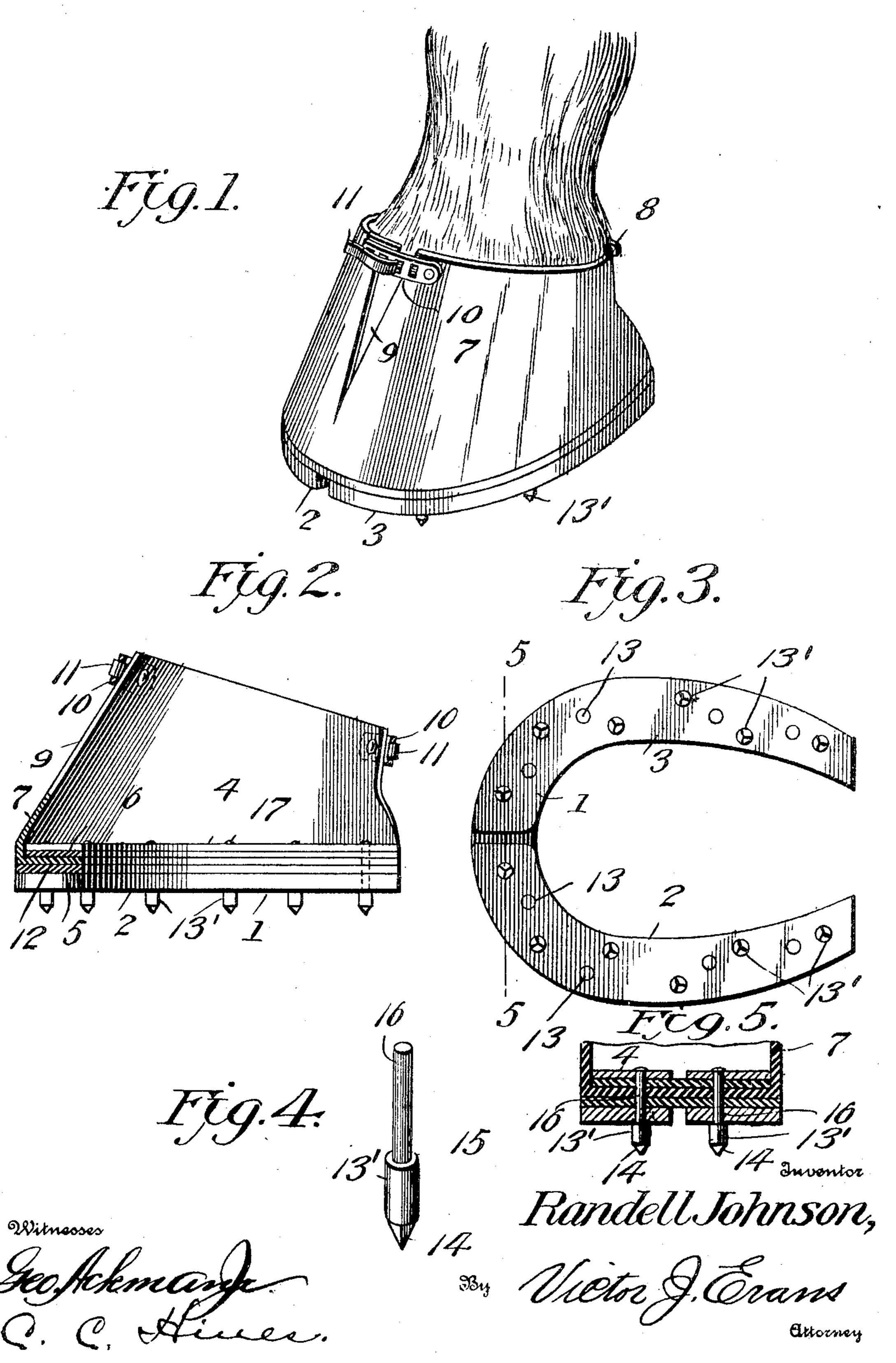
R. JOHNSON.
HORSESHOE.

APPLICATION FILED APR. 27, 1905.



## UNITED STATES PATENT OFFICE.

## RANDELL JOHNSON, OF MADISON, FLORIDA.

## HORSESHOE.

No. 797,895.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed April 27, 1905. Serial No. 257,739.

To all whom it may concern:

Be it known that I, Randell Johnson, a citizen of the United States of America, residing at Madison, in the county of Madison and State of Florida, have invented new and useful Improvements in Horseshoes, of which

the following is a specification.

This invention relates to improvements in horseshoes, the object of the invention being to provide a shoe which may be conveniently applied and removed and which will afford a yielding tread to absorb the jars or vibration ordinarily produced at each contact of the shoe with the road or street surface, thus rendering the shoe easier to the horse, and which is adapted to effectually prevent slipping on icy roads and streets and other slippery surfaces.

The invention further has for its object to provide an elastic or cushion shoe which is adjustable to accommodate irregularities in

the form of the horse's hoof.

The preferred embodiment of the invention is illustrated in the accompanying draw-

ings, in which-

Figure 1 is a perspective view of a horse-shoe constructed in accordance with my invention. Fig. 2 is a central vertical section of the same. Fig. 3 is a bottom plan view. Fig. 4 is a detail view of one of the calks, and Fig. 5 is a section on line 5 5 of Fig. 3.

The shoe portion proper of the device conforms in shape to the ordinary construction of shoe and comprises a bottom or tread plate 1, composed of halves or sections 2 and 3. Above this tread-plate 1 is arranged a similarly-constructed hoof-plate 4, of which one section is shown in Fig. 2. Between the plates 1 and 4 are arranged two plies or layers 5 and 6 of rubber or other suitable elastic material. These plies or layers are of continuous horseshoe shape and extend across the meeting ends of the sections of the tread and hoof plates at the front of the shoe, thus connecting them and forming, in effect, an elastic joint which permits the shoe as a whole to be expanded and contracted in a transverse direction to suit various irregularities in the shape of the hoofs of different horses.

In order to apply the shoe to the hoof, a boot 7 is provided and may be made of leather, rubber, or any other suitable material. This boot conforms to the contour of the outer surface of the hoof and is adapted to fit about the same. The rear edges of the

boot are separated and adapted to be connected by a buckle or other suitable fastening 8, while the front portion thereof is split or formed with a wedge-shaped opening 9, the meeting edges of which are provided with a buckle or other suitable fastening, the form of fastening shown in the present instance being a pivoted slotted keeper-plate 10, connected with one of the meeting edges, and a hinged spring - tongue 11, connected with the other meeting edge and adapted to engage the slots in the keeper-plate. By this construction the boot is adjustable for application to hoofs of different sizes and made readily applicable and removable.

The lower edge of the material of which the boot 7 is formed is bent at an angle thereto and inserted between the elastic layers or plies 5 and 6 of the shoe proper, as shown at 12, and rivets 13 pass through these parts and the tread and hoof plates and rigidly fasten the same together. Projecting below the tread-plate 1 are calks 13', which may be variously arranged and are provided with conical or pointed lower ends 14 to prevent slipping of the shoe on icy roads and streets and other slippery surfaces. Each calk 13' is formed with a shoulder 15, which abuts against the under side of the tread-plate, and with a shank 16, which projects upwardly through said plate, the elastic plies 5 and 6, the interposed edge 12 of the boot 7, and the hooked plate 4, and is offset or riveted at its upper end, as indicated at 17, to serve as an additional fastening to securely unite the parts together.

It will thus be seen that the invention provides a shoe which is simple of construction and comparatively inexpensive of production and may be quickly applied to the hoof; also, that by constructing the hoof and tread plates of similar sections and interposing the elastic plies or layers 5 and 6 therebetween a cushioning action is afforded which yields an elastic tread and lessens the jars or vibrations when the horse brings his foot in contact with the street or road surface. Further, by extending the shanks of the calk up through the shanks of the shoe the calks are made to serve the additional function of fastenings. If desired, the tread and hoof plates may be made of rubber, but metal is preferably used on account of its superior wearing qualities.

From the foregoing description, taken in

connection with the accompanying drawings, the construction and mode of operation of the invention will be understood without

a further extended description.

Changes in the form, proportions, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described the invention, what

is claimed as new is—

1. A horseshoe comprising sectional tread and hoof members, continuous layers of elastic material disposed upon the inner faces of said members and yieldingly connecting the sections thereof, a boot having its lower edge inserted between the elastic layers, and fas-

tenings extending through and permanently

uniting the parts.

2. A horseshoe comprising sectional tread and hoof sections, continuous layers of elastic material yieldingly connecting said sections, a boot having its lower edge inserted between the elastic layers, fastenings permanently uniting the parts, and calks passing through the parts and forming additional fastenings.

In testimony whereof I affix my signature

in presence of two witnesses.

RANDELL JOHNSON.

Witnesses:

JOSEPH MILFORD, J. W. WILLIAMS.