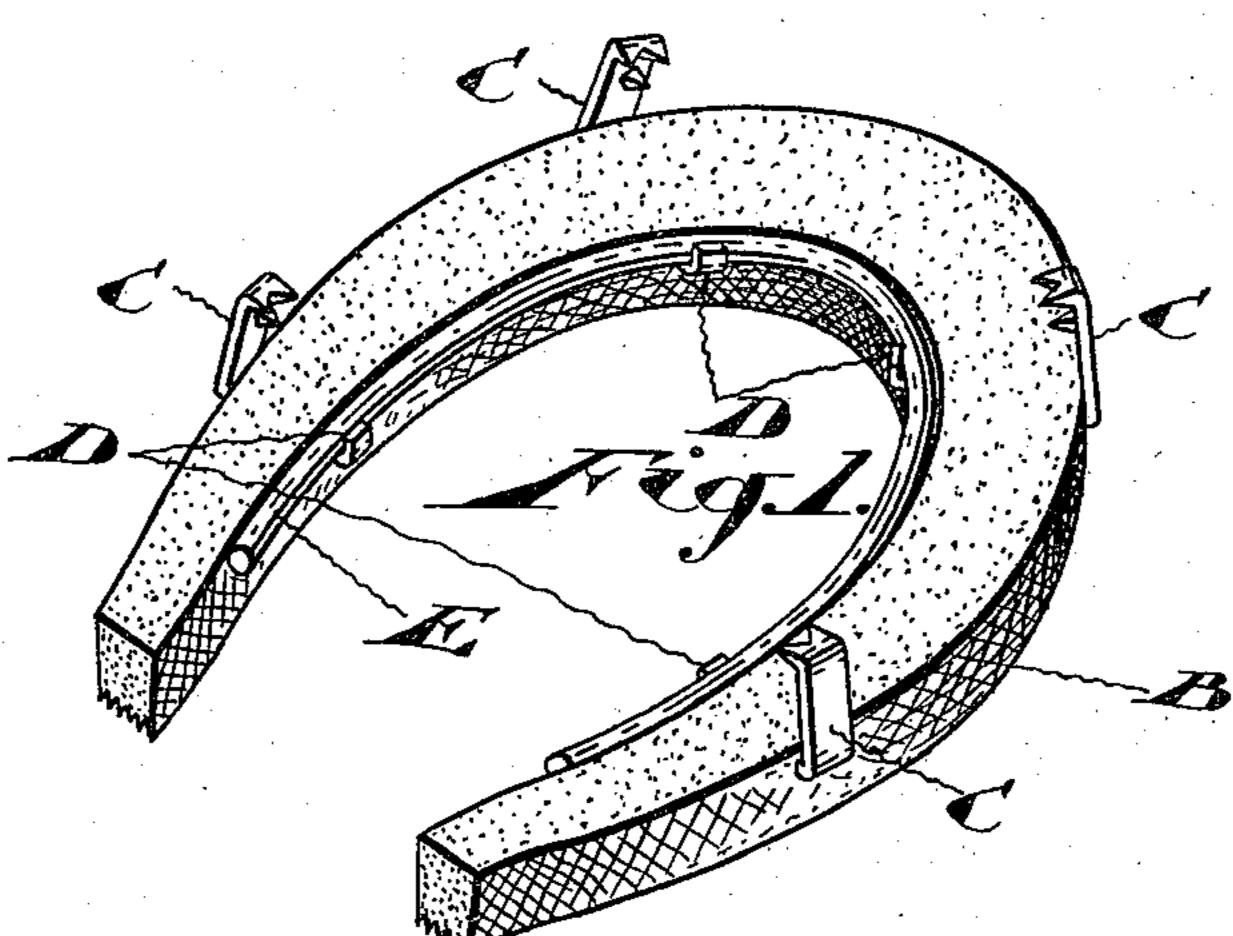
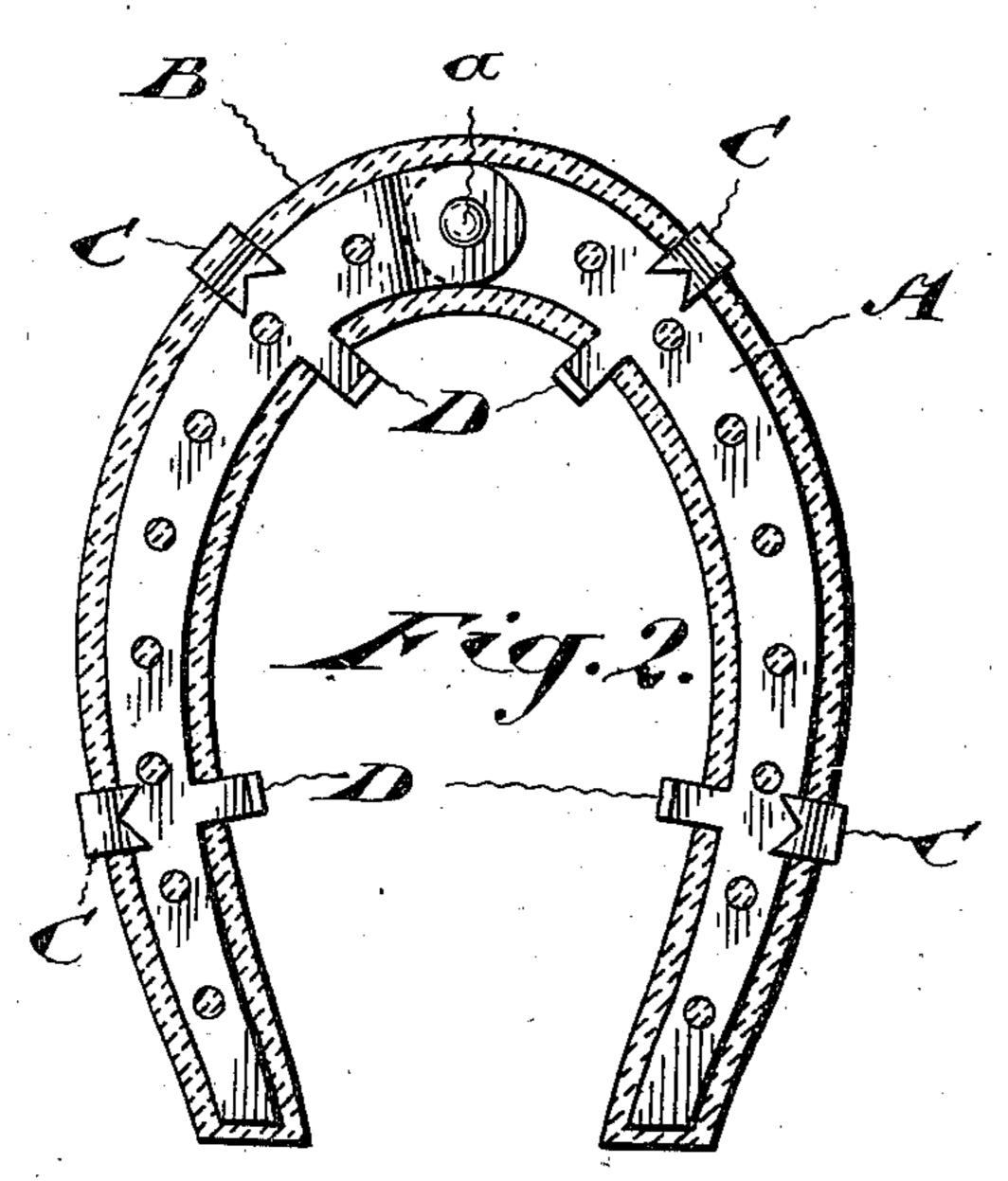
J. J. COLLERAN.

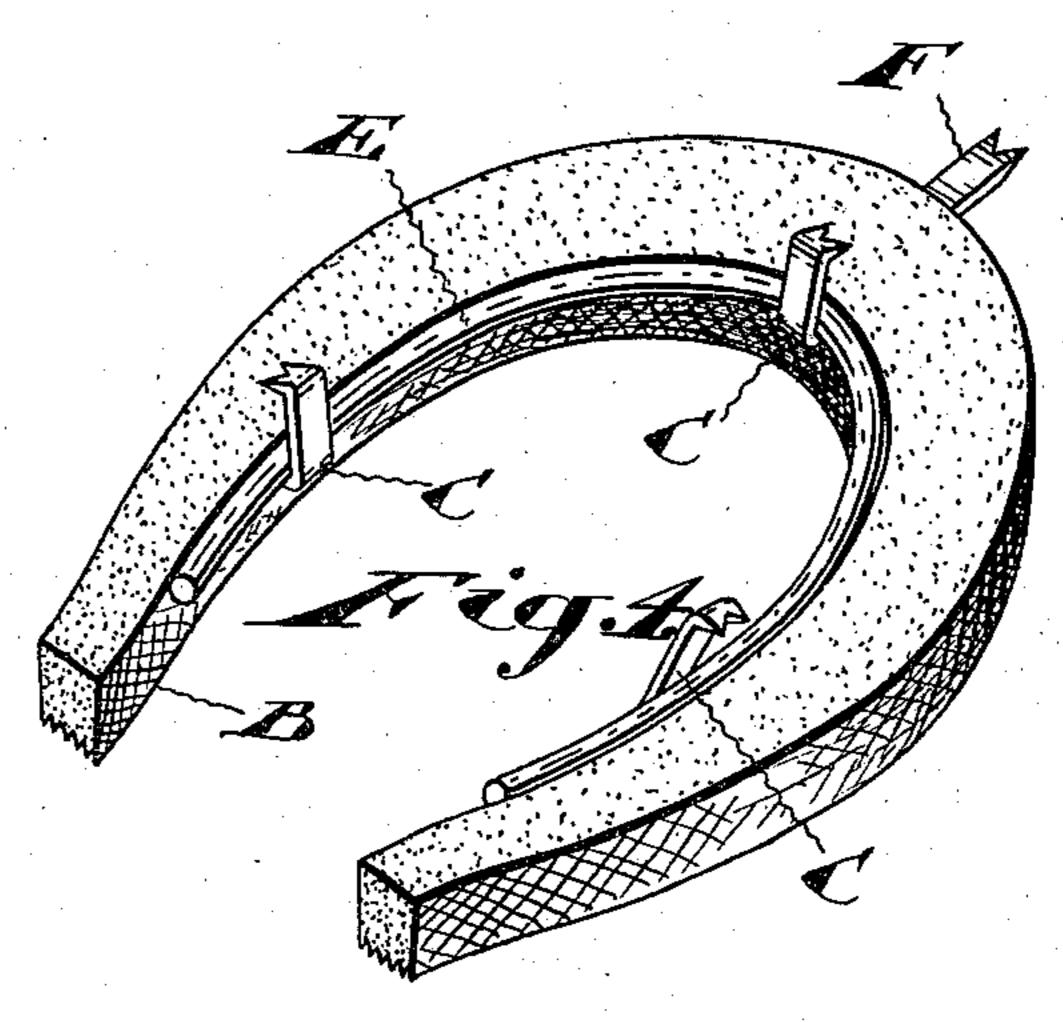
RUBBER HORSESHOE.

APPLICATION FILED FEB. 26, 1903.

NO MODEL.







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United States Patent Office.

JOHN J. COLLERAN, OF TORONTO, CANADA.

RUBBER HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 726,643, dated April 28, 1903.

Application filed February 26, 1903. Serial No. 145, 201. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. COLLERAN, of the city of Toronto, county of York, Province of Ontario, Canada, have invented certain 5 new and useful Improvements in Rubber Horseshoes, of which the following is a specification.

The object of my invention is to devise a rubber horseshoe which may be quickly atto tached to a horse's hoof whether the latter is or is not provided with a metal shoe; and it consists, essentially, of a rubber shoe molded to shape about a hinged core, the latter being provided with engaging clips, and of a 15 spring acting against the shoe to retain the clips in engagement with the hoof or metal shoe, substantially as hereinafter more specifically described and then definitely claimed.

Figure 1 is a perspective view of my improved rubber horseshoe. Fig. 2 is a sectional plan of the same. Fig. 3 is a crosssection through the same adjacent to one of the clips. Fig. 4 is a perspective view show-25 ing a modification of the shoe.

In the drawings like letters of reference indicate corresponding parts in the different

figures.

Referring particularly to Fig. 2, A is a metal 30 core formed in two parts hinged together at a. About this core the rubber tread B is molded to shape. Connected to or formed integral with the core are a plurality of clips C, extending laterally through the tread, then 35 upwardly, and then inwardly to engage the foot, as hereinafter described. In the form of shoe shown in Fig. 1 I show four clips, one at each side toward the toe and one at each side toward the heel. The upright por-40 tions of these clips, as will be seen, are inwardly inclined to follow the inclination of the portion of the hoof opposite which they are placed. These clips are designed to engage the hoof of the horse's foot, and the or-45 dinary metal shoe will be dispensed with. Holes or recesses are not necessary in the outer side of the horse's hoof to enable the horseshoer to properly engage the clips and the hoof, as a tap with the hammer will do 50 the work. In order to maintain the clips in engagement with the hoof, I provide a suitable spring E, acting against the opposite labout the core; a plurality of clips connected

sides of the shoe to retain the clips in engagement. One form of spring is illustrated in the drawings. This comprises a substan- 55 tially horseshoe-shaped spring-wire fitting within the inner sides of the shoe. This spring may be held in place by any suitable means; but I prefer to employ the hooks D, preferably formed integral with the metal 60 core. A sufficient number of these hooks will be employed to properly retain the spring in place.

The shoe is placed in position by grasping it at opposite sides near the heel and spread- 65 ing the halves apart, so that the clips may be engaged with the hoof. On releasing the shoe the spring draws the clips tightly into en-

gagement with the hoof.

Of course if the hoof is provided with a flat 70 shoe the recesses for the clips may be formed between the hoof and the shoe. In Fig. 4 I show a variation particularly adapted for such cases. I provide one clip near the toe and one at each side near the heel, the clips being 75 on the inner side of the shoe. In this case the spring E must be given such a set that it tends to expand the shoe and not to contract it, as is required with the form shown in Fig. 1. I also form at the toe a lug F, which may 80 be turned up after the shoe is in place to pre-

vent it pulling off toward the rear.

A shoe such as described is easily adapted to different sizes and shapes of hoofs, owing to the facilities for expansion and contraction 85 afforded by the hinge at the toe. Also it will be found that it will remain securely attached to the hoof under all ordinary conditions of wear, as any tendency to knock off the shoe caused by the blow of the horse's hoof on the 90 road is counteracted by the natural tendency of the hoof to expand under pressure, forcing it into still closer contact with the clips. Owing to the inclination of these clips, they do not depend entirely on their own points 95 for engagement with the hoof, and for light purposes these may be dispensed with. It will be understood, therefore, that when I use the term "clip" it does not necessarily include points shown and described.

What I claim as my invention is— 1. A rubber horseshoe comprising a hinged metal core; a rubber tread molded to shape

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with the core; and a spring bearing against the opposite sides of the shoe to hold the clips in engagement with the foot, substantially as described.

metal core; a rubber tread molded to shape about the core; a plurality of clips connected with the core; supporting-hooks extending inwardly from the core; and a horseshoe-shaped spring engaged by the said hooks and adapted to retain the clips in engagement with the foot, substantially as described.

3. A rubber horseshoe comprising a hinged metal core; a rubber tread molded to shape about the core; a plurality of clips at the outside of the shoe connected with the core, each clip being adapted to engage the hoof and set at the same vertical angle as the portion of the hoof with which it is engaged; and a spring adapted to draw the sides of the shoe

together to maintain the clips in engagement with the hoof, substantially as described.

4. A rubber horseshoe comprising a hinged metal core; a rubber tread molded to shape about the core; a plurality of clips at the outside of the shoe connected with the core, each clip being adapted to engage the hoof and set at the same vertical angle as the portion of the hoof with which it is engaged; supporting-hooks extending inwardly from the core; 30 and a horseshoe-shaped spring engaged by the said hooks and adapted to retain the clips in engagement with the hoof, substantially as described.

Toronto, February 17, 1903.

JOHN J. COLLERAN.

In presence of—
A. J. COLBOURNE,
J. E. MAYBEE.

726,643