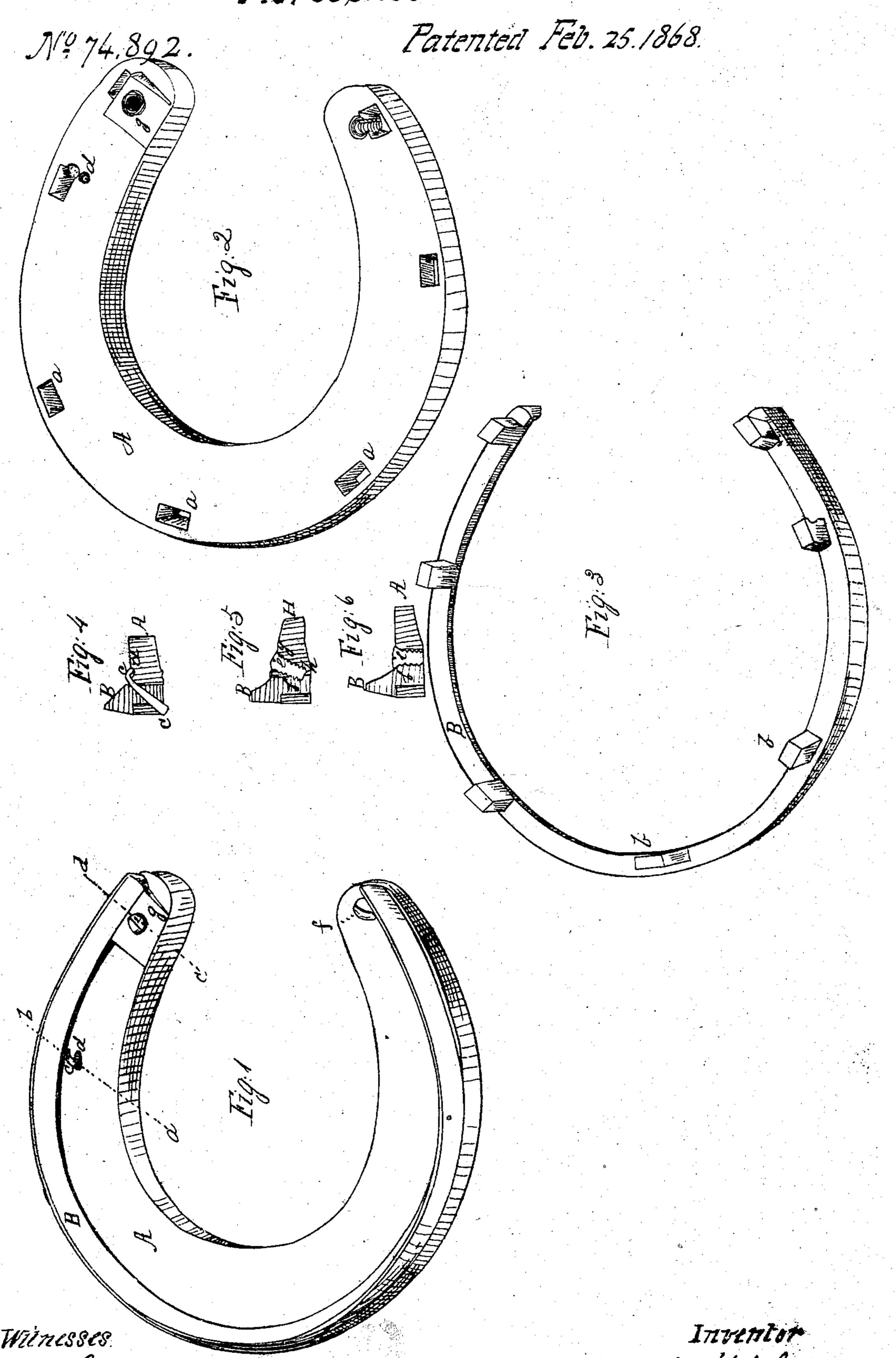
G. T. Chaman, Horseshoe



Minesses.
SHe Austrand
CX Phayer

Au Hohafman

Anited States Patent Affice.

GEORGE T. CHAPMAN, OF NEW YORK, N. Y.

Letters Patent No. 74,892, dated February 25, 1868.

IMPROVEMENT IN HORSE-SHOES.

The Schedule referred to in these Petters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, George T. Charman, of New York city, in the county and State of New York, have invented new and useful Improvements in Horse-Shoes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention relates to the construction of horse-shoes with removable calks, and it consists in the mode of attaching and securing the same to the shoe, and has for its object a simple, easy, and effective means of accomplishment, whereby the same can be cheaply made, and the old and worn-out calks can be easily removed and replaced by new ones without removing the shoe from the foot. On reference to the drawing-

Figure 1 represents a perspective view of my improved shoe.

Figure 2 represents the same with the calk removed.

Figure 3 represents the calk.

Figure 4 represents a section on the line a b, fig. 1, showing the means of securing the calk.

Figure 5 represents a section on the line cd, fig. 1, showing a modification of the means of securing the calk, and

Figure 6 represents a section on the line ef of fig. 1, showing another modification of the same.

A represents the body of the shoe, which is secured to the foot, by nails or screws, in the ordinary manner, and having the rectangular perforations a a, &c. B is a continuous calk, preferably made of steel, having lugs, b b, &c., corresponding to the perforations, a, in the body portion A. The two parts are joined together by inserting the said lugs b in the perforations a, as will be readily understood by inspection of the drawings.

The sectional view, fig. 4, shows my improved mode of securing the two parts together. c represents nails or pins, driven into holes bored or punched from the outer upper edge of the shoe on the line between the lugs and the end wall of the perforations, and terminating at the apex of the angle formed by the under side of the shoe A and the inner inclined face of the calk B, so that an equal amount of metal is removed from those parts of the lug, and the shoe bounded by one end of the perforations and the corresponding face of the lugs.

I prefer to bore or punch the two parts separately, so as to give them a sufficient amount of "draw" to

insure the parts being drawn tightly together.

d represents depressions formed in the under side of the shoe, adjacent to the lower termination of the pinholes, into which the ends of the nails may be bent to prevent them from working loose; or they may be bent around into the angle formed by the lower face of the shoe and the calk.

As many pins may be used as there are lugs on the calk; or two may be used, one on each side.

The pins may be driven through the holes from the opposite direction, if preferred, and the holes may be made of the same diameter throughout; or they may be made tapering, as preferred.

Figs. 5 and 6 represent modifications of my improvement. g is a boss, which may be raised up from the body portion of the shoe A, on the under side, by swaging or otherwise, the face of which is inclined, as in figs. 2, 1, and 5, through which a hole may be tapped, and countersunk at a right angle to the said inclined face, and a screw, e, may be inserted, so as to bear snugly-on the shoulder of a recess formed on the lug, as clearly shown at h, fig. 5; or, as in fig. 6, the hole may be tapped so that on the side next to the lug the threads may be cut into it sufficiently to be firmly held in place by the screw e.

It will be observed that my improved method of attachment is adapted as well to the ordinary toe and heelcalks as to that which I have described, and that to remove a calk requires only the withdrawal of the pins or screws, when the two parts may be easily separated.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is-

1. The continuous detachable calk B, combined with the part A, substantially as described.

2. I also claim the continuous detachable calk B and pin C, in combination with the part A, substantially as described.

Witness:

JOHN D. BLOOR, CHAS. A. FISK.

GEO. T. CHAPMAN.