

S. B. HENRY.

Horseshoes.

No. 160,188.

Patented Feb. 23, 1875.

FIG. 1.

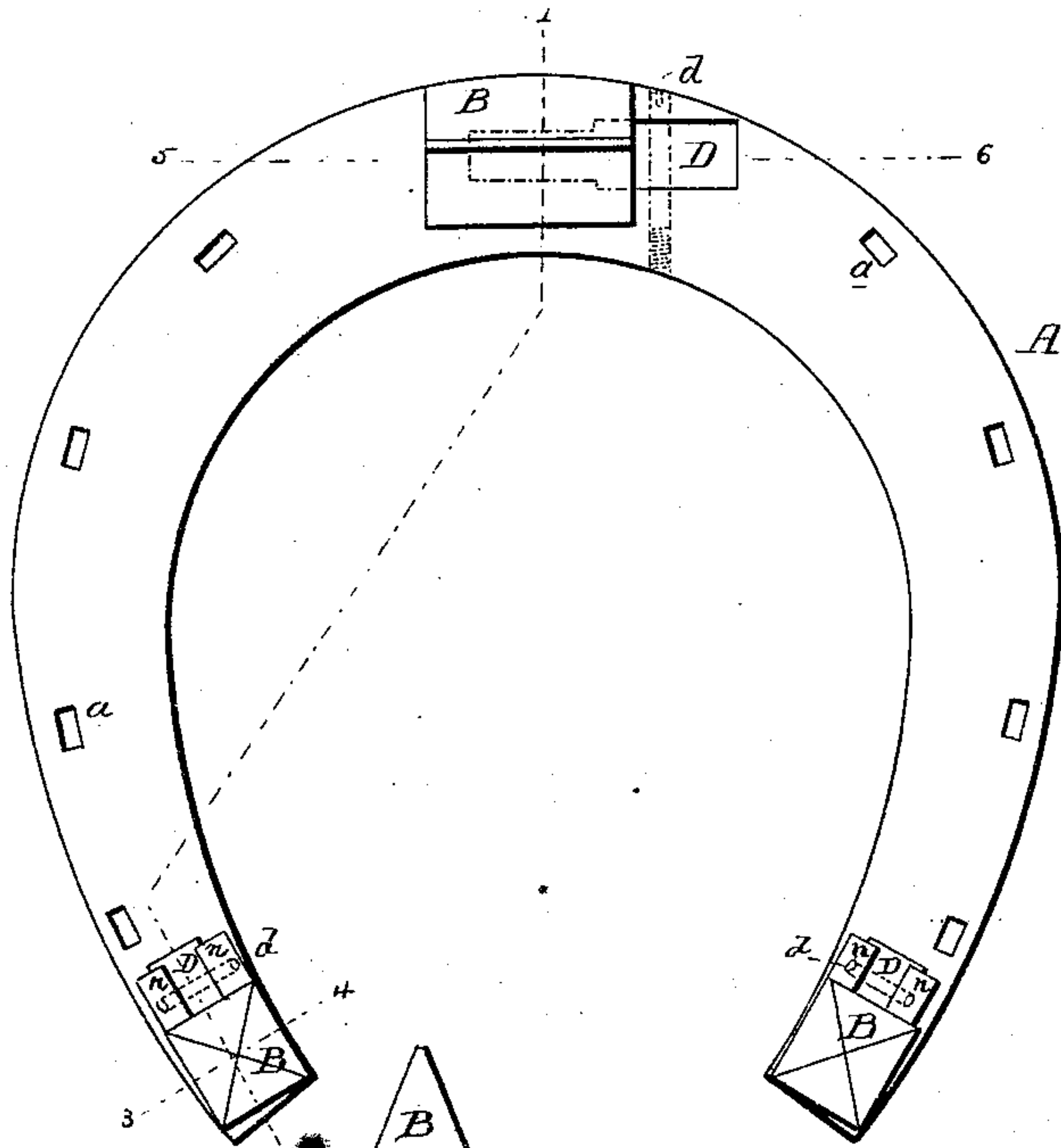


FIG. 5.

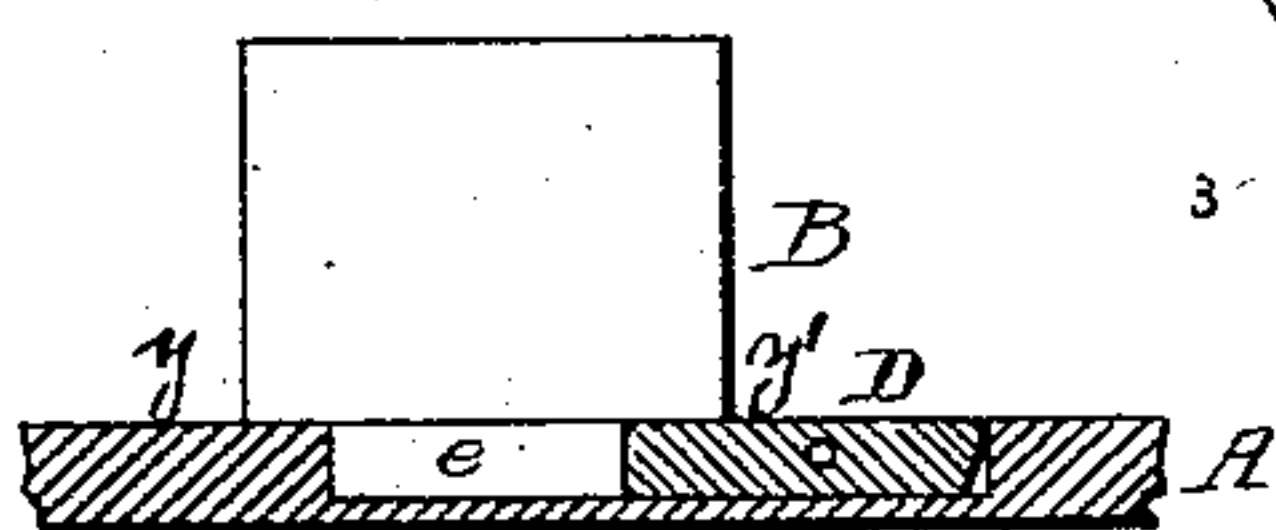


FIG. 2.

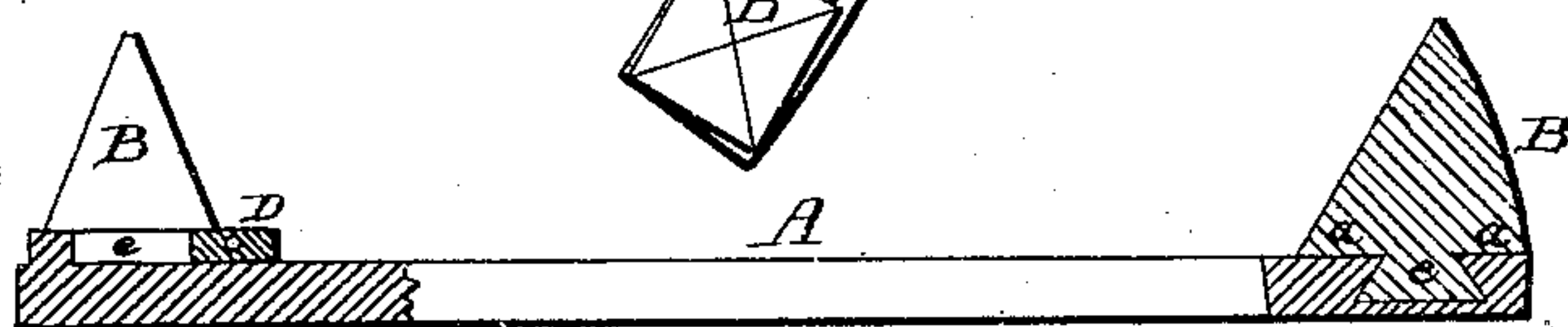


FIG. 3.

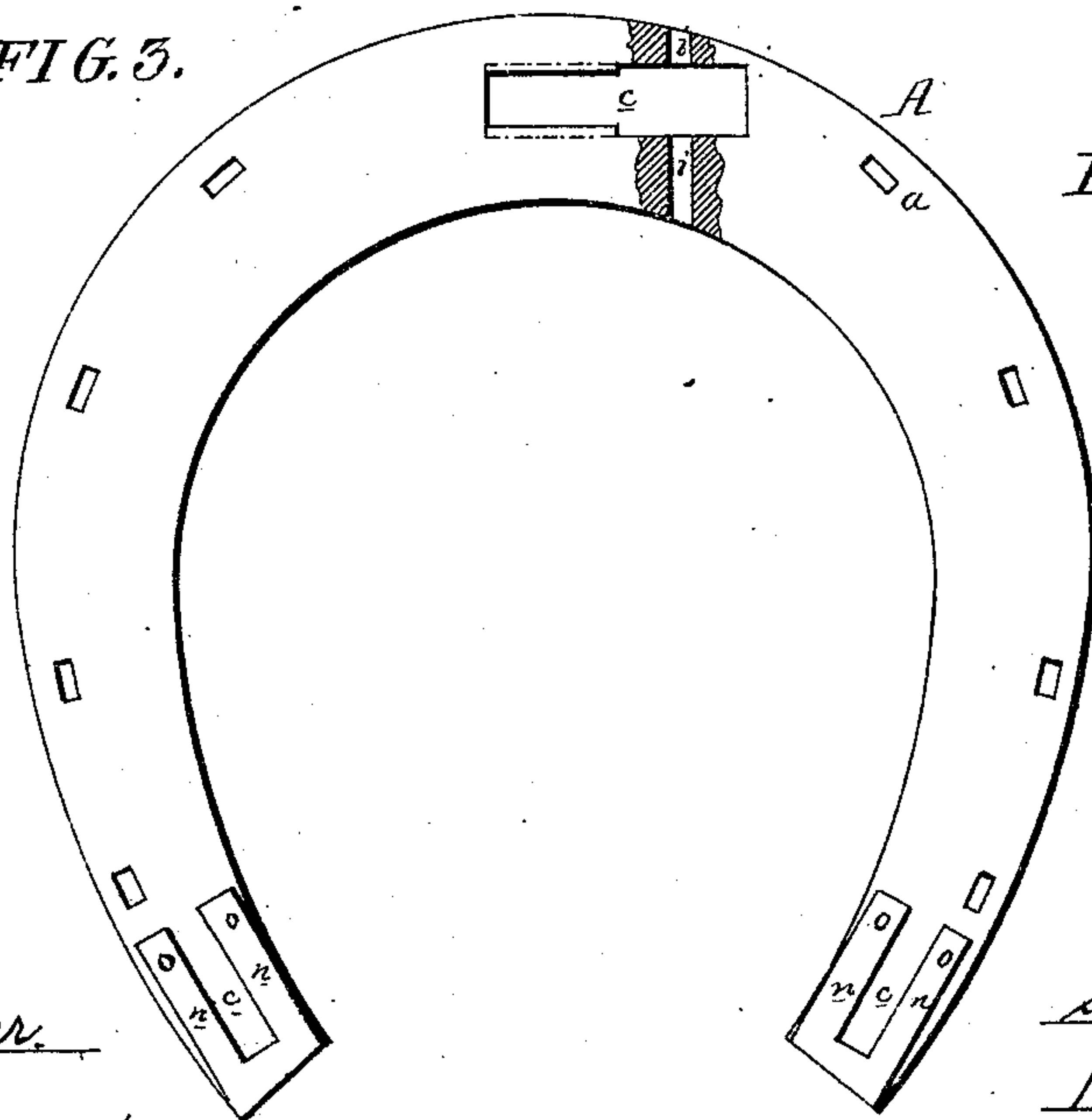
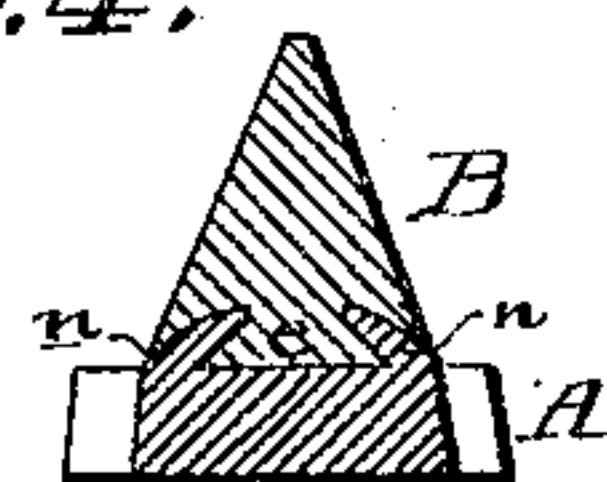


FIG. 4.



Witnesses:

*R. M. Barr.*

*J. L. Skidmore*

*S. B. Henry.*

*By his attys.*

*Howson & Son*



# UNITED STATES PATENT OFFICE.

SAMUEL B. HENRY, OF FARMWELL, VIRGINIA.

## IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **160,188**, dated February 23, 1875; application filed January 21, 1875.

*To all whom it may concern:*

Be it known that I, SAMUEL B. HENRY, of Farmwell, Loudoun county, Virginia, have invented an Improved Horseshoe, of which the following is a specification:

My invention relates to that class of horse-shoes in which detachable calks are provided with tongues fitting grooves in the shoe; and the objects of my invention are to secure the calks firmly in their positions, render them readily detachable, prevent excessive strains upon the tongues and fastening devices, and to prevent the latter from being displaced by the shocks imparted to the shoe.

In the accompanying drawing, Figure 1 is an inverted plan view of the shoe with its calks; Fig. 2, a section on the line 1 2, Fig. 1; Fig. 3, an inverted plan of the shoe with the calks removed; Fig. 4, a section on the line 3 4, Fig. 1; and Fig. 5, a section on the line 5 6, Fig. 1.

The metal shoe A is of any suitable form, and is provided with the usual nail-openings *a a*. At the front of the shoe is a slot, *c*, which is wide enough at the outer end to admit the dovetailed tongue or projection *e* of a calk, B, the slot being reduced in width, and undercut at its opposite end, into which the projection *e* may be introduced by a lateral movement of the calk, which is thus prevented from being moved outward from the shoe. To prevent any lateral movement of the calk after its adjustment, as described, a block or key, D, fitting the enlarged end of the opening *c*, is introduced into the latter, and is there secured by a pin, *d*, which is passed from the front of the shoe to the rear through an opening, *i*, in the shoe, and a corresponding opening in the block. Owing to this transverse position of the fastening-pin, which in some instances might be used without the block D, it will have no tendency to fall out of its place; nor is it so liable to become loosened by the shocks imparted to the shoes as the usual screw-pins fitting openings at right angles to the face of the shoe.

The block is thus securely fastened, and the calk, so long as the block is in position, is as immovably secured in its place as if it were in one piece with the metal of the shoe.

In order that the severe strains to which the calk is subjected may not all be concentrated on the tongue *a*, which would otherwise be torn from the calk, the latter is extended at both sides *x x*, and at both ends *y y'*, so as to bear directly on the face of the shoe, the projecting end *y'* overlapping the block D, and tending to retain it in position, so that there is no strain on the pin *d*.

The heel-calks are fastened in a similar manner, except that the openings *c* for the reception of the calk tongues and blocks may be formed by lips *n n* upon the face of the shoe, the blocks D being retained by transverse pins *d*, as before.

When the calks are not required, they are removed, and blocks of rubber are substituted therefor, and secured in the same manner as the calks, the said blocks not only effectually preventing the animal from slipping, but also serving to neutralize the shocks resulting from the contact of metal shoes with hard pavements.

I do not claim a horseshoe in which a rubber facing is secured to a metal backing by a dovetail and recess, the object of the block of rubber or other material in my invention being to protect the calk-retaining openings when the calks are removed; but

I claim—

1. The combination of a horseshoe, A, having a recess, *c*, and transverse opening *i*, a calk, B, provided with a dovetailed projection adapted to said recess, and extending over the bearing on the face of the shoe, a block, D, fitting the recess *c*, overlapped by the calk, and retained by a transverse pin, *e*, all as set forth.

2. A shoe, A, having recesses *c c*, adapted to receive dovetailed projections of detachable calks, in combination with blocks of rubber fitted to and secured in said recesses, all as set forth.

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

SAML. B. HENRY.

Witnesses:

CHARLES E. FOSTER,  
JAMES MOONEY.