

A. ALBRIGHT.

Horseshoe.

No. 167,600.

Patented Sept. 14, 1875.

FIG. II.

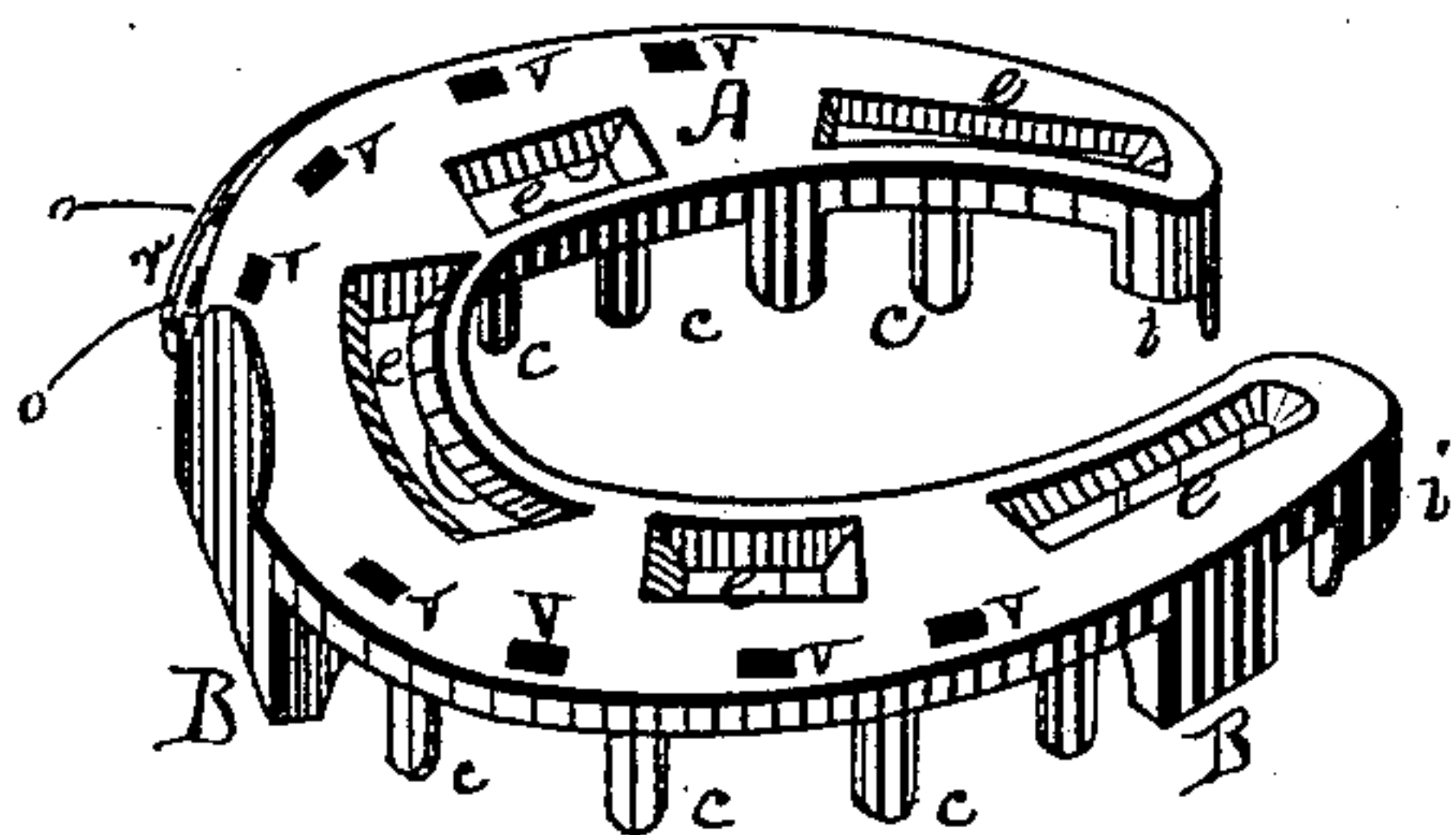


FIG. I.

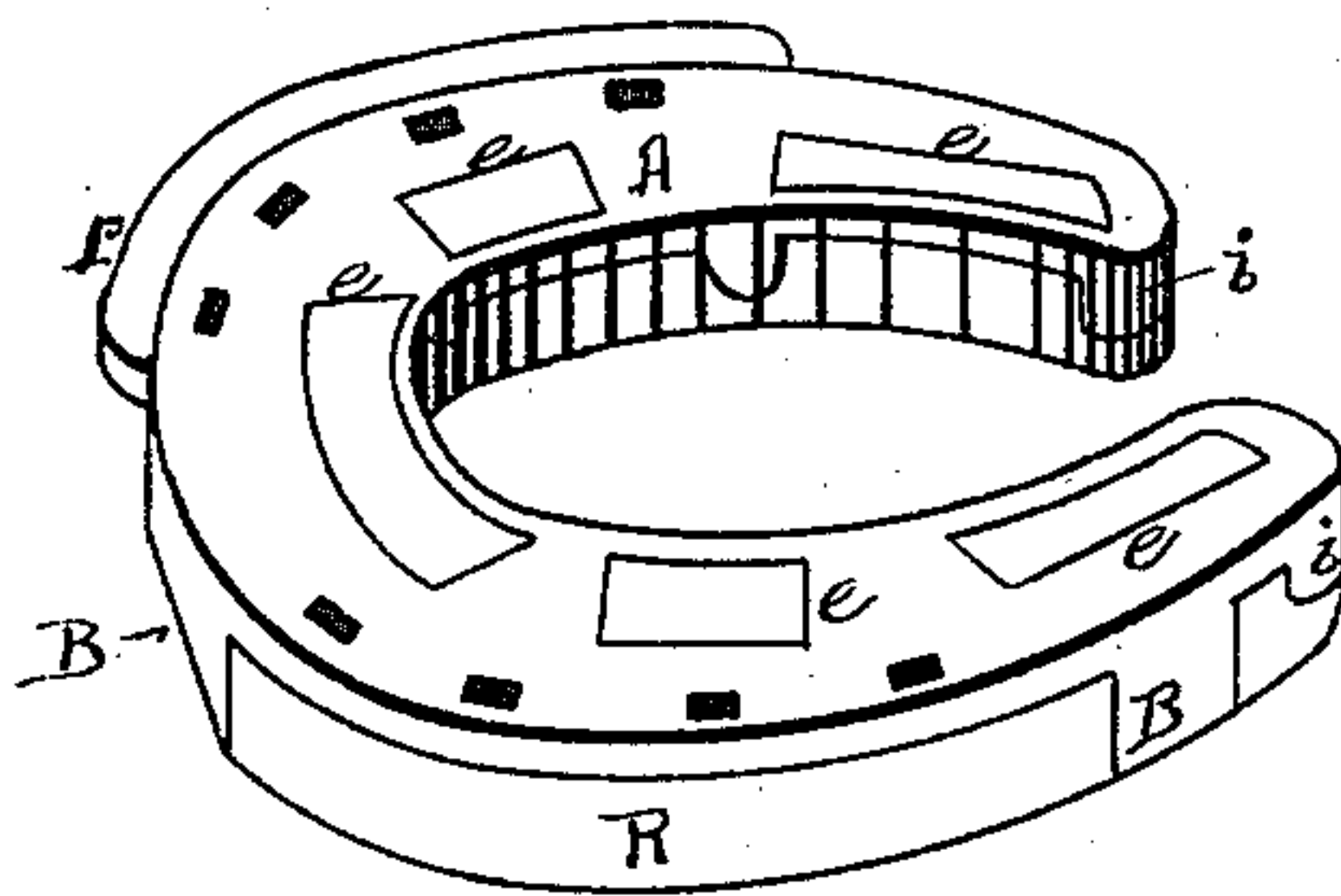


FIG. IV.

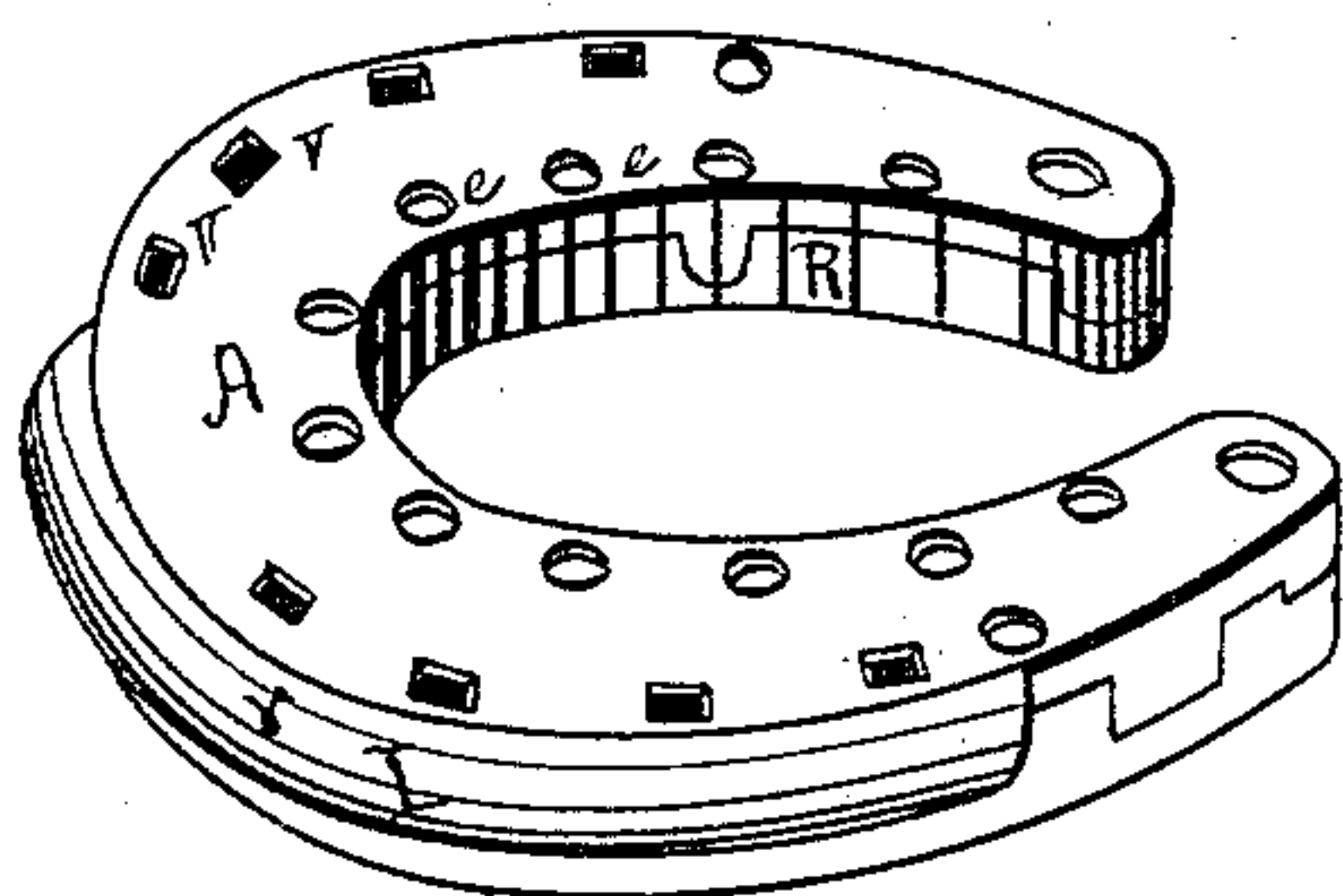
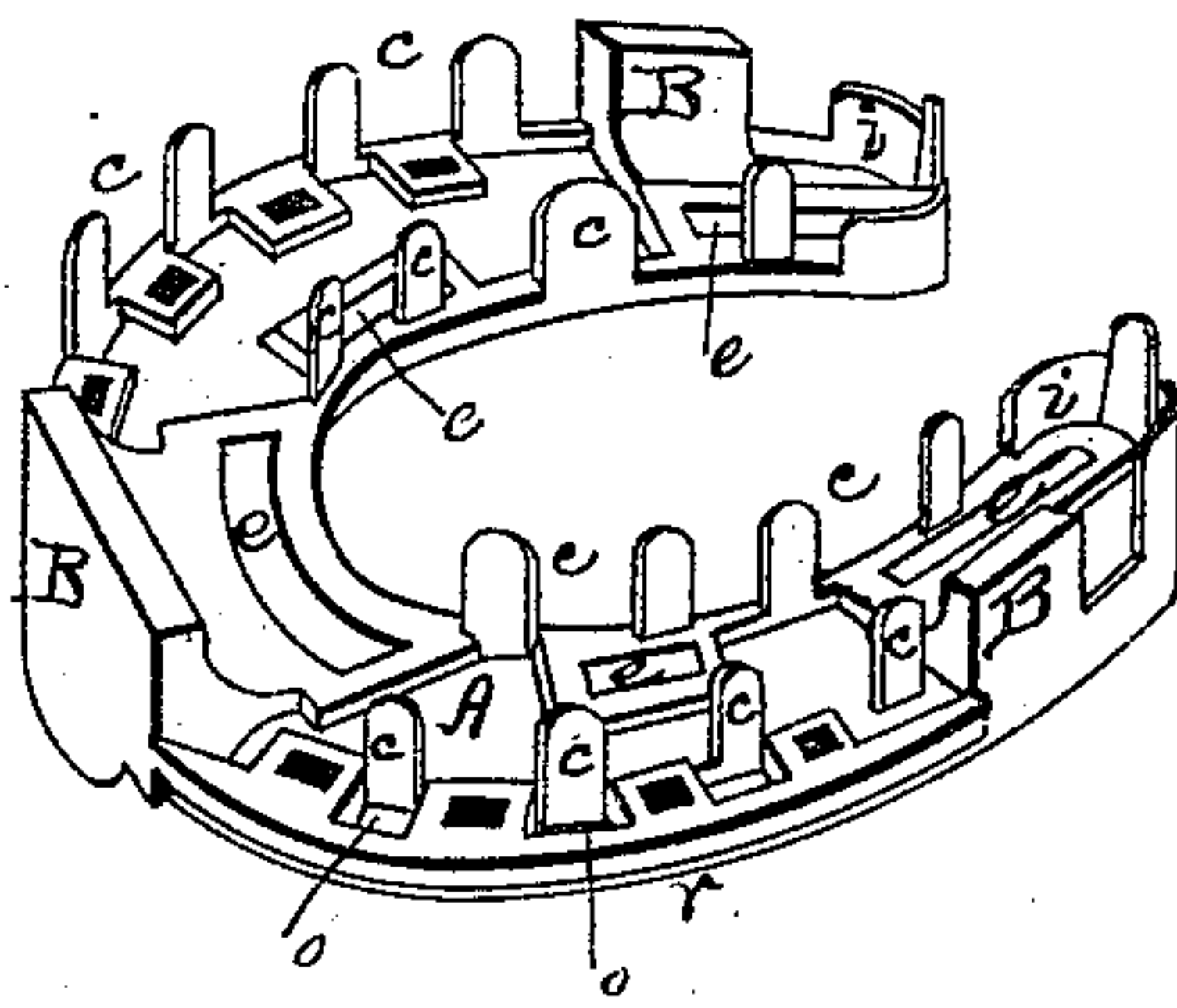


FIG. III.



WITNESSES.

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IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. 167,600, dated September 14, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that I, ANDREW ALBRIGHT, of Newark, Essex county, State of New Jersey, have invented certain new and useful Improvements in Elastic Horseshoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings forming a part of this specification.

Figure 1 is a perspective view, showing the upper surface of the complete shoe, having the elastic guard to prevent "quarter-cutting." Fig. 2 is a similar view, showing only the metal plate of the shoe. Fig. 3 is a similar view, showing the under side of said plate. Fig. 4 shows my shoe with the guard complete.

This invention relates to a horseshoe, having its frame or plate which gives strength made out of metal, and having an elastic filling of rubber, or other suitable elastic or yielding substance, and with or without an elastic guard against quarter-cutting or "interfering;" and it consists in constructing the metal frame with numerous orifices, transverse bars, and prongs, to afford a secure hold for the vulcanized gum, and to keep the same from becoming pressed out of shape or loosened.

A represents the metal plate which gives strength, and which is to be secured to the hoof by nails, or otherwise. When the shoe is to be provided with steel calks B they are set in the flask, and the plate A is cast around them. This plate may be made to advantage of malleable cast-iron, or other metal, cast or forged, swaged or stamped. *c c* are two series of prongs or tongues, (about half an inch wide, and three-quarters of an inch long.) extending around the inner and outer edges of plate A. These prongs are to be bent over that portion of the rubber filling which lies next to the plate, thus serving to bind it to the plate firmly. *e e* are a series of slots in plate A, through which a portion of the rubber is pressed. *V V* are nail-holes through the plate.

When the shoe is to be provided with a shield or guard against interfering, quarter-cutting, or "overreaching," it is supplied with the projecting rib *r*, as part of the plate A, and is placed at about the inner or front quarter of the shoe. This rib *r* serves as a support or back-bone for the rubber or other sub-

stance which covers it, and constitutes the elastic guard. Between rib *r* and plate A are a series of slots or dovetail grooves, *o o*, through which the rubber is to be pressed, so as to be better secured to the rib. *i i* are the metallic heels on the shoe-plate A, to shield the ends of the rubber filling. When the elastic guard or buffer is to be against quarter-cutting, the rib *r* extends around to the front of the shoe, and the toe-calk is set back a little from the front. I is the projecting-rubber guard to prevent injury by quarter-cutting, overreaching, or interfering.

After constructing plate A, as above described, I proceed to combine with it the rubber filling in any convenient manner—for instance, as follows: A suitable quantity of plastic rubber stock of the desired quality is laid upon the plate, to which it is secured by bending over it the prongs *c c*. Another similar quantity is then laid on this first quantity, filling up the shoe to above the level of the calks. Pressure in suitable molds or dies is applied to make the filling one mass, and force it into the slots *o*, and into close contact with the plate. It is then vulcanized while under pressure. When I wish to make such a shoe, with the rib *r* and guard I added, I also apply the proper quantity and quality of stock to cover the rib *r*, and form the guard I while the rubber filling is plastic, and by pressure, as above described, give the proper form to the entire mass of rubber, and vulcanize as above. The guard I should be made of softer and more yielding rubber than the filling. As manufacturers of rubber know how to produce all requisite degrees of hardness and elasticity, there is no need to give details of the modes of doing so.

I claim as my invention—

1. The plate A, provided with slots *e*, and prongs *c*, in combination with the elastic filling R, constructed and operating substantially as and for the purposes set forth.

2. A combined rubber (or elastic substance) and metal horseshoe, constructed with an elastic lateral guard, I, formed upon a projecting rib, *r*, substantially as and for the purposes set forth.

ANDREW ALBRIGHT.

Witnesses:

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