(No Model.)

A. MARSH.

HOOF PAD.

No. 342,449. Patented May 25, 1886.

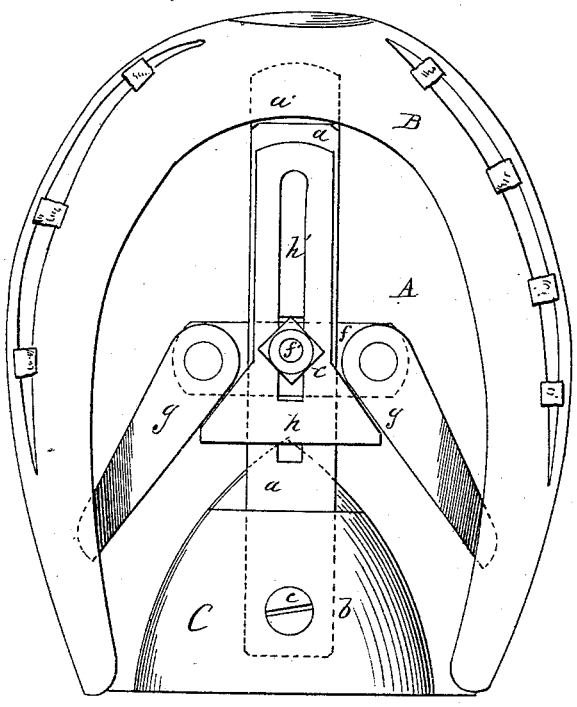

fig. 1.

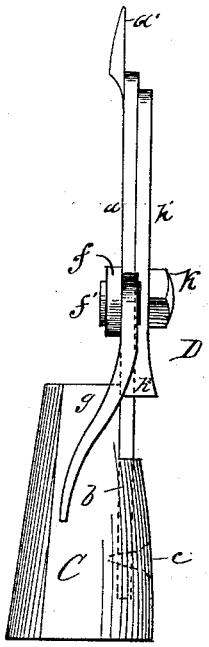

fig. 3.

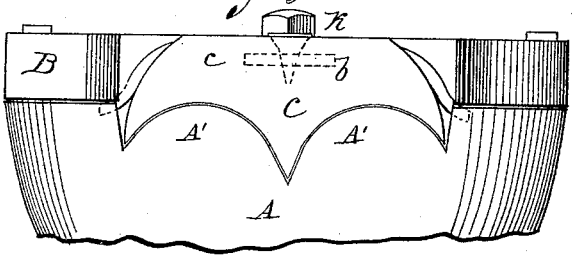

fig. 2.

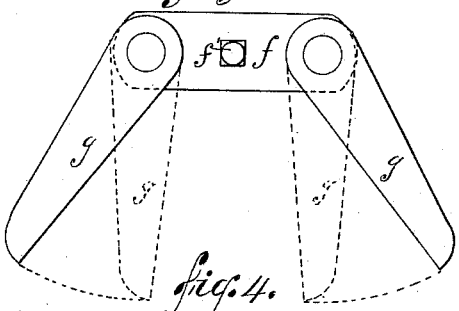

fig. 4.

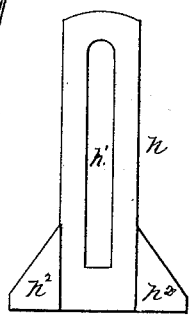

fig. 5.

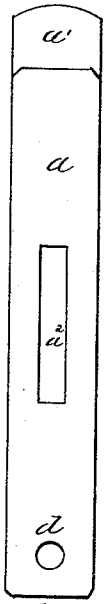

fig. 6.

Witnesses
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Inventor
Albert Marsh.
by Isaac L. Storer.
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UNITED STATES PATENT OFFICE.

ALBERT MARSH, OF AMAWALK, NEW YORK.

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 342,449, dated May 25, 1886.

Application filed March 9, 1886. Serial No. 194,547. (No model.)

To all whom it may concern:

Be it known that I, ALBERT MARSH, a citizen of the United States of North America, and a resident of Amawalk, county of Westchester, State of New York, have invented a new and useful Improvement in Horse-Frog Cushions and Devices for Securing the Same in Place, of which the following is a specification.

It is well known that "quarter-cracks" in horses' hoofs and contraction of the quarters commonly or frequently arise from the fact that the frog of the foot has no bearing upon the ground or floor upon which the horse stands, and that there being consequently no vertical pressure upon the frog it can exercise no lateral force to keep the hoof-quarters out in their natural position; hence the quarters contract or turn inward, get out of shape, and crack and cause lameness and uncertain footing. Horses which are much in stable, with shoes on, are very liable to these injuries, the shoes operating to raise the frogs above the floor, thus preventing their natural action.

The object of this invention is to provide an improved frog-cushion for horses, designed to prevent the contraction or cracking of the hoof-quarters, and to restore distorted or injured quarters to their normal conditions; and, further, to provide a device for securing the cushion in place.

The invention consists of an elastic cushion whose interior surface is made to conform with the surface of a horse's frog, held in place on the frog by a novel device embracing a holding-bar, an adjustable wedge, and laterally-moving arms, and adapted to be placed in position and removed at will, all of which will be hereinafter fully set forth.

Reference is to be had to the accompanying drawings, forming part of the specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of the under side of a horse's hoof with shoe thereon and with my improved device applied thereto. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation of my device. Fig. 4 is a plan of the cross-bar and attached arms of the same. Fig. 5 is a plan of the reverse of the slotted wedge. Fig. 6 is a plan of the slotted holding-bar.

In the drawings, A represents a horse's hoof; A′, the frog thereof, and B an ordinary shoe fixed on the hoof.

The frog-cushion C is made of india-rubber or other sufficiently elastic substance, and fashioned to conform on its under side with the surface of the frog A′ on which it is to be placed, as indicated in Fig. 2.

The device D, for holding the cushion in place, consists of a flat bar, a, having one end preferably slightly offset, as shown at a', to be inserted beneath the shoe B at the front thereof, as indicated in Fig. 1, and the rear end of this holding-bar a is designed to be inserted into a socket, b, in the cushion C, which latter is held in place by a screw, c, passing down through the said cushion into a screw-hole, d, in said bar. About centrally in the bar a is a longitudinal slot, a^2.

A cross-bar, f, is held at right angles to the bar a, on the under side thereof, by a screw-bolt, f', projecting from bar f through slot a^2. Pivoted on each end of this cross-bar f is a swinging arm, g, capable of being swung in a lateral plane, and the free extremity of each of these arms is slightly drawn out and curved downward, as indicated in Figs. 1, 2, 3, and 4, that they may readily be inserted beneath the quarters of the horseshoe. A wedge, h, having a longitudinal slot, h', extending nearly its entire length, is placed on top of the bar a and in line therewith, and is held movably in place thereon by the screw-bolt f', which projects up through the slot h', and a nut, k, on the bolt f' serves to hold the parts of the device together. This wedge is held from lateral motion by its side lugs, h^2, which embrace the sides of the bar a.

The parts being put together as indicated in Figs. 1 and 3, the wedge h is drawn down toward the cushion C, so that the arms g may be made to assume the positions shown in dotted lines, Fig. 4. Then the front end of the holding-bar a is inserted beneath the front of the shoe B, and the cushion C is made to rest on the horse's frog. Then the free extremities of the arms g are moved laterally and inserted beneath the quarters of the horseshoe, as indicated in dotted lines, Figs. 1 and 2, and then the wedge h is pushed forward until its inclined faces are brought hard in contact with the inner edges of the arms g, so as to force the cross-bar f for-

ward and the free extremities of said arms firmly in place. Then the nut *k* is turned down to secure and hold all the parts fixed in place, as shown in Fig. 1. On slackening the nut *k* the wedge *h* can be moved down from contact with the arms *g*, and then the latter can be readily disengaged from beneath the horseshoe and the whole device be at once removed from place—when, for instance, the horse is to be taken out of the stable for use.

The exposed face of the cushion C, when on the frog, is designed to be on a level with or slightly higher than the face of the shoe B, so that when the horse has his foot on the ground or floor the pressure on the said cushion will be transmitted to the frog sufficiently to expand it laterally, so as to gradually force the hoof-quarters outward to their normal positions, if they be contracted, or to prevent their contraction and resulting quarter-cracks if they be normal.

This device is designed to supersede heel-bars and all other appliances in common use for preventing or remedying contracted hoof-quarters. The cushion operates in effect as an artificial frog, by means of which the natural frog is enabled to perform its proper functions.

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

A device for holding a horse-frog cushion in place on a horse's frog, consisting of a slotted bar, *a*, on whose rear end the cushion is designed to be secured by a screw, *c*, and whose front end is designed to be engaged under the toe of the horseshoe, a bar, *f*, secured across the slotted bar by a screw-bolt, *f'*, and adapted to be adjusted on said slotted bar, and arms *g*, pivoted to the ends of the cross-bar, and adapted to be laterally adjusted and held in operative position with their free ends under the quarters of the horseshoe by a slotted sliding wedge adapted and arranged to be moved longitudinally on said bar *a*, all constructed and arranged substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 27th day of January, 1886.

ALBERT MARSH.

Witnesses:
JACOB J. STORER,
HENRY C. FOLGER.