

No. 631,296.

Patented Aug. 22, 1899.

P. H. GRAVES.
HORSESHOE.

(Application filed Mar. 18, 1899.)

(No Model.)

Fig. 1.

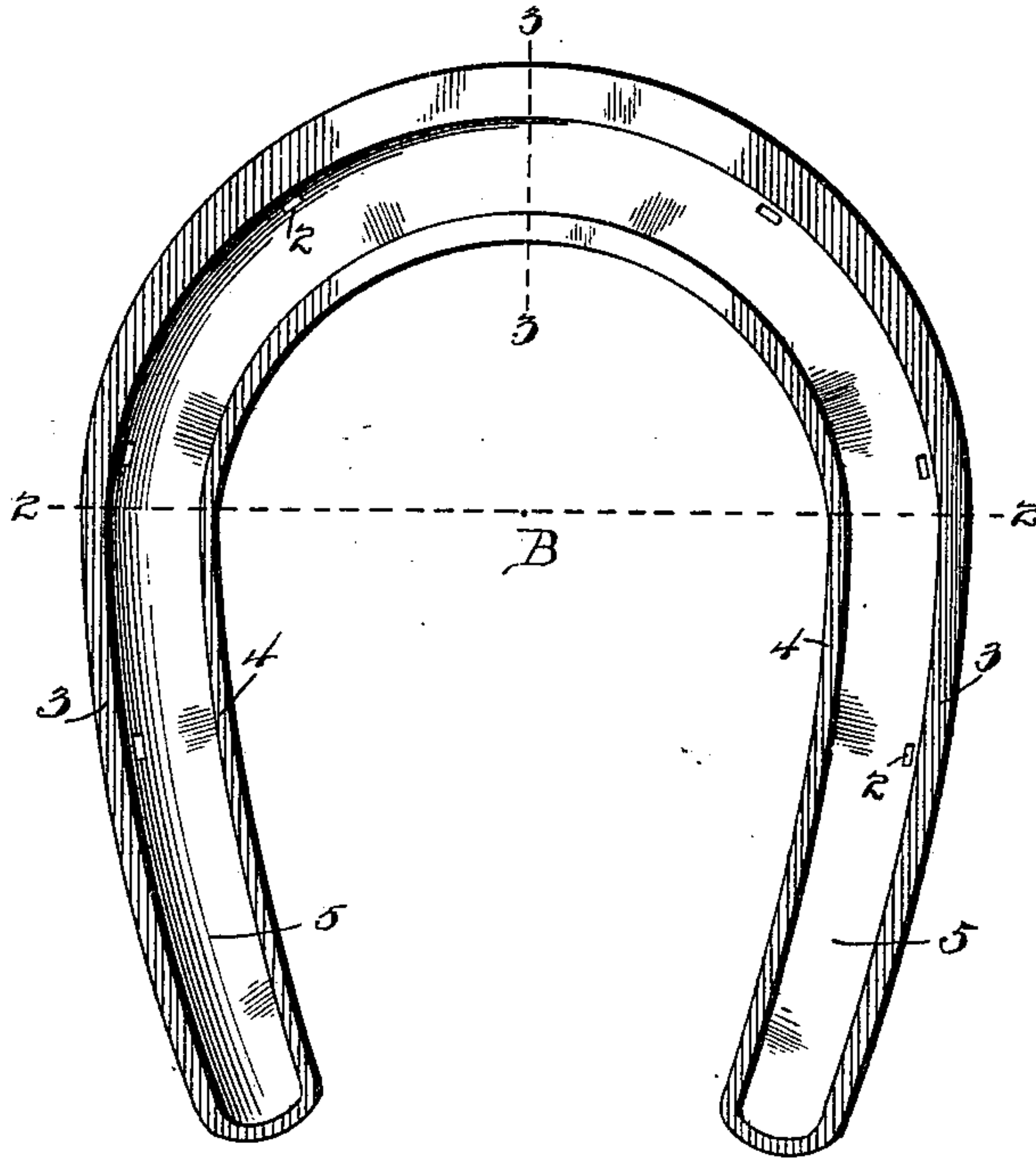


Fig. 2.

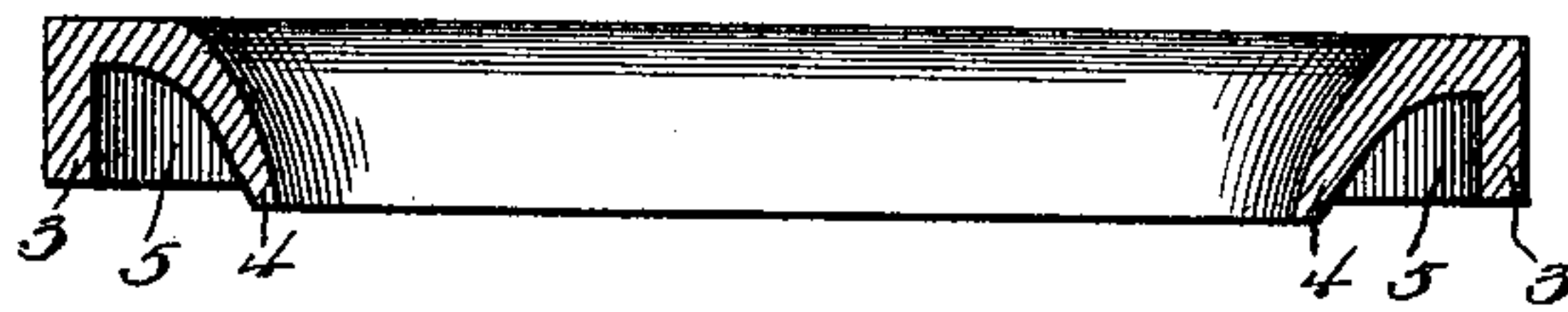
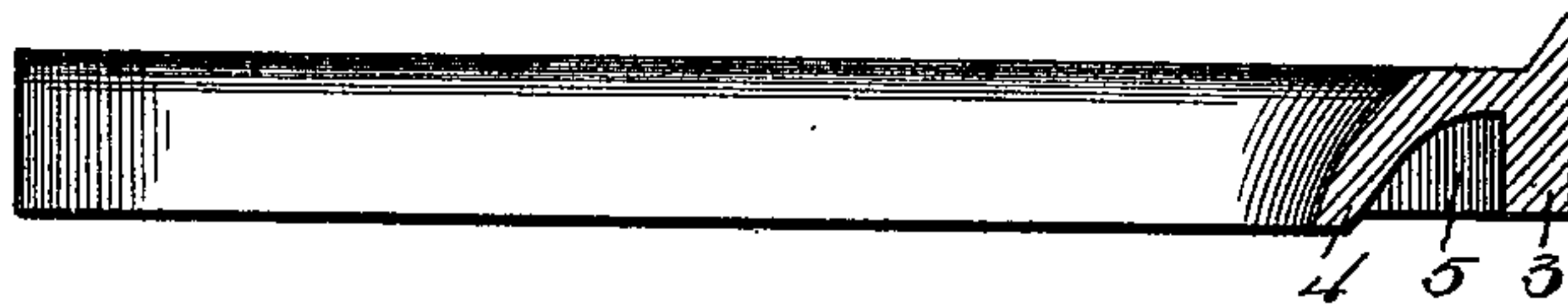


Fig. 3.



Witnesses
Ralph A. Shepard
Wm. L. Litchford

Phylander H. Graves Inventor
By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

PHILANDER H. GRAVES, OF CHICAGO, ILLINOIS.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 631,296, dated August 22, 1899.

Application filed March 18, 1899. Serial No. 709,606. (No model.)

To all whom it may concern:

Be it known that I, PHILANDER H. GRAVES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Horse-shoe, of which the following is a specification.

This invention relates to horseshoes; and the object of the invention is to provide a simple device of this character which can be manufactured at a low cost and which is of such a construction that the slipping of the feet of a horse is not only prevented, but the shock and jar usually experienced by an animal in traveling over hard streets or roads is removed.

The shoe, which may be of any suitable material and of the usual shape, has a resilient metal rim. In the present case I prefer to provide the shoe with two rims, and one of these rims projects below the other and is resilient, and this resilient part as the horse's foot is lowered strikes the ground before the companion part and gives or yields to a sufficient extent to relieve the muscles of the leg and shoulder from what would otherwise be a sudden and violent jar with a metallic shoe. As a convenient means of forming the shoe it is provided with two rims, which extend entirely around the same; and the inner one extends below the outer one and is sloped inwardly as a means for giving it the necessary elasticity.

With these ends in view the invention consists in the novel combination of elements and in the construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand the invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is an under side view of a horse-shoe constructed in accordance with my invention. Fig. 2 is a transverse section taken on the line 2 2, Fig. 1. Fig. 3 is a longitudinal section taken on the line 3 3, Fig. 1.

Like characters denote like and corresponding parts in each of the several figures of the drawings.

In the drawings I have shown a shoe of familiar shape, and it may be made of the ma-

terial usually employed in forming devices of this character, and it includes in its construction the body B, having the holes or perforations 2 at suitable intervals to receive the usual nails by which the shoe is secured to a hoof. The sole or under side of the body is provided with the outer and inner rims 3 and 4, located at a convenient distance apart and joined at the heel of the shoe, thereby forming a groove or channel 5. The two ridges or analogous parts extend entirely around the inner and outer edges of the shoe, and upon an inspection of Figs. 2 and 3 it will be observed that the inner ridge or rim extends below the lower edge of the outer ridge or rim 3, so that said inner part will first come in contact with the ground as the horse's foot is lowered, and as a means for relieving the muscles in the leg from the shock generally experienced the inner part is made elastic or resilient, and this effect is produced by sloping the same inward, as clearly indicated in Figs. 2 and 3, and it is enhanced somewhat by making the same relatively thin. The outer rim or ridge, it will be seen, is comparatively thick at the toe of the shoe, thereby securing rigidity at this place, which is subjected to violent blows.

From the preceding description it will be seen that as a foot is lowered the inner rim 4 will strike the ground, and if the surface of the latter is hard it will spring upward, and subsequently the outer and thicker ridge or rim 3 will also strike the earth; but the blow will be materially modified and to such an extent as to cause no harm to an animal. It will be understood that as the lower edge of each rim rests upon the surface of the ground the spring or upward movement of the resilient rim 4 causes a suction in the groove or channel 5, whereby the shoe is held firmly upon the surface of the ground, and thereby prevented from slipping thereupon.

The shoe hereinbefore described is a safety one and in the nature of a calkless device, and as it has no projections it can pass over the slots in cable and electric conduits without possibility of the horse tripping, as is frequently the case where projecting calks are employed, as these catch in the conduits and railway-frogs and cause the accident above stated.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

1. A horseshoe having two rims extending entirely around the same and the inner one extending below the outer one and being sloped thereby to produce elasticity in the same.

2. A horseshoe having two rims extending entirely around the same and joined at the rear or heel of the shoe, the inner rim extend-

ing below the outer rim and being sloped inward thereby to produce elasticity.

3. A horseshoe having two rims extending entirely around the same and joined at the rear or heel of the shoe, and the outer rim being perpendicular and the inner rim extending below the outer rim and sloping inward and being also thinner than the outer rim.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PHILANDER H. GRAVES.

Witnesses:

FREDERICK J. FACHEN,
FRANK J. HETZEL.