M. BLACKMAN.

OVERSHOE FOR HORSES.

APPLICATION FILED JULY 31, 1915.

1,174,542.

Patented Mar. 7, 1916.

Fig. 1.

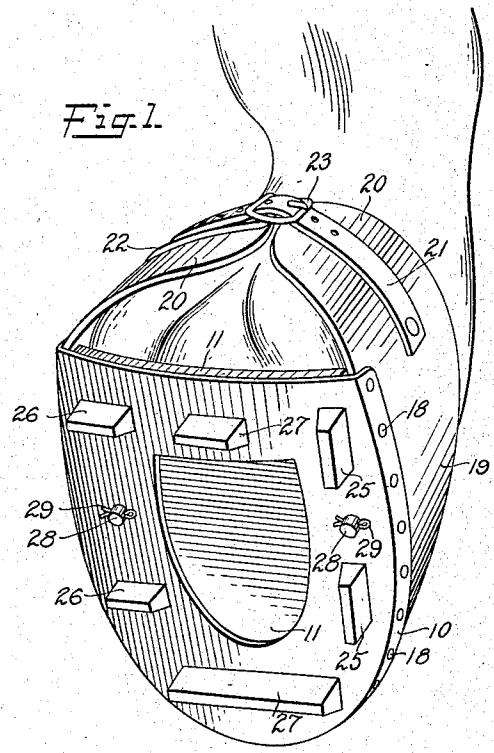


Fig. 2.

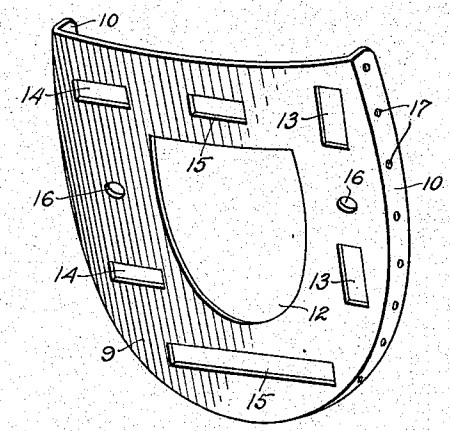


Fig. 3.

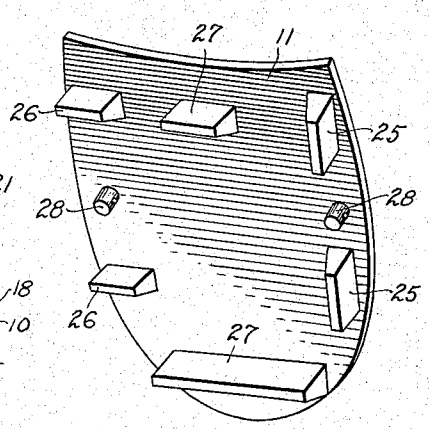
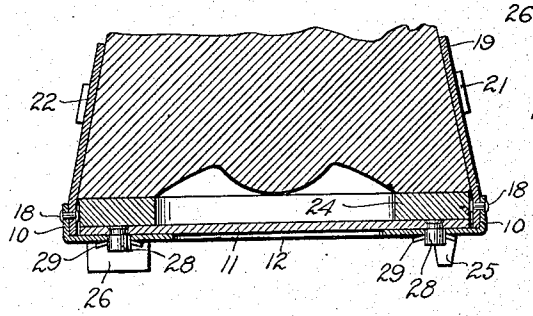


Fig. 4.



WITNESSES

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OVERSHOE FOR HORSES.

1,174,542. Specification of Letters Patent. Patented Mar. 7, 1916.

Application filed July 31, 1915. Serial No. 42,976.

To all whom it may concern:

Be it known that I, MABEL BLACKMAN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Overshoe for Horses, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide an overshoe of the character mentioned with removable wearing members and a rigid sole plate partially covering said wearing members; to provide means for readily attaching and detaching the shoe; and to provide means for preventing rattling or jamming of the parts of the shoe.

Drawings.—Figure 1 is a perspective view of an overshoe constructed and arranged in accordance with the present invention, showing in conjunction therewith, a horse's hoof; Fig. 2 is a perspective view of a sole plate for the shoe detached from the upper or flexible portion of the shoe; Fig. 3 is a detail view of a calk or wearing plate with which the shoe is provided; and Fig. 4 is a vertical section, showing the overshoe as applied in service to the hoof of a horse.

Description.—As seen in the drawings, the overshoe has a rigid sole 9 formed preferably from thin plate metal and shaped to form an upstanding annular flange 10. The flange 10 is omitted at the rear or heel of the shoe to avoid injury to the frog of a horse's hoof and to facilitate the placement of a calk plate 11. To lighten the construction of the sole 9, the center is cut out to form an opening 12, which in service is covered by the center of the plate 11. The sole 9 is also lightened by forming therein the openings 13, 14, 15 and 16.

The flange 10 is provided at suitable intervals with perforations 17, through which rivets 18 are passed for holding the upper 19. The upper 19 is preferably constructed of leather, but any suitable pliable material may be employed. The upper is shaped to fit the upper part of the hoof and is provided at the rear with extensions 20, upon which are mounted the fastening strap sections 21, 22, the latter of which carries a buckle 23 to engage the section 21 in the conventional manner. The extensions 20 of the upper 19 protrude beyond the rear ends of the flange 10 to infold the heel of the hoof, in the manner shown best in Fig. 1 of the drawings. When the strap sections 21 are united in service the upper 19 is drawn closely to the upper wall of the hoof, while the sole 9 holds the plate 11 securely in contact with the service shoe 24 that is secured to the hoof in the conventional manner. The service shoe 24 is usually a smooth shoe, that is to say, unprovided with calks. It will be understood, however, that while this form of service shoe is best adapted to the overshoe, nevertheless a service shoe having calks could be used in conjunction with an overshoe, constructed and arranged in accordance with the present invention. The plate 11 is shaped to conform with the contour of the sole 9. Rigidly mounted on the plate 11 are calks 25, 26 and 27, said calks being shaped and arranged to conform with the openings 13, 14 and 15 respectively. It will be noted that the calks 25 are disposed on the plate 11 for extension through the openings 13 in the sole 9, in position corresponding with the side of a hoof to which the overshoe is applied. The calks are preferably elongated and the arrangement thus provided, avoids the sidewise slip of the overshoe. The calks 26 and 27 are provided to check the pulling strain exerted by the horse on the overshoe and plate 11 thereof. To prevent rattling of the plate 11 and the sole 9, the former is furnished with two or more connecting posts 28. The posts 28 are suitably perforated, to receive when in service, cotter pins 29. When installing the plate 11, the posts 28 are forced through the sole 9 until the perforations in the said posts are exposed to receive the cotter pins 29.

Operation.—The overshoes are ordinarily employed as emergency shoes and are carried during ordinary service, loosely in the vehicle being drawn by the animal for which the shoes are intended. When unexpectedly a sleet or snow storm arises, the driver adjusts the overshoe to the hoof of the animal. The plate 11 is usually disposed on the sole 9 prior to adjusting the overshoe to the hoof, the cotter pins 29 holding the plate 11 in service relation to the sole 9 during the inactive period of the overshoe. The overshoe is adjusted to the horse's hoof by releasing the strap sections 21 and 22 and spreading the upper sufficiently to draw the same over the hoof, the service shoe 24 entering therein to rest on the plate 11. The overshoe having been thus adjusted to the hoof, the extensions 20 of the upper 19

are arranged to the frog of the hoof to prevent the subsequent chafing of the strap sections 21 and 22, which are then united and drawn closely to the hoof to bind the overshoe in service relation. It will be noted that the plate 11 covering as it does, the opening 12, prevents the admission of snow or mud to the hoof of the animal, preventing what is known as balling, while the calks 25, 26 and 27 furnish ample purchase or grip of the shoe on the pavement. The calks 25, 26 and 27 save the sole 9 and overshoe from wearing. As the calks wear away or become dull and require sharpening, the plates 11 are replaced, it being customary to carry two plates for each shoe, the calks one of which may be sharpened or replaced while the other is in service.

Claims:

1. An overshoe for horses comprising a flexible upper for covering the upper wall of a hoof, said upper embodying free end extensions to cover the hoof of an animal; means for holding the end extensions in service relation; a perforated rigid sole shaped to conform to the hoof of a horse; and a calk plate removably attached to said sole by calks extending through said sole, said plate being adapted to support the weight of the horse and the service shoe held on the hoof thereof.

2. An overshoe for horses comprising a flexible upper for covering the upper wall of a hoof, said upper embodying free end extensions to cover the hoof of an animal; means for holding the end extensions in service relation; a perforated rigid sole shaped to conform to the hoof of a horse; a calk plate removably attached to said sole by calks extending through said sole, said plate being adapted to support the weight of the horse and the service shoe held on the hoof thereof; a plurality of posts rigidly mounted on said plate to extend through said sole; and means engaging said posts in exposed relation to said sole, said means being removable to permit the withdrawal of said plate from service relation to said sole.

3. An overshoe for horses comprising a flexible upper for covering the upper wall of a hoof, said upper embodying free end extensions to cover the hoof of an animal; means for holding the end extensions in service relation; an open-centered rigid sole having a series of openings formed therein for the passage of calks therethrough; an annular flange rigidly mounted on said sole surrounding the edge of the same, except at the heel portion thereof; means for rigidly attaching said flange and said upper; and a calk plate having a series of calks rigidly mounted thereon, said calks corresponding in shape and location with the openings in said sole to extend therethrough.

4. An overshoe for horses comprising a flexible upper for covering the upper wall of a hoof, said upper embodying free end extensions to cover the hoof of an animal; means for holding the end extensions in service relation; an open-centered rigid sole having a series of openings formed therein for the passage of calks therethrough; an annular flange rigidly mounted on said sole surrounding the edge of the same, except at the heel portion thereof; means for rigidly attaching said flange and said upper; a calk plate having a series of calks rigidly mounted thereon, said calks corresponding in shape and location with the openings in said sole to extend therethrough; a plurality of fastening posts rigidly mounted on said plate to extend through said sole; and removable fastening devices for engaging said posts to secure the same and the plate to which they are attached in service relation to said sole.

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

MABEL BLACKMAN.

Witnesses:

E. F. MURDOCK,

PHILIP D. ROLLHAUS.

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