(No Model.)

M. E. POUPARD.

SECTIONAL HORSESHOE.

No. 526,049. Patented Sept. 18, 1894.

Fig. 1.

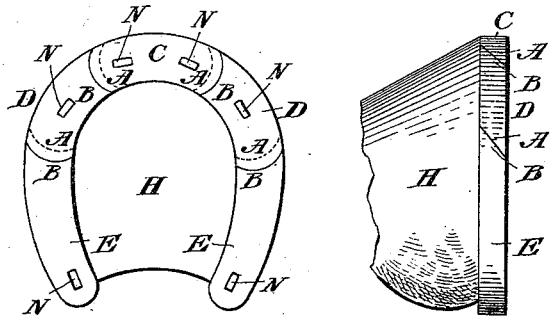


Fig. 2.

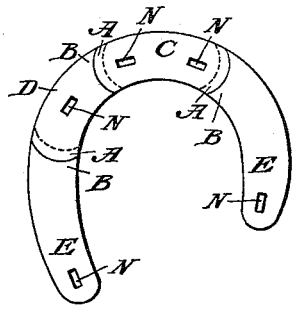
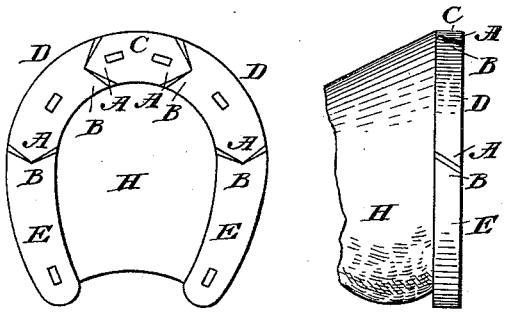


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

MARY EMILY POUPARD, OF LONDON, ENGLAND.

SECTIONAL HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 526,049, dated September 18, 1894.

Application filed August 9, 1893. Serial No. 482,764. (No model.) Patented in Canada September 8, 1893, No. 44,200.

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 West Norwood, London, in the county of Surrey, England, have invented a new and useful Improvement in Shoes for Horses or other Hoofed Animals, (patented to me in the Dominion of Canada by Letters Patent No. 44,200, dated September 8, 1893,) of which the following is a specification.

This invention relates to what are known as sectional horseshoes, and consists in an improved shoe of this description for horses or other hoofed animals as hereinafter set forth and claimed.

An improved sectional horseshoe embodying all said features of construction is adapted to be applied cold, without forging or bending the shoe or any part thereof, and without cutting or paring the hoof, to hoofs of widely different contours, as for example hoofs with one side convex and the other side nearly flat, as well as hoofs both sides of which are of either of these shapes; every section is solidly bedded upon the sole of the hoof itself; the toe-piece, which wears away most rapidly, or any other section which may become worn or loosened, may be removed and replaced without disturbing the remainder of the shoe; an accident which would tear off a one-part shoe would ordinarily detach only a single section of the improved shoe, and the animal could travel some days on rough roads with the remainder of the shoe attached without injury to the hoof; the natural expansion and contraction or "play" of the shod hoof is freely permitted; there can be no pressure upon the heel of a cracked or sore hoof; the shoe may be reduced to a "three-quarter" or "fractional" shoe, with properly formed heels at both extremities, by simply omitting an intermediate section; and the shoe may be cheaply manufactured by drop forging alone, and from material which would be characterized as scrap or waste in the manufacture of ordinary horseshoes.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 of the drawings represents bottom and edge views of an improved sectional horseshoe applied to the hoof. Fig. 2 is a bottom view of the same shoe as reduced to a three-quarter shoe; and Fig. 3 represents bottom and edge views of a modified shoe, constructed according to the same invention.

Like letters of reference indicate corresponding parts in all the figures.

Each of the shoes shown in the drawings is securely attached to the hoof, which is represented at H, by ordinary nails N clinched over the hoof, and is composed of several interlocked sections, each in solid contact with the hoof, which are separated from each other by pivotal open joints; and each joint is formed by a single beveled convexity A and a single beveled concavity B at the abutting ends of the adjoining sections; the respective sections of each shoe being a toe-piece C, a pair of intermediate sections D, except in the three-quarter shoe Fig. 2, which has but one intermediate section, and a pair of heel-pieces E. Said pivotal open joints are in the form of circular arcs as in Figs. 1 and 2, or are otherwise so formed as to permit the pivotal movement of each heel-piece and intermediate section and thus to provide for fitting hoofs of various shapes, and for the natural expansion and contraction or "play" of the hoof as aforesaid; while at the same time the sections mutually support one another to a sufficient extent to prevent any lateral displacement of the adjoining ends of the sections, and are interlocked against separation from the hoof, without the aid of pins, tenons or other small or delicate parts, and so that each section is bedded directly upon the hoof as above; the oblique faces of the beveled ends sliding upon one another until this is effected in nailing on the shoe and in tightening the sections if need be after wear occurs.

The term "interlocked" as hereinafter employed refers to such interlocking of the sections against separation from the hoof by beveling the abutting ends of the sections as above.

In the improved sectional shoe the front ends of the intermediate sections D and the heel-pieces E are of one and the same form; and one of the intermediate sections can consequently be omitted, and the corresponding heel-section will adjoin the toe-piece in its place, as represented by Fig. 2, to make a

three-quarter shoe as above. In this shoe the bevels at A and B are also so formed that the rear ends of the intermediate sections overlap the front ends of the heel-pieces, and the toe-piece overlaps the front ends of the intermediate sections so as to be the part mostly easily detached, as it is the part most subjected to wear, and consequently requiring replacement more frequently than the other sections. The convexities A of the pivotal joints are also in front of the concavities B in said shoe; but this is considered immaterial.

In Fig. 3 the beveled convexities A and beveled concavities B are angular instead of being arc-shaped as in the other figures, the angle of each concavity being more obtuse than the angle of the abutting convexity so as to allow free radial play of the sections relatively to one another. Otherwise the shoe is similar to the one first described, (Figs. 1 and 2.) Such angular joints (Fig. 3) may further be modified as to the obliquity of the abutting ends of the respective sections as before described with reference to said arc-shaped joints. Each shoe may also if desired consist of more than five sections by shortening the heel-pieces and intermediate sections and multiplying the latter. At least five sections in the complete shoe are considered necessary to provide for fitting hoofs of different shapes as above. The close following by the shoe of the contour of the hoof is important as any projection of the shoe beyond the hoof may render it liable to be knocked off by another foot of the animal.

Having thus described the said improvement, I claim as my invention and desire to patent under this specification—

In a sectional horseshoe, the combination of a toe-piece, a pair of heel-pieces, and intermediate sections between said toe and heel-pieces separated by pivotal open joints, each of which is formed by a single beveled convexity and a single beveled concavity at the abutting ends of the adjoining sections, the front ends of the heel-pieces and intermediate sections being alike, whereby the several sections are mutually supported against edgewise displacement and interlocked against separation from the hoof, and the shoe is rendered comformable to hoofs of various shapes, and at the same time the shoe is adapted to be converted into a three-quarter shoe by the omission of either intermediate section, substantially as hereinbefore specified.

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

MARY EMILY POUPARD.

Witnesses:
RICHARD A. HOFFMANN,
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