

(No Model.)

J. E. JARVIS.
HORSESHOE.

No. 478,435.

Patented July 5, 1892.

FIG. 2.

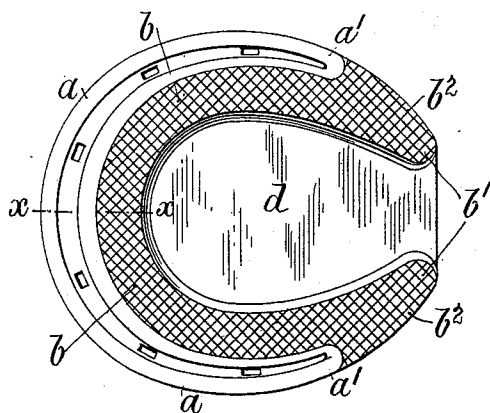


FIG. 3.

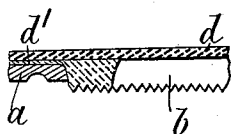
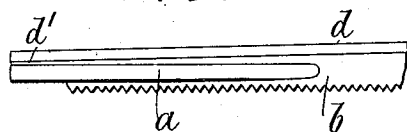


FIG. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN EDMUND JARVIS, OF LONDON, ENGLAND.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 478,435, dated July 5, 1892.

Application filed January 27, 1892. Serial No. 419,425. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDMUND JARVIS, veterinary surgeon, of 39 Victoria Road, Kensington, London, in the county of Middlesex, England, have invented new and useful Improvements in Horseshoes, of which the following is a full, clear, and exact description.

My invention relates to a combined metal and rubber horseshoe in which the india-rubber is combined with the metal shoe in such a way that the weight shall be principally borne by the wall of the hoof and the india-rubber shall be held in place by the metal shoe and its fastenings and shall constitute an integral part of the wearing-surface of the shoe, the sole of the hoof being either uncovered or so far covered as to bring a part of the weight onto the frog, as may be desired.

The principal advantages of my invention are lightness, elasticity of tread, the prevention of slipping, the protection of the heels and feet from undue pressure, the prevention of cutting and clicking, and the avoidance of capped elbows.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figures 1, 2, and 3 represent a side elevation, under side plan, and cross-section on line *x x* of one form of compound shoe in which the sole of the foot is covered.

My compound shoe is formed partly of iron or steel and partly of india-rubber and leather, the metal being situated at the parts exposed to the roughest wear.

The part *a* resembles an ordinary iron or steel shoe, except that it is considerably narrower and lighter and does not extend to the heel of the foot, but stops short at the point *a'*.

b is a horseshoe-shaped cushion of rubber of greater thickness and length than the metal part *a*. The cushion *b* is cemented upon a hoof-shaped leather sole-piece or backing *d*. The lower outer edge of the cushion *b* is cut away or rabbeted to form a groove, which receives the metal part snugly within it, and also to form a thin flange *d'* of rubber to be interposed between the metal part *a* and the sole-piece or backing *d*, as shown in Figs. 1 and 3. The width of the rabbet is about the same as the metal portion and the depth

of the rabbet is greater than the thickness of the metal portion *a*, so that the lower or wearing face of the cushion will be in a lower plane than that of the metal portion *a*. The rabbet in the cushion *b* does not extend as far as the extremities *b'* of the cushion, and the heels *b²* are thus the width of the cushion including its flange. The rear ends *a'* of the metal part *a* abut against the end walls of the rabbet or groove, which end walls are formed by the forward ends of the heels *b²*.

The leather backing *d* may be cut away, if desired, so as to leave the sole of the foot entirely uncovered. The formation of "capped elbows" by metal heels when the animal is lying down is prevented by terminating the metal part at the points *a'* and having the heels of rubber, as at *b²*.

The rubber cushion *b* receives the shock, as its lower face is exposed throughout the entire extent of the metal part, and its thin flange *d'* lies between the leather backing *d* and the metal portion *a*. The nails are to be driven through the usual nail-holes in metal section *a* of the shoe and will pass also through the rubber flange *d'* and the leather backing *d*, thus securing the several parts of the shoe firmly to the animal's foot.

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

1. A composite horseshoe formed of a leather sole-piece or backing, a rubber horseshoe-shaped cushion on the lower face thereof and having its lower outer edge cut away or rabbeted in front of its heel portion *b²*, thus forming the outwardly-projecting flange *d'*, and the metal portion *a*, fitting snugly within said rabbet or groove and having its heels *a'* resting against the rear end walls thereof and its upper face engaging said flange, substantially as described.

2. In a horseshoe, the sole-piece or backing *d*, having a horseshoe-shaped rubber cushion *b* on its lower side formed with heel portions and rabbeted around its lower outer edge in front of said heel and forming the outward-projecting flange *d'*, substantially as described.

3. A composite horseshoe consisting of the

sole piece or backing *d*, the horseshoe-shaped
rubber cushion *b* on the lower face thereof,
having heel portions *b*² and rabbeted or cut
away on its lower outer edge in front thereof,
5 thus forming an outwardly-projecting flange
d', and the metal portion resting on the flange
d' in said rabbet with its rear ends *a'* resting
against the forward end of the heel portion *b*²,
the depth of the rabbet being greater than
10 the thickness of the metal portion *a*, causing
the working face of the cushion to lie in a

lower plane than that of the metal portion *a*,
substantially as described.

The foregoing specification of my improve-
ments in horseshoes signed by me this 4th 15
day of January, 1892.

JOHN EDMUND JARVIS.

Witnesses:

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