

No. 688,006.

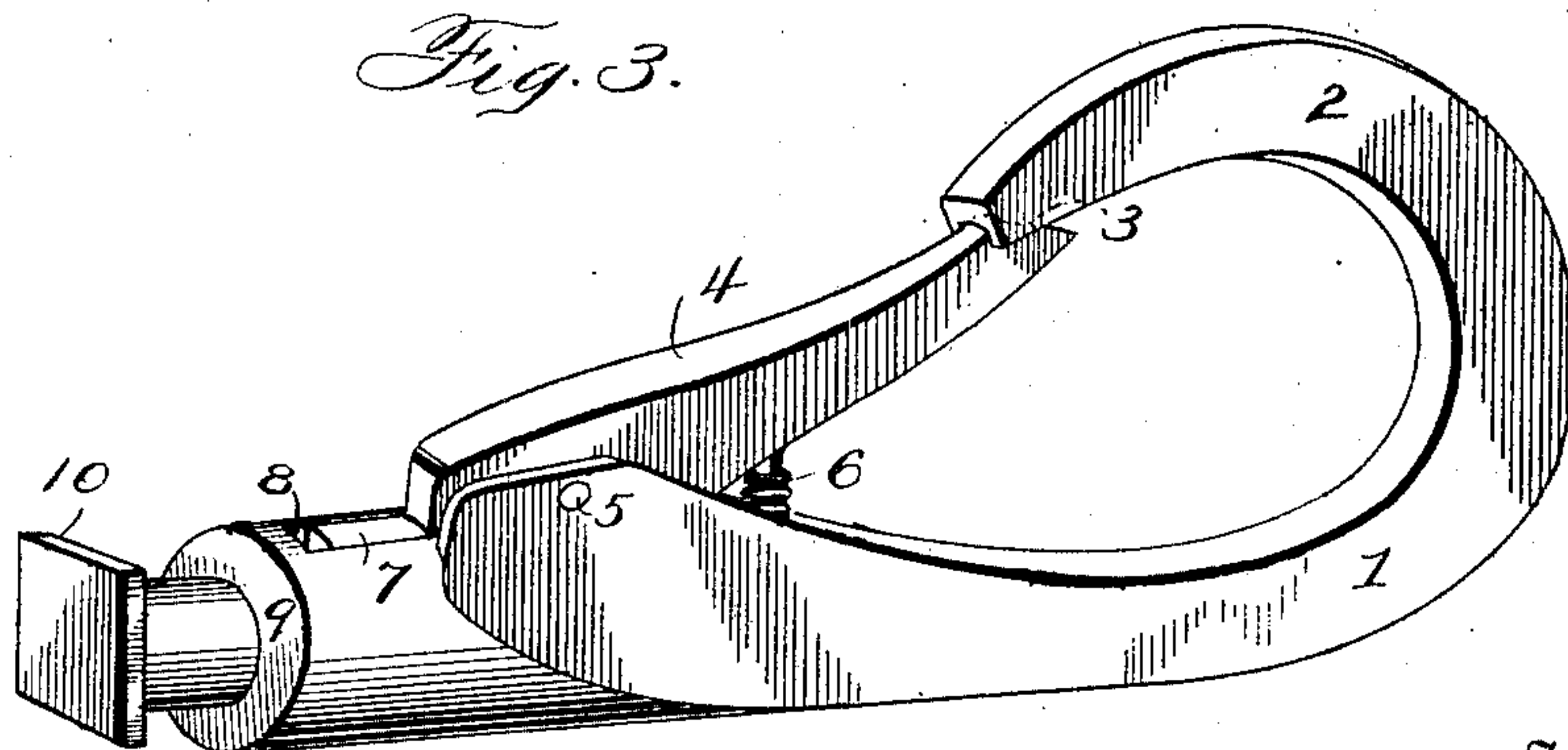
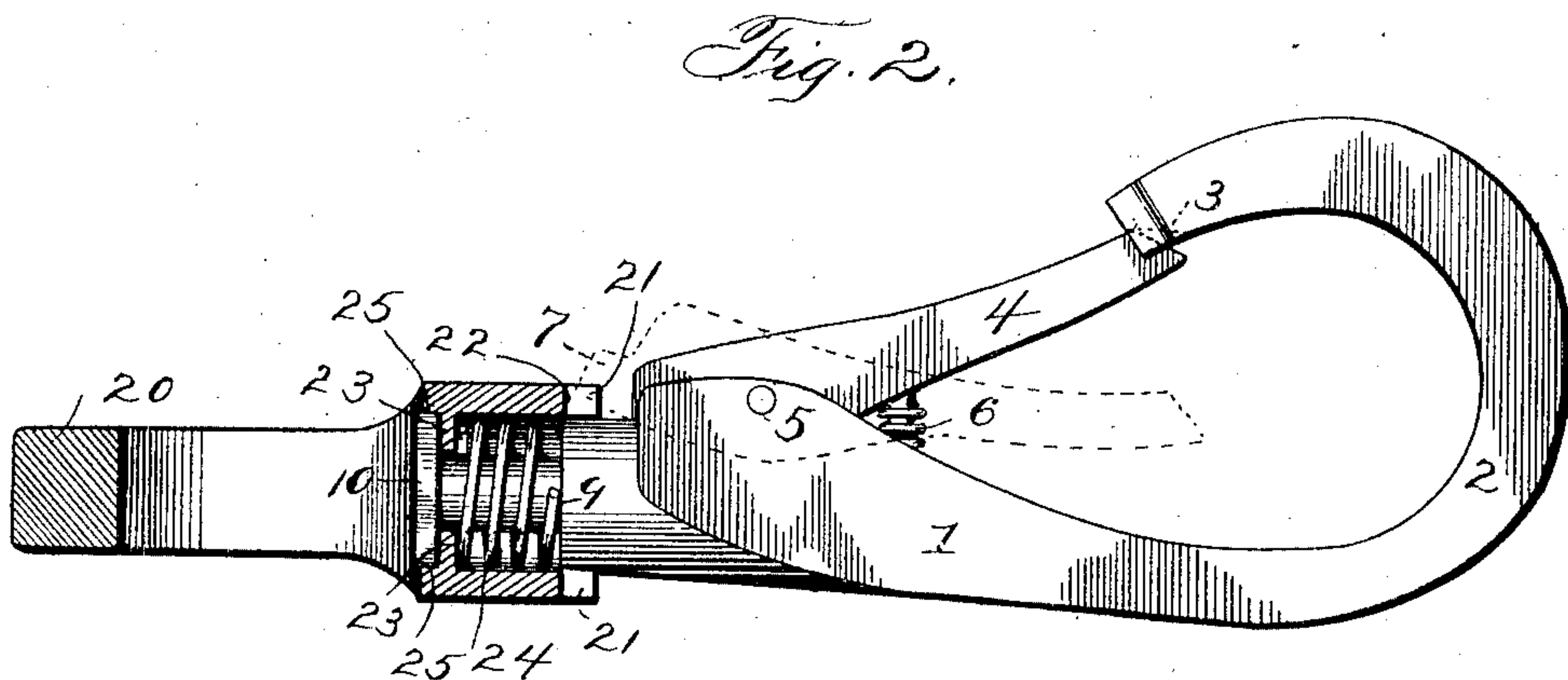
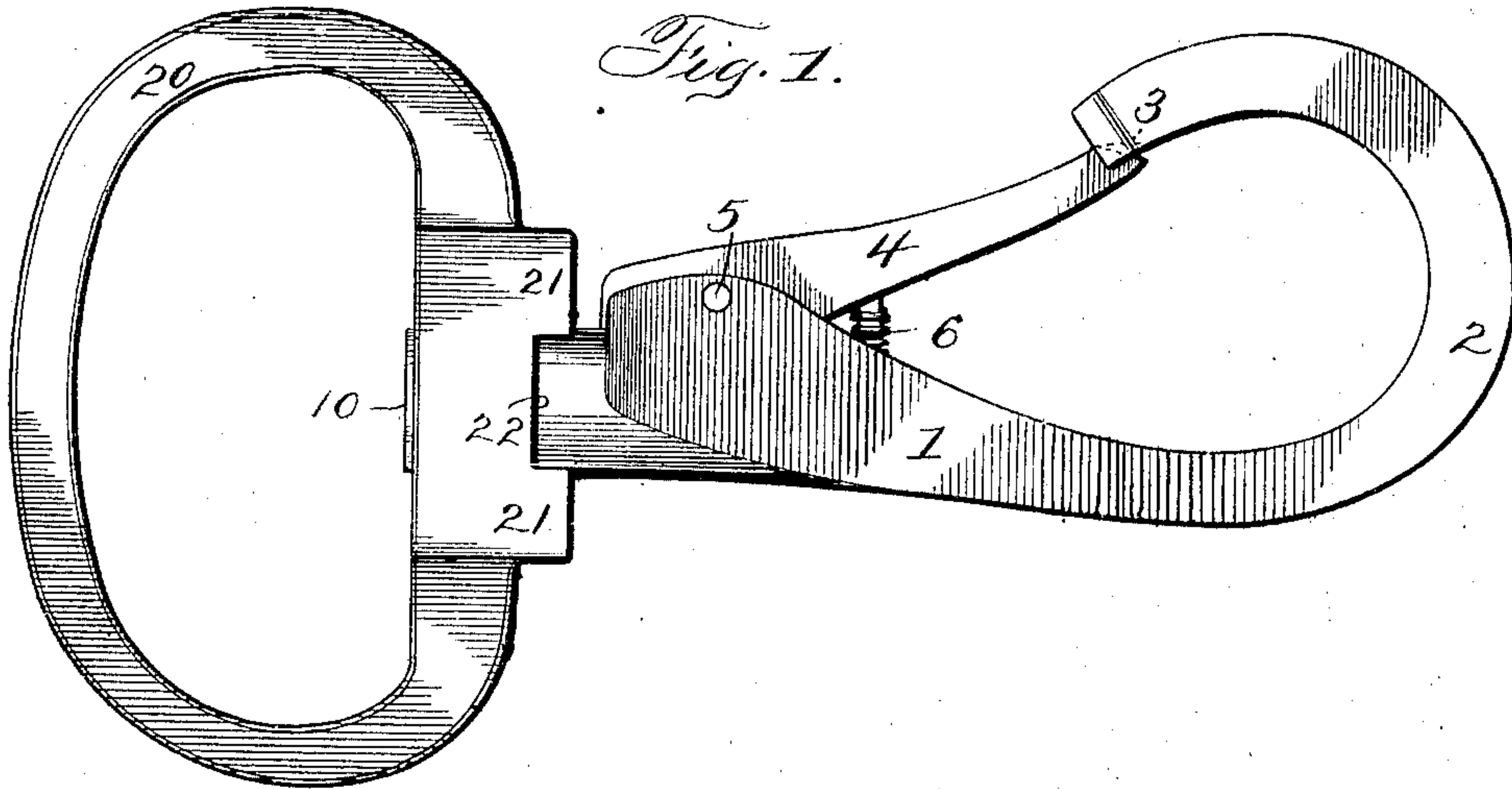
Patented Dec. 3, 1901.

J. H. RICKMAN.

SNAP HOOK.

(Application filed Feb. 18, 1901.)

(No Model.)



Witnesses

Frank G. Campbell
H. R. Pitton.

Inventor:

By John H. Rickman,
Collamer & Co., Attorneys.

UNITED STATES PATENT OFFICE.

JOHN H. RICKMAN, OF GLADSTONE, NORTH DAKOTA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 688,006, dated December 3, 1901.

Application filed February 18, 1901. Serial No. 47,797. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. RICKMAN, a citizen of the United States, and a resident of Gladstone, Stark county, State of North Dakota, have invented certain new and useful Improvements in Snap-Hooks; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to harness, and more especially to that class of devices used in connection therewith which are known as "snap-hooks;" and the object of the same is to produce a snap-hook whose tongue shall be locked across its throat when in use.

To this end the invention consists in the details of construction described below for carrying out this general idea, all as illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of this snap-hook with the parts in the position they assume when in use. Fig. 2 is a side elevation of the hook and a sectional view through the eye, the parts being in the position they assume when it is desired to open the hook, as indicated in dotted lines. Fig. 3 is a perspective detail of the hook removed from the eye.

In the said drawings the numeral 1 designates the shank of the hook proper, which is bent over at its outer end, as at 2, and may be notched at its extremity, as indicated in dotted lines at 3, and 4 is the tongue, which is pivoted at 5 to the shank and whose tip is thrown normally into said notch by means of the spring 6, all as usual in snap-hooks as now constructed. The heel 7 of this tongue, however, is continued beyond the pivot 5 and reduced or cut away, so that when its tip lies within the notch 3 the heel stands in a groove 8 in the shank and lies within the contour thereof. Such contour is round, as best seen in Fig. 3, and beyond the heel the shank is shouldered, as at 9, and carries a square or angular head 10 at its inner end.

20 is the eye, which may be of any suitable construction, except as now described. That portion of the eye to which the hook is to be attached is enlarged or thickened, as best seen in Fig. 1, and provided on its outer side with two parallel lugs 21, so spaced that either will hold the heel 7 in the groove 8 when the

heel lies next a lug. Between these lugs is the groove 22, which extends across the outer side of the eye, and when the hook is turned for a quarter-revolution the heel 7 comes into the path of this groove, and hence the latch may be moved on its pivot, as indicated in dotted lines. Through the body of the eye between said lugs is formed a hole, whose shape is best seen in Fig. 2. It is round or cylindrical at its outer portion, so as to receive the shank of the hook. Next it has a shoulder 23, against which rests a coiled spring 24, whose body surrounds the shank and whose other end abuts against the shoulder 9 on said shank, and the inner end of this hole is formed into a square or rectangular cavity 25 of a shape and size to receive the head 10 at the inner end of the shank.

All parts are of the desired sizes, shapes, and proportions; but the device is preferably entirely of metal, as usual in this art.

I do not desire to be limited to the exact details of construction, as considerable change may be made therein without departing from the essential principles of my invention.

With the above construction of parts the operation of this device is as follows: The eye is connected with a part of a harness or with the whiffletree, as usual, and the hook is intended to receive a ring or to temporarily engage with another part of the harness when desired. When the device is in use, the parts stand, as seen in Fig. 1, with the tongue lying across the throat of the hook, its tip in the notch in the extremity thereof, and its heel held by one of the lugs, so that it cannot accidentally or intentionally be borne inwardly to open the throat of the hook. In order to effect this, the entire hook must be pressed slightly toward the eye to compress the spring 24, and which movement pushes the head 10 out of the socket 25, then rotated axially for a quarter-revolution, which brings the heel 7 out of engagement with one of the lugs 21 and into the path of the groove or notch 22, and then released, so that the spring 24 causes the head to snap back into the socket. Thereafter it is obvious that the tongue can be pressed inward, because the heel is free to move in the groove 8 of the shank, and, if desired, the snap-hook may be used in this way like those of ordinary con-

struction. It will be clear that the lugs might stand parallel with the length of the eye instead of at right angles thereto, as shown, in which event the operation would be the same, except that the hook in the locked position of its tongue would stand relatively to the eye, where as herein shown it so stands when in its unlocked position. After the ring has been engaged with the hook the latter is given another quarter-rotation in either direction to again lock the tongue. The advantages of having the tongue of a snap-hook positively locked in place are obvious to those skilled in the art.

What I claim as new is—

1. In a snap-hook, the combination with the hook proper, and a spring-actuated tongue pivoted to its shank and adapted to close its throat, the inner end of said tongue extending beyond the pivot in a heel; of an eye or companion member receiving the shank of said hook, and a lug thereon for holding the heel depressed and the tongue locked when the shank is turned to a certain position, as set forth.
2. In a snap-hook, the combination with the hook proper having a groove in its shank, and a tongue pivoted thereto and having at its inner end a heel adapted to be seated in said groove; of an eye or companion member receiving the shank of said hook, and a lug thereon for holding the heel depressed and the tongue locked when the shank is turned to a certain position, as set forth.
3. In a snap-hook, the combination with the hook proper having a cylindrical shank with a square head at its inner end, and a tongue pivoted to said shank and having a heel between the pivot and head; of an eye or companion member having a hole within which the said shank is mounted rotatably, such hole being provided with a square socket at

its inner end for the reception of the head, and lugs on this member at opposite sides of the outer end of the hole adapted to engage said heel, as and for the purpose set forth.

4. In a snap-hook, the combination with the hook proper having a cylindrical shank with a square head at its inner end and provided in one side with a longitudinal groove, and a tongue pivoted to said shank and having a heel between the pivot and head adapted when depressed to lie in said groove; of an eye or companion member having a hole within which the said shank is mounted rotatably, such hole being provided with a square socket at its inner end for the reception of the head, and a lug on this member at one side of the outer end of the hole adapted to engage said heel, as and for the purpose set forth.

5. In a snap-hook, the combination with the hook proper having a cylindrical shank with a square head at its inner end and a shoulder in its body, and a tongue pivoted to said shank and having a heel between the pivot and head; of an eye or companion member having a hole within which said shank is mounted rotatably, such hole being provided with a square socket at its inner end for the reception of the head and with an internal shoulder, an expansive spring between this shoulder and that on the shank, and lugs on this member at opposite sides of the outer end of the hole adapted to engage said heel, as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my signature this the 13th day of February, A. D. 1901.

JOHN H. RICKMAN.

Witnesses:

GEO. W. LEE,
A. W. LINK.