

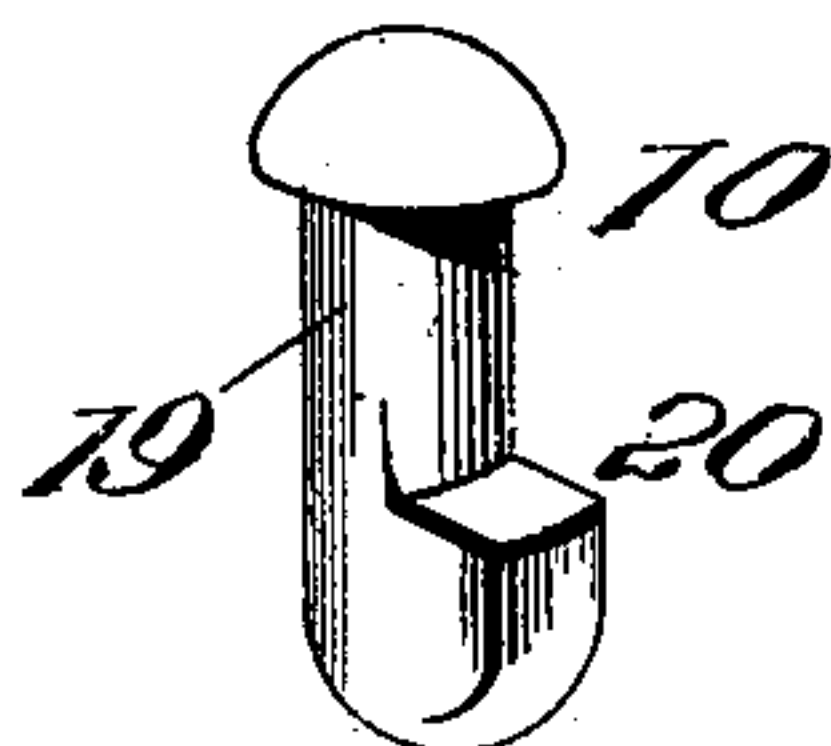
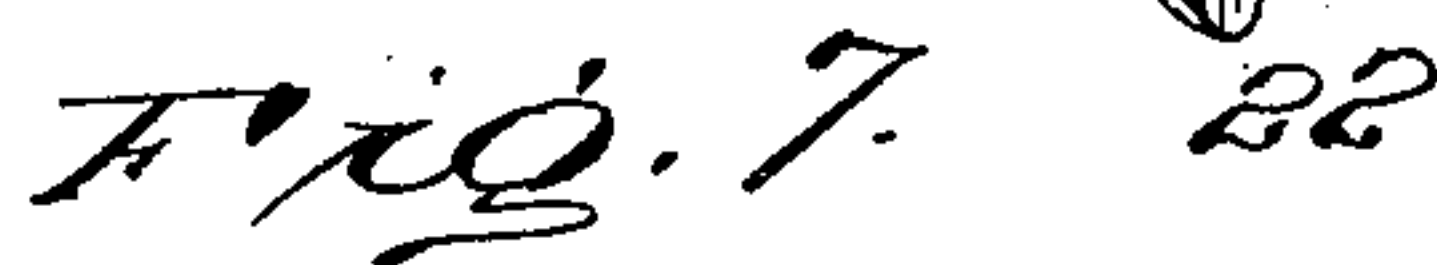
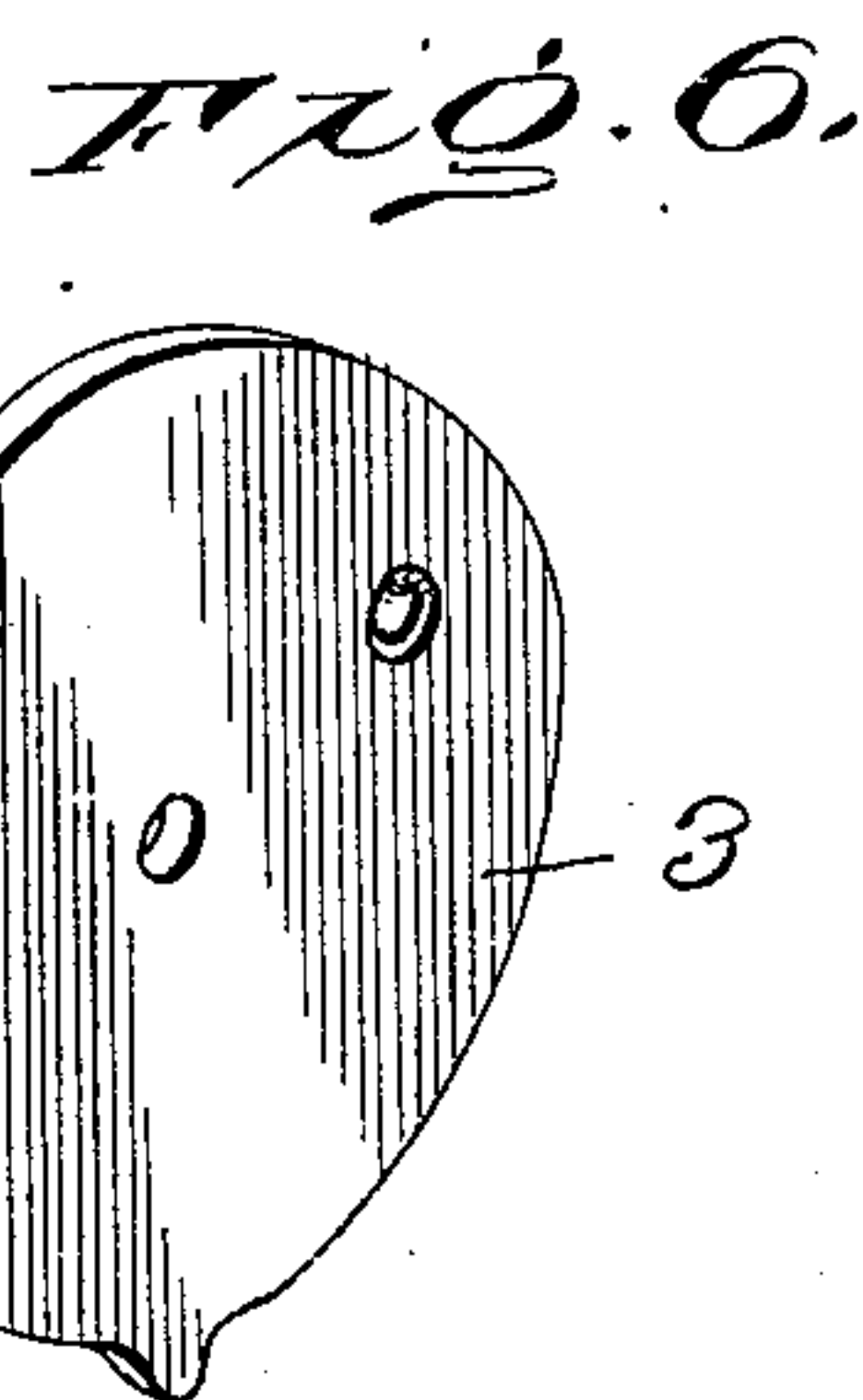
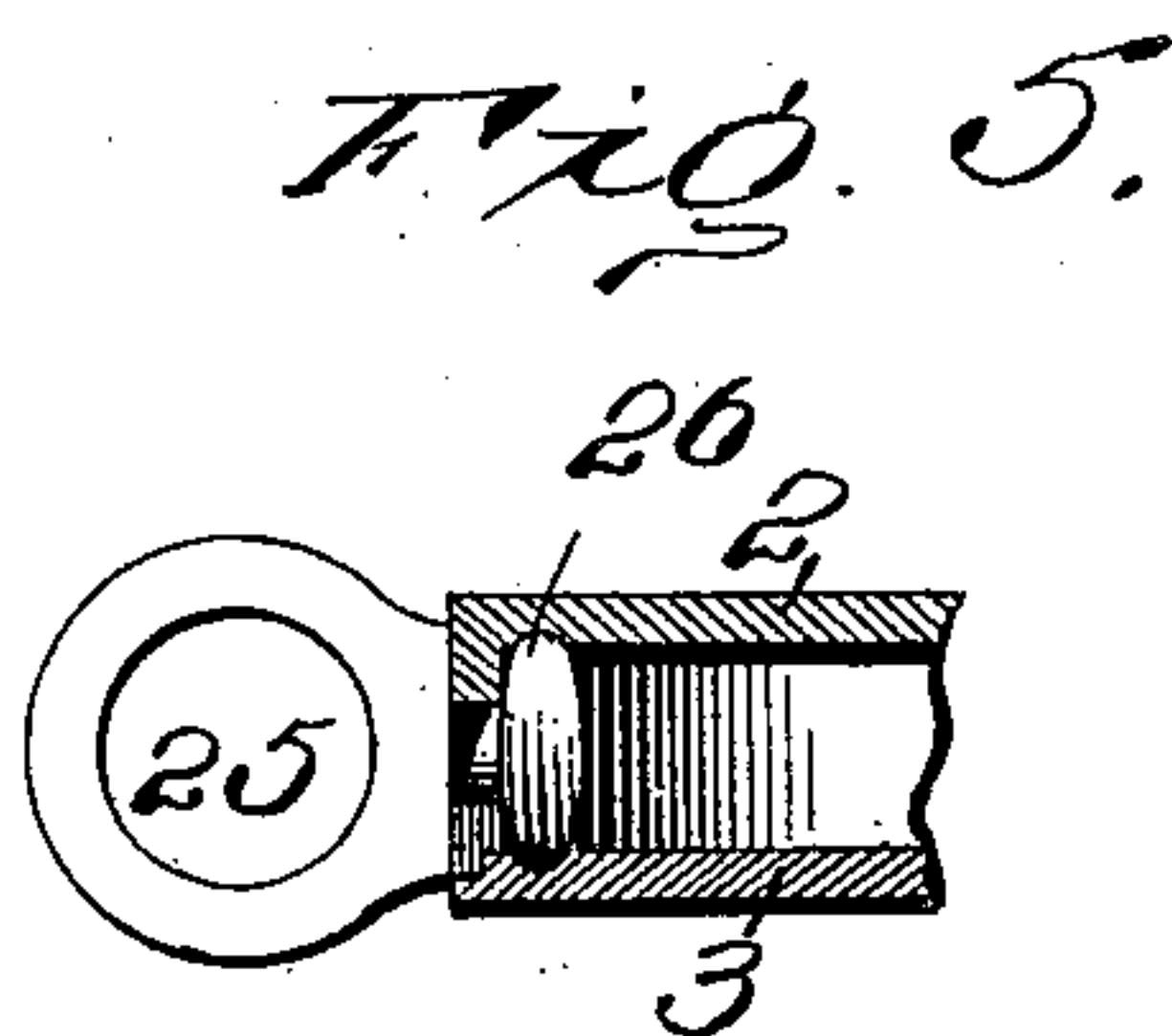
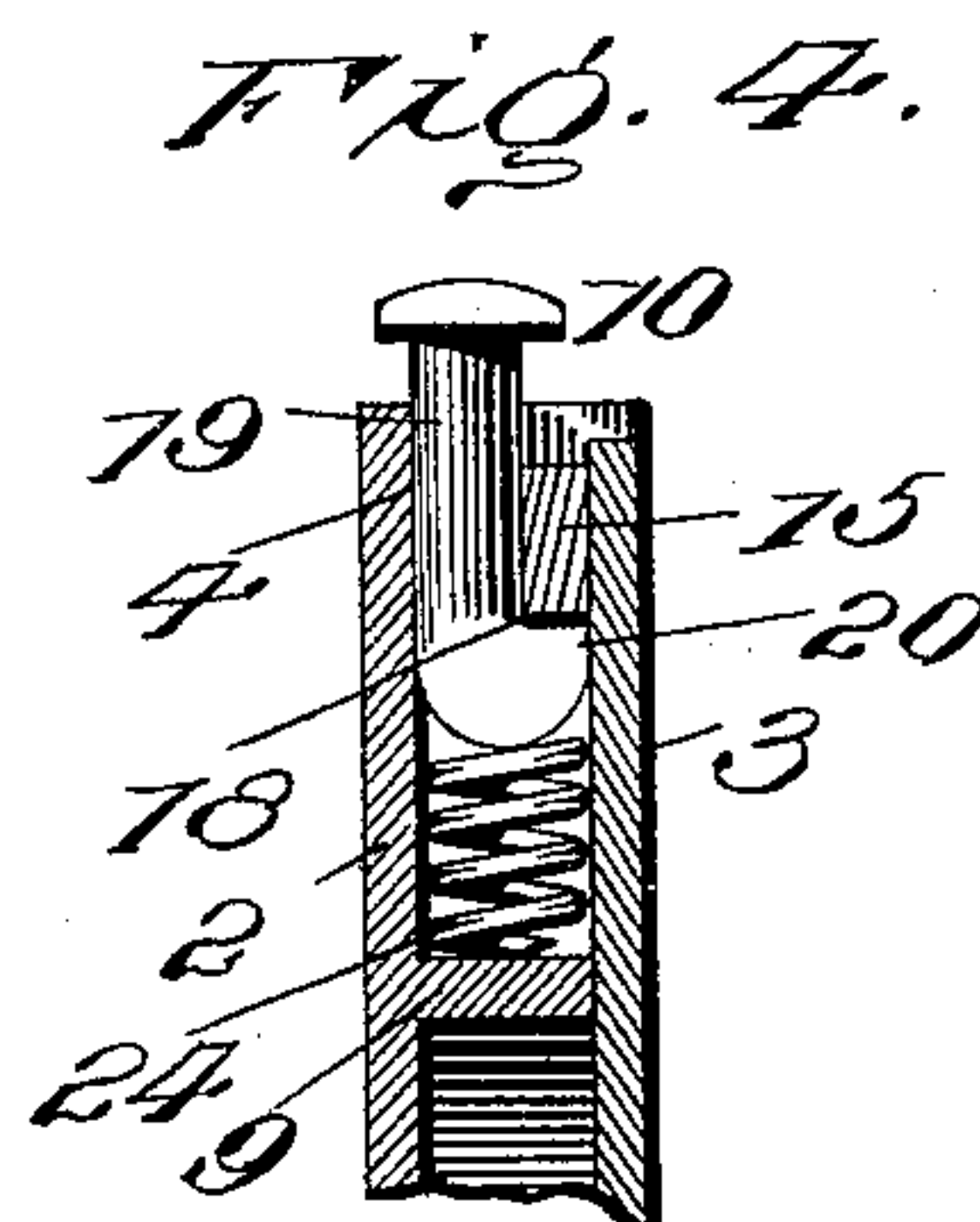
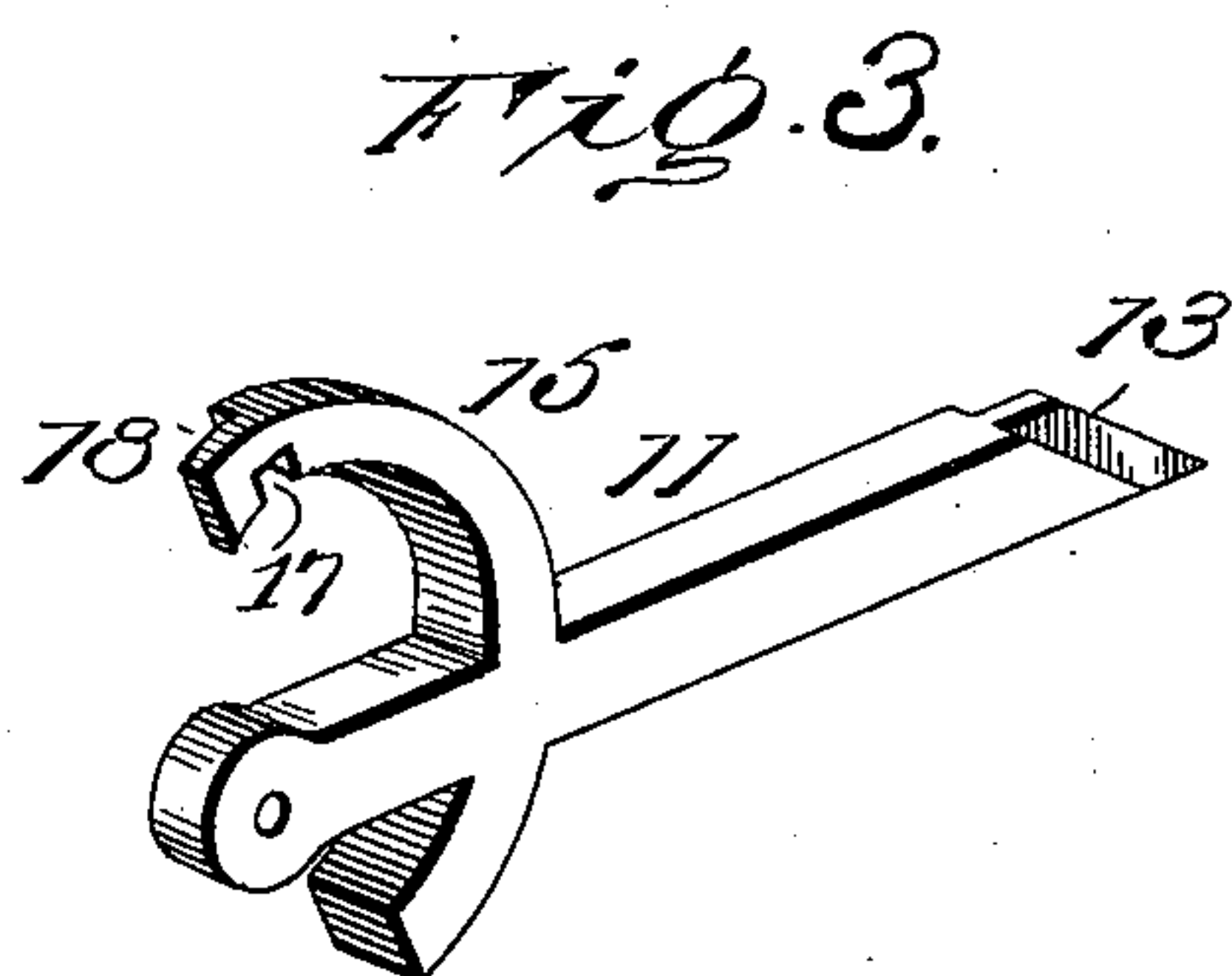
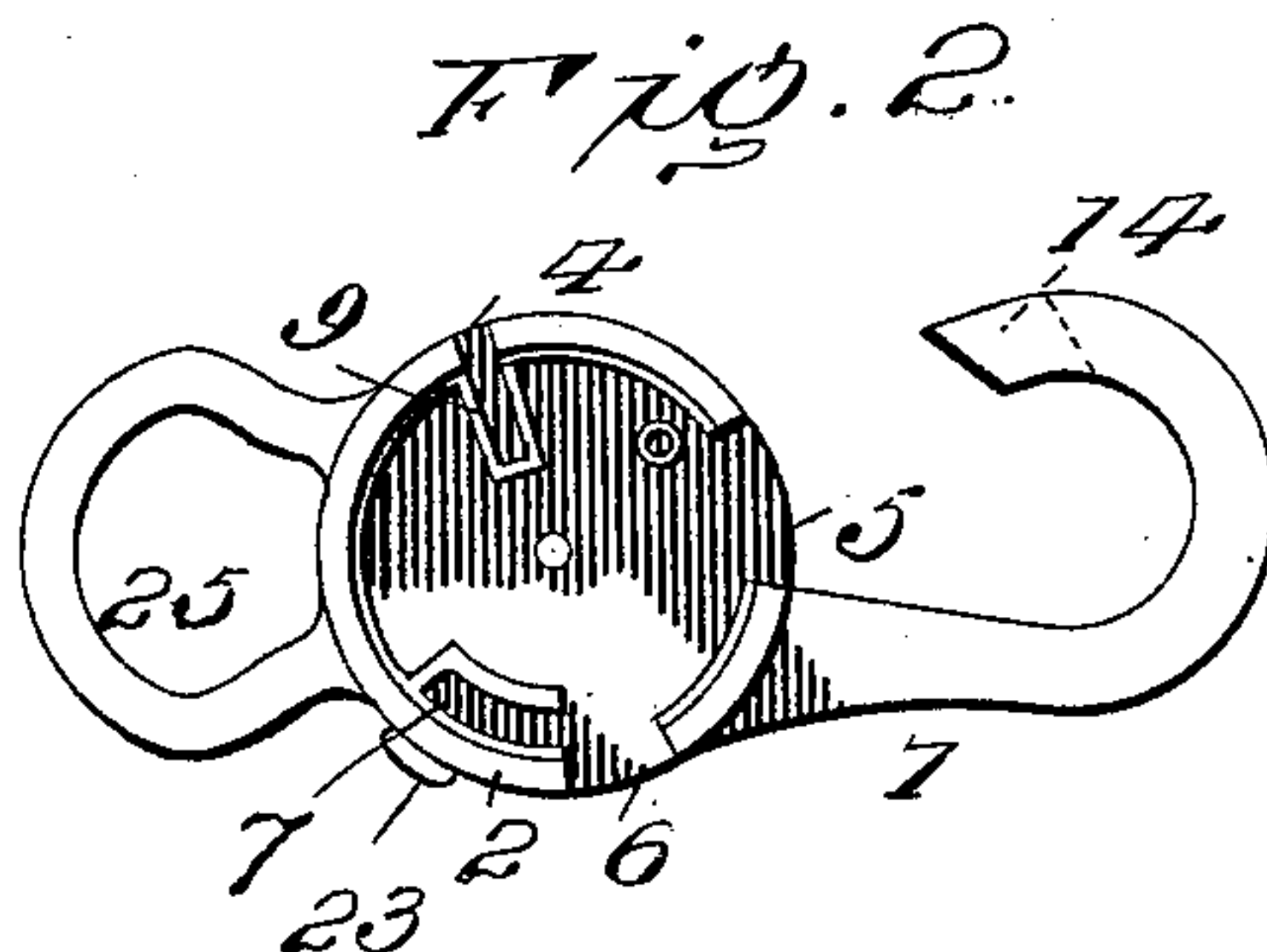
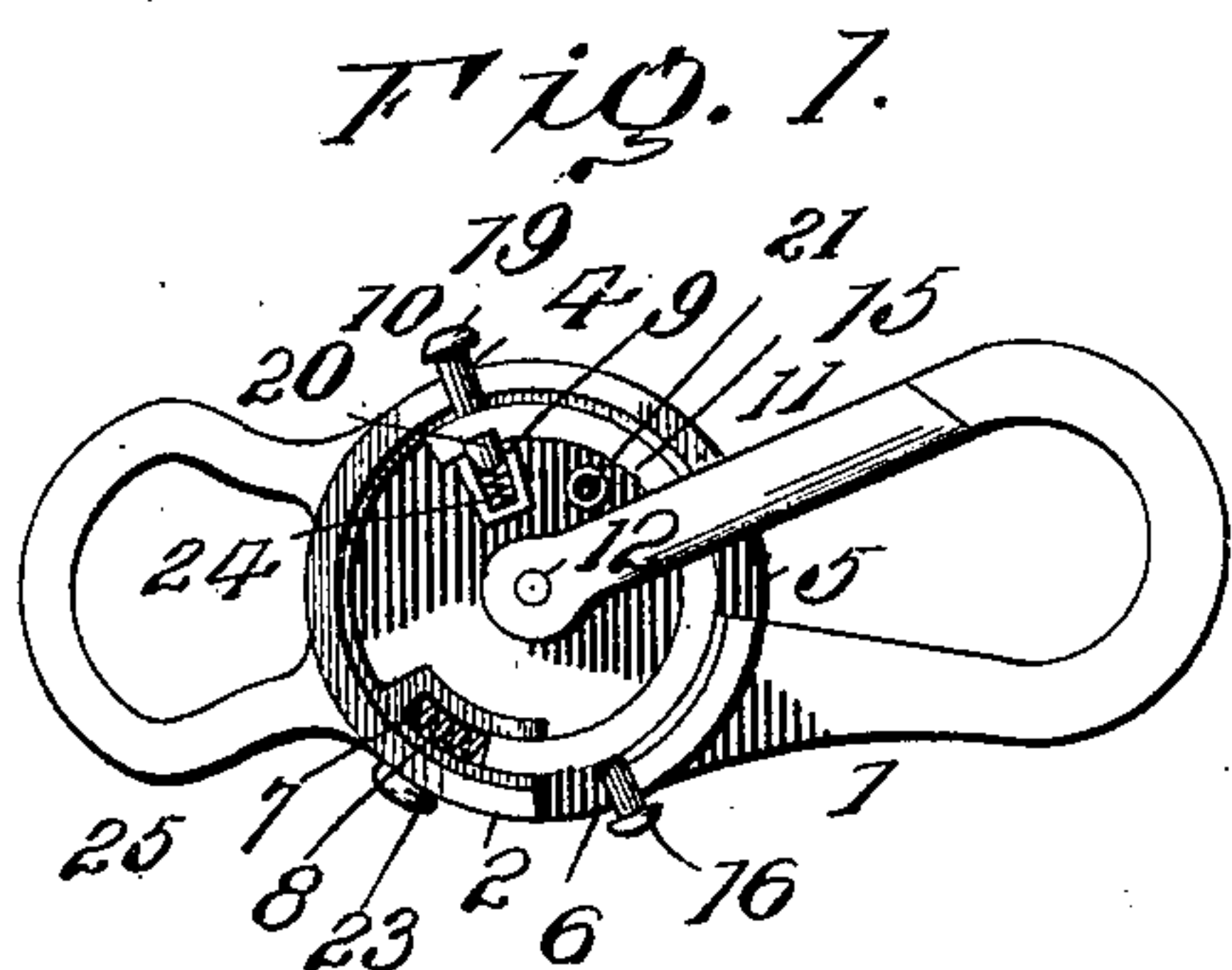
No. 656,233.

Patented Aug. 21, 1900.

C. A. WHITNEY.
SNAP HOOK.

(Application filed Dec. 5, 1899.)

(No Model.)



Witnesses

for Inve
Eldridge C. Thompson

Inventor
Charles A. Whitney

by R. H. Racey His Attorney

UNITED STATES PATENT OFFICE.

CHARLES A. WHITNEY, OF STEVENSVILLE, PENNSYLVANIA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 656,233, dated August 21, 1900.

Application filed December 5, 1899. Serial No. 739,304. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. WHITNEY, a citizen of the United States, residing at Stevensville, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare the following to be a 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.

This invention relates to snap-hooks, the chief object being to combine with the tongue or latch locking means of novel construction to prevent accidental opening of the hook when snapped; also, to house the working parts in such a manner that foreign matter is prevented from having ingress thereto.

A further purpose of the invention is the provision of a snap-hook possessing the characteristics aforesaid which will be light, strong, durable, and withal compact, easily operable, and adapted to be manufactured about as cheap as any high-grade article of ordinary construction and superior thereto in the particulars noted.

For a full description of the invention and the merits thereof, and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and to the drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, the cap-plate of the casing being removed. Fig. 2 is a view similar to Fig. 1, the working parts being removed. Fig. 3 is a detail view of the tongue and semicircular bar. Fig. 4 is a detail section of the casing, showing more clearly the construction and relation of the lock and the curved bar of the tongue. Fig. 5 is a detail section showing the loop connected by a swivel-joint with the casing. Fig. 6 is a detail view of the cap-plate. Fig. 7 is a detail view of the spring-actuated catch.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The hook 1 has a casing 2 of approximately circular form applied to its shank and open at one side, the open side being closed by a cap-plate 3. Openings 4, 5, and 6 are formed at intervals in the rim of the casing for different purposes, which will appear more fully in the course of the disclosure. A pocket 7 is provided adjacent to the rim and at one side of the opening 6 and receives a spring 8, by means of which the tongue is closed automatically. A pocket 9 is formed in the case in line with the opening 4 and receives the spring-actuated catch 10, by means of which the tongue of the hook is locked when closed, so as not to open accidentally.

The tongue or latch 11 is pivoted at its inner end to the casing at 12 and passes through the opening 5, in which it plays when opening and closing the hook. An interlocking connection is formed between the terminals of the tongue and the hook to prevent relative sidewise play of these parts when the hook is in service and subjected to lateral stress. A miter-joint is formed between the terminals of the tongue and the hook, and one of the parts has a projection 13 and the other a groove 14 to match with and receive the projection 13. The curved bar 15, formed with or applied to the tongue 11, is of semicircular form and fits against the inner side of the rim of the casing 2 and has an operating knob or stud 16 passing through the opening 6 and a notch 17 to receive the shouldered portion of the catch 10 when the tongue is closed and locked. The end of the bar 15, adjacent to the operating-stud 16, bears against the spring 8, by means of which the tongue is projected and normally closed when released after being depressed. The notched end of the bar 15 is cut away for a short distance upon one side, as shown at 18, to clear the projecting portion of the catch 10.

The catch 10 comprises a reduced portion 19 and a shouldered part 20, the latter adapted to enter the notch or seat 17 and lock the bar and tongue, and the part 19 passing by the cut-away part 18 of the bar 15 and out through the opening 4 and terminating a short distance from the casing, the projecting end portion being adapted to be pressed upon to disengage the shoulder 20 from the notch 17 when it is required to depress the tongue 11

to engage the snap with or remove it from a part of the harness.

The edge of the rim bordering upon the open side of the casing is rabbeted to receive the cap-plate 3, the shoulder forming a seat therefor, and this cap-plate is held in place by a rivet or like fastening 21 passing through coincident openings in the said plate and side of the casing. A lip 22, projecting from the edge of the plate 3, is adapted to be engaged by a loop 23 of the casing and supplement the action of the rivet 21 in holding the cap-plate to place. This cap-plate closes the open sides of the pockets 7 and 9 and retains the springs 8 and 24 in place, the spring 24 acting on the catch 10 and being located in the pocket 9.

A loop 25 is provided at the edge of the casing opposite the hook 1, and may be of any shape and may be fixed or have swivel connection therewith. In the latter form the loop has a headed shank, which passes through a slot in the rim of the casing, the head 26 entering recesses formed in the side of the casing and the cap-plate adjacent to the slot in which the shank is fitted.

The curved bar 15 closes the openings 4, 5, and 6 at all times and at all stages of adjustment of the tongue 11. When snapped into the ring or link, the tongue or latch 11 will be held closed by the catch 10 springing into the notch 17 of the bar 15, the interlocking of the terminals of the parts 1 and 11 preventing lateral play. Before the tongue 11 can be depressed it is necessary to free it from the catch 10 by pressing the latter inward.

Having thus described the invention, what is claimed as new is—

1. In a snap-hook, the combination with the tongue having an arcuate movement at its outer end, and a curved bar movable with the tongue, of a catch applied to the hook and lo-

cated at one side of the bar and having a portion constructed to interlock therewith and secure the said bar and tongue when the latter is closed, substantially as described.

2. In combination, a hook, a casing having a circumferentially-disposed pocket adjacent to its rim, a pivoted tongue, a curved bar movable with the tongue and having one end entering said pocket, a spring located in the said pocket and adapted to automatically close the tongue, and a catch disposed to engage with the opposite end of the bar and lock it and the tongue, substantially as set forth.

3. In combination, a hook, a casing having an opening and a pocket in line with the said opening, a pivoted tongue, a curved bar movable with the tongue and having a side portion cut away, and a spring-actuated catch located in the aforesaid pocket and comprising a shouldered part to interlock with the curved bar and a reduced part to pass by the reduced part of the curved bar and extend through the opening of the casing, substantially as described.

4. In combination, a hook, a casing having a series of openings in its rim, a pivoted tongue operating through one of the openings, a curved bar movable with the tongue and having an operating stud passing through another of the openings, and a spring-actuated catch for the tongue projecting through another of the said openings, the curved bar closing all of the said openings, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. WHITNEY. [L. S.]

Witnesses:

C. C. WHITNEY,
W. H. DODGE.