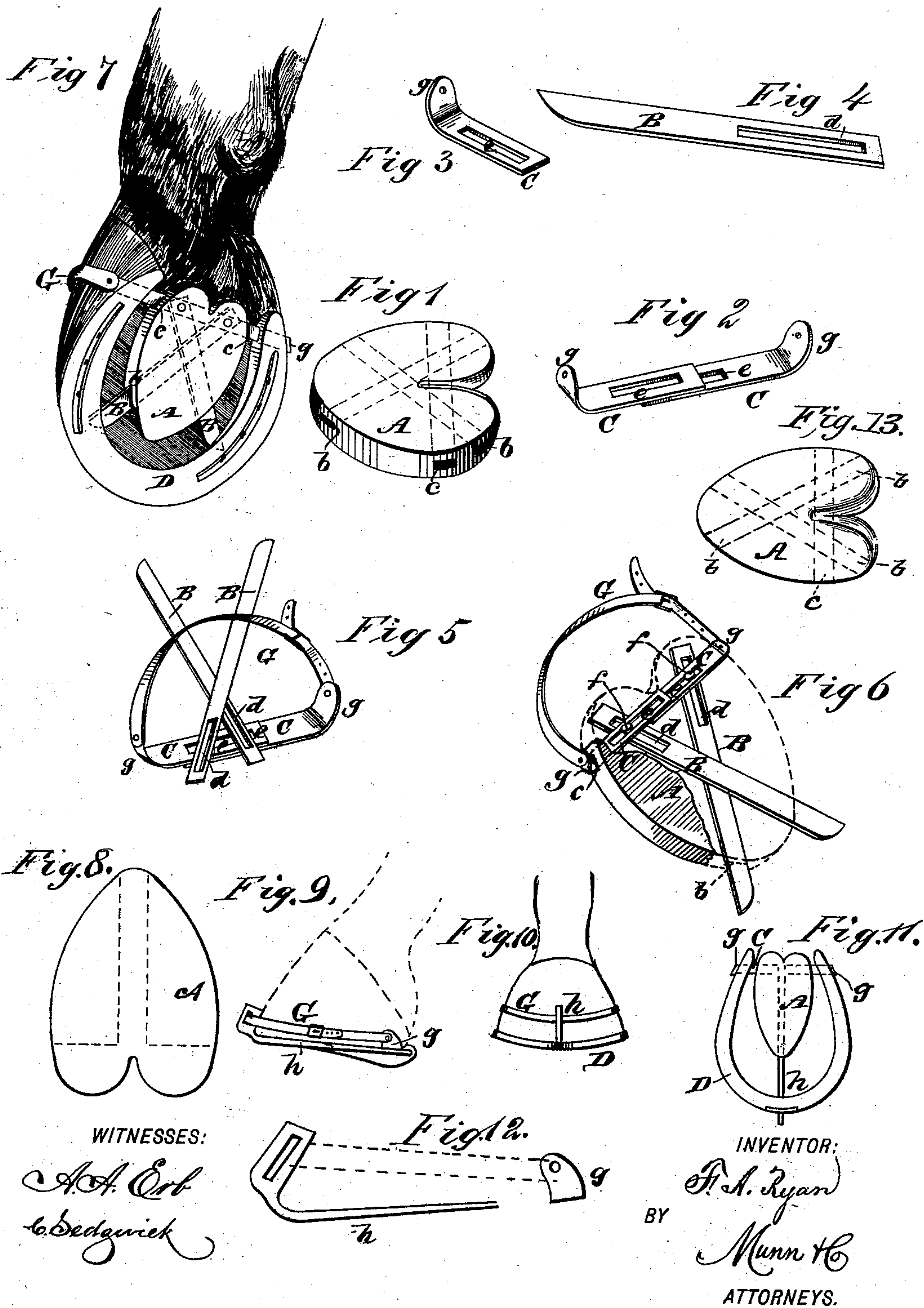


(No Model.)

F. A. RYAN.
HOOF PAD.

No. 506,941.

Patented Oct. 17, 1893.



UNITED STATES PATENT OFFICE.

FRANK A. RYAN, OF SHERMAN, TEXAS.

HOOF-PAD.

SPECIFICATION forming part of Letters Patent No. 506,941, dated October 17, 1893.

Application filed April 9, 1892. Serial No. 428,516. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. RYAN, of Sherman, in the county of Grayson and State of Texas, have invented a new and useful Improvement in Animal Foot-Pads, of which the following is a full, clear, and exact description.

My invention consists in a rubber foot pad and, as it may be termed, hoof expander, for animals, especially horses, of novel construction, and in means for adjusting the same, substantially as hereinafter described and more particularly pointed out in the claims, whereby the pad proper which is made of rubber may be readily fastened to the hoof, is almost instantly adjustable to any shaped or sized foot, avoids all contact of metal with any tender or delicate portions of the animal's foot, may be worn at any and all times for travel over all kinds of roads, and in which the parts are interchangeable so that when the rubber pad becomes too much worn for further use it can be replaced without renewing the metal or mechanical parts, also which will expand a contracted hoof in a natural and easy manner.

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

Figure 1 is a view in perspective of the rubber pad provided with slots in its exterior rim adapted to receive within and through them adjustable diagonally crossing metal bars or braces that pass under the animal's shoe and that in connection with a straight adjustable metal brace passing through certain of said slots near the heel end of the shoe serve, in connection with a strap and buckle applied to the latter brace, to securely fasten the pad to the foot. Fig. 2 is a view in perspective of said adjustable straight brace constructed in sections; Fig. 3 a perspective view of one of said sections; Fig. 4 a perspective view of one of the diagonally crossing bars or braces hereinbefore referred to. Fig. 5 is a view in perspective of said diagonally crossing and straight braces in connection with the buckled strap that, in combination with the braces, holds the rubber pad to the foot. Fig. 6 is a view in perspective of the

united braces, rubber pad and strap combined, the pad being broken away, and Fig. 7 is a view in perspective of the rubber pad, with its braces and strap, applied to the foot of the animal. Figs. 8, 9, 10, 11 and 12 show a modified construction of the rubber pad and braces with attached strap, and manner of applying the rubber pad to the foot of the animal as hereinafter described, and Fig. 13 is a plan view of the rubber pad.

Referring, in the first instance, to the first seven figures of the drawings, A indicates the rubber pad which is hollowed out on the upper side to conform to the shape of the frog of the animal's foot, as clearly shown in Fig. 13, and which has slots *b b* in its surrounding rim or edge adapted to receive diagonally crossing metal braces B B, and further slot *c* adapted to receive a sectionally constructed straight metal brace at the heel end of the pad through them, the dotted lines in Fig. 1 indicating the direction of the several slots. The diagonally crossing braces B B have longitudinal slots *d d* near their back ends, and the straight crossing brace is constructed of two longitudinal sections C C having longitudinal slots *e e* in them, and arranged to slide the one over the other and to cross the slotted portions of the braces B B, whereby the several braces may be adjusted to the size of the animal's foot and the pad be adjusted to conform and the whole be secured after adjustment by screws *f f* passing through the several slots in the braces and into the rubber pad, or the braces might be otherwise adjustably fastened to the rubber pad. The forward or toe ends of the diagonally crossing braces B B are curved or J shaped and, after adjustment, project on either side of the toe end of the pad to pass under the animal's shoe D, that is over its inner face and such, in connection with the straight crossing brace C C bent at the outer ends *g g* of its two sections to pass over the heel of the shoe, serve, with the aid of a divided buckling strap G attached to the bent ends *g g* of the brace C C and passing round the foot of the animal, to securely hold the adjusted rubber pad in place.

In Figs. 8, 9, 10, 11 and 12 of the drawings,

I have shown the rubber pad as having a straight groove in it from the toe toward the heel end thereof, and a single brace *h* inserted therein from the front and outside of the toe of the foot, said brace to be used instead of the two diagonally crossing braces and being bent upward and curved to conform to the curve of the foot. The pad is also slotted at its heel end for the straight crossing brace *C* to pass through, with the ends of which the strap *G* from the heel is connected and passes through a slot in the upward bent end of the brace *h*, which bent end admits of a toe weight being attached in the same way as on a spur made for that purpose. The slot and groove in the pad is shown by dotted lines in Fig. 8; Figs. 9 and 10 show a side and front view of the animal's foot with the braces and strap in their relation thereto applied. Fig. 11 a plan view of the pad, braces and shoe combined; and Fig. 12 a side view of the brace *h* in part and one of the bent-up ends *g* of the brace *C*, with dotted lines showing the connection of the strap.

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

1. In a foot-pad for protecting an animal's foot, an adjustable rubber pad adapted to be arranged within the shoe of the animal, and provided with metal braces passing through the pad for engagement between the foot and the shoe, in combination with a fastening strap applied to said braces and adapted to pass from the heel end over and around the foot of the animal, substantially as specified.

2. In an adjustable foot-pad for animals, the combination of a rubber pad *A*, having slots *b b* and *c*, the diagonally crossing braces *B B* passing through and arranged to project in front of the slots *b b* for engagement with or under the shoe of the animal, a straight crossing brace constructed in sections *C C*, near the heel end of the pad, and the fastening strap *G*; the several braces and brace sections being slotted where they slide on or over and across each other, to provide for their adjustment in various directions and being secured to the pad, substantially as described.

FRANK A. RYAN.

Witnesses:

S. HARE, Jr.,
MILO HUTT.