

No. 674,242.

Patented May 14, 1901.

G. L. MACEY.

TOE WEIGHT.

(Application filed Mar. 30, 1901.)

(No Model.)

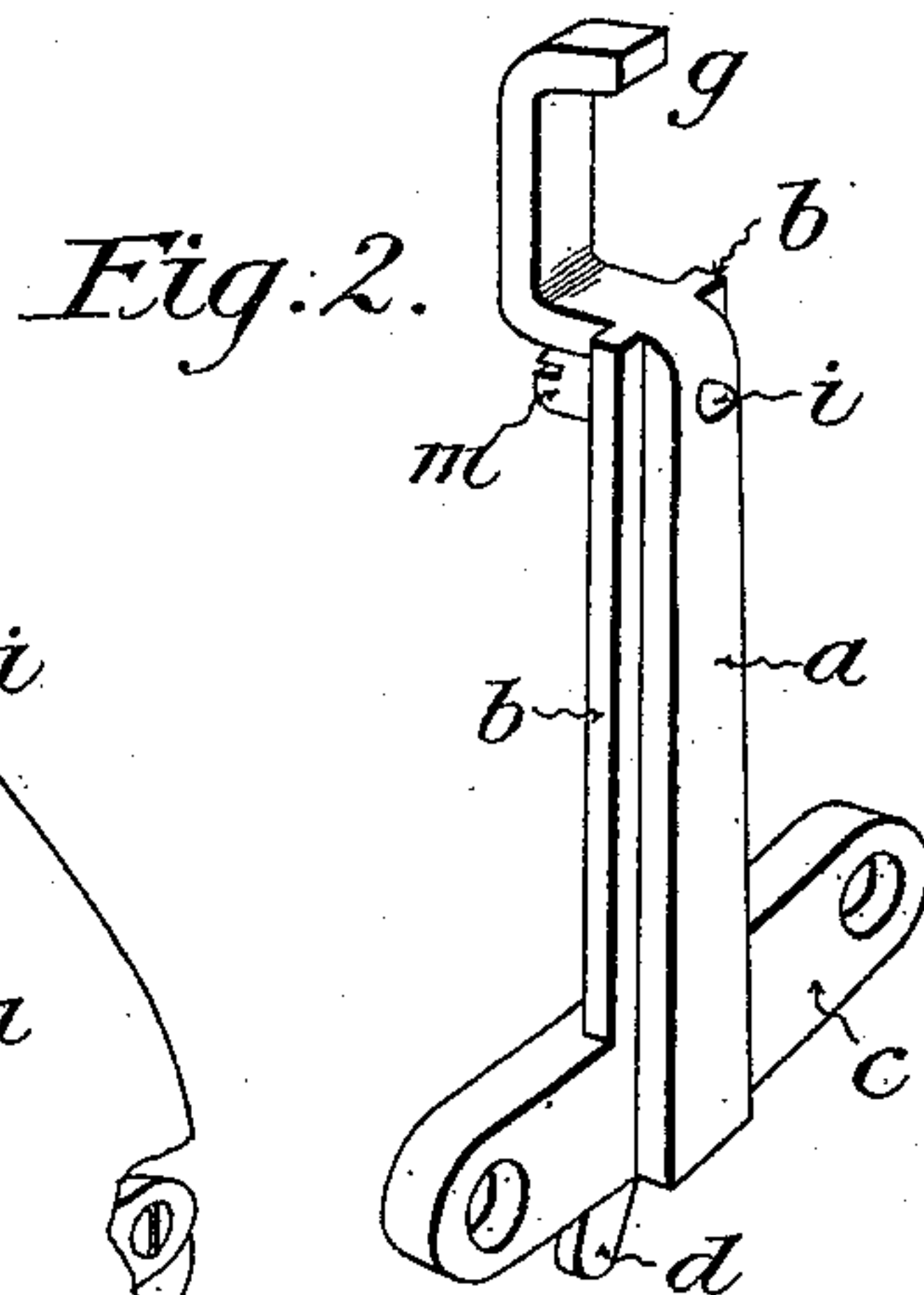
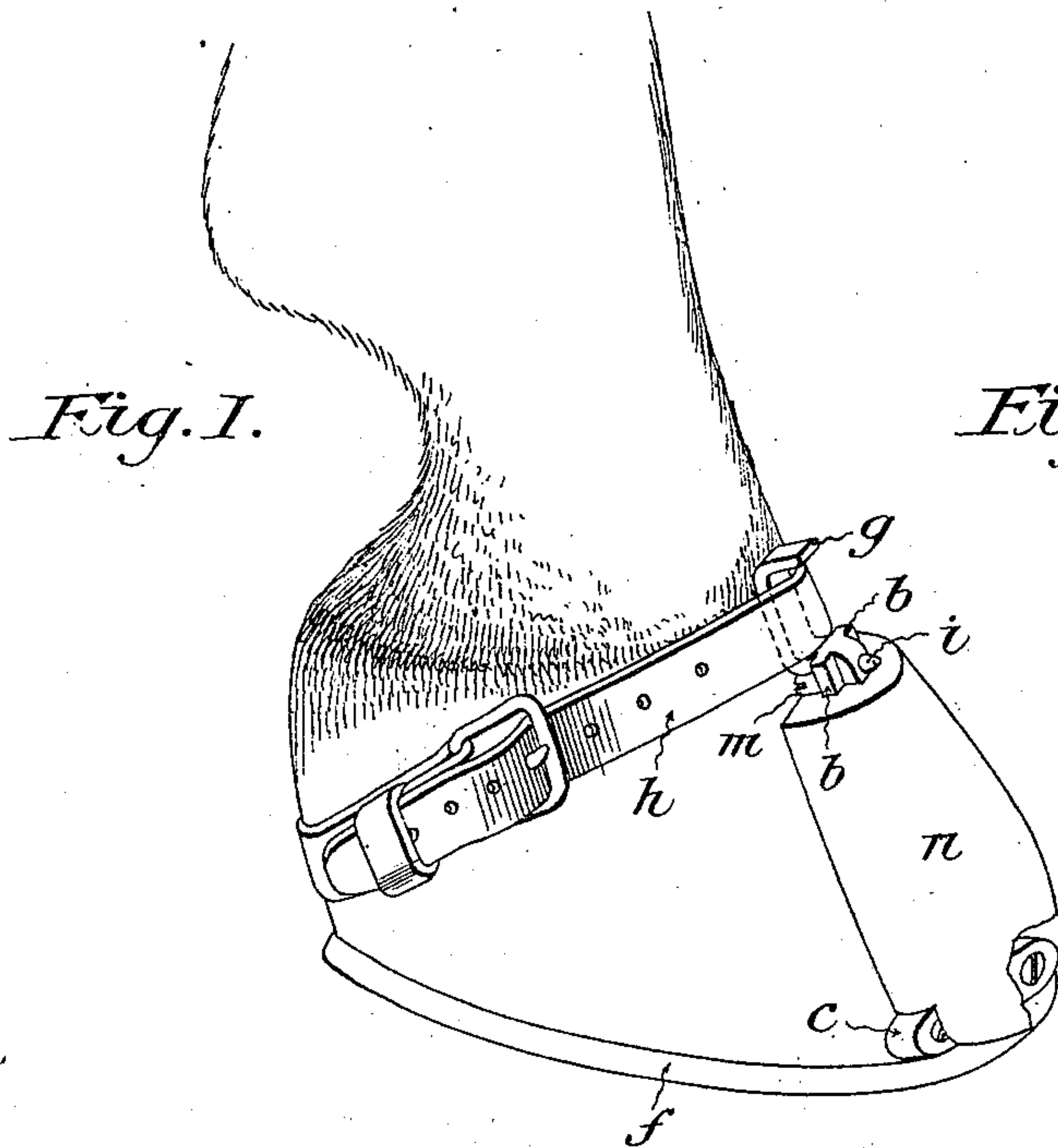


Fig. 3.

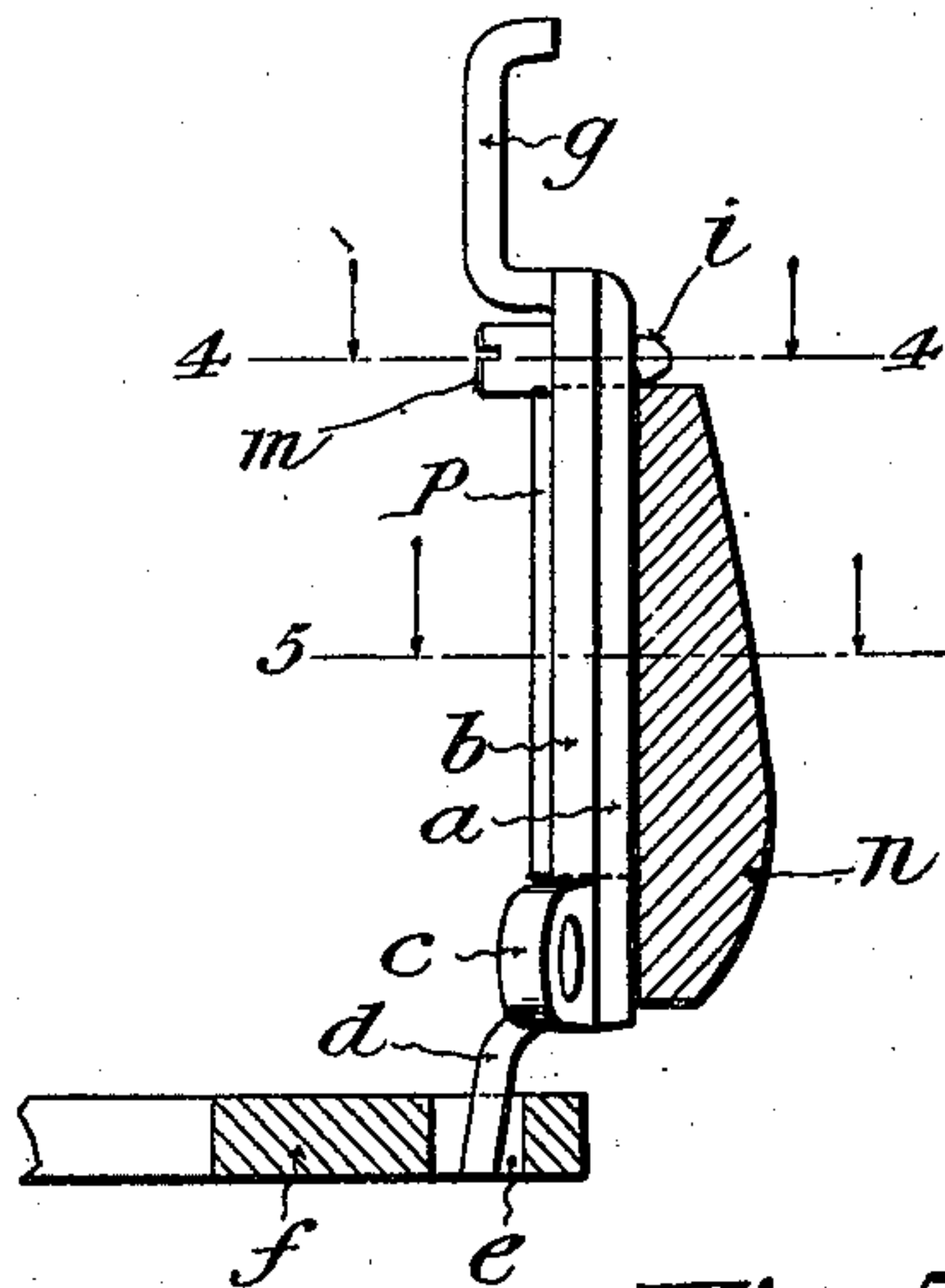


Fig. 4.

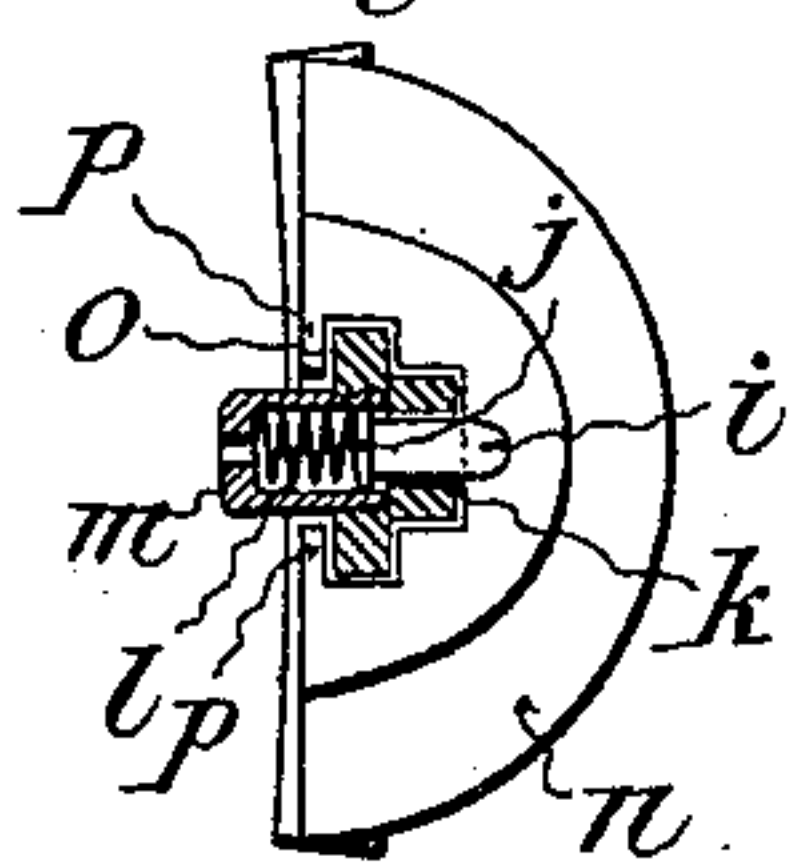


Fig. 6.

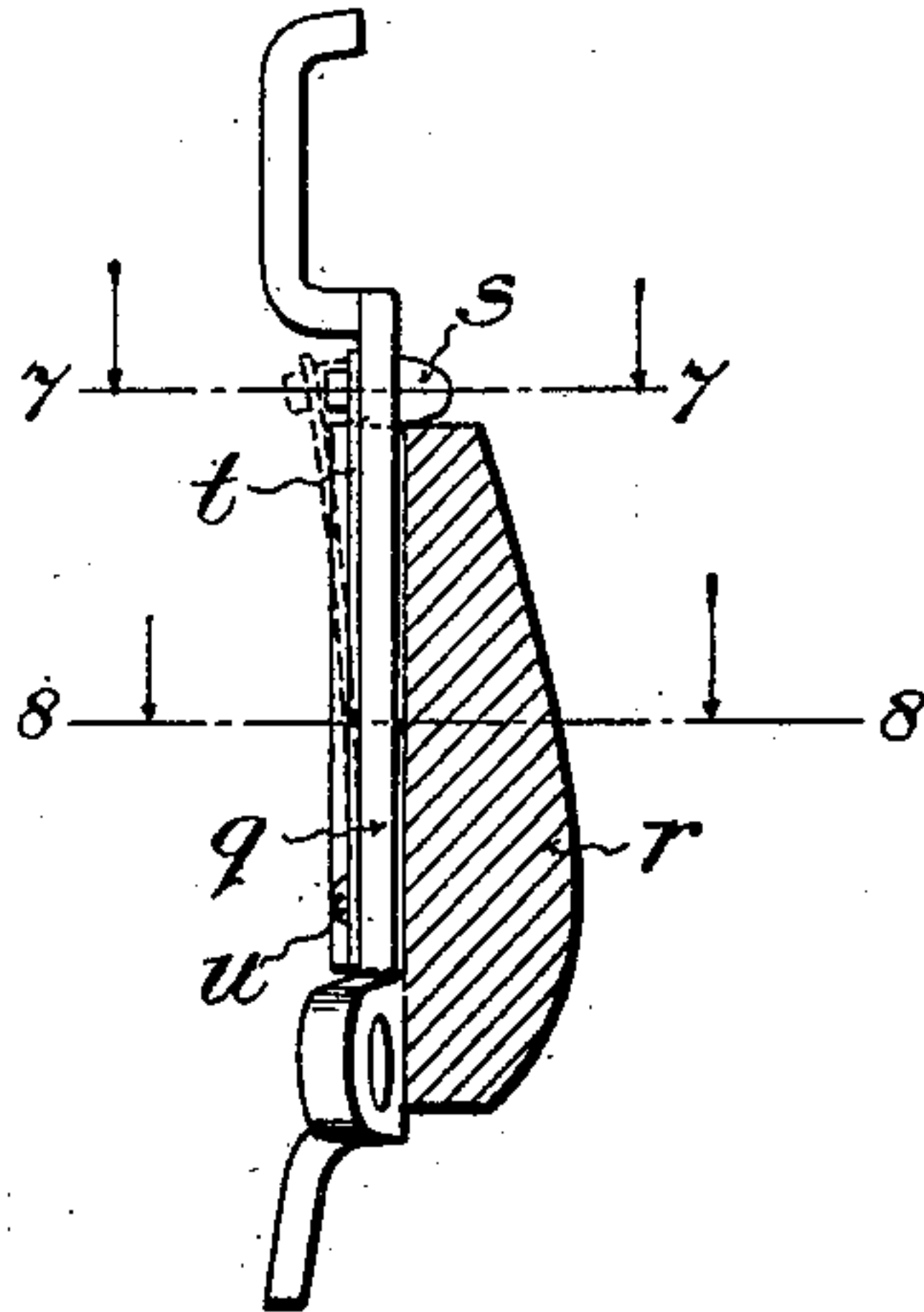


Fig. 7.

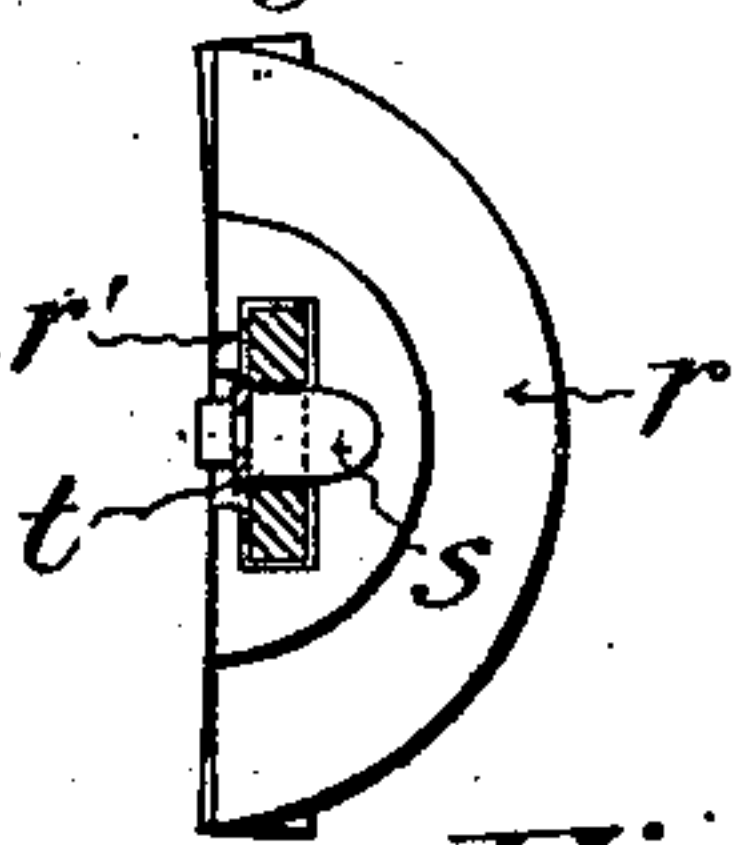


Fig. 5.

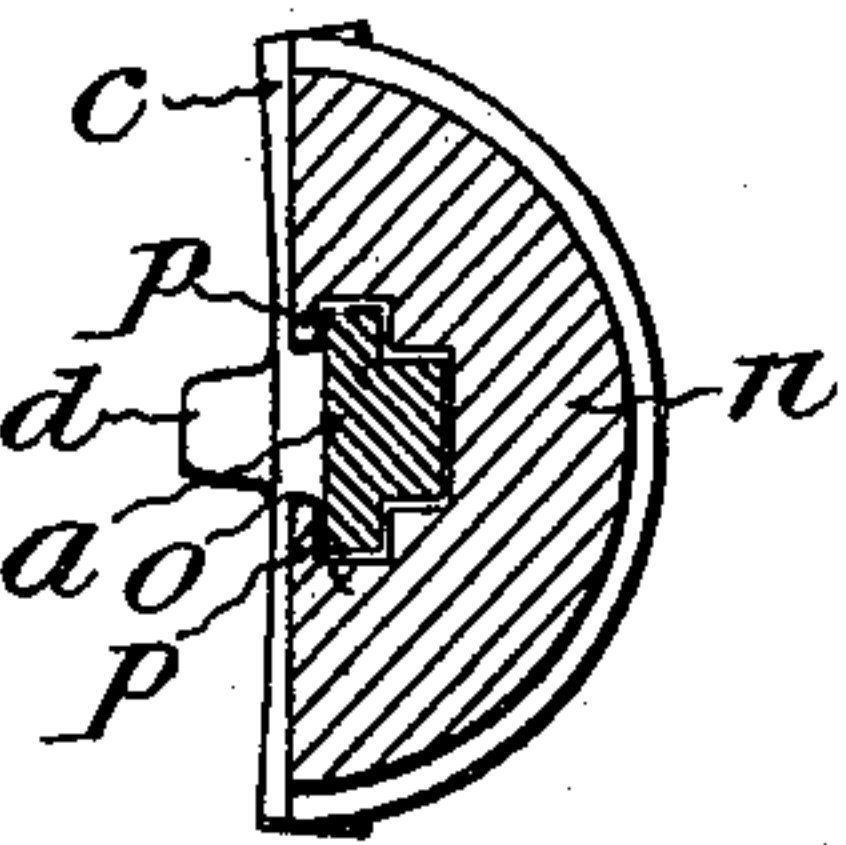
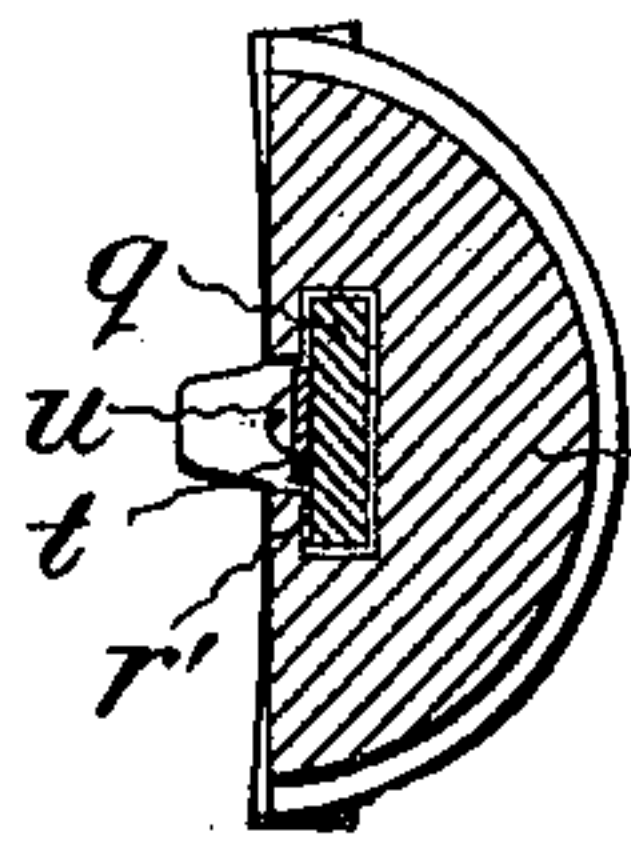


Fig. 8.



Witnesses:

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Atty.

UNITED STATES PATENT OFFICE.

GUSS L. MACEY, OF VERSAILLES, KENTUCKY.

TOE-WEIGHT.

SPECIFICATION forming part of Letters Patent No. 674,242, dated May 14, 1901.

Application filed March 30, 1901. Serial No. 53,699. (No model.)

To all whom it may concern:

Be it known that I, GUSS L. MACEY, a citizen of the United States, residing at Versailles, in the county of Woodford and State of Kentucky, have invented a certain new and useful Improvement in Toe-Weights, of which the following is a full, clear, and exact description.

This invention relates to that class of devices commonly called "toe-weights" used by horsemen, and especially turfmen, upon the hoofs of horses to improve the speed of the horses in racing or speeding.

The objects of the invention are to simplify the construction of toe-weights, increase their efficiency, facilitate their attachment and removal, and render their accidental loss well-nigh, if not entirely, impossible.

The invention consists of a holder preferably engaging with the horseshoe, also directly with the hoof, and also with a strap or band secured about the hoof and having a weight applied thereto by an undercut groove and held in place by a spring-bolt, so as to be readily removable to rest the horse when desired, and adapted to be again applied without in either case disturbing the holder's connection with the hoof, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view showing the device applied to a horse's hoof, part of the weight being broken away. Fig. 2 is a perspective view of the holder. Fig. 3 is a sectional elevation. Fig. 4 is a cross-section taken in the plane of line 4 4, Fig. 3. Fig. 5 is a cross-section taken in the plane of line 5 5, Fig. 3. Fig. 6 is a sectional elevation of another form of device, and Figs. 7 and 8 are respectively cross-sections taken in the planes of lines 7 7 and 8 8 of Fig. 6.

Referring to Figs. 1 to 5, inclusive, the holder, as seen especially in Fig. 2, comprises a shank *a*, having laterally-projecting flanges *b* to receive the removable weight; a cross-piece *c*, perforated for the passage of screws or other fastenings to secure the holder to the hoof, as shown in Fig. 1; a spur *d* to enter a hole *e* in the toe of the horseshoe *f*, (see

Fig. 3,) and a hook *g* to receive the strap *h*, by which the holder may be secured to the hoof with or without the use of the screws in cross-piece *c*. The holder is also provided with a bolt to secure the weight to it in a removable manner, and I have shown two forms of such bolt. In Figs. 1 to 5 the bolt comprises a metallic piece *i*, made with a head *j*, and seated from the back in a hole *k* in the shank *a* and held in place and normally projected by a coiled or other spring *l*, arranged within a hollow screw *m*, tapped into the back of the shank. (See details, Fig. 4.) With this form of bolt is used a weight *n*, grooved to fit about the shank and over the cross-piece *c*, its groove *o* being undercut to leave lips *p*, which overlap the flanges *b*, and thus assist in holding the weight firmly on the holder against liability of accidental loss. The bolt normally projects over the upper end of the weight, as seen in Figs. 1, 3, and 4, and retains it in place against escape in a lengthwise direction.

In the form of the invention shown in Figs. 6 to 8 there is no mid-rib in the shank *q*, such as is seen in shank *a*; but said shank *q* has the cross-piece, spur, and hook, as in the other holder. The weight *r* is provided with an undercut groove *r'*, which engages the shank *q*. The bolt-piece *s* is supported upon a flat spring *t*, which extends lengthwise of the shank and is secured thereto by a screw or other fastening *u*. This bolt is for the same purpose as the bolt previously described, and each is operated to release the weight and permit its removal by pressing back the projecting piece *i* or *s*, so that the weight may be slid over it and off the shank. The holder shown in Figs. 6 to 8, inclusive, may be made exactly as the holder of Figs. 1 to 5, inclusive, and with a mid-rib, as therein shown, the two holders differing only in the spring attachment of the bolt-piece. This removal of the weight and likewise its replacing may be accomplished without removing the strap or detaching the holder or even loosening the strap or the screws or fastenings in the cross-piece. This facility of removing and replacing the weight is of great advantage in racing horses, since it enables one to rest the horse between heats. It will be noted also that it is impossible for the weight to escape from the holder

in any direction, since the bolt holds it against longitudinal movement and the undercut groove against lateral movement. The holder also is firmly secured at at least two points—
5 namely, the engagement of the spur with the hole in the toe of the shoe and the strap engaging the hook and if and when desired its security may be further increased by screwing the cross-piece to the hoof. In all cases
10 the toe-weight of my invention is reliably fixed to the hoof, and its weight is readily removable at pleasure without disturbing the holder.

What I claim is—

15 1. A toe-weight, comprising a holder provided with a shoe-engaging spur, a shank, and a hook to receive a fastening-strap, a weight embracing the shank, and a spring-bolt on the shank detachably engaging the weight,
20 substantially as described.

2. A toe-weight, comprising a holder provided with a shank, a shoe-engaging spur at one end thereof, and a strap-receiving hook at the other end, a cross-piece near its lower

end adapted to be fastened to a horse's hoof, 25 and a spring-pressed bolt near its upper end, combined with a weight movably embracing said shank and locked thereon by the bolt in a removable manner, substantially as described. 30

3. A toe-weight, comprising a flanged shank, a spur to engage a hole in the shoe, a cross-piece to be screwed to the hoof, a hook to receive a strap, a spring-bolt, and a weight having an undercut groove embracing the 35 flanged shank, substantially as described.

4. In a toe-weight, a holder having a shank provided with a spring-bolt, the spring being secured within a hollow screw tapped in the shank, combined with a detachable weight 40 applied to the shank and engaged by the bolt, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of March A. D. 1901.

GUSS L. MACEY.

Witnesses:

T. D. EDWARDS,
FANNY TURNER.