

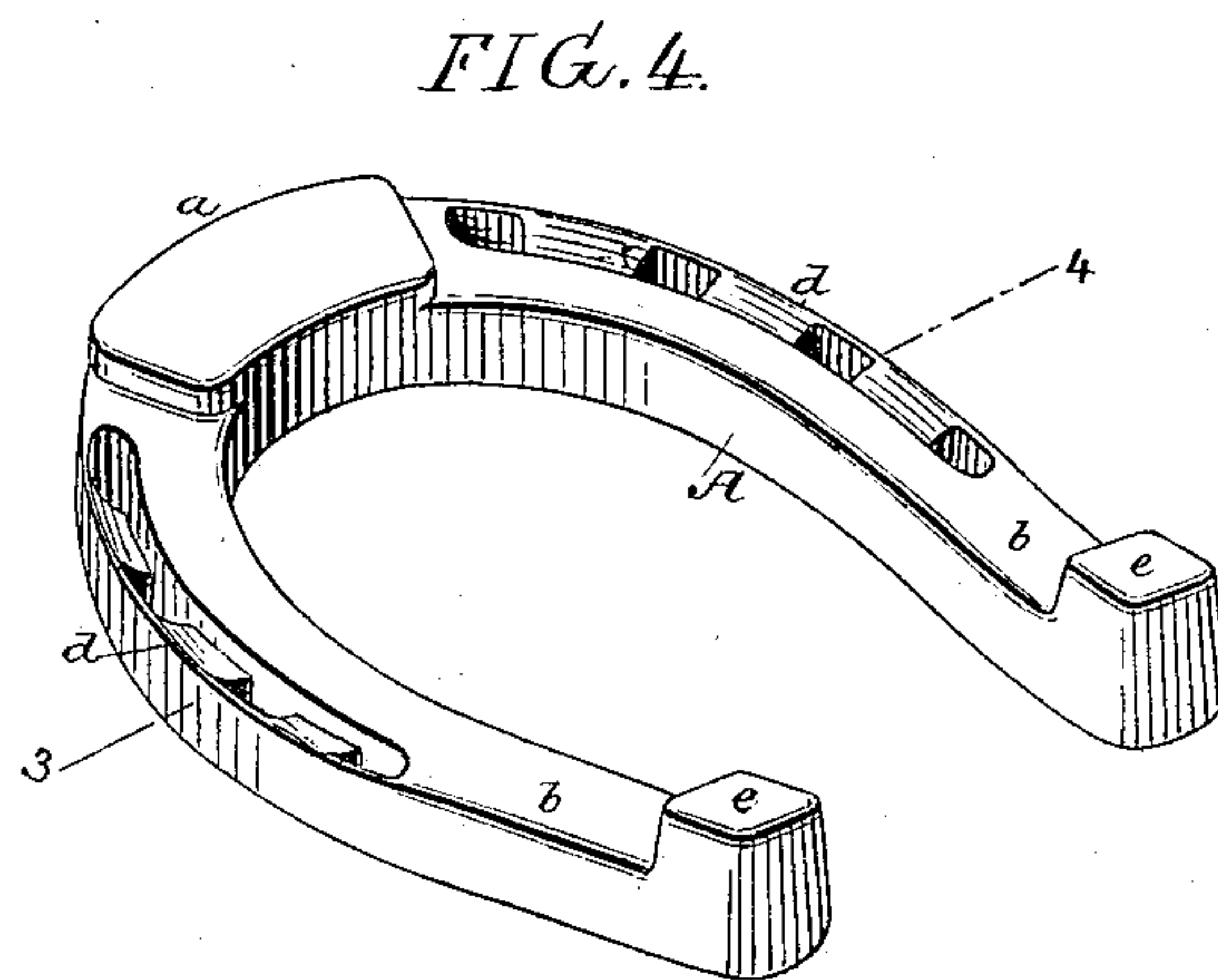
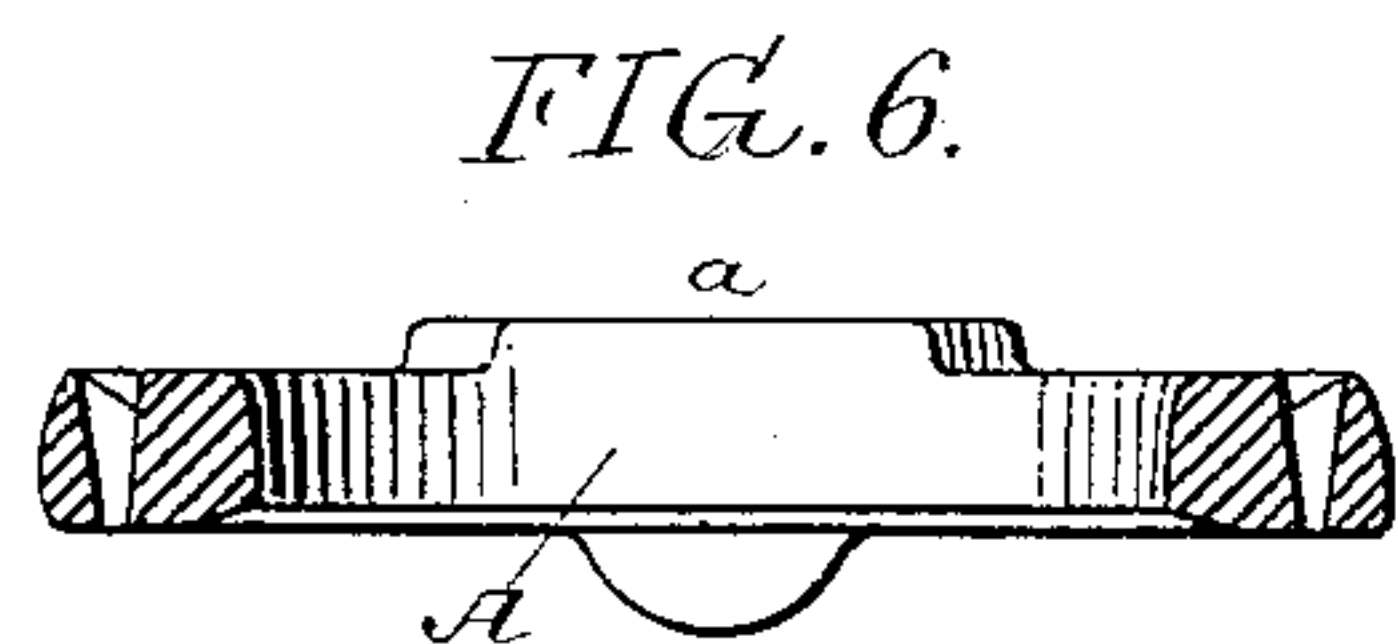
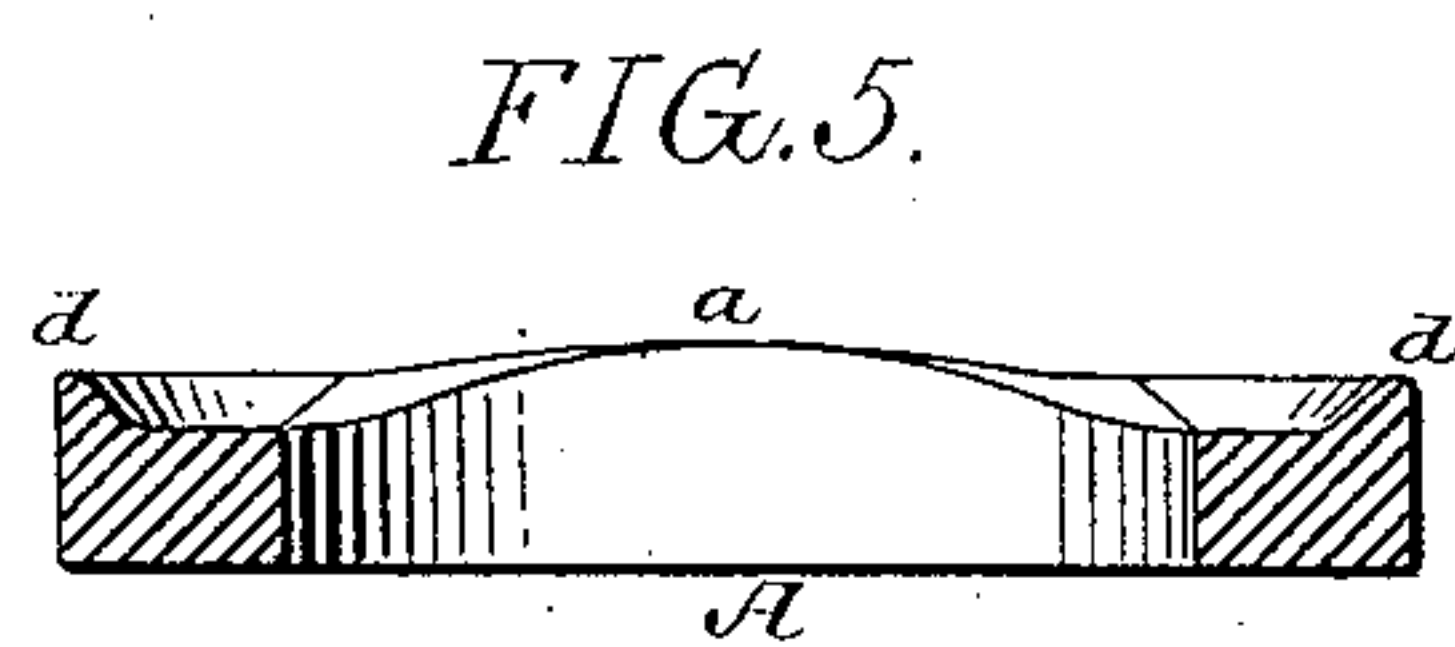
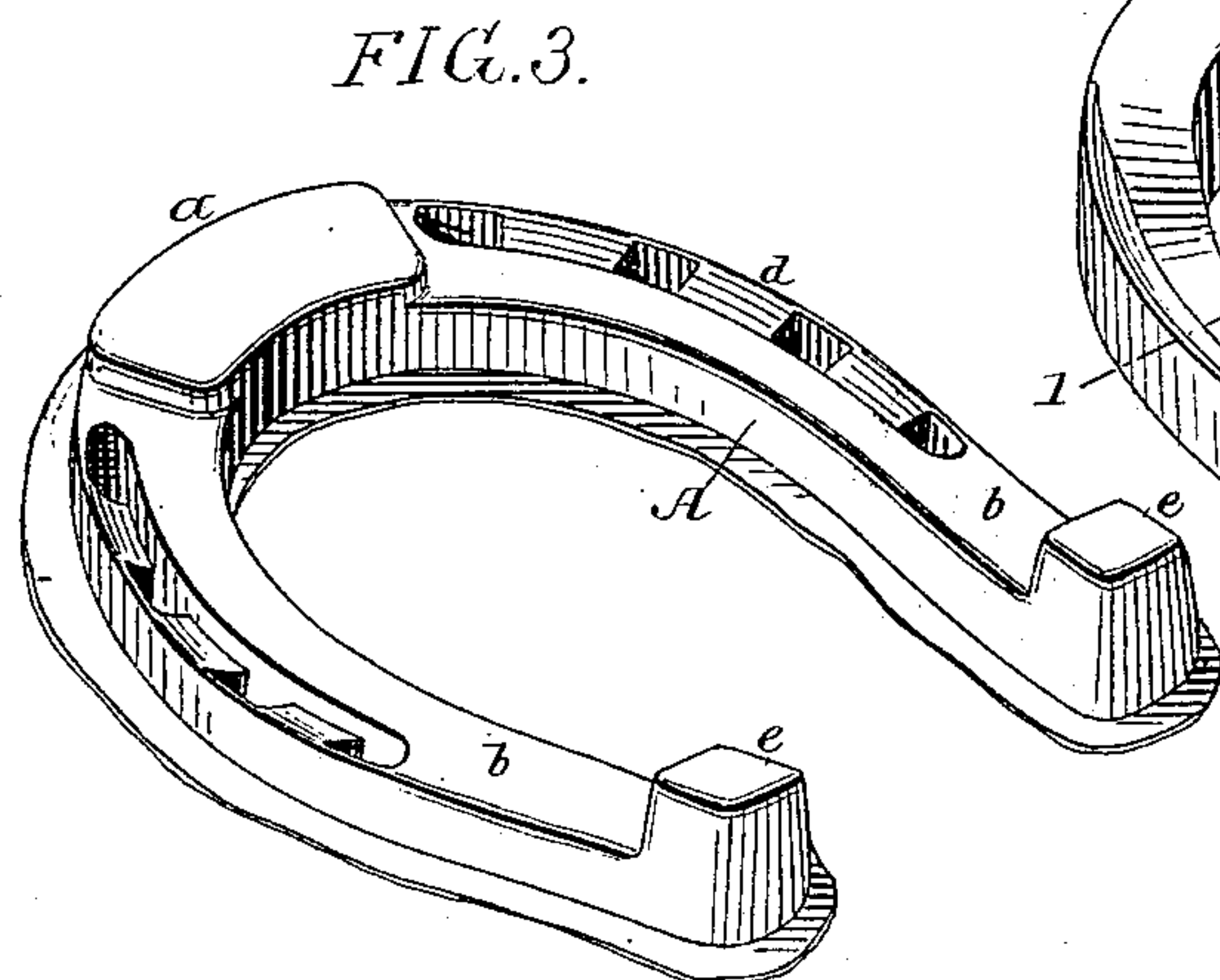
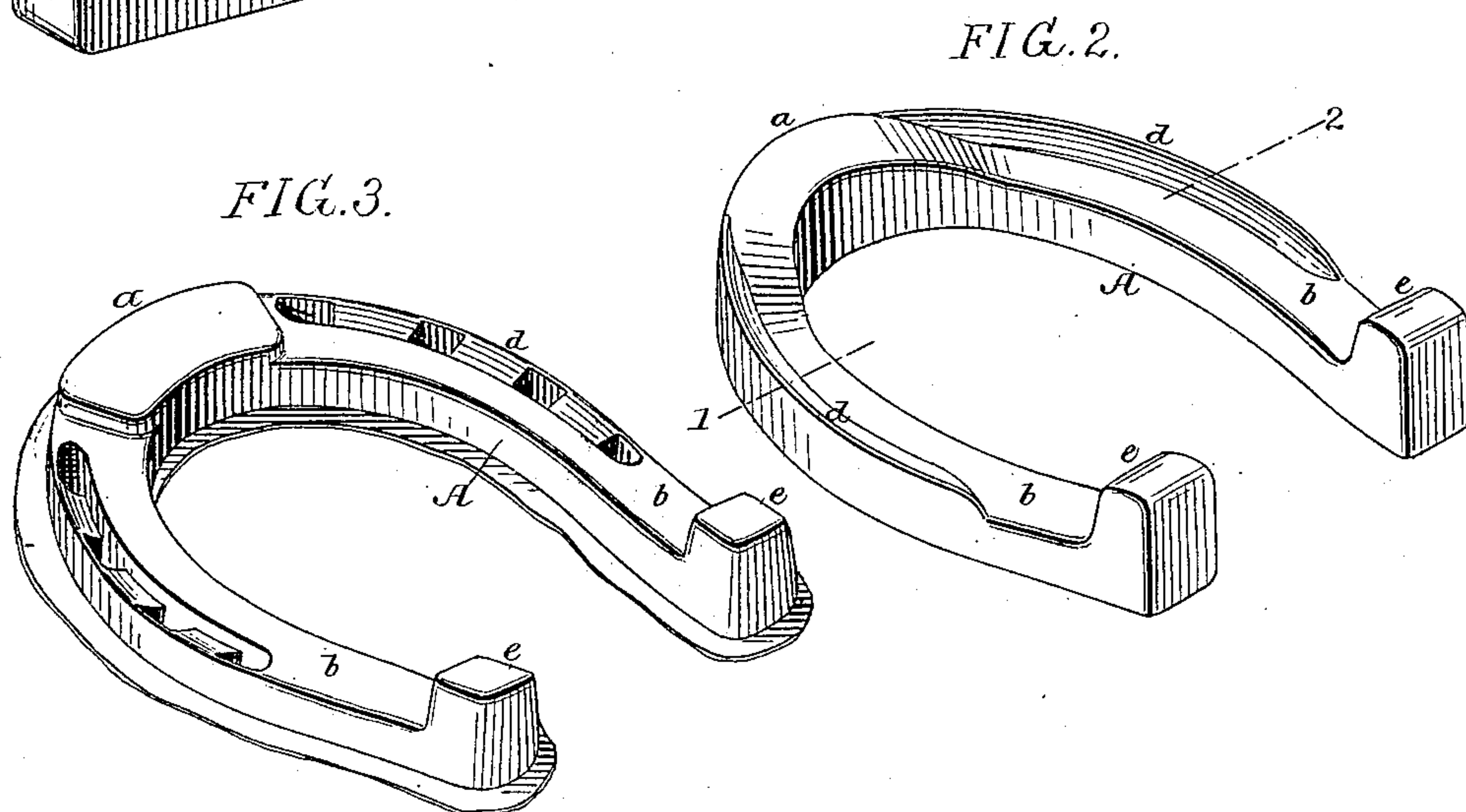
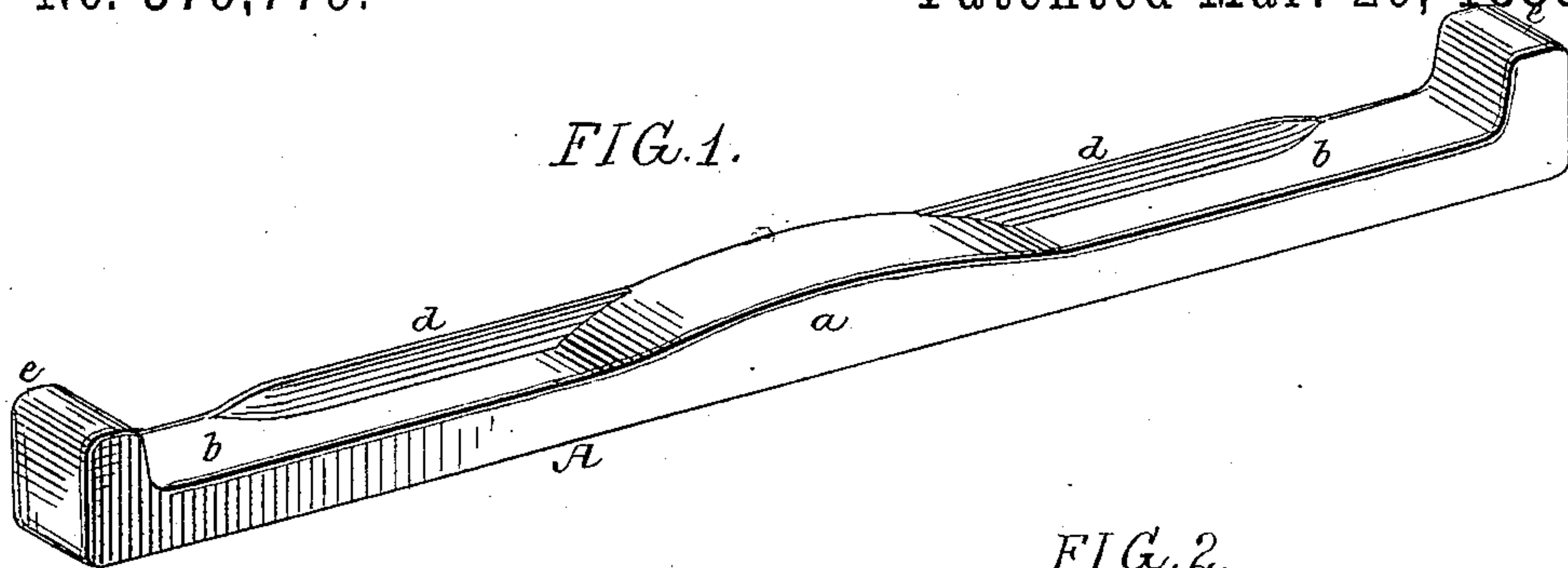
(No Model.)

P. F. GREENWOOD.

HORSESHOE BLANK.

No. 379,779.

Patented Mar. 20, 1888.



Witnesses:  
Jno. E. Parker.  
William D. Bonner.

Inventor:  
Peter F. Greenwood,  
by his Attorneys,  
Howson & Howson.

# UNITED STATES PATENT OFFICE.

PETER F. GREENWOOD, OF PHILADELPHIA, PENNSYLVANIA.

## HORSESHOE-BLANK.

SPECIFICATION forming part of Letters Patent No. 379,779, dated March 20, 1888.

Application filed January 16, 1888. Serial No. 260,873. (No model.)

*To all whom it may concern:*

Be it known that I, PETER F. GREENWOOD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Horseshoe-Blanks, of which the following is a specification.

My invention relates to the manufacture by machinery of the class of horseshoes known as "forged shoes."

One object of my invention is to so form the blank, preferably by rolling, that the side of the shoe will not be depressed below the surface when the nail holes and creases are formed, a further object being to so form the blank that the shoe forged therefrom will have a low front calk and large heel-calks. These objects I attain as described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the blank for the shoe. Fig. 2 illustrates the blank bent into form. Fig. 3 illustrates the blank after being forged into shape. Fig. 4 is a perspective view of the finished shoe. Fig. 5 is a transverse section on the line 1 2, Fig. 2; and Fig. 6 is a transverse section on the line 3 4, Fig. 4.

A is the blank from which the shoe is formed, this blank being preferably produced by rolling a long strip of the proper shape and then cutting said strip into suitable lengths for the blanks. The blank has a central swell, *a*, as shown in Fig. 1, to form the toe-calk, this swell being preferably rounded on top and merging at each end into the flat face of the blank. Along the outer edge of the blank, and extending from the swell *a* toward the ends of the blank, is a tapered rib, *d*, straight on the outside and beveled on the inside. Usually in making drop-forged shoes the portions *b b* of the blank are rolled plain, so that when the dies press the creases and nail-holes in the shoe they draw down with them the metal outside of the creases, thus forming a ragged strip outside the nail-holes and creases. This defect I overcome by forming the rib *d* on the blank, for when the side creases and nail-holes are

formed in my improved blank the upper dies will strike the rib *d* and carry it down into the body of the shoe, thus making a firm and straight edge on the outside of the shoe beyond the creases, as shown in Fig. 3, the metal of the rib being utilized for this purpose.

At each end of the blank A are formed projections *e e*, which, when the shoe is forged, form the heel-calks of said shoe, although in some cases the heel-calks and toe-calk may be dispensed with.

The blank A is bent first to the form shown in Fig. 2, then drop-forged, as shown in Fig. 3, giving form to the toe-calk and heel-calks, creasing the shoe and punching the nail-holes, and the blank is finally trimmed, as shown in Fig. 4, by a suitable cutting-die.

It will be noticed on reference to Fig. 4 that the toe-calk is not as high as the heel-calks, but is broad and has opposite flaring sides, thus giving the shoe a broad flat bearing-surface at the toe.

I claim as my invention—

1. A horseshoe-blank having ribs *d d* at the points where the nail-holes and creases are to be formed, whereby when the blank is forged into a shoe the metal of the ribs will be compressed into the body of the shoe, substantially as shown and described.

2. A horseshoe-blank having a low swell or projection in the middle to form the toe-calk, and higher projections at the ends from which to form the heel-calks, all substantially as shown and described.

3. A horseshoe-blank having a central swell or projection from which the toe-calk is to be formed, and edge ribs extending from this projection in both directions, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER F. GREENWOOD.

Witnesses:

WILLIAM D. CONNER,  
HENRY HOWSON.