(No Model.)

M. E. POUPARD.

HORSESHOE.

No. 526,050. Patented Sept. 18, 1894.

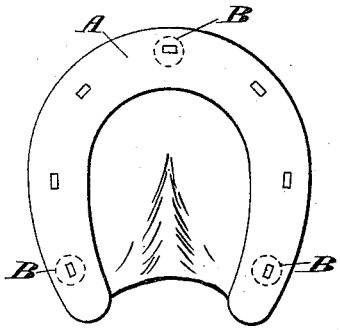

FIG. 5.

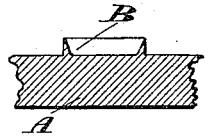

FIG. 1.

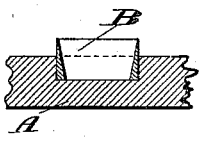

FIG. 2.

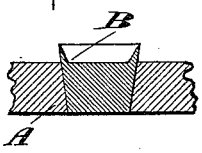

FIG. 3.

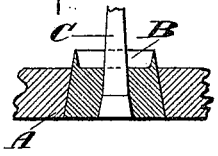

FIG. 4.

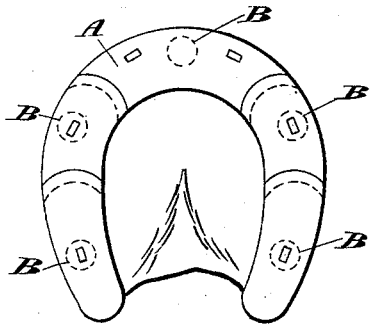

FIG. 6.

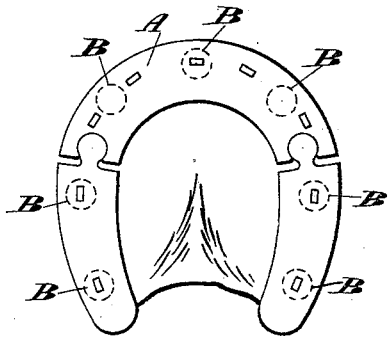

FIG. 7.

Witnesses:
Jesse P. Suter
Geo. M. Whitney

Inventor.
Mary Emily Poupard
by her attorney,
Thos. L. Ewin.

UNITED STATES PATENT OFFICE.

MARY EMILY POUPARD, OF LONDON, ENGLAND, ASSIGNOR TO THE MAIL HORSE SHOE SYNDICATE, (FOREIGN PATENTS,) LIMITED, OF SAME PLACE.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 526,050, dated September 18, 1894.

Application filed January 11, 1894. Serial No. 496,538. (No model.)

To all whom it may concern:

Be it known that I, MARY EMILY POUPARD, a subject of the Queen of Great Britain and Ireland, residing at London, England, have invented Improvements in Shoes for Horses or other Hoofed Animals, of which the following is a specification.

This invention relates to an improvement in shoes for horses, or other hoofed animals; and consists of crater-like studs, adapted to the shoe, to engage with the horny part of the under face of the hoof, in such a manner that the shoe may be forced home upon the hoof with little pressure, or with a gentle blow, while at the same time the engaging studs, by reason of their crater-like formation, inclose a definite portion of the hoof other than the outside horny scale, and confer the following advantages in wear:

First. They prevent the shoe from jarring or slipping laterally, even under the heaviest blows, and thus relieve lateral strain and jar upon the shoe-nails.

Second. They do not tend to set up spreading cracks in the material of the hoof, as might be the case where lateral jar is resisted by solid spikes or nails.

Third. They present equal resistance to the movement of the shoe edgewise in any direction.

Fourth. They bring into play, for the better fastening of the shoe, a part of the hoof which cannot be pierced by nails, and is therefore at present unutilized.

Where shoes are attached to hoofs, as they are ordinarily attached at present, by nails only, the said nails can be pierced only through the external part of the hoof, near to the horny outer scale; and it is known that such shoes are often jarred from the horse's hoofs before being worn out; and the jarring action upon the nails tends to split and loosen the outer scaly horn of the hoof.

The improved crater-studs may be used in any number or in any position upon the inner tread of an ordinary shoe, or upon the inner tread of a sectional shoe or of any other description of metallic shoe, for horses or other hoofed animals.

Figure 1 is a sectional elevation and plan of the crater-stud, forged or pressed solid with the shoe. Fig. 2 is a sectional elevation of a crater-stud formed out of a tube inserted into the shoe. Fig. 3 is a sectional elevation of a modification of the same. Fig. 4 is a sectional elevation of a further modification of the same, secured by a nail therethrough. Fig. 5 is a plan of an ordinary shoe with crater-studs upon the inner tread. Figs. 6 and 7 are plans of sectional shoes, with various dispositions of crater-studs thereon.

Upon the inner tread of any shoe, A, where it comes in contact with a hoof, a crater-like projecting stud B is formed, which may be circular, oval, or in any form which will give an external continuous ridge which may be conveniently sharpened to a knife-edge, inclosing a central depression, which will be filled with the substance of the hoof when the shoe is driven home upon the hoof with slight pressure or a gentle blow.

This crater-stud may be formed by pressure, or forged out of the solid material of the shoe, as in Fig. 1, the central crater being counter sunk to bring the ridge of the crater to a knife-edge; or, a hole may be drilled a short distance into the material of the shoe; and a tube may be driven in tight, and its upper edge sharpened, as in Fig. 2; or, a conical hole may be bored through the shoe with the largest diameter toward the inner tread, and a plug, with an upper crater, driven therein, as in Fig. 3; or, a parallel or a reverse conical hole may be pierced through the shoe, and a plug with crater-top be inserted therein, with a hole for a nail or screw C through it to prevent the plug from falling out; but it is evident that the exact shape of this crater stud and method of attaching the same to or forming it on the shoe, may be varied in any convenient manner, without departing from the essence of this invention. The said crater-studs may be disposed in any numbers, or in any variety of disposition, upon the inner tread of the shoe, of which there is given some examples in Figs. 5, 6, and 7. When the crater-like ridges of said crater-studs surround attaching nails of screws as in Figs. 4, 5, 6, and 7, the compression of the material of the hoof by said ridges

is utilized to increase the hold of the nails or screws, and when such crater-like ridges are formed on upwardly tapering plugs through which such nails or screws extend, as in Fig. 4, the fastening devices as a whole are adapted to be formed independently of the shoe and of a different metal or metals if desired, while the aforesaid advantages of the nail-or-screw-surrounding ridges are at the same time obtained.

Having now particularly described and ascertained the nature of this said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In combination with a shoe of any description for horses or other hoofed animals, a projecting stud upon the inner tread of the shoe, consisting of a crater-like ridge, surrounding an internal hollow, affording easy entry into the hoof by slight pressure or a gentle blow or other means, and embracing firmly a portion of the hoof within the said hollow or crater.

2. A shoe, for a horse or other hoofed animal, provided with a sharp crater-like ridge which projects above the inner tread of the shoe, and a nail-or-screw-hole surrounded by said ridge, substantially as described.

3. In a shoe for a horse or other hoofed animal, the combination with the shoe proper having an upwardly tapering socket, of a conical plug fitted to said socket, and provided with a sharp crater-like ridge which projects above the inner tread of the shoe, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARY EMILY POUPARD.

Witnesses:

CHARLES JAMES JUTSON,

FREDERICK ABRAHAM POUPARD.