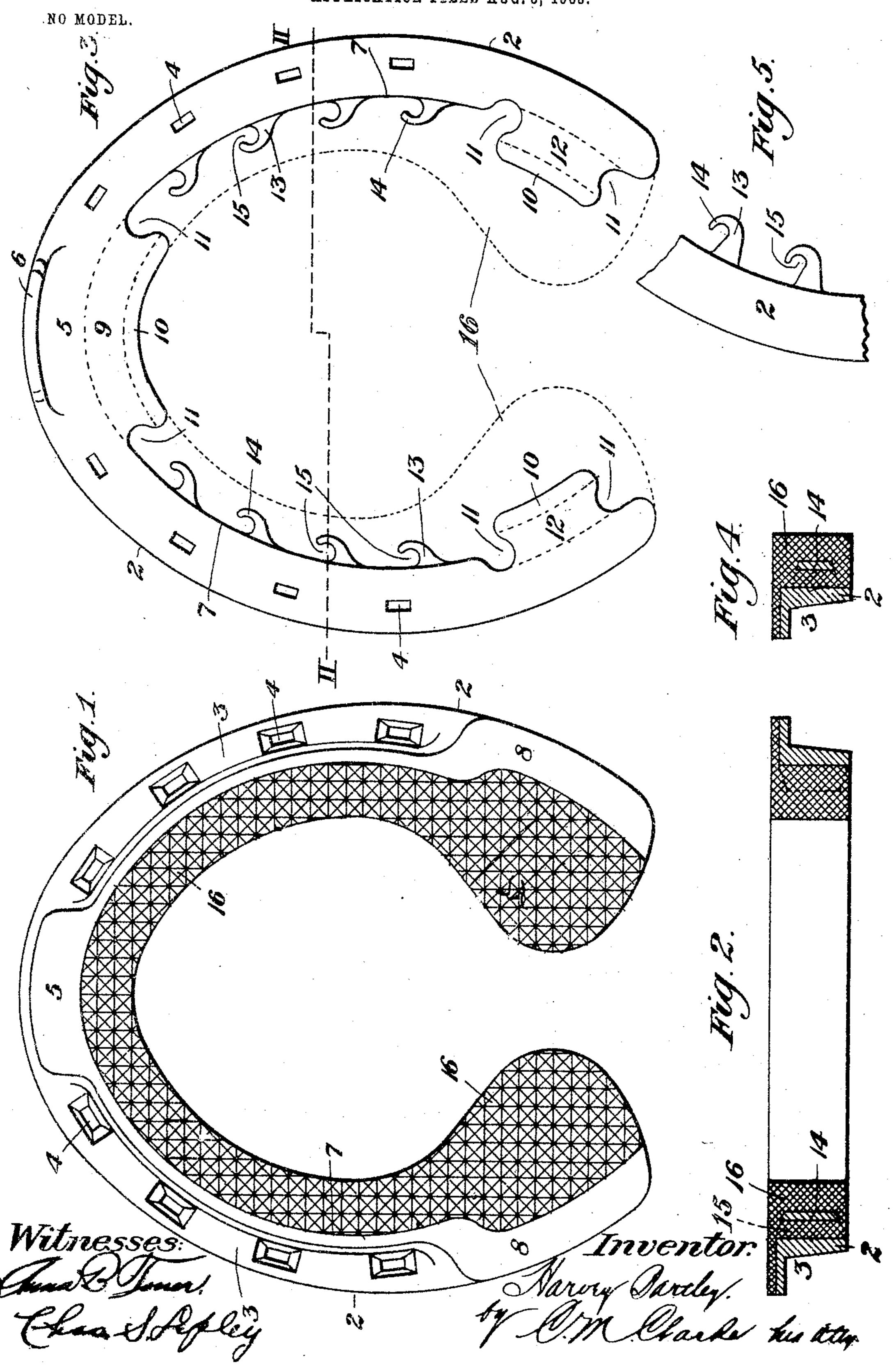
H. BARTLEY.

COMPOSITION HORSESHOE.

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## COMPOSITION HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 774,820, dated November 15, 1904.

Application filed August 8, 1903. Serial No. 168,834. (No model.)

To all whom it may concern:

Be it known that I, Harvey Bartley, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Composition Horseshoes, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an under plan view of my improved horseshoe. Fig. 2 is a cross-section taken on the line II II of Fig. 3. Fig. 3 is an upper plan view of the metal base. Fig. 4 is a view showing a modified construction, the anchor being of reduced thickness. Fig. 5 is a detail view showing a modified construction of anchor.

My invention relates to improvements in horseshoes in which a cushioning portion is incorporated with a holding-base, and it refers more particularly to the construction of the base and to the supporting and anchoring devices for the cushioning portion, whereby these parts are securely incorporated with each other.

Referring now to the drawings, 2 represents the base, made in one integral piece of metal, preferably of forged or cast steel or 30 aluminium, the sides of which are recessed, as at 3, and provided with the usual nail-holes 4. The toe 5 is reinforced, as indicated, and is provided with the usual upwardly-extending tip 6 of suitable form to engage the toe of the 35 hoof. The inner edge 7 of the base is preferably continued around for the full length of the shoe and of the same depth as the toe 5, being somewhat thickened at the rear portion, as indicated at 8, and adapted as thus 4° formed to provide a surrounding rigid holding-frame for the cushion and also a wearing edge adapted to bear upon the pavement.

Extending backwardly from the toe 5 is a web portion 9, terminating in a downwardly45 turned lip 10, forming an anchor adapted to engage and hold the cushion. Each end of such backwardly-extending anchor is preferably recessed or narrowed, as at 11, the terminal corners projecting so as to approximate a dovetail shape, which will maintain a

firm binding hold upon the cushion. At the inner portions of the heels of the base are provided similar inwardly-projecting holding anchors or extensions 12, the ends of which are preferably recessed in a similar manner, as at 55 11, and provided with similar holding-lips 10.

Between the forward and back holding anchors 9 and 12, arranged along the inner edge of the base, are a series of inwardly and preferably forwardly projecting tongues or sup- 60 plemental anchors 13 of the full depth of the base, as shown in Fig. 2, or of less depth, as shown in Fig. 4, and preferably integral with the base. These anchors 13 are preferably tapered and terminate in hooked or turned 65 extremities 14, having vertical walls, between which extremities and the base are thus provided recesses 15, into which the cushioning substance is forced in a direction parallel with such vertical walls of the hooks, so that it 70 thus firmly embraces the terminals 14, while the tongues and their terminals are firmly embedded in the cushion with a binding-hold. The anchors or tongues 13 are preferably arranged at an oblique angle to the inner face 75 of the base, although they may, if desired, extend inwardly therefrom at approximate right angles, the terminals being turned outwardly toward the base, so as to provide the recess 15, as indicated in Fig. 5.

As thus constructed it will be seen that all of the holding anchors and tongues extend inwardly and that the recessed cavities between them and between their curved terminals and the base provide efficient holding 85 means for the cushion. The number of the holding-anchors and their location at the front, back, and intermediate portions of the base provide substantial bearing-surfaces, against which the cushion will press and by 90 which it will be well supported. While the arrangement of the anchors, as shown, is productive of good results, it is obvious that it may be varied, as by eliminating the front and back dovetail-form anchors and provid- 95 ing one continuous series of the anchors 13, having the curved terminals 14 and intervening spaces 15.

The cushioning substance, either of rubber or a combination of rubber and canvas or of

any other suitable combinations of material, (indicated by the numeral 16,) is pressed into the holding-cavities and around the anchoring portions of the shoe-base, so as to completely fill such cavities and surround the holding de-

vices, as clearly shown.

It will be understood that the cushioning substance is preferably forced around and over the entire upper portion of the base, thus providing a good bearing-surface for the hoof. In attaching the shoe the nails are driven through the openings 4 and the upper cushioning layer and into the hoof in the usual manner.

As thus constructed I have provided a very serviceable efficient horseshoe capable of long continued use and of holding the cushioning substance tightly to the base without displacement under the excessive wear or jar incident

20 to devices of this kind.

Changes and variations may be made by the skilled mechanic in the design, proportions, or other details of the invention—as, for instance, the number, location, and shape of the holding-anchors—but all such are to be considered as within the scope of the following claims.

What I claim is—

1. A horseshoe-base having on its inner sides inwardly-extending hooked holding-anchors having vertical holding-faces, substantially as set forth.

2. A horseshoe having on its inner sides a series of inwardly-extending holding-anchors provided with hooked terminals having vertical holding-faces, substantially as set forth.

3. A horseshoe-base having on its inner sides a series of inwardly and forwardly extending holding-anchors provided with hooked terminals having vertical holding-faces, substantially as set forth.

4. A horseshoe-base having on its inner sides a series of inwardly and forwardly extending holding-anchors provided with hooked

terminals having vertical holding-faces, with 45 intervening recesses adapted to engage and hold a cushioning substance, substantially as set forth.

5. A horseshoe-base having on its inner sides a series of angularly-arranged inwardly- 5° extending holding-anchors provided with hooked terminals having vertical holding-faces adapted to engage and hold a cushioning substance, substantially as set forth.

6. A horseshoe-base provided at its toe and 55 heel portions respectively with inwardly-extending holding-anchors of dovetail form, and intervening series of inwardly-extending holding-anchors provided with hooked terminals, substantially as set forth.

7. A composite horseshoe consisting of a base having on its inner sides hooked holding-anchors having vertical holding-faces, and a cushioning substance incorporated there-

with, substantially as set forth.

8. A composite horseshoe consisting of a base, provided at its toe and heel portions respectively with inwardly-extending holding-anchors of dovetail form, and intervening inwardly-extending holding-anchors provided 7° with hooked terminals, and a cushioning substance incorporated therewith, substantially as set forth.

9. A composite horseshoe consisting of a base, provided at its toe and heel portions re- 75 spectively with inwardly-extending holding-anchors of dovetail form, and intervening inwardly-extending holding-anchors provided with hooked terminals, having vertical holding-faces, and a cushioning substance incorporated therewith, substantially as set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

## HARVEY BARTLEY.

Witnesses:
Jas. J. McAfee,
C. M. Clarke.