No. 742,362. PATENTED OCT. 27, 1903.

E. J. SINNOTT.

ELASTIC HORSESHOE.

APPLICATION FILED JUNE 4, 1903.

NO MODEL.

Fig. 1.

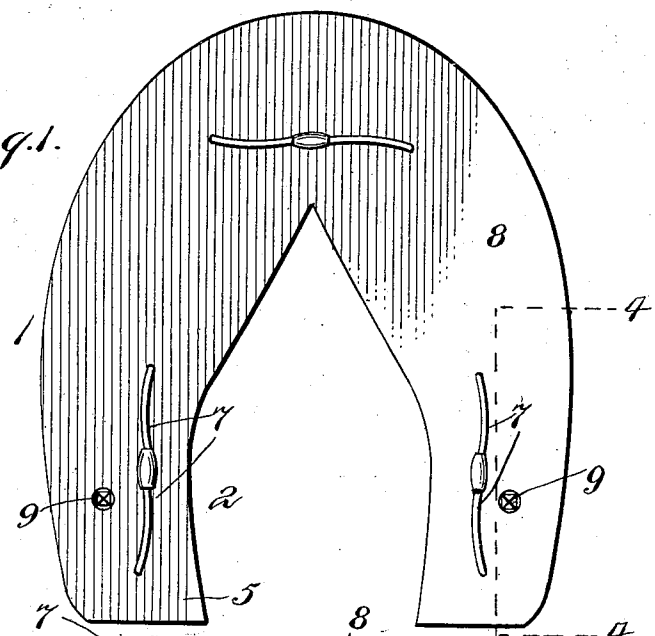



Fig. 2.

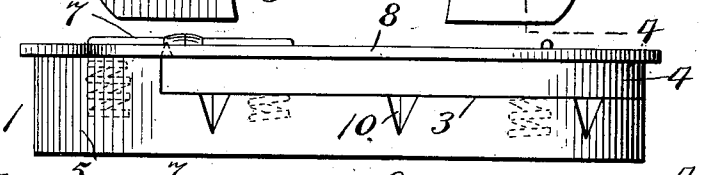



Fig. 4.

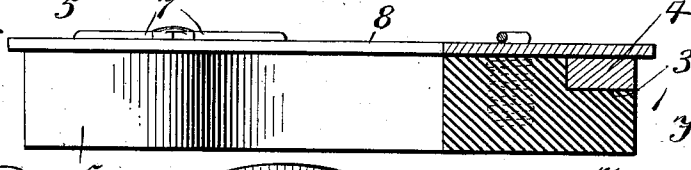



Fig. 6.

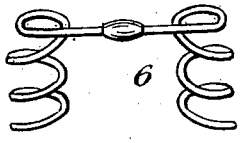



Fig. 5.

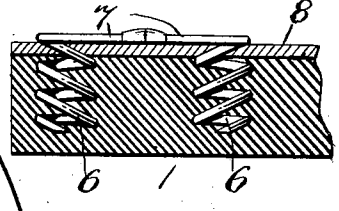
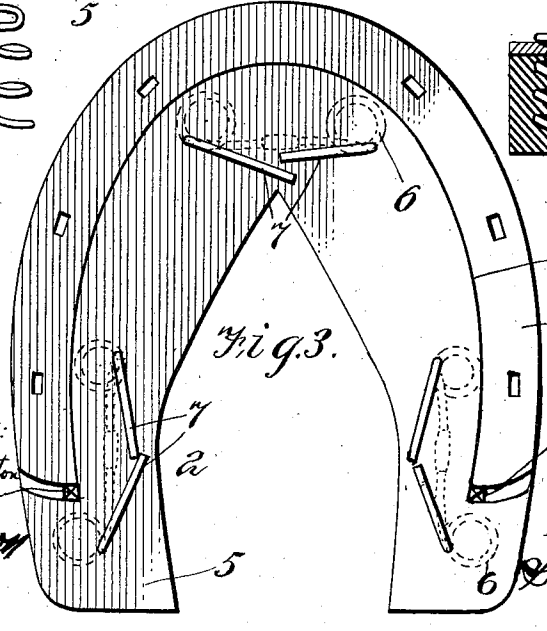



Fig. 3.




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No. 742,362. Patented October 27, 1903.

# UNITED STATES PATENT OFFICE.

EDWARD J. SINNOTT, OF ERIE, PENNSYLVANIA.

## ELASTIC HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 742,362, dated October 27, 1903.

Application filed June 4, 1903. Serial No. 160,051. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD J. SINNOTT, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Elastic Horseshoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in elastic horseshoes.

The object of the invention is to provide a horseshoe of this character which may be quickly and easily applied to the hoof of the animal and firmly held in place and prevented from being casually pulled away.

Another object is to provide a shoe of this character whereby slipping is prevented and the jar to the animal when traveling on hard pavements is relieved and also preventing all noise and pounding accompanying such travel.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan view of a horseshoe embodying the invention. Fig. 2 is a side view of the same. Fig. 3 is a top plan view with the pad removed. Fig. 4 is a longitudinal vertical sectional view. Fig. 5 is a detail vertical sectional view through one side of the shoe on the line 4 4 of Fig. 1. Fig. 6 is a detail view of the wire connecting device.

Referring more particularly to the drawings, 1 denotes the shoe, which is formed of rubber or other elastic composition and is horseshoe-shaped, being formed with a central opening 2 for the accommodation of the frog. The upper surface of the elastic shoe is cut away, as at 3, to form a seat for the accommodation of a metal shoe or horseshoe-shaped plate 4, having the usual nail-holes and by which the shoe is held to the hoof. The metal shoe or plate 4 does not extend clear to the end of the heels of the elastic shoe, they being formed of solid elastic material, as shown at 5 in Figs. 2 and 3 of the drawings.

6 denotes coils of spring-wire which are embedded in the rubber shoe, preferably by being cast in when the elastic material is molded, the ends 7 of the coils projecting upwardly. The coils are arranged in pairs, one pair being located in the toe and one pair in each of the heel or side portions of the shoe.

8 denotes a pad or lining formed of leather or strong heavy fabric, such as canvas or duck. The pad 8 is similar in shape to the rubber shoe and is adapted to be cemented to the central portion of the same and to project over the metal shoe or plate 4. The upwardly-extending ends 7 of each pair of coils 6 project through the pad 8 and are bent over toward each other and soldered or otherwise connected together, thereby positively and securely holding the pad to the elastic shoe. The wire coils also serve to stiffen and strengthen the elastic shoe without decreasing the elasticity of the same, the arrangement of the wire in the elastic material facilitating the wearing properties of the shoe and causing the same to last longer, the coiled shape of the wire holding the shoe until the same is entirely worn out.

On each end or heel portion of the metal shoe or plate is formed a short upwardly-projecting tooth or point 9, which passes through the pad 8 and serves as additional means for holding the parts in place.

Should it be necessary to remove the metal shoe or plate to fit the same to a hoof or for other reasons, it is simply necessary to raise the edge of the pad from engagement with the points 9 and press the heel ends of the elastic shoe together, thereby contracting the same, when the metal shoe may be readily drawn out and in the same manner replaced.

The elasticity of the elastic shoe causes it to accommodate itself to any changes made in the shape of the metal shoe in fitting the same to a hoof. Therefore one size of the elastic shoe may be made to fit several sizes of hoof. This is an important feature of the invention.

When applying the shoe, the nails are driven in through the holes in the metal shoe and through the pad or lining 8 and into the hoof, tightly securing the whole shoe in place. Depressions 10 are formed around the edge of the elastic shoe to permit the nail-holes in the

metal shoe to be reached and the nails to be driven.

The open heel and center portion of the shoe allows the frog room to grow and prevents the same from becoming tender or sore, as is the case in rubber shoes, which entirely cover the hoof.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A horseshoe of the character described, comprising an elastic horseshoe-shaped body portion, a horseshoe-shaped attaching-plate set into said elastic body portion, a pad or lining fixed to said elastic body portion and extending over said metallic plate, wire coils embedded in said elastic body portion and having upwardly-projecting ends, which pass through said pad or lining and are bent down and connected together, upwardly-projecting teeth or points formed on said plate and engaging said pad to hold said parts in place, substantially as described.

2. A soft-tread horseshoe comprising an elastic body and tread portion, an attaching-plate set into the outer edge thereof on its upper side, a flexible pad covering said body portion and attaching-plate, and spring-coils embedded in the elastic body portion and securing the pad thereon, substantially as described.

3. A soft-tread horseshoe comprising a horseshoe-shaped elastic body and tread portion open at the heel, an attaching-plate set into the outer edge thereof on its upper side, and a flexible pad covering said body portion and attaching-plate, secured to the former at points within but clear of the latter to adapt the attaching-plate to be removed from the elastic body portion independently of the pad, said attaching-plate having studs on the upper sides of its heel portions, and said pad having openings to receive said studs to secure the pad to the attaching-plate, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EDWARD J. SINNOTT.

Witnesses:
P. V. GIFFORD,
L. E. TORRY.