A. MYER.

HORSESHOE.

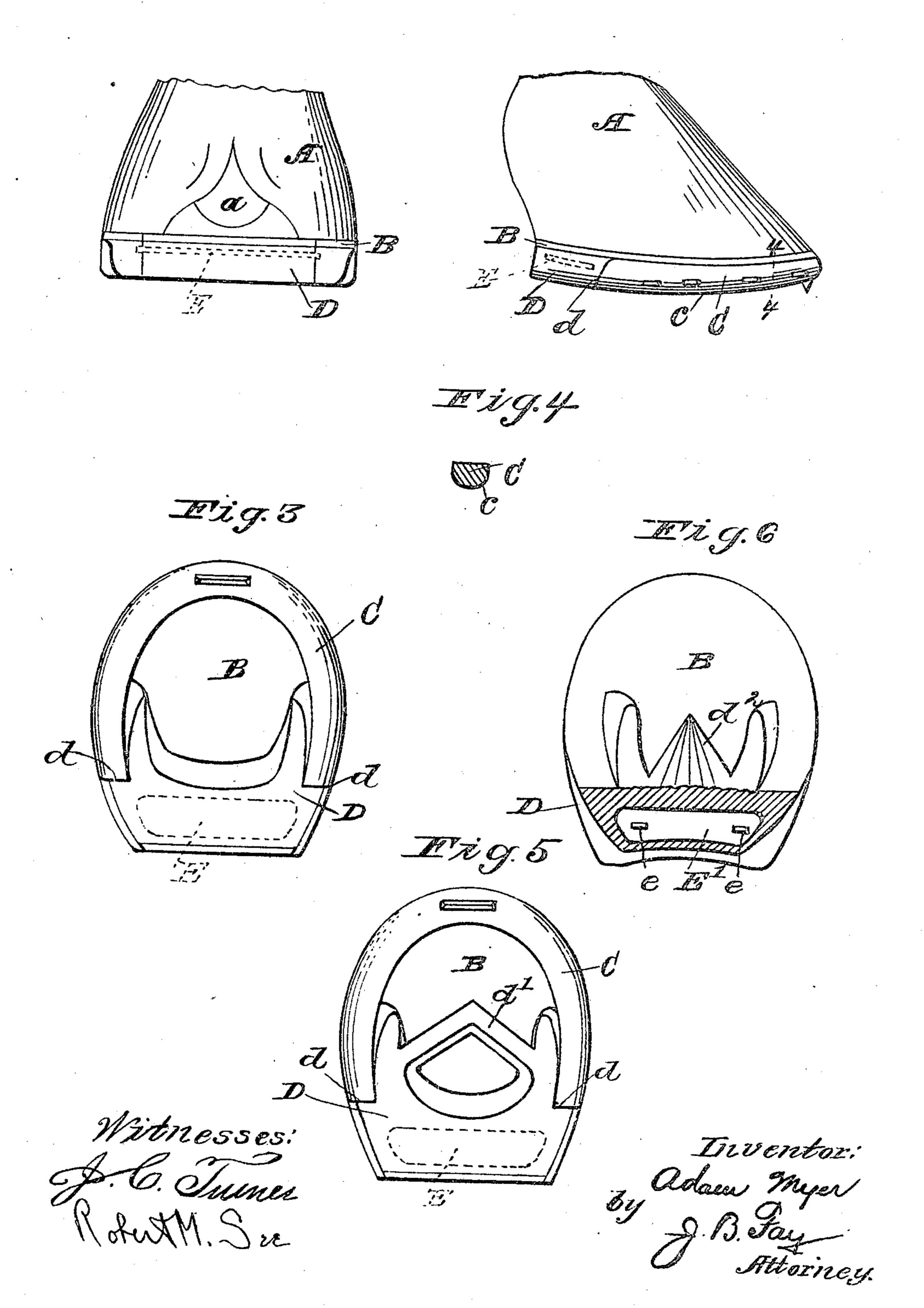
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UNITED STATES PATENT OFFICE.

ADAM MYER, OF CLEVELAND, OHIO.

HORSESHOE.

952,208.

Specification of Letters Patent. Patented Mar. 15, 1910.

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To all whom it may concern:

Be it known that I, Adam Myer, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Horseshoes, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates in general to horse

shoes and their supports.

A prevailing type of shoe, is a flat steel shoe and is supported partly by a leather backing interposed between it and the hoof, and partly by a rubber pad disposed rearwardly of the shoe and below the leather backing. After very little use the rubber pad and the leather backing both work upwardly in the center, and consequently the leather backing presses against the frog of the hoof and soon causes lameness. Furthermore, the rubber pad extends downwardly below the steel shoe, or shoe tip, as it is generally termed, and obviously is therefore extremely liable to be caught and torn off.

My invention has for its object the obvia-30 tion of these defects, and still other objects will appear from the description which

follows.

To the accomplishment of these and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the following claims.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of my invention may be used.

In said annexed drawing:—Figure 1 is a rear elevation of a hoof provided with my improved shoe; Fig. 2 is a side elevation thereof; Fig. 3 is a plan of the bottom; Fig. 4 is a cross section through the shoe tip on the line 4—4 in Fig. 2; Fig. 5 is a plan of the bottom of a shoe showing a modified form of support, and Fig. 6 is a plan partly in section of still another modified form of support.

In the application of my invention, a leather backing B is attached to the under side of the hoof A, substantially covering

the lower surface of the hoof. Attached below the leather backing B is a steel shoe or shoe tip C of the usual semi-circular shape. This shoe, however, in contradis- 60 tinction to the prevailing type of shoe is formed so that it curves upwardly at front and rear, so that it may be described as being formed downwardly convex from front to rear. Furthermore, the shoe is formed 65 so that its under surface c is convex in cross section, the shoe thus being, in cross section, of a general semi-cylindrical form. Rearwardly of the shoe C and also immediately beneath the leather backing B, is a rubber 70 pad D. The rubber pad D and the steel shoe C are of the same height, so that at their contacting faces d there is no shoulder, their under surfaces forming a continuous line. A flat steel spring E is molded in 75 the rubber pad D; the spring E is disposed horizontally and is located near to the upper surface of the rubber pad D, and sufficiently forward so that it is adapted to lie substantially below the frog a of the hoof. A con- 80 venient method of building up support is to mold a portion of the rubber pad integrally with the leather backing, to then place the flat steel spring on the under side of this portion of the rubber pad, and to 85 then mold the remainder of the rubber pad below the spring.

Fig. 5 illustrates a slightly modified form of support. The distinction of this form exists in the forwardly projecting bridge d' 90 formed integrally with the rubber pad D. Fig. 6 illustrates still another method of forming this forwardly projecting support, the support here being shown as formed by a series of projections d^2 integral with the 95 rubber pad. The spring E' here shown is slightly different from the spring E already described, in that it has two elongated apertures e for the reception of the customary depending pins from the leather 100

backing.

With this brief description of the shoe and its supports, a clear understanding of its several advantages may be had. The placing of the flat steel spring within the 105 rubber pad very effectually reinforces the latter and the leather backing, and absolutely prevents any working up of the pad and backing against the frog. By making the rubber pad and the shoe proper of the 110 same height and thereby eliminating the usual shoulder at their juncture, any possi-

bility of the rubber pad being caught by an object in the street and torn off is eliminated. The whole contacting surface presented by the steel shoe and the rubber pad, as has been described, is curved from front to rear and thereby a much better bearing surface for the shoe is provided, and the work of the horse is made appreciably easier. By making the shoe convex on its under side instead of flat, as usual, the disadvantageous tendency of the shoe to pack snow is decreased.

The provision of a support for the shoe embodying these several improved features has been greatly desired, and my invention accomplishes this purpose not only by eliminating the defects of the present type, but by providing in addition a new style of shoe

offering distinct advantages.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and dis-

tinctly claim as my invention:

1. The combination of a horse shoe formed downwardly convex from front to rear, a pad disposed rearwardly of the shoe, a backing disposed above the shoe and the pad, and means for reinforcing the pad.

2. The combination of a horse-shoe formed downwardly convex from front to rear, a pad disposed rearwardly of the shoe, said shoe and pad being of substantially equal height, and a backing disposed above

the shoe and the pad.

40 3. The combination of a horse-shoe formed downwardly convex from front to rear, the under surface of the shoe being convex in cross section, a pad disposed rearwardly of the shoe, said shoe and pad being of substantially equal height, and a backing disposed above the shoe and the pad.

4. The combination of a horse-shoe formed downwardly convex from front to rear, a pad disposed rearwardly of the shoe,

a backing disposed above the shoe and the 50 pad, and reinforcement disposed horizon-tally substantially at the upper surface of the pad.

5. The combination of a horse-shoe formed downwardly convex from front to 55 rear, a pad disposed rearwardly of the shoe, said shoe and pad being of substantially equal height, a backing disposed above the shoe and the pad, and reinforcement disposed horizontally substantially at the up- 60

per surface of the pad.

6. The combination of a horse-shoe formed downwardly convex from front to rear, the under surface of the shoe being convex in cross section, a pad disposed rear- 65 wardly of the shoe, said shoe and pad being of substantially equal height, a backing disposed above the shoe and the pad, and reinforcement disposed horizontally substantially at the upper surface of the pad. 70

7. The combination of a horse-shoe formed downwardly convex from front to rear, the under surface of the shoe being convex in cross section, a pad disposed rearwardly of the shoe, said shoe and pad being 75 of substantially equal height, a backing disposed above the shoe and the pad, and a flat steel spring disposed horizontally with-

in the pad near its upper surface.

8. The combination of a horse-shoe 80 formed downwardly convex from front to rear, the under surface of the shoe being convex in cross section, a pad disposed rearwardly of the shoe, said shoe and pad being of substantially equal height, a backing disposed above the shoe and the pad, said pad being provided with a forwardly extending projection forming a support under the backing, and a flat steel spring disposed horizontally within the pad near its upper 90 surface.

Signed by me this 14th day of September, 1909.

ADAM MYER.

Attested by—
Anna L. Gill,
Jno. F. Oberlin.