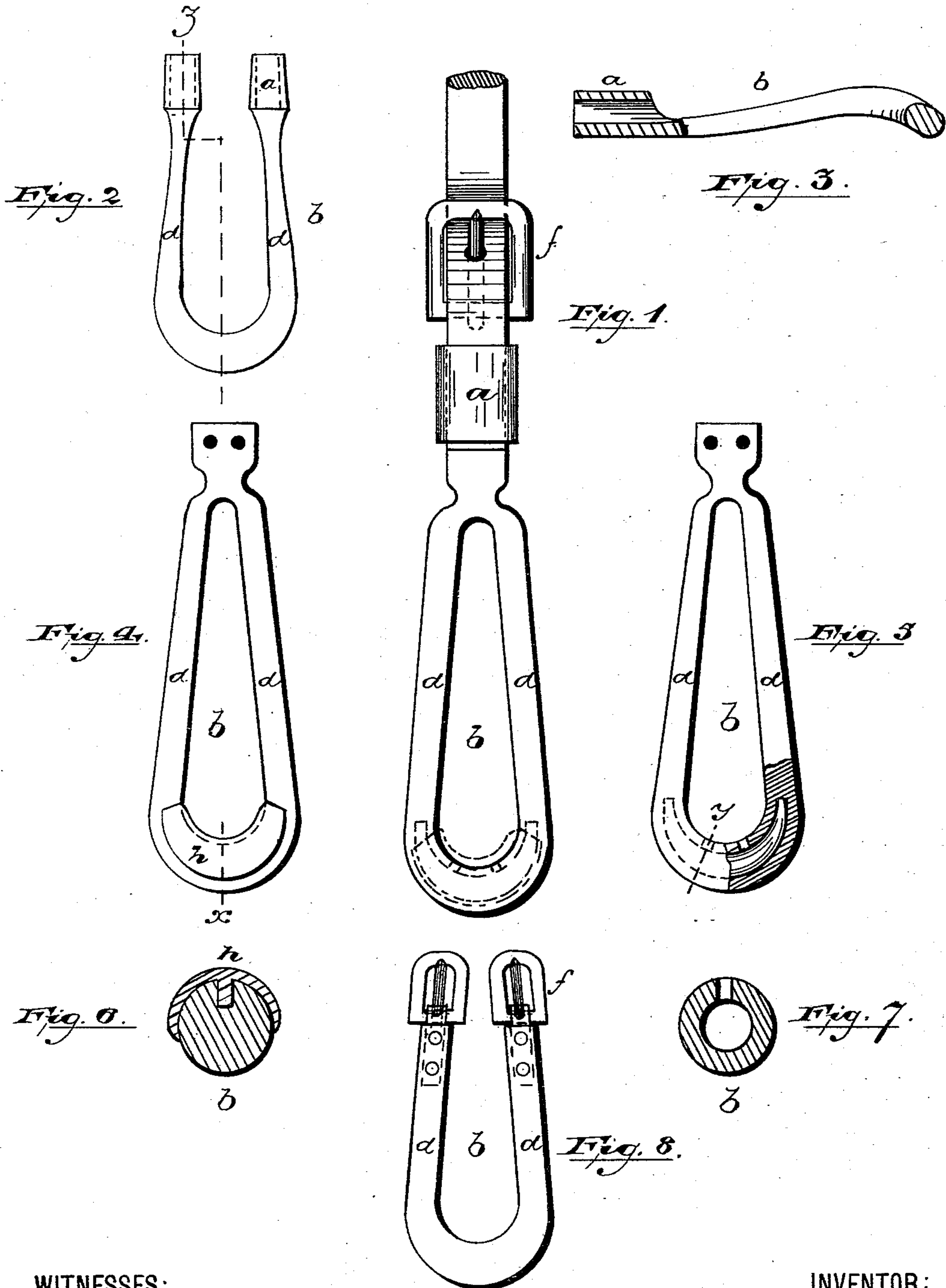


(No Model.)

J. STANLEY.
HARNESS.

No. 350,216.

Patented Oct. 5, 1886.



WITNESSES:

INVENTOR:

Oscar A. Michel.
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UNITED STATES PATENT OFFICE.

JAMES STANLEY, OF NEWARK, NEW JERSEY.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 350,216, dated October 5, 1886.

Application filed December 31, 1885. Serial No. 187,254. (No model.)

To all whom it may concern:

Be it known that I, JAMES STANLEY, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Harness; and I do hereby declare the following to be full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to reduce the cost of construction, to keep the parts of the crupper-loops in their respective positions more permanently, to increase the strength and durability of the said crupper-loops, and to render said loops more elastic and easy and comfortable for the horse, and to prevent said loops from becoming hard and rough, as in the case of leather that has been subjected to wear, in which state it tends to injure the flesh of said horse.

The invention consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally be embodied in the clause of the claim.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the several figures, Figure 1 is an elevation of a loop illustrating the improvements. Fig. 2 is an elevation illustrating a preferred construction. Fig. 3 is a sectional view taken through line *z*, Fig. 2. Figs. 4 and 5 illustrate certain details of construction which may be employed under certain conditions; and Figs. 6 and 7 are sectional views taken, respectively, through lines *x* and *y*. Fig. 8 is another elevation showing detail modifications.

In said drawings, *a* is a box loop of hard or soft rubber which is cast integral with a crupper-loop, *b*, whereby the relative positions of the parts are caused to remain constant after

long use and subjection to the influences of the weather, and that without the necessary use of stiffening-plates. Said crupper is preferably made of soft rubber, as by that make considerable elasticity is secured, whereby the loop is rendered easy and comfortable for the horse. The portions *d d* of the loop may be joined at the top, as in Figs. 4 and 5, or be separated, as in Figs. 2 and 8, the upper end or ends being provided with the box or boxes, as shown. To the upper end or ends of the crupper the ordinary buckle, *f*, may be secured by means of a leather buckle-loop, 9, riveted or otherwise secured to the crupper either under or within the loop *a* or in suitable sockets formed at the end or ends of said crupper, as indicated in Fig. 8. When made of soft rubber the lower end of the crupper is preferably provided with a projecting plate, *h*, of some hard material—such as celluloid or hard rubber which presents a smooth anti-friction surface to the tail. Though the use of this plate is desirable it is not necessary, for the soft rubber, though having a peculiar frictional surface, is pliable and is not apt to irritate the flesh as would a leather surface made hard and rough by wear and repeated wetting. I also prefer to have the lower end of the loop hollow, as in Fig. 5, whether the plate *h* be employed or not, as by this means I am enabled to obtain a cushion-like effect that is desirable in making the loop comfortable for the horse.

Having thus described the invention, what I claim as new, is—

The rubber crupper-loop and a box-loop combined in one integral piece of rubber, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of December, 1885.

JAMES STANLEY.

Witnesses:

CHARLES H. PELL,

FREDERICK F. CAMPBELL.