

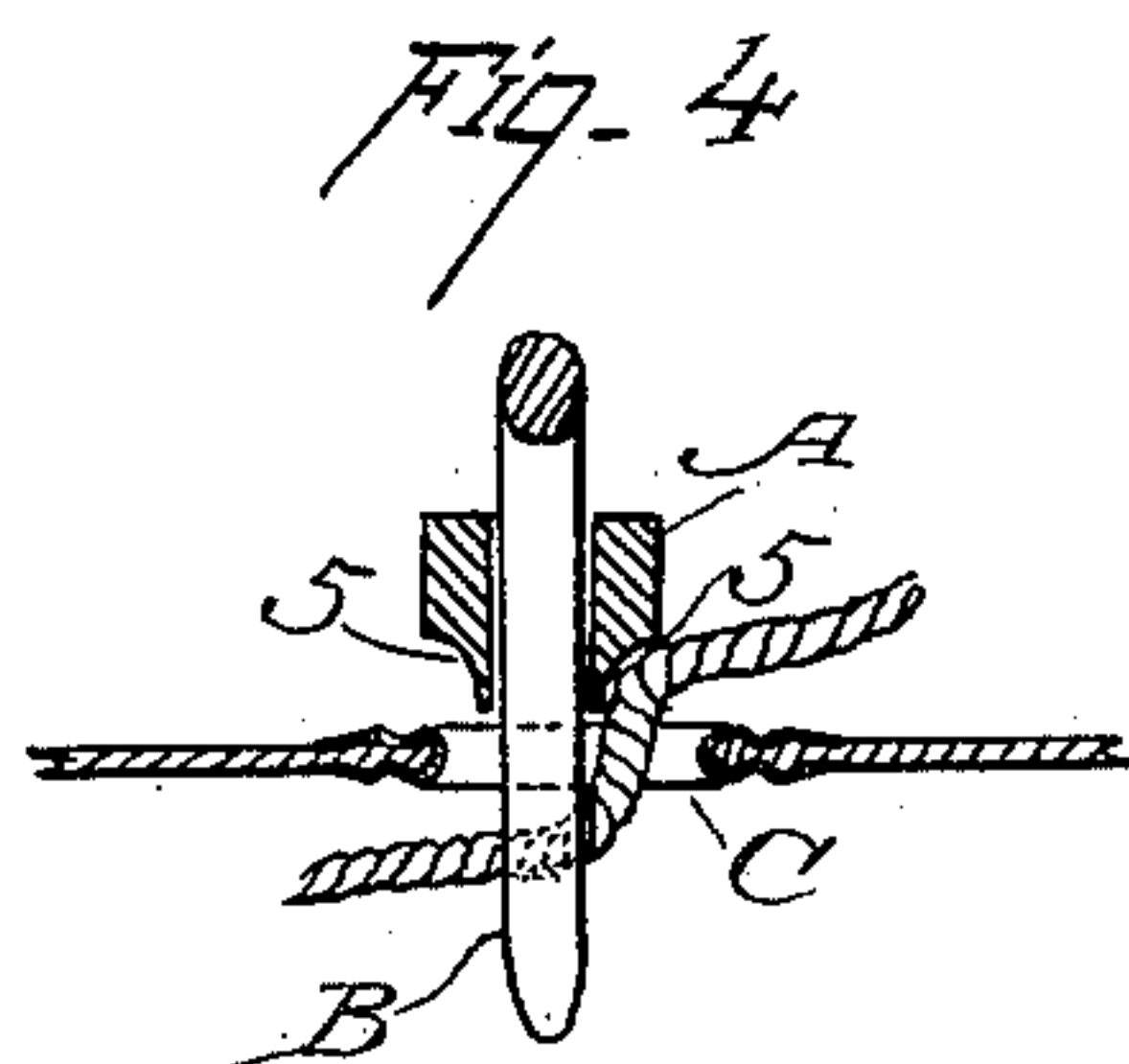
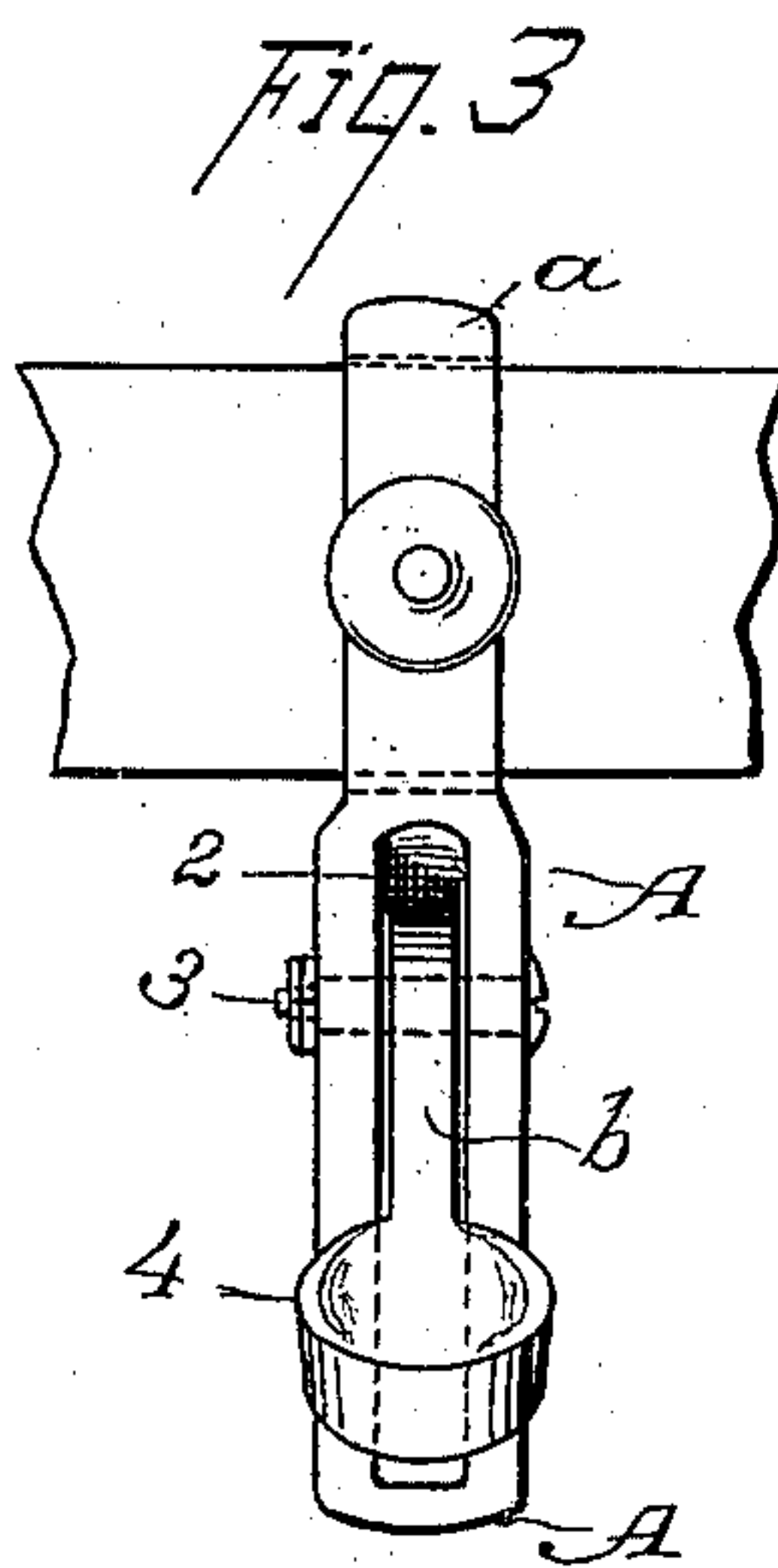
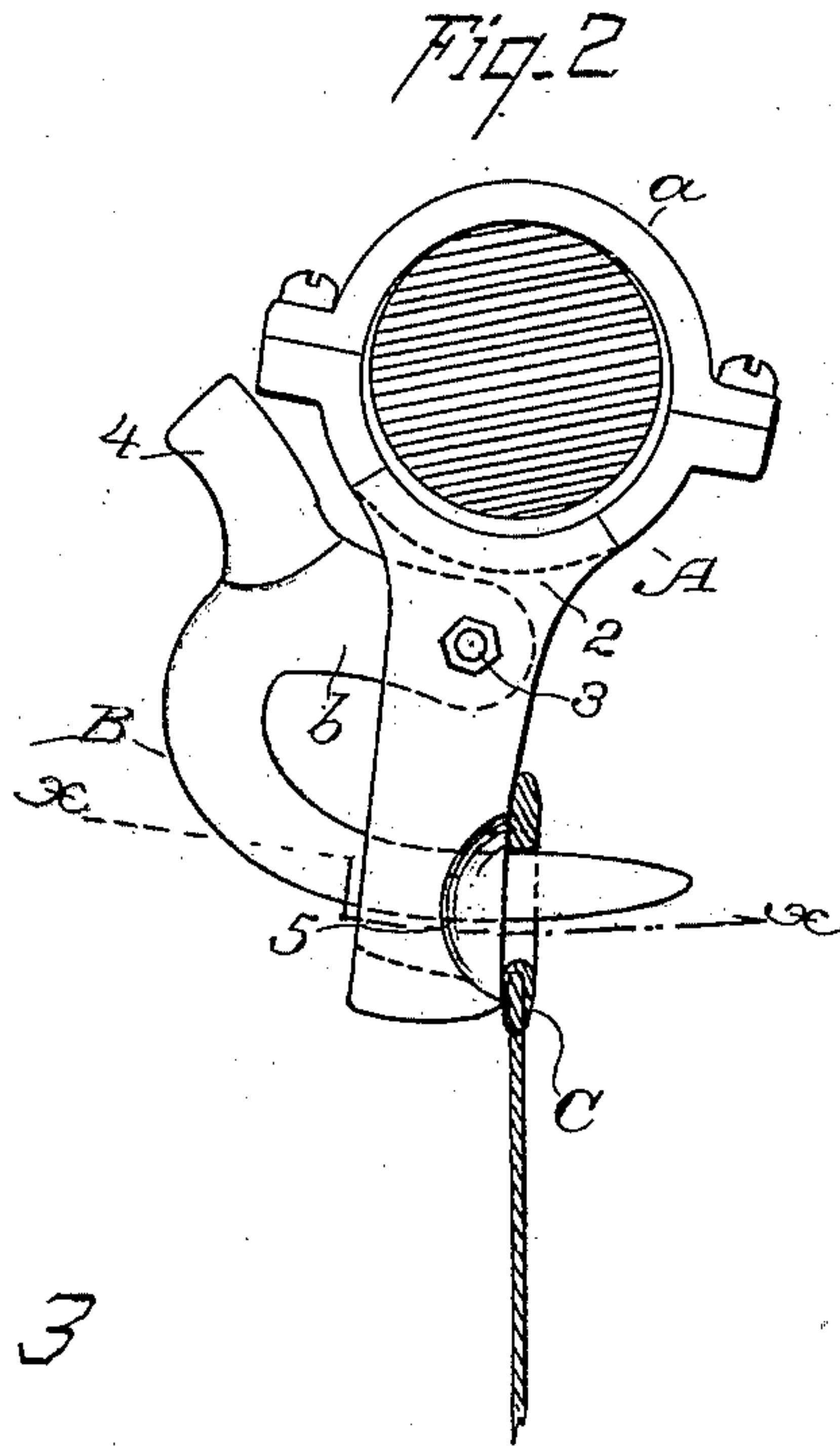
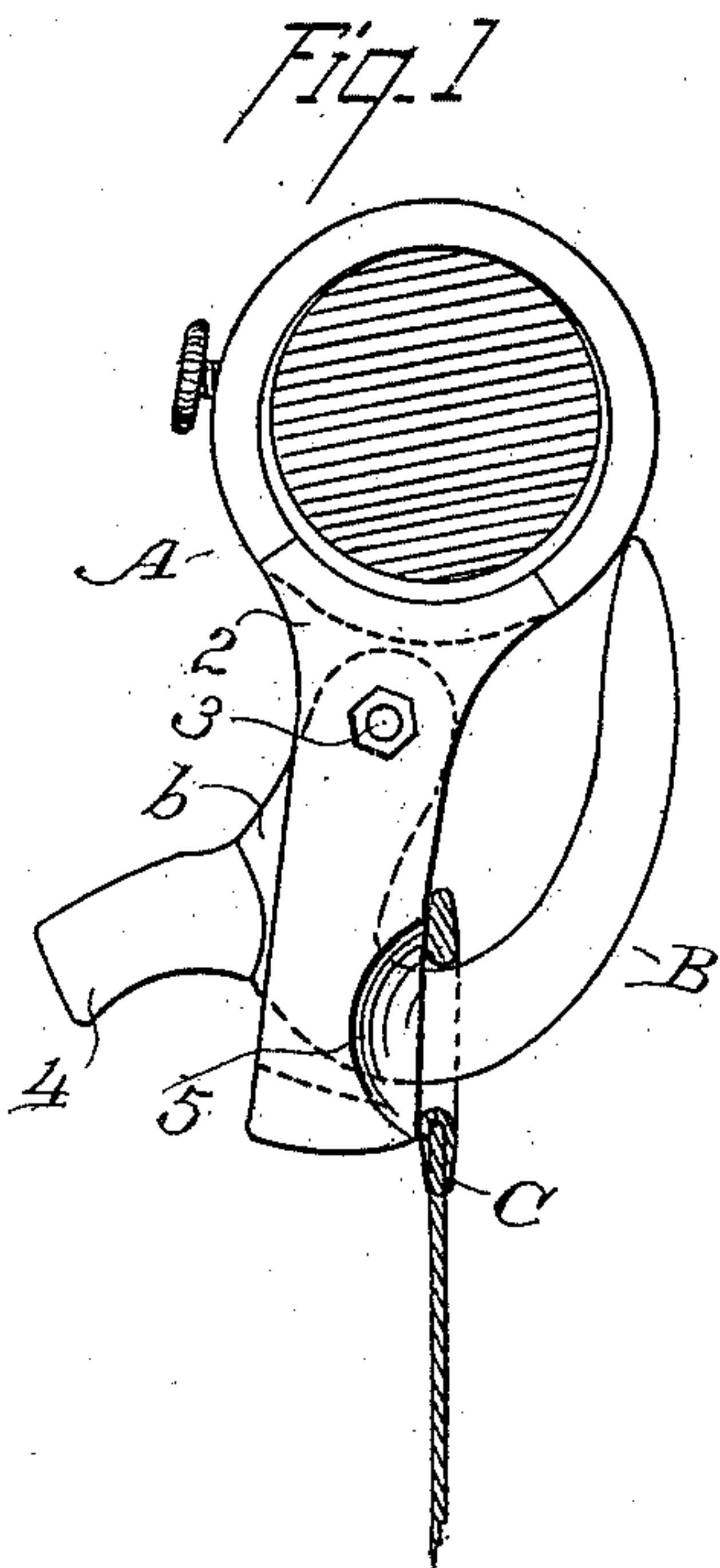
No. 685,915.

Patented Nov. 5, 1901.

F. G. GASCHLIN.  
SELF LOCKING HOOK.

(Application filed Dec. 22, 1900.)

(No Model.)



Witnesses,  
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Att.

# UNITED STATES PATENT OFFICE.

FREDERICK G. GASCHLIN, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO  
POSTAL DEVICE AND IMPROVEMENT COMPANY, OF SAN FRANCISCO,  
CALIFORNIA, A CORPORATION OF CALIFORNIA.

## SELF-LOCKING HOOK.

SPECIFICATION forming part of Letters Patent No. 685,915, dated November 5, 1901.

Application filed December 22, 1900. Serial No. 40,773. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK G. GASCHLIN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Self-Locking Hooks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in hooks such as are automatically held in a closed position and retained so by the weight suspended thereon and yet are readily released at any time of their load.

It consists, essentially, of two members, in one of which is pivoted the hook member having a weight extension by which the point of the hook is normally made to lie against the other member, forming an inclosed space between the two members, in which the article to be suspended or held is thus securely locked.

It consists also of details to be set forth in the following specification and accompanying drawings, in which—

Figure 1 shows a weight suspended and the hook locked. Fig. 2 shows the hook retracted and the weight ready to be discharged. Fig. 3 is an end view of the hook. Fig. 4 is a horizontal section through the lower part of the hook on line  $x x$  of Fig. 2.

My invention has for its particular object the furnishing of a satisfactory hook upon which to hang mail-bags in post-offices, railway-cars, &c., while the bags are being filled. The first requisite in such a hook is that it can be quickly engaged and quickly disengaged, and, second, that while the bag is being hung up or being filled there is no possibility of the bag slipping off of any hook, causing delay and annoyance where expedition is of the greatest importance.

With reference to the drawings, A represents a base member having a slot 2, in which is pivoted at 3 the hook member B.

The device is adapted to be attached loosely to the pipes forming the racks for the mail-bags, so that it may be turned easily thereon. For this purpose the upper part of the member A is provided with a ring portion  $a$ , which

may be made in two parts for convenience of attachment. I do not wish to limit myself to this particular means of attachment nor the device to this particular use, for the hook is adaptable to many purposes. Wherever it is used, however, it is desirable that it be so hung as to have the whole device turnable on the support. This is understood upon consideration of the shape and operation of the hook member.

The back  $b$  of the hook is of such a length that between it and the front portion a deep depression is formed, in which the weight is held. The hook is pivoted in the upper part of this back portion  $b$  at 3, as before stated. The front of the hook is for the greater part of its length nearly straight and approximately parallel with the back and is of greater length than the back.

On the back of the hook member is formed a weight-lever extension 4. By reason of this weight and of the peculiar construction of the hook the front is thrown so that its end always tends to rest against the upper part of the member A. When a weight, as C, is suspended on the hook, the hook is still kept closed, and in fact more securely locked than before, for the inner edge of the front portion being nearly straight the weight is thrown well to the bottom of the depression and against the member A, and this latter being loosely secured on the pipe or other support turns on the same as a pivot, so that its lower portion is at an angle with the vertical line through the center of gravity. The weight is released by moving the hook by means of the weight-lever 4, and herein comes the peculiar function of the extended part of the member A. When the hook is moved, the member A acts as a brace to prevent the suspended weight, be it rope, eyelet, &c., from following the hook. Consequently the weight remains practically stationary and the hook slides beneath it, and the weight is released when it has been shoved on the front of the hook a distance equal approximately to the distance from the bottom of the depression to the center of the pivot 3.

By making my hook so that the front por-



tion extends above the pivot-point 3 I not only form a lock by the end being brought against the member A, as before indicated, but when it comes to releasing the weight this  
5 release takes place gradually and allows the weight to slip from the hook easily instead of, as in the usual turning hooks, disengaging the weight abruptly and unwarned.

When used for mail-bag purposes, as here-  
10 in indicated, the lower edges of the member A at and below the hook are slightly concaved, as at 5, in order to give proper accommodation to the rope which passes through the eyelets of the bag and by which the bag  
15 is closed. As the hook is usually passed through the eyelet of the bag, the reason is obvious.

The features that are to be emphasized are the longer parallel front portion of the hook  
20 engaging the side of the member A, the deep depression between the front and back portions, the weight-lever, and the function of the member A in forcing the suspended weight from the hook.

25 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A self-locking hook including a ring portion and a portion depending therefrom and  
30 forked, a hook member pivotally secured between the forks of said depending portion and having a deep depression between its front and back portions said front portion operating through said forked portion at a  
35 point above the lower end thereof and extending above the pivotal center and into contact with the ring portion above, and the outer wall of said base portion serving as a brace to prevent the weight in the depressed

portion of the hook from following the hook 40 when releasing said weight.

2. The combination of a base member having a depending slotted portion; a hook member pivotally secured in the slot of the base member and having a front extended and of 45 such length that when the hook is closed said front extends above the pivotal point and into contact with the base member and thereby forms an inclosed space between itself and the outer wall of the depending portion of 50 the base member, said hook member being weighted and its front operating through the slot of the depending portion of the base member at a point above the lower end thereof, and the outer wall of said depending portion 55 serving as a brace to prevent the suspended weight from following the hook when releasing said weight.

3. A self-locking hook comprising a base member adapted to be removably and turn- 60 ably secured to a support, having a slotted pendent portion in which a hook member is pivoted, said hook member having a deep depression between its front and back portions, a weight-lever extension formed on the back 65 of the hook member, whereby the end of the front of the hook is normally held against the base member and the hook made to inclose the suspended weight, and whereby the hook is moved to disengage the suspended 70 weight.

In witness whereof I have hereunto set my hand.

FREDERICK G. GASCHLIN.

Witnesses:

FRANK B. HOYT,  
HARRY L. HORN.