

(No Model.)

E. S. THURBER.

SHOE FOR THE HOOFS OF ANIMALS.

No. 274,852.

Patented Mar. 27, 1883.

Fig. 1.

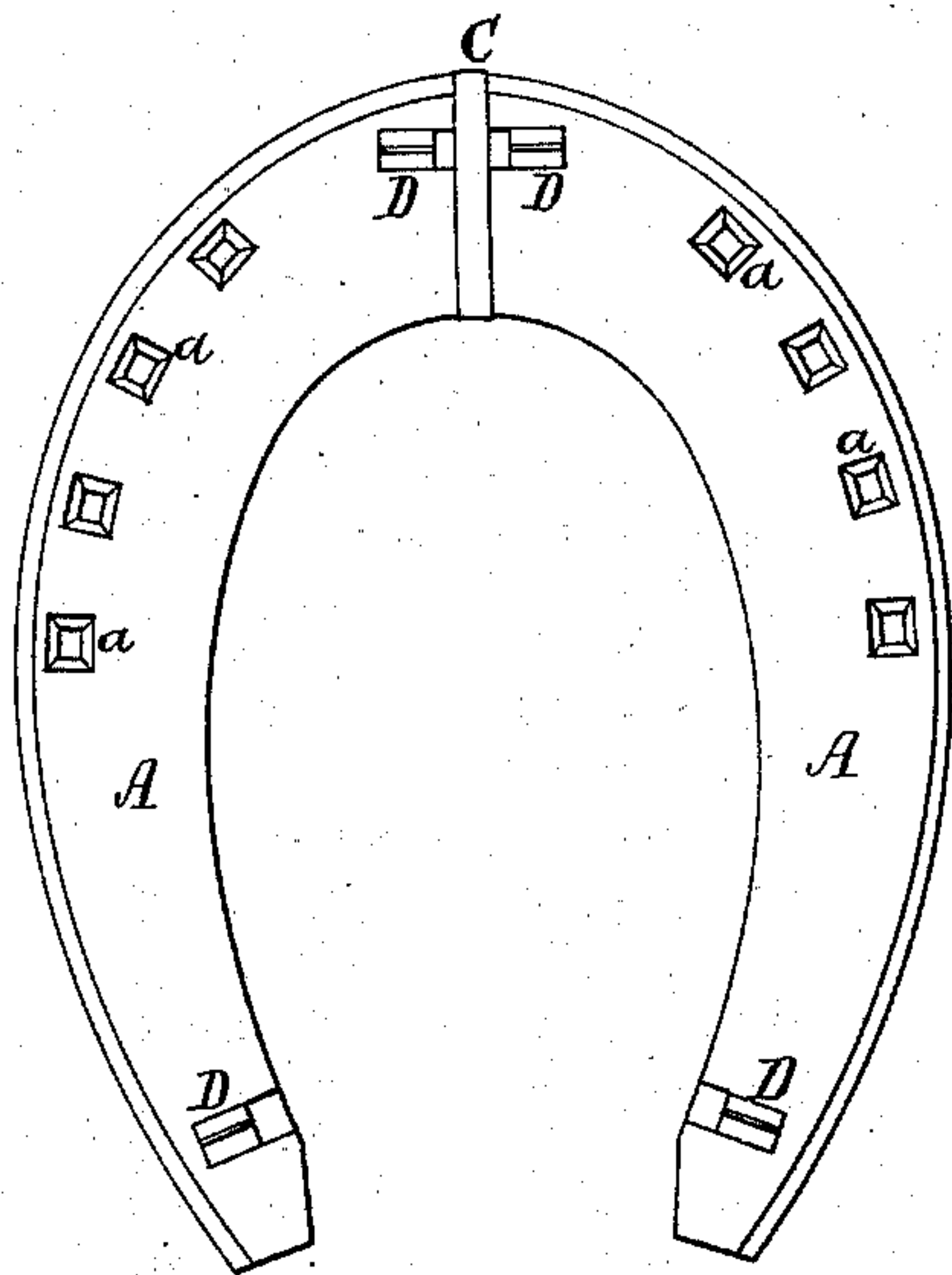


Fig. 2.

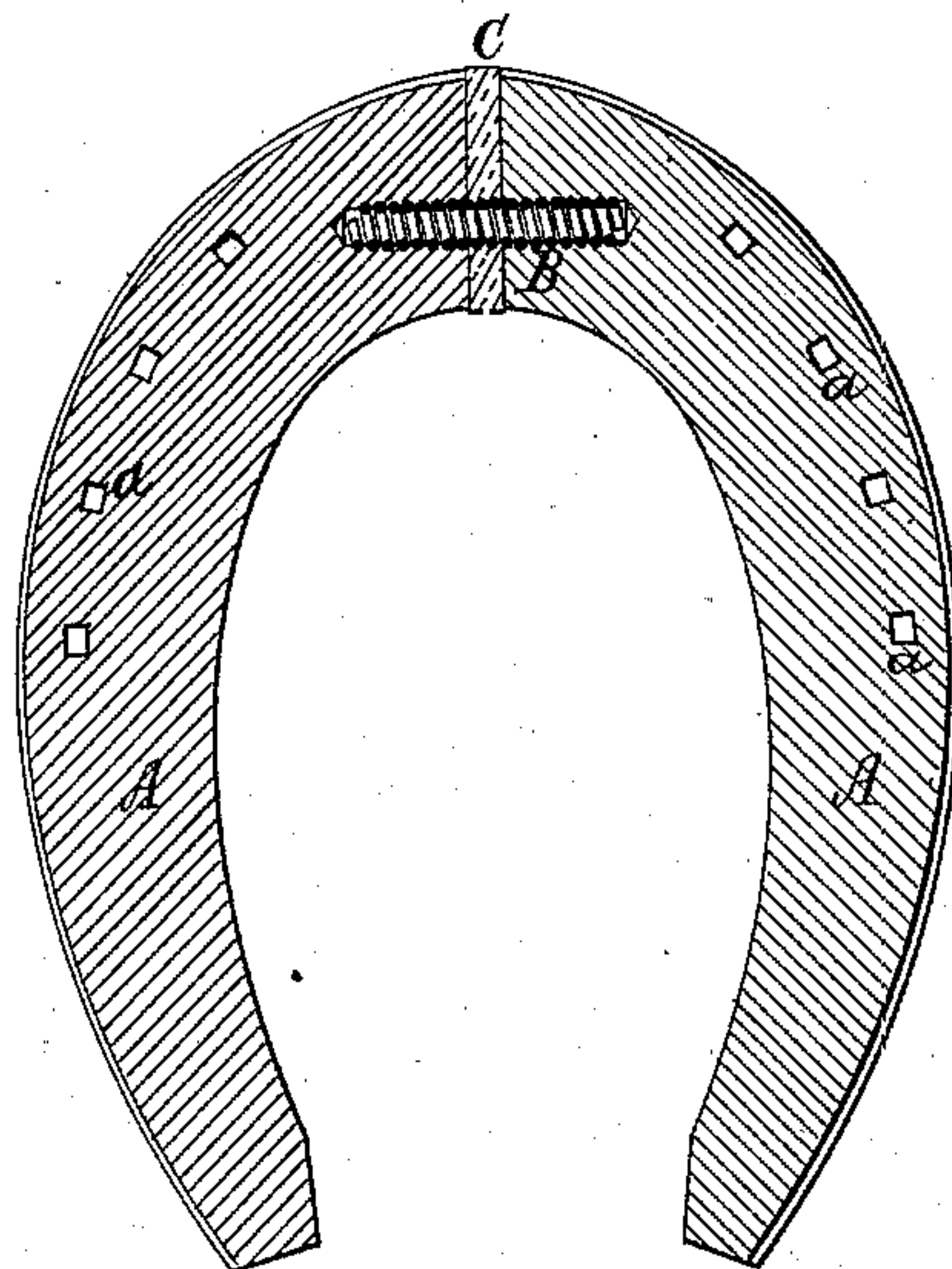


Fig. 3.

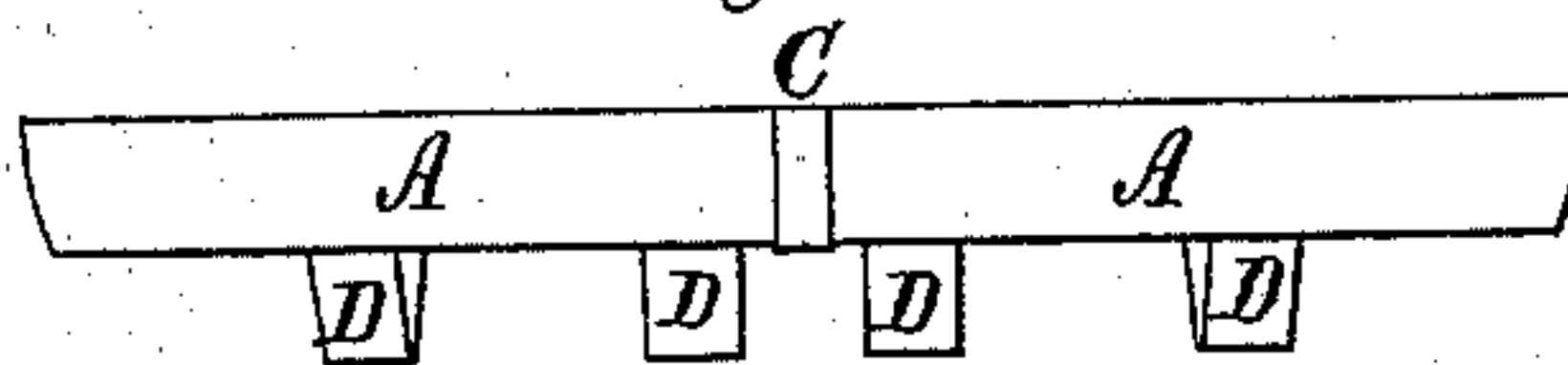


Fig. 5.

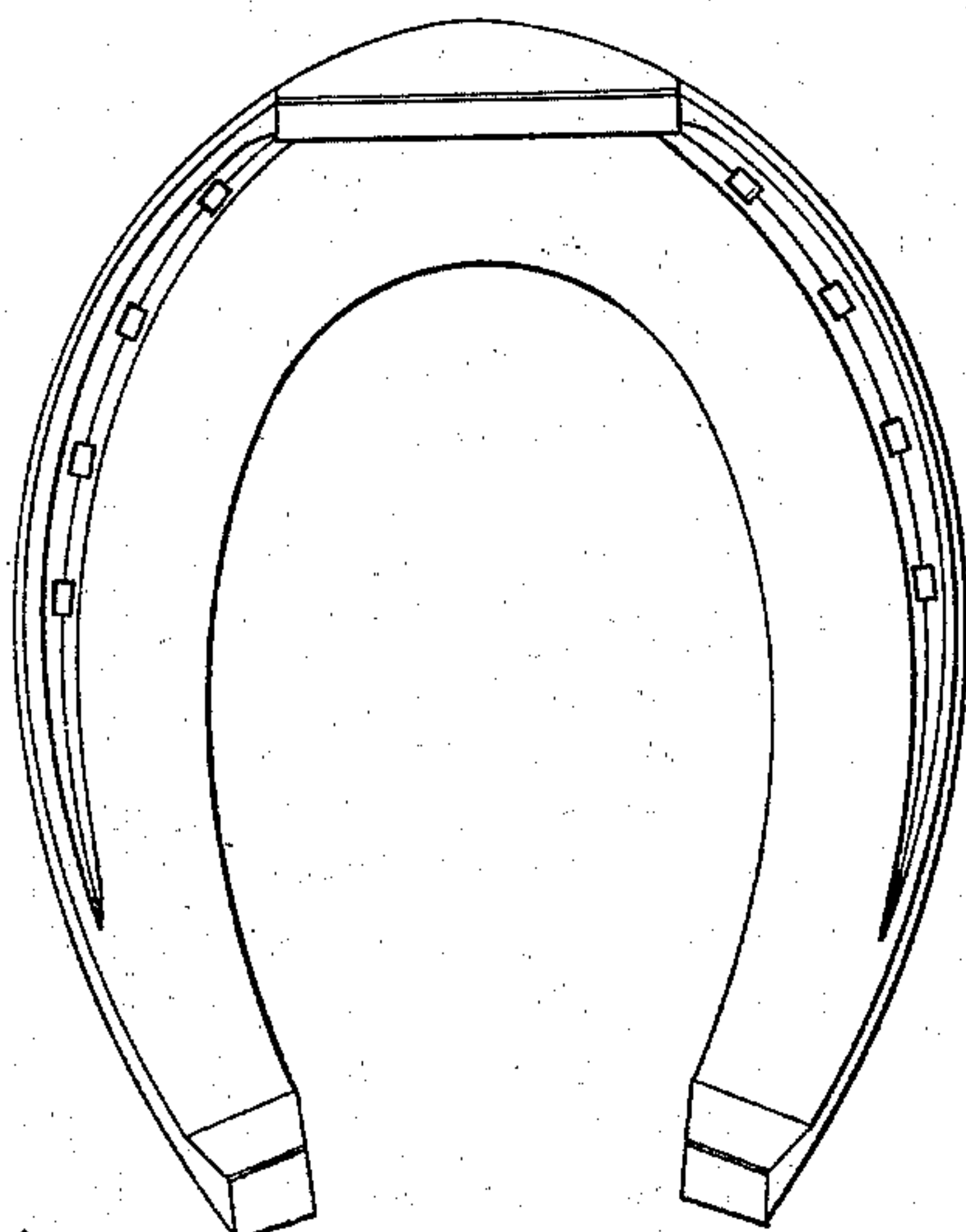
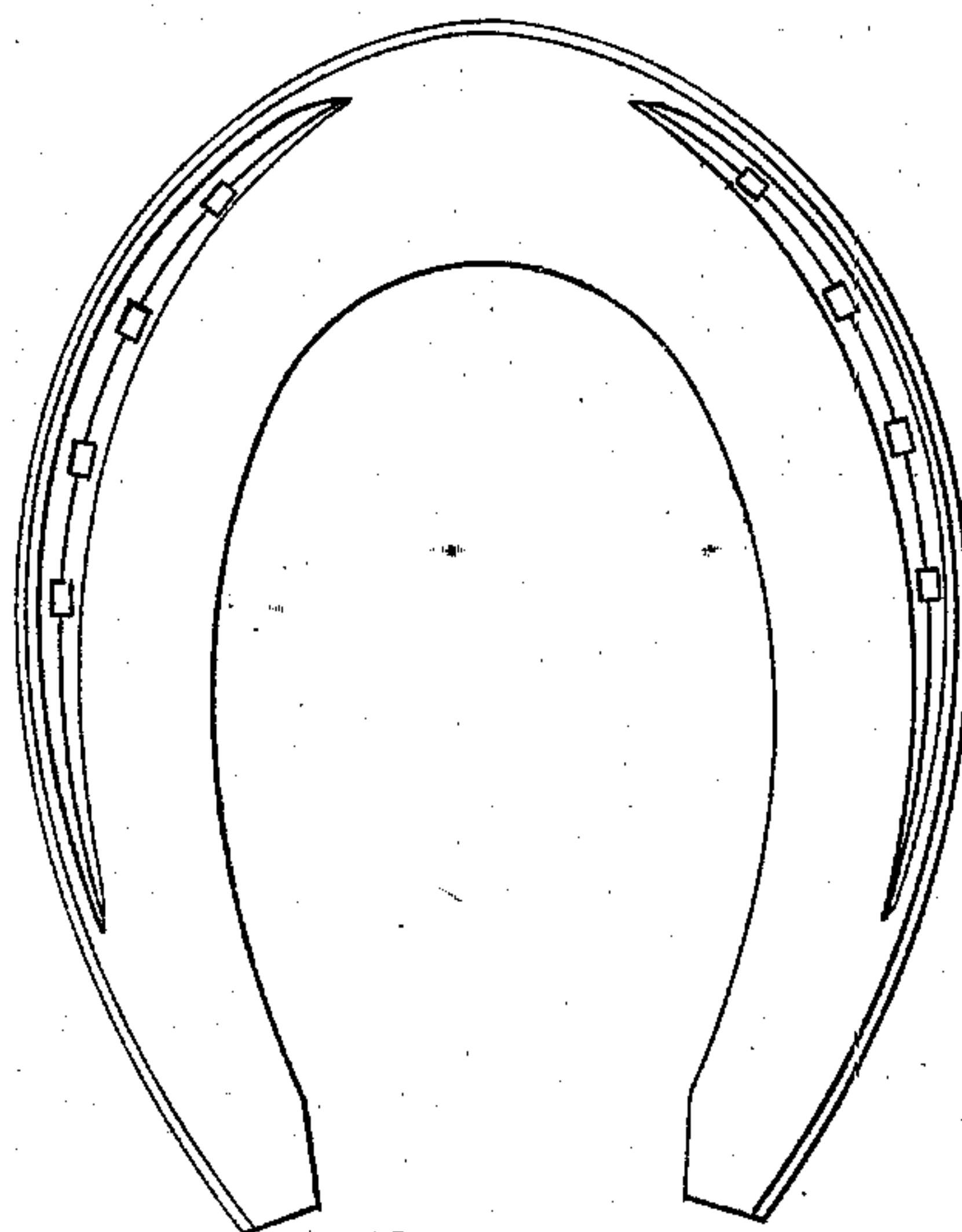


Fig. 4.



Witnesses.

S. N. Piper  
E. A. Pratt.

Inventor.

Edwin Stanton Thurber.  
by R. H. Eddy atty.



# UNITED STATES PATENT OFFICE.

EDWIN S. THURBER, OF BOSTON, MASSACHUSETTS.

## SHOE FOR THE HOOFS OF ANIMALS.

SPECIFICATION forming part of Letters Patent No. 274,852, dated March 27, 1883.

Application filed January 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN STANTON THURBER, of Boston, in the county of Suffolk, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Shoes for the Hoofs of Animals; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a bottom view, Fig. 2 a longitudinal section, and Fig. 3 is an edge view, of a horseshoe provided with my improvement, there being in this case two separable calks at the toe and two at the heels of the shoe. Fig. 4 is a bottom view of an ordinary hoof-shoe or horse-shoe without calks. Fig. 5 is a bottom view of it provided with calks at the heel and toe.

The nature of my invention is defined in the claims hereinafter presented.

My said invention relates to metallic shoes for the hoofs of animals, and especially for those of horses, asses, mules, and oxen, the particular object of the improvement being to prevent slipping of the shoe on the rails of street-railways, as well as on the pavements of streets, such being accomplished by making in whole or in part magnetic a shoe provided with holes for receiving nails for securing such shoe to the hoof of an animal, such being so as to cause it, when in contact with a street-rail or a pavement more or less coated with iron, to adhere more or less thereto through its inherent magnetic attraction.

I am aware that what are called "horseshoe-magnets" are old and well known; but such are not for use as horseshoes, and are unprovided with any holes to receive nails for securing them to the hoof.

It is well known that accidents are of frequent occurrence by means of the horses of a tram-railway car stepping and slipping on the rail or rails of the track, the animals falling and being injured in consequence of such slipping. So horses or draft-animals of ordinary carriages, stepping upon the rails of a tramway, or on the pavements of a street, are liable to slip thereon, and to fall and be injured by reason of such slipping. I have dis-

covered that by the constant passage of carriage-wheels and horses over the pavements of streets such pavements become more or less covered with iron removed from the tires of the wheels or the shoes of the horses. I have also discovered that by making a horseshoe magnetic at its heels or toe such operates very materially in practice to prevent such slipping of the shoe on iron rails or on a pavement.

In Figs. 1, 2, and 3 the horseshoe is represented as in two separate parts, A A, connected at the toes by a spiral spring, B, screwed into both, and arranged in them as represented, there being between the toes and on the spring an elastic or rubber cushion, C. Furthermore, each part A at the toe is provided with a calk, D, which may be permanently fixed to the said part, or be applied thereto so as to be separable from it. In case the calk being separable from the shoe, such calk may have a dovetail form, and be inserted and fixed in a dovetailed recess in the part A. A similar calk, D, may project from each heel of the shoe. Each part A is to be provided with holes *a* for receiving nails for fastening the part to a hoof, and, if desirable, such part may be creased, as usual, the nails leading from the crease. Instead of nails, screws may be used.

The shoe thus constructed is to be made magnetic in whole or in part, more especially in the heel and toe calks, when it has such, in order that they, when resting upon or touching the pavements of a street or a rail of a tramway or street-railway, may adhere more or less thereto through the attractive force of their inherent magnetism.

When the shoe is without calks it is to be magnetized in order that its heels may be attractive to iron, the shoe under such circumstances being provided with nail-holes for receiving nails for securing it to a hoof.

When the shoe is one piece and is provided with heel and toe calks, it is to be magnetized, so as to render the heel-calks or the toe-calk, or both heel and toe calks, magnetically attractive to steel or iron.

I claim as my invention as follows, viz:

1. An animal-hoof shoe provided with nail-receiving holes, and composed of iron or steel, or partly of each, and magnetized in whole or in part, all being substantially as and for the  
5 purpose set forth.

2. An animal-hoof shoe composed of iron or steel, or partly of iron and partly of steel

and provided with nail-holes, and with calks, fixed or separable, and magnetic or magnetized, for the purpose set forth.

EDWIN STANTON THURBER.

Witnesses:

R. H. EDDY,

E. B. PRATT.