C. G. DELANO.

OVERSHOE FOR HORSES.

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1,040,166. Patented Oct. 1, 1912.

Fig. 1.

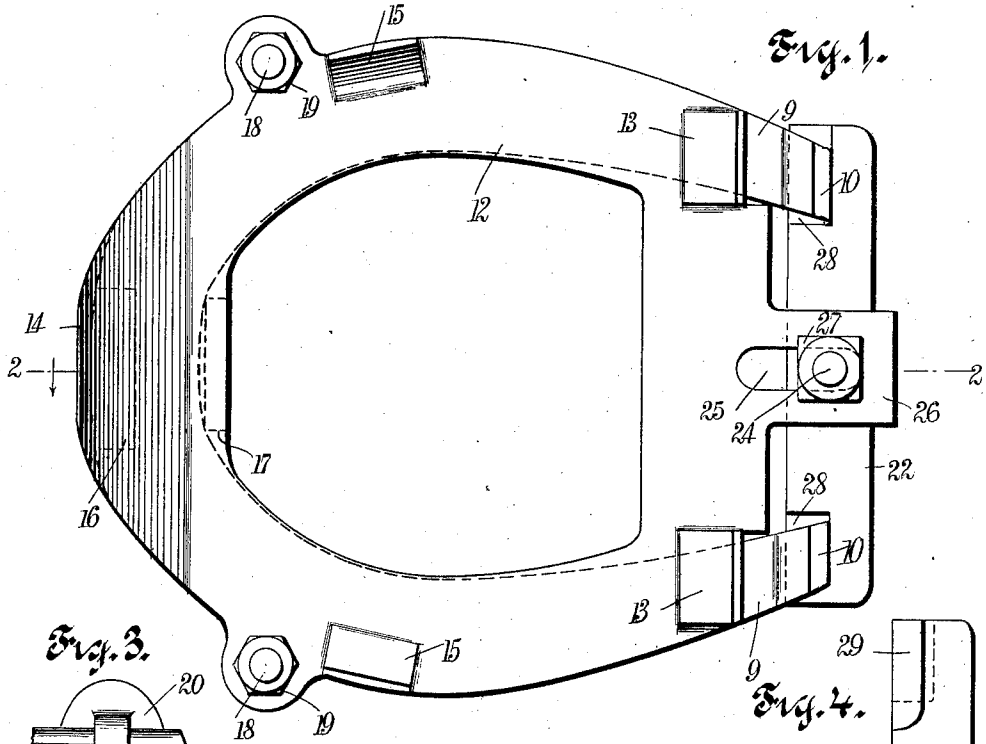

Fig. 3.

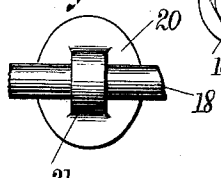

Fig. 4.

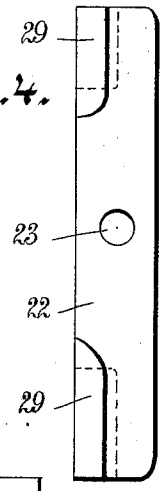

Fig. 2.

WITNESSES

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OVERSHOE FOR HORSES.

1,040,166. Specification of Letters Patent. Patented Oct. 1, 1912.

Application filed September 28, 1911. Serial No. 651,737.

To all whom it may concern:

Be it known that I, CHARLES G. DELANO, a citizen of the United States, and a resident of Taunton, in the county of Bristol and State of Massachusetts, 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 a shoe of the character mentioned having sharpened calks to prevent slipping on icy or slimy pavements or roads; and to provide means for securing a shoe of the character mentioned over the shoe with which the animal is ordinarily shod.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a bottom plan view of an overshoe constructed and arranged in accordance with the present invention, showing the same in conjunction with the ordinary wearing shoe to which the overshoe is secured; Fig. 2 is a longitudinal section taken on the line 2—2 in Fig. 1; Fig. 3 is a detail view of a holding plate to rest upon the hoof of the animal when the overshoe is adjusted; and Fig. 4 is a detail view of a locking bar for securing the overshoe to the wearing shoe.

As seen in the accompanying drawings, the hoof of the animal provided with the wearing shoe 9 is indicated by the letter A. The shoe 9 is secured to the hoof A by any suitable and approved method. The shoe 9 may be smooth or calked, as desired. In the accompanying drawings the said shoe is shown as provided with heel and toe calks, 10 and 11 respectively.

The overshoe shown in the accompanying drawings is provided with a flat plate body 12 from which are extended the heel calk 13, toe calk 14 and the side calks 15. The object of the overshoe being to prevent the slipping incident to certain conditions of slime covered roadways and to sleet and ice covered pavements, the said calks are sharpened, and preferably formed from some suitable hard wearing material, such as chilled or air-cooled steel. In the usual practice to which the employment of the overshoe here shown lends itself, the overshoe is carried for use in an emergency. To prevent loss of the different parts of the shoe all of the parts are united in the manner as hereinafter described.

As seen best in Fig. 2 of the drawings, the toe calk 14 is provided with a pocket 16, furnished to receive the calk 11 when the shoe 9 is provided with a calk of this character. When the shoe 9 is thus provided with the calk 11 the said calk serves to form a holding member for the overshoe, the calk 11 fitting into the pocket 16 and bearing against the side wall thereof. To provide for that contingency where the shoe 9 is not provided with the calk 11, and to prevent the forward shift of the overshoe, the same is provided with a flange 17 which is disposed in such position as to bear against the back of the toe part of the shoe 9, as seen best in Fig. 2 of the drawings. From this it will be evident that the shift of the overshoe forward on the wearing shoe 9 from the correct adjusted position is prevented. To avoid the shift of the overshoe rearward on the wearing shoe I have provided the clamping loop 18 which is U-shaped to infold the forward section of the hoof A. The ends of the loop 18 are screw threaded to receive the nuts 19 by means of which the loop is clamped downward over the top of the wall of the hoof A. To form a rest for the loop 18 on the crown of a hoof A I provide a small saddle plate 20; through a perforation in an inner tab 21 formed thereon is extended a wire or rod forming the loop 18. The saddle plate 20 is loosely secured on the loop 18 to permit the rocking adjustment of the said loop and saddle.

The loop 18 not only serves to prevent the shift of the overshoe backward on the wearing shoe 9, but it further serves as a support to the toe of the said overshoe. The heel of the overshoe is supported by the cross bar 22, through a perforation 23 in which is extended a small bolt 24. The threaded end of the bolt 24 is passed downward through an elongated slot 25 formed in the bracket plate 26. A square nut 27 straddles the slot 25 to form a seat on the bracket 26.

The elongation of the slot 25 provides the necessary means for the lengthwise adjustment of the bar 22 to accommodate a standard make of overshoe to wearing shoes of various length. Thus, if the wearing shoe 9 shown in the accompanying drawings is

shorter than illustrated, it is evident the bar 22 could be shifted toward the center of the overshoe by loosening the nut 27 and slipping the said bar 22, with its engaging bolt 24, toward the said center of the overshoe. When the bar 22 is adjusted on the wearing shoe 9, the recesses 28 fit over the heel ends of the shoe 9, the shoulder of the said recesses preventing any lateral or lengthwise displacement of the overshoe relative to the heel of the wearing shoe.

The calks 15 are furnished to amplify the grip of the overshoe on the roadbed or pavement, and to form anti-slipping members particularly disposed to prevent the lateral slide of the overshoe or the hoof of the animal so equipped. To avoid the fork of the hoof A the cross bar 22 is cut away to form the spaces 29, the inset of which is sufficient to permit the form of the hoof to rest above without touching the inclined surfaces of the spaces thus formed.

When called upon to adjust the overshoe, the necessary operation is as follows: The nuts 19 being sufficiently loosened on the loop 18 to permit the introduction of the said loop over the hoof A, and the bar 22 having been loosened or released from engagement with the bracket plate 26, the overshoe is adjusted to the wearing shoe, substantially as shown in the drawings. If the wearing shoe has the calk 11, this is seated in the pocket 16. If the calk 11 is not present the flange 17 is adjusted to rest against the back of the toe plate of the wearing shoe 9. The saddle plate 20 is adjusted on the crown of the hoof A, set up to clamp the loop 18 and plate 20 upon the hoof A, drawing the overshoe rigidly against the wearing shoe 9. The bar 22 is now properly adjusted, the recesses 28 being set over the heel ends of the shoe 9, and the bolt 24 is extended through the slot 25 to receive the nut 27. The nut 27 is now set up to draw the bracket plate 26 and the rear of the overshoe connected therewith toward the bar 22, tightly clamping the heel of the shoe 9 between the body 12 of the overshoe and the said bar 22. The nuts 19, 19 and 27 being now tightened the overshoe will be found in serviceable condition for the use of the animal. When the need for the employment of the overshoe has passed the loosening of the nuts 19, 19 and 27, and the removal of the bar 22, if found necessary, force the overshoe from the wearing shoe 9, permitting the animal to resume work with the lighter and more serviceable shoe.

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

1. An overshoe of the character described, having a body portion shaped to conform with the ordinary horseshoe and provided at the toe portion thereof with a pocket for the toe-calk of the ordinary shoe, and with a standing flange disposed in line with said pocket to rest against the inner side of the horseshoe when the toe-calk thereof is deposited in said pocket; a loop adjustably mounted in the overshoe and shaped to encircle the toe portion of the hoof of the horse wearing the horseshoe; a cross-bar to rest above the heel of the horseshoe; and clamping means for securing the overshoe to said cross-bar.

2. An overshoe of the character described, having a body portion shaped to conform with the ordinary horseshoe, and provided at the toe portion thereof with a pocket for the toe-calk of the ordinary shoe, and with a standing flange disposed in line with said pocket to rest against the inner side of the horseshoe when the toe-calk thereof is deposited in said pocket; a loop adjustably mounted in the overshoe and shaped to encircle the toe portion of the hoof of the horse wearing the overshoe; a cross-bar adapted to rest upon said horseshoe and provided with recesses to receive the heel portions of said horseshoe, to prevent said cross-bar from moving forward; and clamping means for connecting in engaged clamping relation with said horseshoe said overshoe and said cross-bar.

3. An overshoe of the character described, having a body portion shaped to conform with the ordinary horseshoe, and provided at the toe portion thereof with a pocket for the toe-calk of the ordinary horseshoe, and with a standing flange disposed in line with said pocket to rest against the inner side of the horseshoe when the toe-calk thereof is deposited in said pocket; a loop adjustably mounted in the overshoe and shaped to encircle the toe portion of the hoof of the horse wearing the overshoe; a cross-bar adapted to rest upon said horseshoe and provided with recesses to receive the heel portions of said horseshoe, to prevent said cross-bar from moving forward; clamping means for connecting in engaged clamping relation with said horseshoe said overshoe and said cross-bar; and a bracket plate extending across the heel portion of said overshoe, said plate provided with an elongated slot to receive said clamping means, to permit adjustment thereof lengthwise said shoes.

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

CHARLES G. DELANO.

Witnesses:
GRACE M. HALLAHAN,
HERBERT G. HOWES.