

R. McCOY.
HORSESHOE.
APPLICATION FILED JULY 11, 1917.

1,298,364.

Patented Mar. 25, 1919.

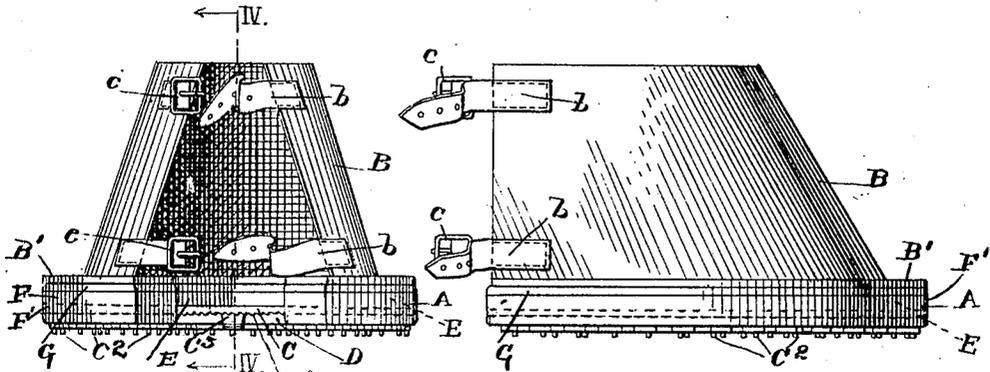


Fig. 1.

Fig. 2.

Fig. 3.

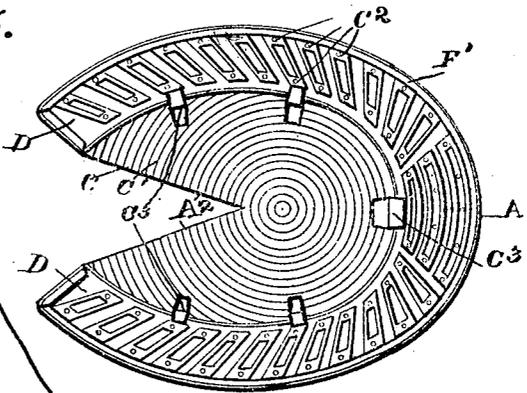
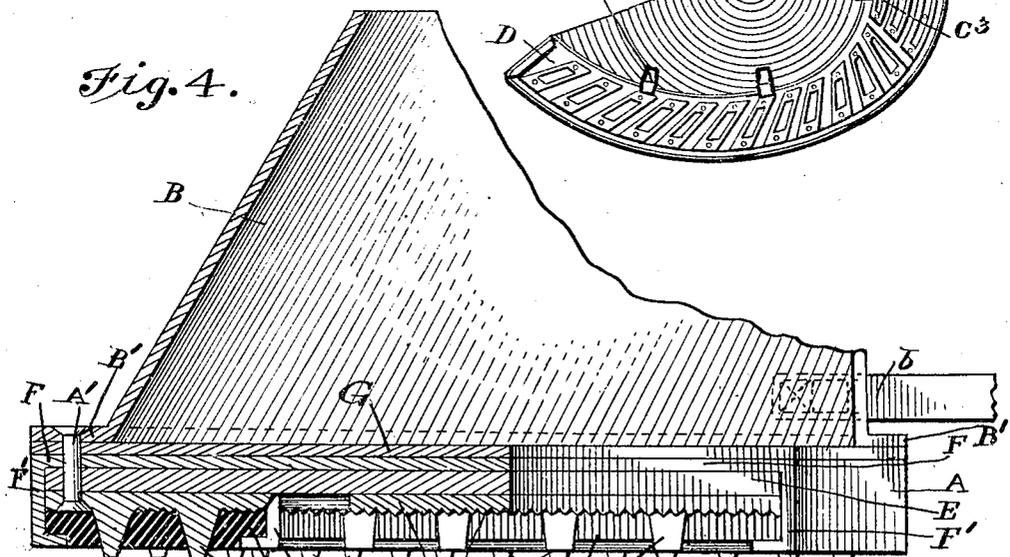


Fig. 4.



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ROBERT McCOY, OF NEW YORK, N. Y.

HORSESHOE.

1,298,364.

Specification of Letters Patent. Patented Mar. 25, 1919.

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To all whom it may concern:

Be it known that I, ROBERT McCOY, a subject of Great Britain, and a resident of New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification.

This invention relates to horseshoes. The object of the invention is to provide a horseshoe that may be readily applied and removed from a horse's foot and which will prevent a horse from slipping in bad weather on snow or ice, and which is adapted to be readily removed when the horse is not at work.

Further objects of the invention are to provide a durable and substantial shoe; to provide a shoe which will fit snugly to the foot; to provide a shoe which cannot be accidentally removed; to provide a shoe which will not injure or hurt the foot, and to provide a shoe simple and cheap of construction which will grip firmly to any slippery surface over which a horse may be driven.

A still further object is to provide a shoe of the character described, which may be applied to the foot of a horse which is shod with a smooth shoe or plate, all of which I accomplish by the means hereinafter described, pointed out in my claims, and illustrated in the accompanying drawings forming a part of this specification.

Referring to the accompanying drawings, Figure 1 is a rear view of the shoe in elevation; Fig. 2 is a side elevation; Fig. 3 is a bottom plan view of the shoe; and Fig. 4 is a longitudinal sectional view taken through the line IV—IV of Fig. 1.

In the drawings A indicates the tread of the shoe; B, the upper part or casing for securing the shoe upon the foot; *b, b*, are straps for fastening the shoe on the foot; and *c, c* are buckles for securing the straps *b—b*.

The tread A of the shoe is constructed of a number of superposed plates of various material, as follows: C indicates a metal plate of the conformation of the bottom of the horse's foot. The plate C has a corrugated under surface C' for engaging the surface over which the horse is driven to prevent slipping, and said plate is provided with spurs or calks C² which are formed on the under side of the plate for gripping the surface to prevent slipping, openings are

provided through the outer edge of the plate C to admit the rivets A', and clips are formed by incisions as C³. An elastic tread D, preferably of rubber or of rubber and textile fabric combined, is disposed beneath the plate C, and around the outer edge thereof; and the elastic tread D is perforated at intervals to admit the calks or spurs C² which protrude therethrough, whereby the calks and adhesive character of the elastic or rubber tread combine to produce a tread surface which will adhere to the surface over which a horse is driven more surely and firmly than either the rubber tread or the calks, without the other. The elastic tread D is prevented from moving inwardly from impact, by the clips C³. Said clips also prevent the elastic tread from becoming dislodged from the surface of the corrugated plate C at the inner edge of the tread. A leather layer E is disposed upon the top of the metal plate C and is perforated to admit the rivets A'; and superposed upon the leather E is a metal plate F, with perforations for the rivets A' and flanged as at F', said flange serving as a binding to engage and retain the edges of the superposed plate layers, and to engage and retain the outer edge of the elastic tread D firmly in its position beneath the metal plate C. Thus the elastic tread D is firmly held in place by the spurs or calks C², and the corrugated surface C' of the plate C, and by the clips C³ which engage the inner edge of the elastic tread, and by the flange F' of the plate F which engages the outer edge of the said elastic tread D. Superposed upon the top of the metal plate F is a leather plate G, perforated to admit the rivets A', which serves to form a pad or cushion lining for the shoe and which prevents the foot of the horse from sliding on the top of the tread, and superposed upon the said leather plate G is the upper or casing B with the flange B' perforated to admit the rivets A', whereby all the superposed plate members are firmly bound and held together so as to form a rigid and firm shoe tread formed of superposed plates. The tread A is cut away as at A² to provide clearance for the frog of the horse's foot.

The pad or yielding plates E and G and the upper B are preferably of leather, but may be made of any suitable flexible material, as canvas, or rubber and canvas.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent, is:

1. A detachable horseshoe having a tread 5 portion and an upper portion adapted for securing the tread portion beneath the hoof, said tread portion having an elastic tread member secured beneath the edge of the tread, and a metal plate disposed upon the 10 elastic tread and having a corrugated under surface, and means for securing the elastic tread in its position, substantially as shown and described and for the purposes set forth.

2. A detachable horseshoe having a tread 15 portion and an upper portion adapted for securing the tread portion beneath the hoof, said tread portion comprising an elastic tread, calks protruding through said elastic tread, means for retaining the elastic tread 20 beneath the edge of said tread portion, a cushion member, a clamping member comprising a flanged metal plate, and a flexible lining member, substantially as shown and 25 described and for the purposes set forth.

3. A detachable horseshoe having a tread 30 portion and an upper portion adapted for removably securing the tread portion beneath the hoof, said tread portion comprising an elastic tread for engaging the sur-

face over which the horse is driven, a metal plate disposed upon the elastic tread, said metal plate having spurs or calks protruding through openings provided therefor in the elastic tread and adapted to engage the 35 surface, said metal plate having a corrugated under surface, and having clips formed thereon for retaining the elastic tread in position therebeneath, and a metal plate superposed upon a flexible layer which 40 rests on said first-mentioned metal plate, said second-mentioned metal plate having a flanged edge adapted for clamping the elastic tread, the metal plate with the spurs 45 and corrugated surface, and the flexible layer firmly against the superposed second metal plate, a second elastic plate superposed upon the flanged metal plate, and a flanged upper secured by rivets to the tread, 50 substantially as shown and described and for the purposes set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in the presence of two witnesses, this 14th day of May, A. D. 1917.

ROBERT McCOY.

Witnesses:

CHARLES F. WILCOX,
HUGO HESS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."