

(No Model.)

G. W. WEMPLE.
HORSE HOOF EXPANDER.

No. 263,825.

Patented Sept. 5, 1882.

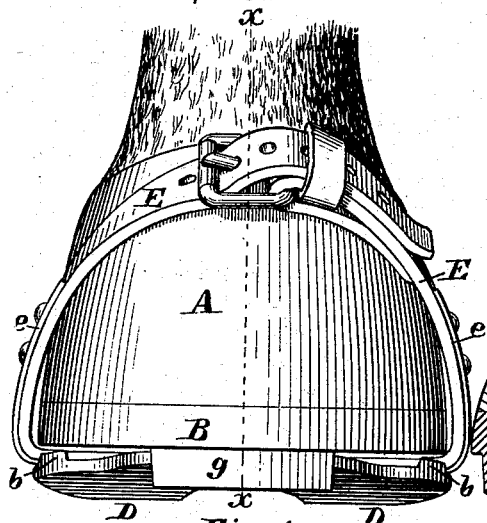


Fig. 1.

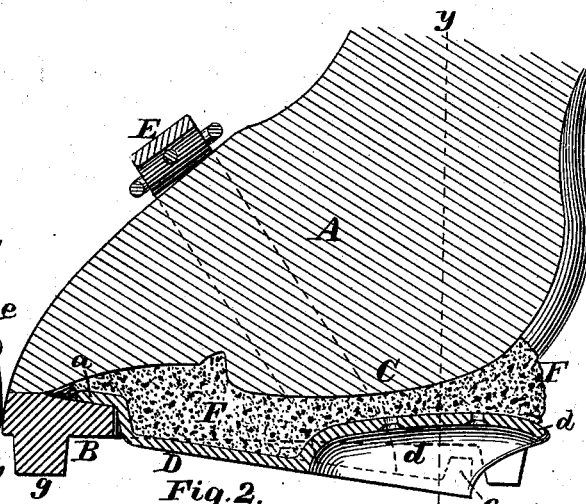


Fig. 2.

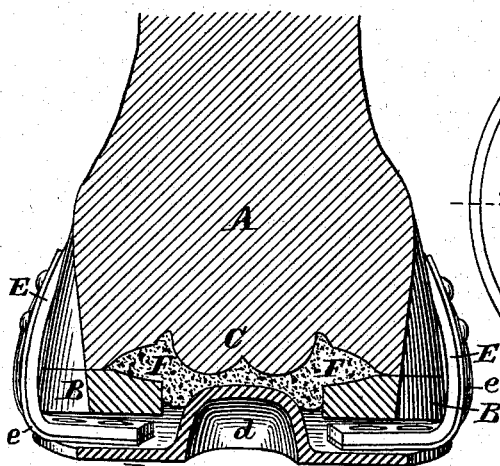


Fig. 4.

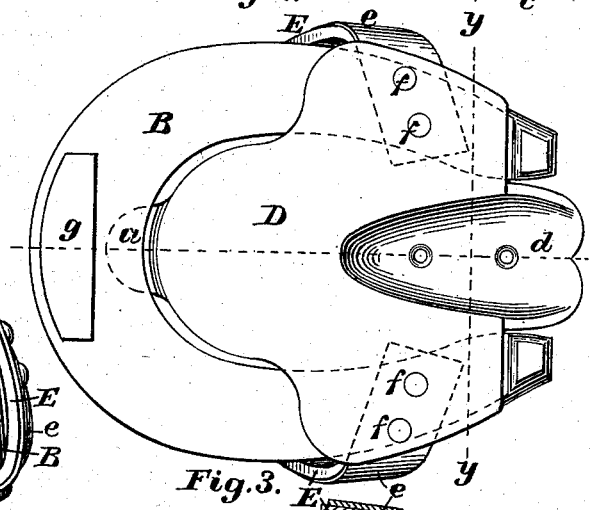


Fig. 3.

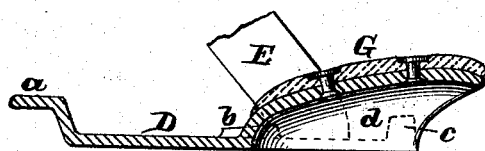


Fig. 6.

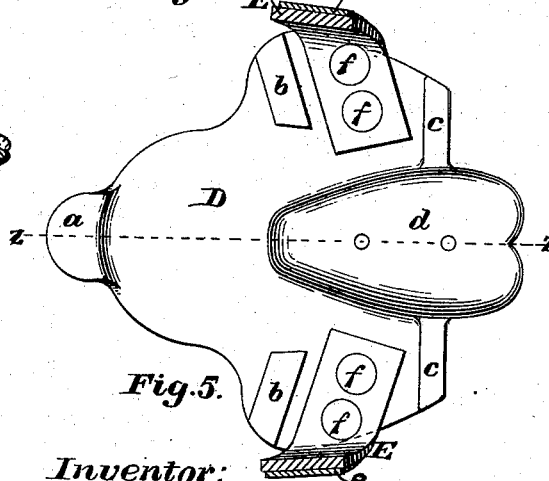


Fig. 5.

Witnesses:

C. A. Hemmenway.
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George W. Wemple
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UNITED STATES PATENT OFFICE.

GEORGE W. WEMPLE, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO BRAINARD W. CHILD, OF SAME PLACE.

HORSE-HOOF EXPANDER.

SPECIFICATION forming part of Letters Patent No. 263,825, dated September 5, 1882.

Application filed March 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WEMPLE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hoof-Expanders for Horses' Feet, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to a device to be attached to the bottom of a horse's foot for the purpose of moistening the frog of the foot and applying pressure thereto, whereby the arches of the frog are flattened, causing a lateral pressure upon the sides of the hoof at or near the heel; and it consists of a plate provided with an ear or lip on its forward end, to be inserted between the shoe and hoof, with a pair of ribs or lugs to bear against the under surface of the shoe between the heel and toe, and serve as a fulcrum about which said plate may be moved to a limited extent, and also with a pressure pad or projection extending upward from the heel portion of said plate and between the heel portions of the shoe, so as to bear against and press upon the frog of the foot, or upon a sponge or other soft porous material interposed between it and the frog, which should be kept moist.

Figure 1 of the drawings is a front elevation of a horse's foot with my improved hoof-expander applied thereto. Fig. 2 is a vertical section on line *x x* on Fig. 1. Fig. 3 is an inverted plan. Fig. 4 is a transverse section on line *y y* on Figs. 2 and 3. Fig. 5 is a plan of the expander-plate removed from the foot, and Fig. 6 is a section of the same on line *z z* on Fig. 5.

A is the hoof; B, the shoe, secured thereto in the ordinary way and, C the frog.

D is a metal plate of the form shown in Fig. 5, and provided with the ear *a*, the raised lugs or ribs *b b* and *c c*, and the upwardly-projecting frog-presser *d*, and having secured to opposite sides thereof two leather straps, E E, those portions of which that are attached to or are near the plate D being re-enforced and protected by the sheet-metal guard-plates *e e*, said straps and plates being secured to the plate D by the rivets *f f*, as shown in Figs. 4 and 5.

In applying my invention the ear *a* is inserted between the forward part of the shoe B and the hoof A, with the plate D in such a position that the frog-presser *d* shall lie directly beneath the frog and between the heel portions of the shoe, as shown in Fig. 4. The space between the plate D and presser *d* and the frog and hoof is filled with a wet sponge, F, and the plate is secured in the desired position, with the lugs or ribs *b b* and *c c* removed from contact with the under side of the shoe, by the straps E E, buckled together in front of the hoof, as shown in Figs. 1 and 2.

When this device is properly applied to the horse's foot his weight rests upon the toe-calk *g* and the rear or heel end of the plate D in such a manner that a pressure is applied to the frog, which, being softened by the moisture in the sponge surrounding it, is flattened, and as a consequence is expanded laterally, and thus forces the rear portions of the sides of the hoof outward, which accelerates the circulation of blood and promotes a healing growth, and prevents corns, contraction, hoof-bound, and all diseases of the feet. When the lugs or ribs *b b* and *c c* come in contact with the under surface of the shoe B and bear fairly thereon before sufficient pressure has been applied to the frog the plate may be removed and a larger piece of sponge placed between it and the frog; or a piece of felt, G, may be riveted to the pressure-pad, *d*, as shown in Fig. 6, when the plate is again applied, and the frog will continue to be pressed until the weight of the horse has brought the shoe down upon the ribs *b b* and *c c* again.

By making that portion of the plate D which is forward of the lugs or ribs *b b* of a width not greater than the width between the inner edges of that part of the shoe B the plate D may be applied to shoes of different thicknesses, and work equally well upon all.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a horse-hoof expander, the plate D, provided with the lip or ear *a*, the ribs or lugs *b b* and *c c*, and the raised or elevated pressure-pad *d*, all arranged and adapted to operate substantially as and for the purposes described.

2. The plate D, provided with the ear *a*, the
ribs *b b* and *c c*, the raised or elevated frog-
presser *d*, and means for securing its heelend
to the horse's foot, and having that portion
5 forward of the ribs *b b* made of a width to fit
between the inner edges of that part of the
shoe, substantially as described.

Executed at Boston, Massachusetts, this
25th day of March, 1882.

GEORGE W. WEMPLE.

Witnesses:

E. A. HEMMENWAY,
WALTER E. LOMBARD.