

G. LOEFFLER.

HORSESHOE.

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940,337.

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Fig. 1.

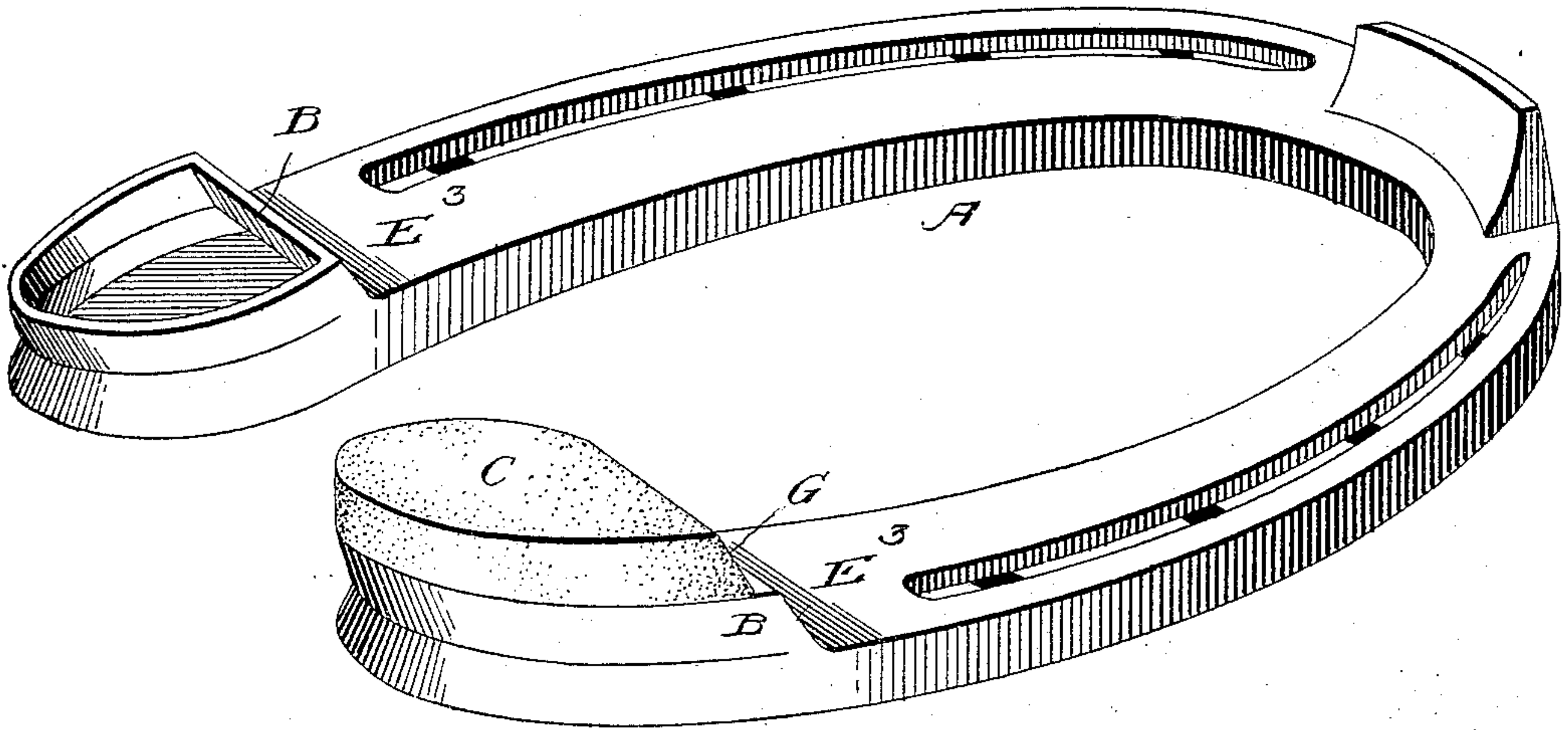


Fig. 2.

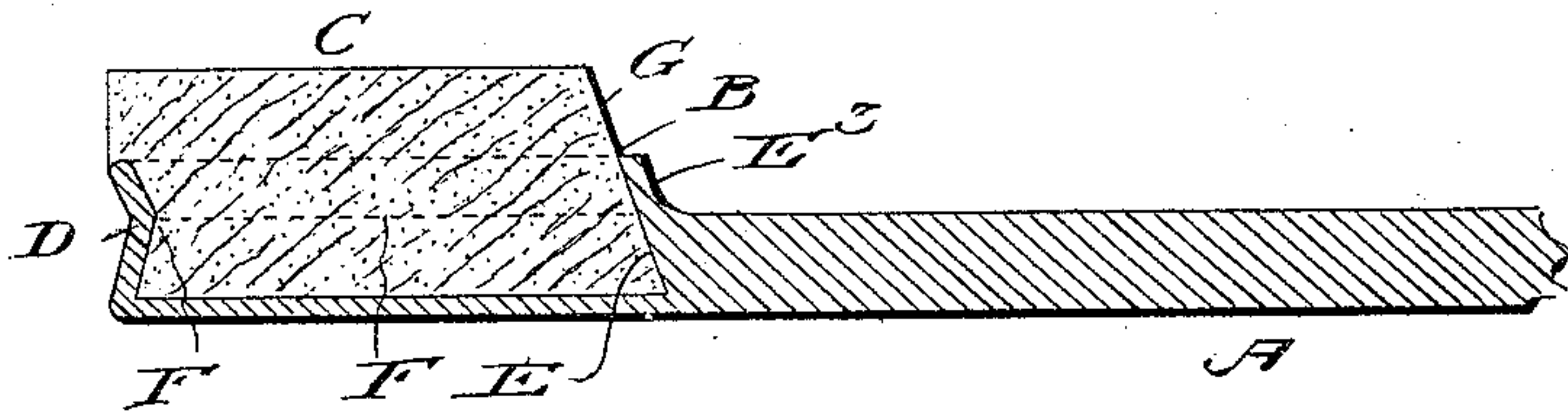


Fig. 3.

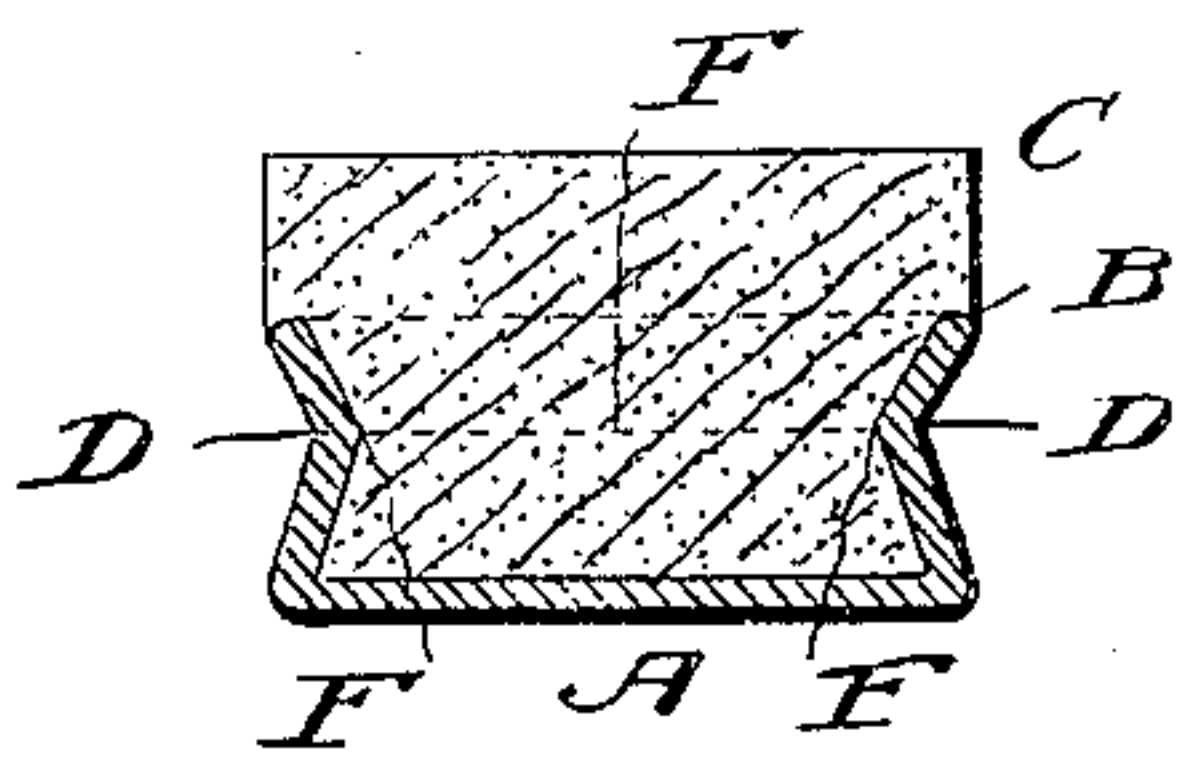
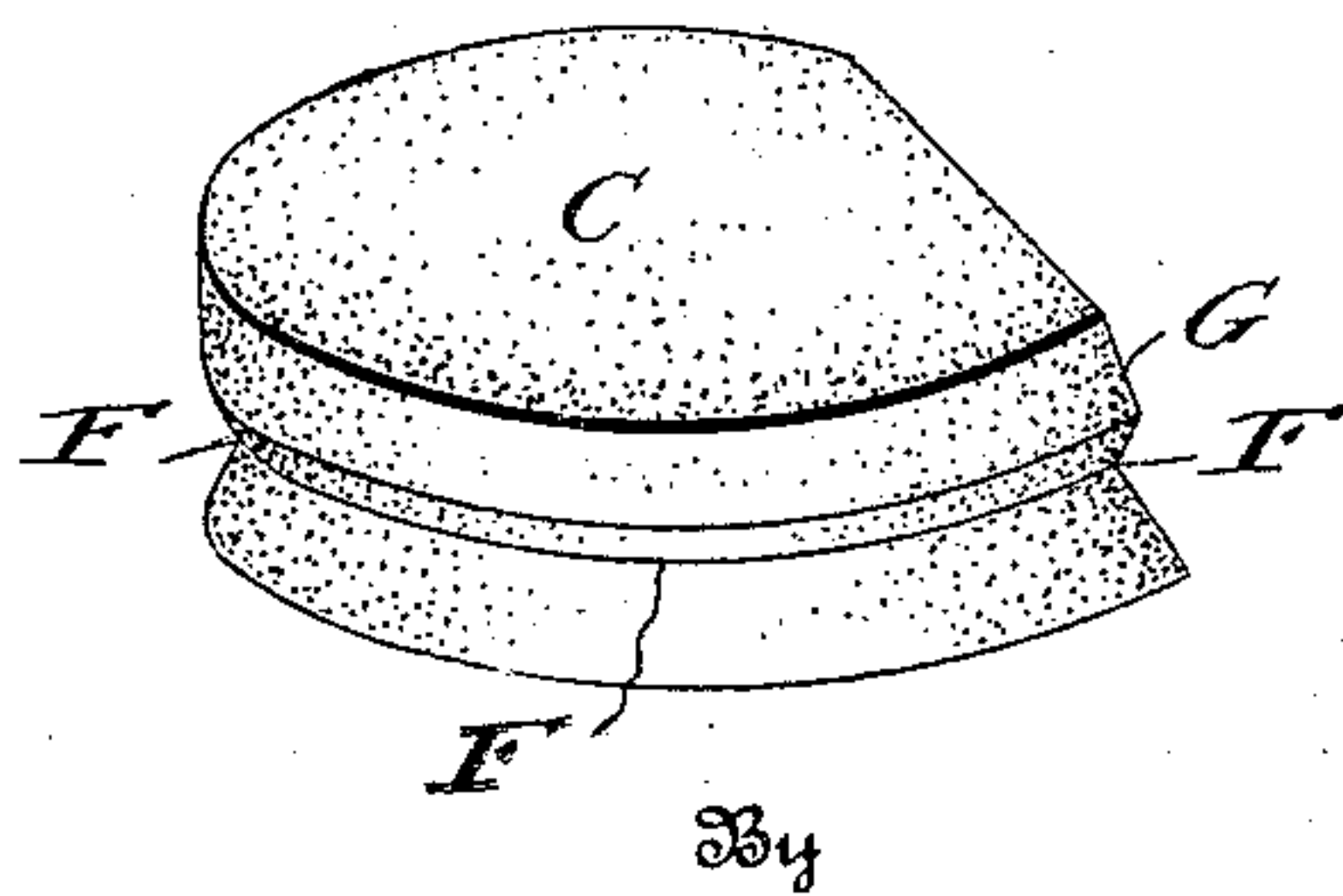


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

GUSTAV LOEFFLER, OF TAMPA, FLORIDA.

HORSESHOE.

940,337.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, GUSTAV LOEFFLER, citizen of the United States, residing at Tampa, in the county of Hillsboro and State of Florida, have invented new and useful Improvements in Horseshoes, of which the following is a specification.

My invention pertains to horseshoes such as are provided with soft-tread heel pads; and it has for its general object to provide a shoe of said type, embodying such a construction of elastic heel pads and sockets therefor that the pads are reinforced by the sockets and are not liable to be cut or otherwise deteriorated by the walls thereof, and the pads may be sprung into the sockets and secured by their elasticity or resiliency in such manner that they are not liable to be casually displaced in use and can only be removed through the medium of tools adapted for the purpose.

With the foregoing in mind, the invention will be fully understood from the following description and claim when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a perspective view showing in inverted position a horseshoe constituting the best practical embodiment of my invention of which I am cognizant. Fig. 2 is a longitudinal central section taken through a portion of the shoe body and one pad and showing the pad in its complementary socket in the body. Fig. 3 is a view taken at a right angle to Fig. 2, and showing the said pad and socket. Fig. 4 is a perspective view of the said pad as it appears when removed from its socket in the shoe body.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is the body of my novel shoe, which is made of metal and preferably in the ordinary, well known manner, with the exception that it is provided at its ends with sockets B, and C C are the soft-tread heel pads, which are made of rubber and fiber or of any other material or composition of materials possessed of the elasticity necessary to enable the pads to assist in holding themselves in position in the sockets and to afford the cushions desired at the heel of the shoe.

Each of the sockets B is provided at its back and along its sides with inwardly deflected walls D having lower inwardly in-

clined portions and upper outwardly inclined portions, and each socket is further provided with an undercut forward end wall E, the purpose of which will be hereinafter more fully set forth in detail. It will be noted, however, that the inwardly deflected portions D are of V-shape in cross-section, which is the preferred form, and that the wall E is undercut to a considerable extent. It will also be noted that the undercut wall E is provided with a correspondingly inclined extended portion E<sup>3</sup> for an important purpose hereinafter set forth. It will be observed that the side and back walls as well as the portions E<sup>3</sup> of the sockets depend considerably below the underside of the major portion of the shoe body and consequently said sockets are enabled to engage a considerable portion of and securely hold the pads without the necessity of making the metallic body unduly heavy.

The soft-tread heel pads are identical in the respects hereinafter set forth in detail and therefore a detailed description of the pad C, shown in Fig. 4, will suffice to impart a definite understanding of both pads C. The said pad C, Fig. 4, is provided in its rear end and its opposite sides with grooves F corresponding in cross-sectional shape and size with the inwardly deflected portions D and designed to snugly receive the said inwardly deflected portions; and it is also provided with a beveled forward end G the extremity of which is designed to enter and fully occupy the space under the forward undercut wall E of the socket complementary to the pad.

The provision of the inwardly deflected portions D at an intermediate point in the height of the back and side walls of each socket B is materially advantageous inasmuch as it enables the said back and side walls to securely hold the pads C without liability of cutting or otherwise deteriorating the pads, and at the same time enables the said back and side walls to bear against and reinforce the pads with the result that the usefulness of the pads is prolonged and the cushioning of the heel portions of the shoe is improved.

In practice, the pads C are forced into the sockets B, when, by reason of the inwardly deflected portions D and the undercut forward end walls E and the extended portions E<sup>3</sup> coöperating with the grooves F and beveled ends G, respectively, the pads will be



retained in the sockets without the employment of extraneous devices, and this in such manner that the pads are not liable to be casually displaced while the shoe is in use, and can only be removed through the medium of specially devised instruments or tools. It will be understood, however, in this connection that when one set of pads is removed another set may be employed in combination with the old shoe body, and that this replenishing of the pads may be continued so long as the shoe body is fit for use. I would further have it understood that the inclined extended portions  $E^3$  of the undercut walls  $E$  cooperate with the beveled ends  $G$  of the pads and assist materially in retaining the pads in the sockets, and that the sockets in their entirety are calculated to reinforce the pads while holding the same, and this without liability of the pads being cut, worn or otherwise deteriorated by the sockets when the shoe is in use.

It will be readily gathered from the foregoing that my novel shoe embodies but three parts, viz: the metallic shoe body  $A$  and the two pads  $C$ , and that therefore it is a material simplification of the soft-tread horse-shoes extant; also, that by reason of the side and back walls of the sockets being shaped, and the sides and backs of the pads being grooved, and the forward ends of the pads being inclined throughout correspondingly to the forward ends  $E$  and the inner sides of the extended portions  $E^3$  of the sockets, the pads may be readily removed from the sockets and as readily replaced by new pads, and yet there is no liability of the pads working loose or being displaced while the shoe is in use. It will further be gathered that the pads  $C$  arranged as shown and described, are calculated to efficiently cushion the rear or heel portion of the shoe, and materially lessen the liability of a horse's hoof being injured by a hard roadway or pavement.

As before stated, the construction herein illustrated and described constitutes the best practical embodiment of my invention at present known to me, but it is obvious that in the future practice of the invention such changes in the form, construction and relative arrangement of parts may be made as fairly fall within the scope of my invention as defined in the claim appended.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

A horseshoe comprising a metallic body having a major portion and also having heel sockets each of which is made up of an undercut forward end wall, a correspondingly inclined portion  $E^3$  depending below the underside of said major portion, and back and side walls also depending below the major portion and each having a lower inwardly inclined portion and an upper outwardly inclined portion, and elastic pads disposed in the said sockets of the body and also disposed below and bearing against the edges of the side and back walls of the sockets, and having grooves in the upper portions of their rear ends and sides corresponding in cross-sectional shape and size to the inwardly and outwardly inclined portions of the back and side walls of the sockets and snugly receiving the said portions and also having forward ends arranged against the undercut forward end walls of the sockets and also against the inner sides of the extended portions  $E^3$  and inclined throughout correspondingly to said end walls and the inner sides of said extended portions  $E^3$ .

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

GUSTAV LOEFFLER.

Witnesses:

E. R. DICKENSON,

C. W. STEVENS.