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EMERGENCY CALK FOR HORSES.

APPLICATION FILED DEC. 27, 1907.

903,830.

Patented Nov. 17, 1908.

Fig. 1.

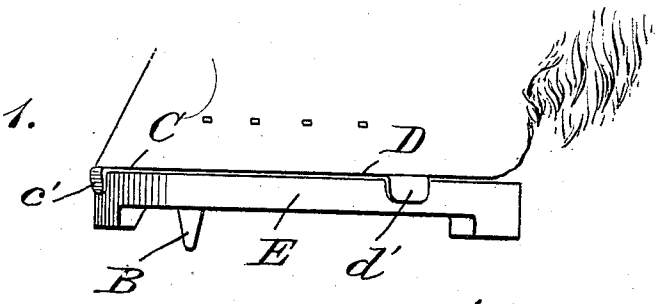


Fig. 2.

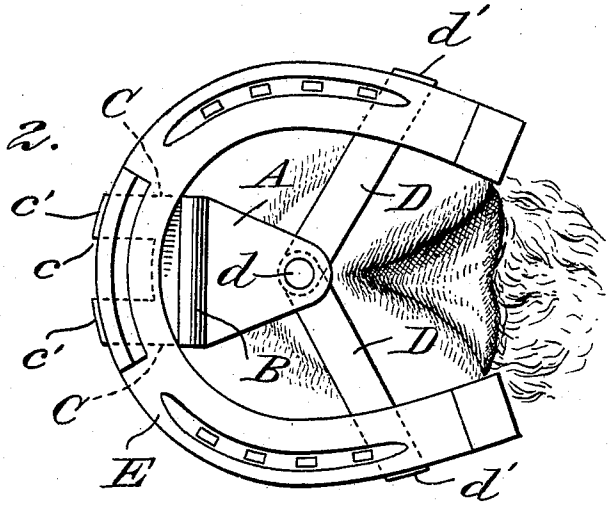


Fig. 3.

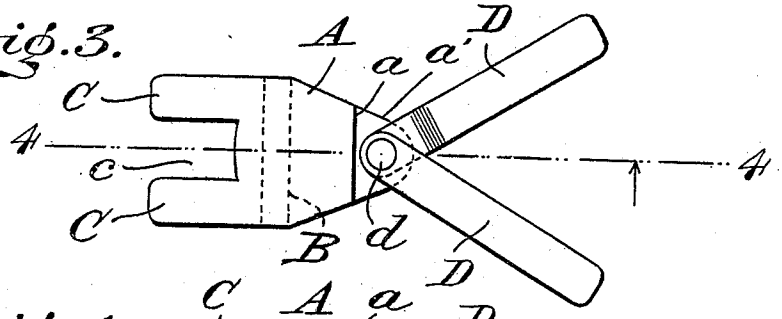
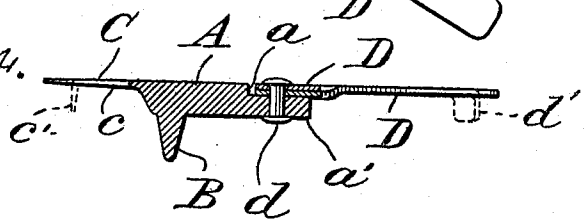


Fig. 4.



WITNESSES

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EMERGENCY-CALK FOR HORSES.

No. 903,830. Specification of Letters Patent. Patented Nov. 17, 1908.

Application filed December 27, 1907. Serial No. 408,226.

To all whom it may concern:

Be it known that I, CARL BERG, a citizen of the United States, residing in the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Emergency-Calk for Horses, of which the following is a specification.

This invention is an emergency calk for horses, adapted for use in conjunction with an ordinary horse shoe when road conditions, such as slippery pavements, make it desirable or necessary to provide additional means to meet the exigency of such conditions.

It is well recognized that the ordinary shoe, particularly when the same has become more or less worn, will not prevent horses from slipping on wet or icy pavements.

The present invention is designed with a view to providing a calk which will enable horses to travel with safety on roads over which they could not otherwise travel.

It has been attempted heretofore to use devices of this general character, but on account of their inefficiency in operation, their cost of manufacture, and the difficulty in applying them, their application usually requiring skilled horse shoers, they have had only a very limited use.

The present invention is an emergency calk of simple construction, economical to manufacture, and which can be quickly and securely applied to the hoof without requiring skilled labor or any special tools other than a hammer.

In the accompanying drawings, I have illustrated one practical embodiment of the invention, but the construction shown therein is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a side elevation representing the emergency calk applied to an ordinary horse shoe. Fig. 2 is an inverted plan view of the devices represented in Fig. 1. Fig. 3 is a top plan view of the emergency calk disconnected from the horse shoe. Fig. 4 is a longitudinal section on the line 4—4 of Fig. 3.

The emergency calk of the present invention comprises a plate, A, a calk, B, a plurality of members, C, extending forwardly of the calk plate, and locking arms, D, adjustably connected to the calk plate rearwardly of the calk thereon.

The plate, A, is shown as cast in a single piece of metal, although the particular method of making the plate is not material. The calk, B, depends from said plate, A, and extends across the same, substantially from side to side thereof. Said calk, B, is shown as being integral with the plate, although it may be secured thereto in any suitable way. The front part of the plate, A, is bifurcated as at *c* to produce the members or prongs, C, although I may employ a single prong, if desired. The prongs are made tapering longitudinally, and they are separated by the slot or opening, *c*, whereby the prongs are spaced relative to each other, said spaced prongs extending forwardly of the plate. The calk, B, extends across the plate intermediate of the length thereof, and the tapering prongs, C, extend forwardly from the calk. The prongs are of such length that they exceed the width of an ordinary horse shoe, whereby the prongs are adapted to be bent at their outer ends so as to produce the lips, *c'*, which overlap the toe portion of the shoe, E. The rear part of the plate, A, is recessed as at *a*, thereby producing a lug, *a'*, the upper face of which is below the corresponding face of the plate, A.

The locking arms, D, are connected pivotally to the plate, A, and it is preferred to connect said arms in the recessed portion, *a*, of the plate, and by a common pivot, *d*. As shown in Figs. 3 and 4, the ends of the arms, D, are assembled into lapping relation to each other and so that one arm will rest on the lug, *a'*, after which the rivet, screw or its equivalent, *d*, is passed through the lapped ends of the arms and the lug, *a'*. The pivoted ends of the two arms are thus connected by a common rivet or its equivalent to the plate, and the upper arm is substantially flush with the top face of the plate. The arms are pivoted to the plate rearwardly of the calk, B, and said arms are adapted to extend rearwardly and outwardly from the plate.

The operation is as follows: When it is desired to apply the calk to a hoof, the members, D, are folded inwardly and the entire device is placed within the shoe and the frog of the hoof, the prongs, C, facing toward the toe of the shoe. The plate, A, is driven forward so that the prongs, C, are thrust

between the hoof and the toe portion of the shoe, such operation of driving home the plate being continued until the calk, B, strikes against the inner edge of the shoe. The tapering form of the prongs enables them to readily pass between the hoof and the shoe, and when the plate is in its proper position, the ends of the prongs project beyond the front edge of said shoe, after which the prongs are bent into overlapping relation to the shoe, thus producing the bent lips, c', shown in Figs. 1 and 2 of the drawings. The arms, D, are now turned outwardly in opposite directions, and the outer edges thereof are positioned to pass between the hoof and the shoe at the respective sides thereof. The arms are driven individually through the space between the hoof and the shoe until they engage with the last nails of the two rows, and then the ends of the arms are bent downwardly into engagement with the shoe substantially as indicated at d' in Figs. 1 and 2.

From the foregoing description, taken in connection with the drawings, it will be seen that my new emergency calk consists practically of three pieces, each of which is cheaply produced. The parts are simple in construction, and capable of ready assemblage, thus enabling the article to be produced economically. The calk is easily and quickly applied to a horse's hoof without the aid of special tools, and without requiring the services of a skilled horse shoer. It will be noted that it is only necessary to drive the calk plate into position, spread the locking arms, and bend the ends of the prongs and said arms, whereupon the entire device is fastened securely in place without using nails or other fastenings.

An important advantage secured by my invention is that the emergency calk is applied and worn without injury to the frog of the hoof. It will be noted that the plate and arms are positioned for edge insertion between the bottom of the hoof and the shoe, so that said plate and arms do not engage with the frog. Furthermore, the plate and arms are secured firmly in place and lie above the shoe, so that said parts are not pressed upwardly against the frog when the device is in use.

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

1. In an emergency calk, a calk-plate provided with a depending calk integral therewith, a prong secured to the plate forwardly of the calk and extending forwardly of the front edge of the plate and said prong being adapted to be inserted between a hoof and a shoe, and locking arms pivoted to said plate.

2. In an emergency calk, a calk-plate provided with a depending calk, tapering prongs extending forwardly of said plate and adapted to be driven between the hoof and shoe, and bent over upon the shoe for the purpose of anchoring said plate, and locking arms pivoted to said plate.

3. In an emergency calk, a calk-plate provided with a depending calk extending across the plate, tapered prongs forwardly of said calk adapted to be inserted between the hoof and shoe, and of a length exceeding the width of the shoe, whereby they are adapted to be bent over into lapping relation with the toe portion of the shoe, and locking arms pivoted to the plate and rearwardly of the calk and adapted to be positioned between the hoof and the shoe.

4. In an emergency calk, a calk-plate adapted to be positioned within the shoe and provided with a depending calk adapted to be positioned within the inner contour of the shoe, means, extending forwardly of the calk and integral with the plate, adapted to be inserted between the hoof and the shoe, a recess in the plate rearwardly of the calk, and locking arms pivotally secured to the plate in said recess.

5. In an emergency calk, a bifurcated calk-plate, a calk secured thereto, and locking arms pivoted at a common center on the plate and adapted to be inserted between the hoof and the shoe and secured in fixed positions by bending their ends over the shoe.

6. In an emergency calk, a calk-plate provided with a depending calk, retaining means secured to and extending forwardly of said plate and adapted for insertion between the hoof and the shoe, and locking arms adapted to be inserted between the hoof and the shoe, said locking arms being rearwardly of the calk and coöperating with the plate and shoe.

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

CARL BERG.

Witnesses:
THOMAS E. FAGANS,
J. J. HARTNETT.