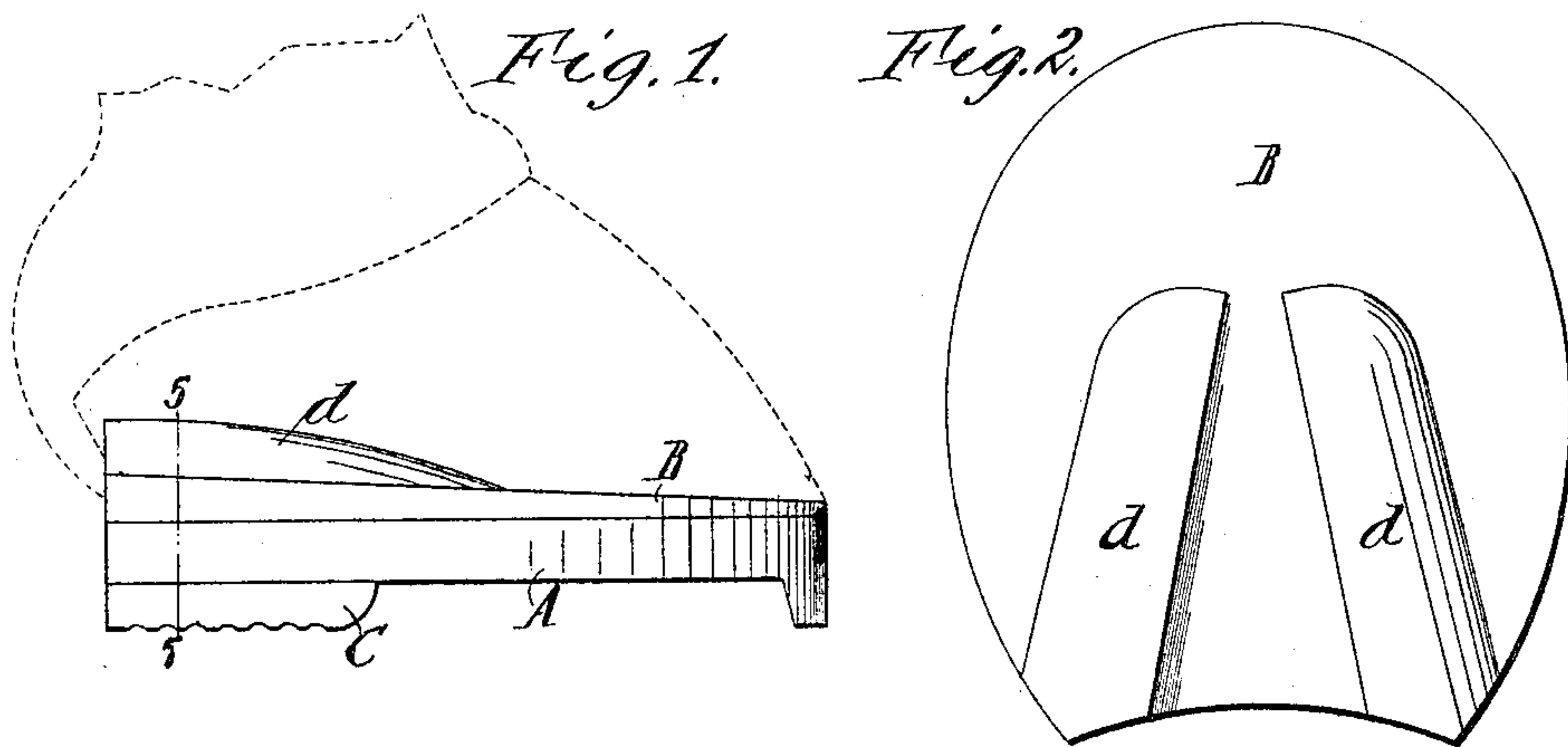


No. 803,211.

PATENTED OCT. 31, 1905.

P. CLIFFORD.  
HORSESHOE CUSHION.  
APPLICATION FILED JULY 24, 1905.



Witnesses:  
Louis W. Gratz.  
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# UNITED STATES PATENT OFFICE.

PATRICK CLIFFORD, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF  
TO DENNIS J. CORBETT, OF BUFFALO, NEW YORK.

## HORSESHOE-CUSHION.

No. 803,211.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed July 24, 1905. Serial No. 270,905.

*To all whom it may concern:*

Be it known that I, PATRICK CLIFFORD, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Horseshoe-Cushions, of which the following is a specification.

This invention relates to the rubber pads or cushions which are applied to ordinary iron horseshoes for relieving the foot from severe concussion and preventing the animal from slipping.

One of the objects of my invention is to provide a simple cushion of this character which can be readily applied and which presents a large tread-surface practically coextensive with the width of the shoe.

A further object is to provide the cushion with effective means for spreading the bars or portions of the hoof at opposite sides of the frog, so as to retain the same in their normal condition and prevent contraction of the hoof.

In the accompanying drawings, Figure 1 is a side elevation of the cushion applied to a horseshoe. Fig. 2 is a top plan view of the cushion. Fig. 3 is a bottom plan view of the cushion and the horseshoe. Fig. 4 is a longitudinal central section thereof. Fig. 5 is a cross-section in line 5 5, Fig. 1.

Similar letters of reference indicate corresponding parts throughout the several views.

A indicates an iron horseshoe of the closed type having a rear cross-bar *a* and commonly called a "bar-shoe."

B indicates the improved pad or cushion, preferably constructed of soft rubber and consisting of a body or main plate interposed between the hoof and the horseshoe and extending in its preferred form from end to end and from side to side of the shoe, so as to completely cover the same. The main plate follows the contour of the shoe and is flush with its outer edge, and it gradually increases in thickness from the toe to the heel of the shoe, as shown in Fig. 1.

Below its rear portion the cushion is provided with a heel-plate C, which is arranged on the under side of the heel portions of the horseshoe and extends across the full width of the shoe, its lateral edges being preferably flush with the outer edges of the horseshoe, as shown in Figs. 3 and 5. By this construction a large and extensive tread-surface is

obtained at the rear portion of the horseshoe which affords a firm grip upon the pavement and prevents slipping of the animal and also avoids rocking of the shoe. As shown in the drawings, the face of the heel-plate is grooved, ribbed, or otherwise roughened.

The heel-plate is formed integral with the body A of the cushion and provided in its ends with grooves or recesses *c c*, which receive the heel portions of the horseshoe, and in its rear side with a similar recess *c'* for receiving the cross-bar *a* of the shoe. The neck or web *c''* formed by these recesses connects the body A with the heel-plate B of the cushion and extends through the opening of the shoe.

The cushion is held in place by the usual nails, which pass through the horseshoe and the body of the cushion, and for this purpose the body is substantially flush with the outer edge of the shoe, as shown, so as to extend beyond the nail-holes.

On its upper side the body of the cushion is provided with raised integral spreading-ribs *d d*, which extend from the rear edge thereof to about its center and converge forwardly, as shown. These ribs are spaced a sufficient distance apart to receive the frog of the hoof between them. Their upper sides are beveled or inclined outwardly and adapted to bear against the so-called "bars" of the hoof located at opposite sides of the frog, so that the downward pressure of these bars against the sloping ribs tends to spread the hoof, thereby gradually expanding a contracted hoof to its normal state and resisting contraction of a healthy hoof. The inner edges of the spreading-ribs are abrupt to afford ample room for the frog, as shown.

In applying the cushion to the horseshoe preparatory to fastening the latter to the hoof the cushion is turned at right angles to the shoe and its heel-plate is passed through the shoe in that position, as shown by dotted lines in Fig. 3, after which the cushion is turned in line with the shoe, whereby the heel portions and the cross-bar of the shoe are interlocked with the recesses *c c'* of the heel-plate. To permit of this engagement of the cushion with the shoe, the width or small dimension of the heel-plate is less than that of the opening bounded by the shoe.

My improved cushion is also applicable to an ordinary horseshoe open at its rear end



and when used with such a shoe the rear recess  $c'$  is not required.

I claim as my invention—

5 1. A horseshoe-cushion comprising an elastic body-plate adapted to be interposed between the hoof of the horse and the shoe and an elastic heel-plate arranged below the same and connected therewith, said heel-plate being constructed to extend across the full width of  
10 the rear portion of the shoe but so as to terminate short of its toe portion and provided with recesses for receiving the heel portions of the shoe, the width or small dimension of the heel-plate being less than that of the shoe-  
15 opening to permit the heel-plate to be passed through said opening by turning the cushion at right angles to the shoe, substantially as set forth.

2. A horseshoe-cushion comprising an elastic body-plate adapted to be interposed between the hoof of the horse and the shoe and an elastic heel-plate arranged below the same and connected therewith, the body-plate being provided on its upper side with forwardly-converging spreading-ribs spaced apart to receive the frog of the hoof between them, said  
25 ribs having abrupt inner faces and outwardly-inclined upper or outer faces adapted to bear against the bars at opposite sides of the frog of the hoof, substantially as set forth. 30

Witness my hand this 18th day of July, 1905.

PATRICK CLIFFORD.

Witnesses:

C. F. GEYER,  
MAY E. MCARTHUR.