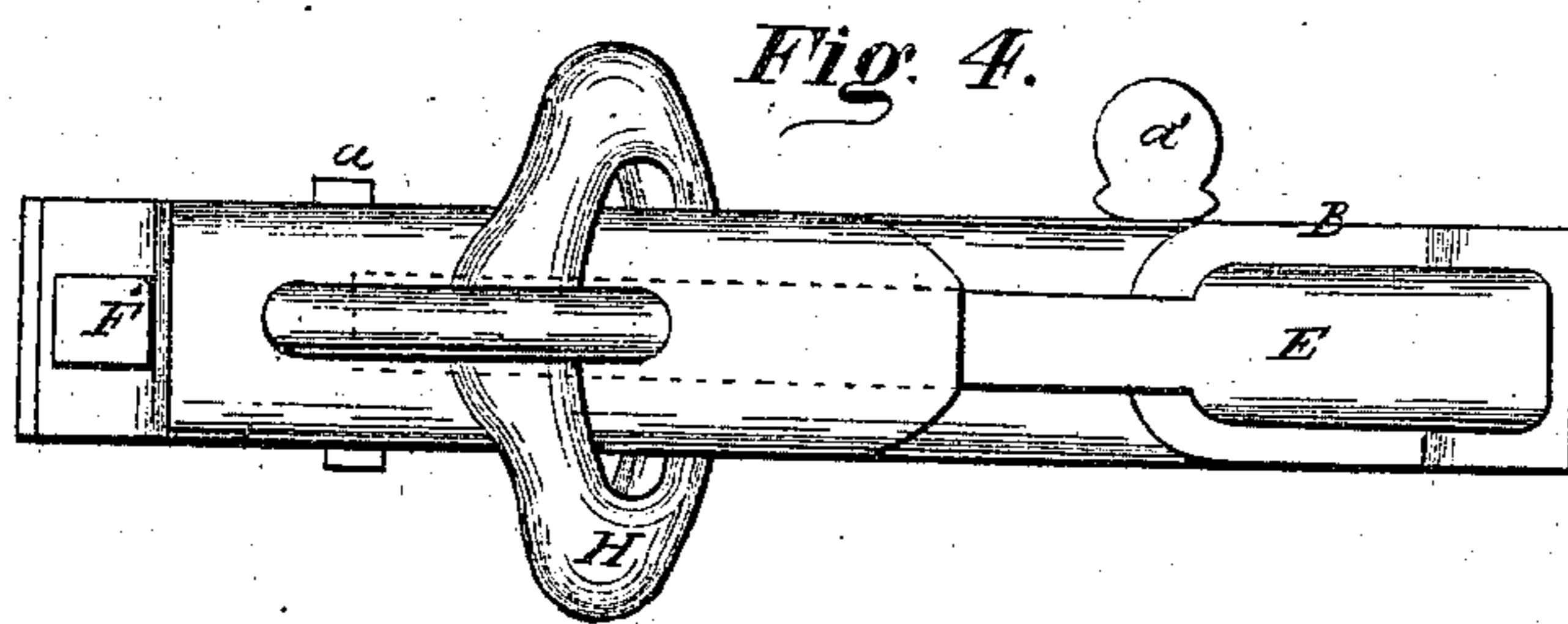
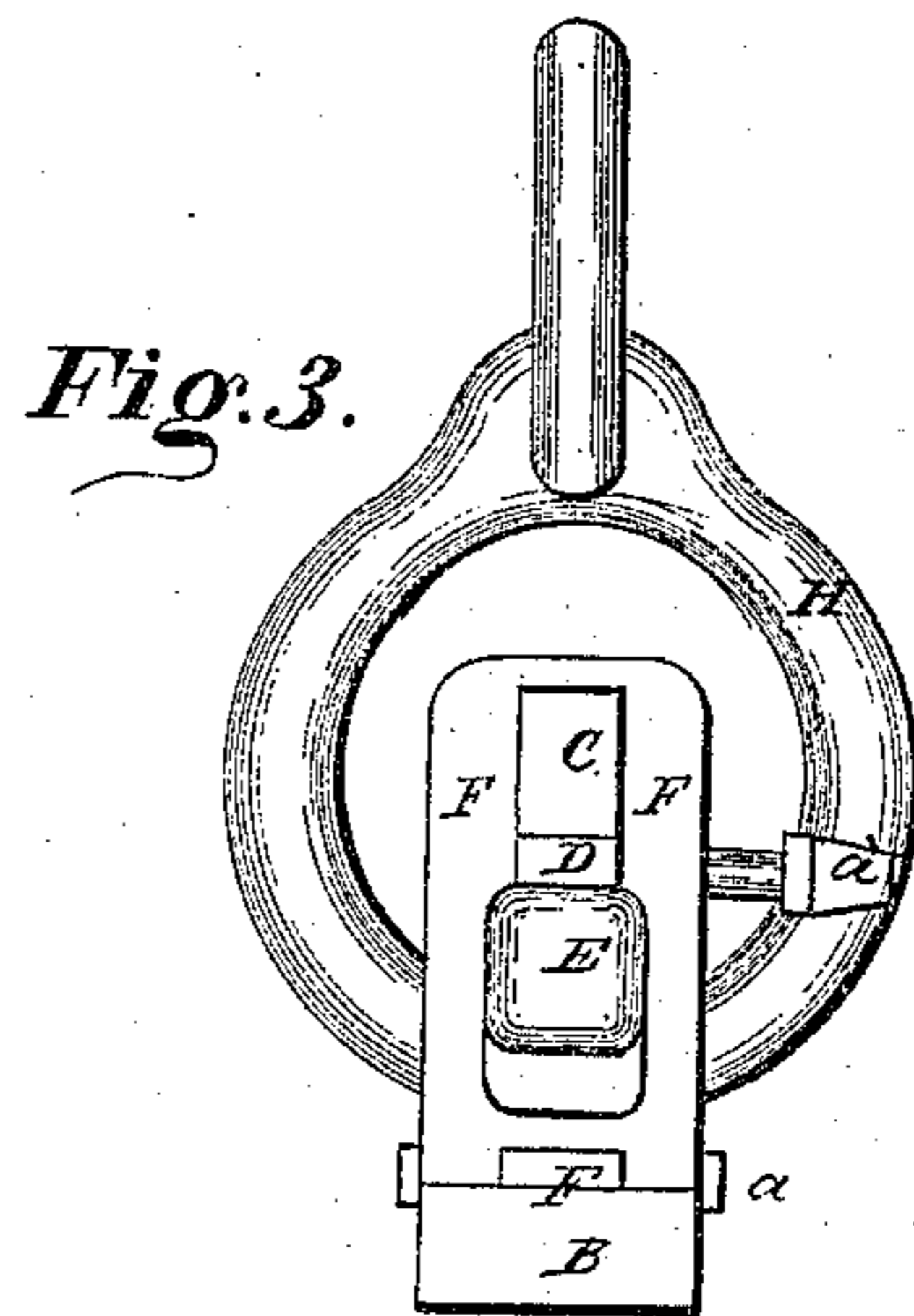
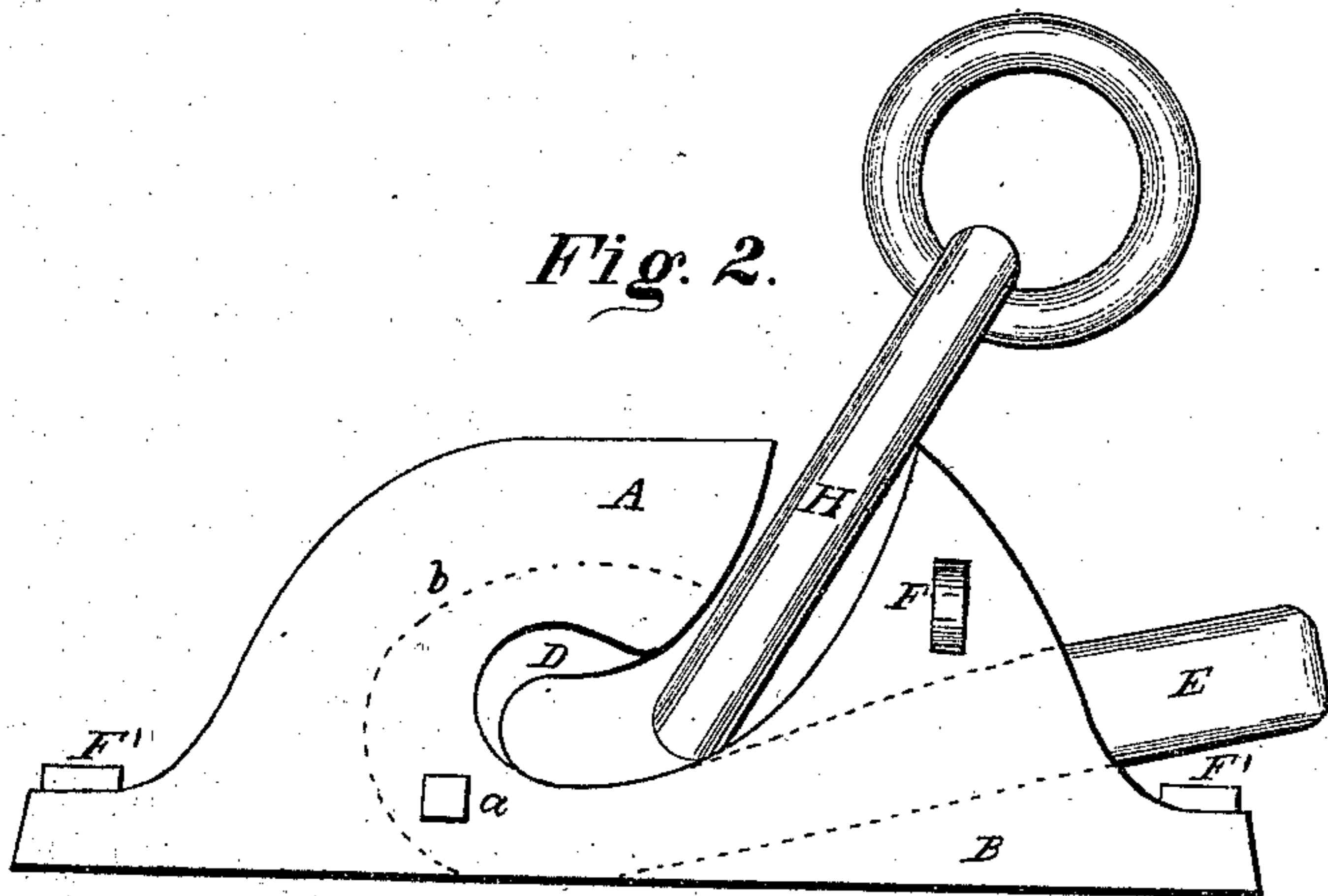
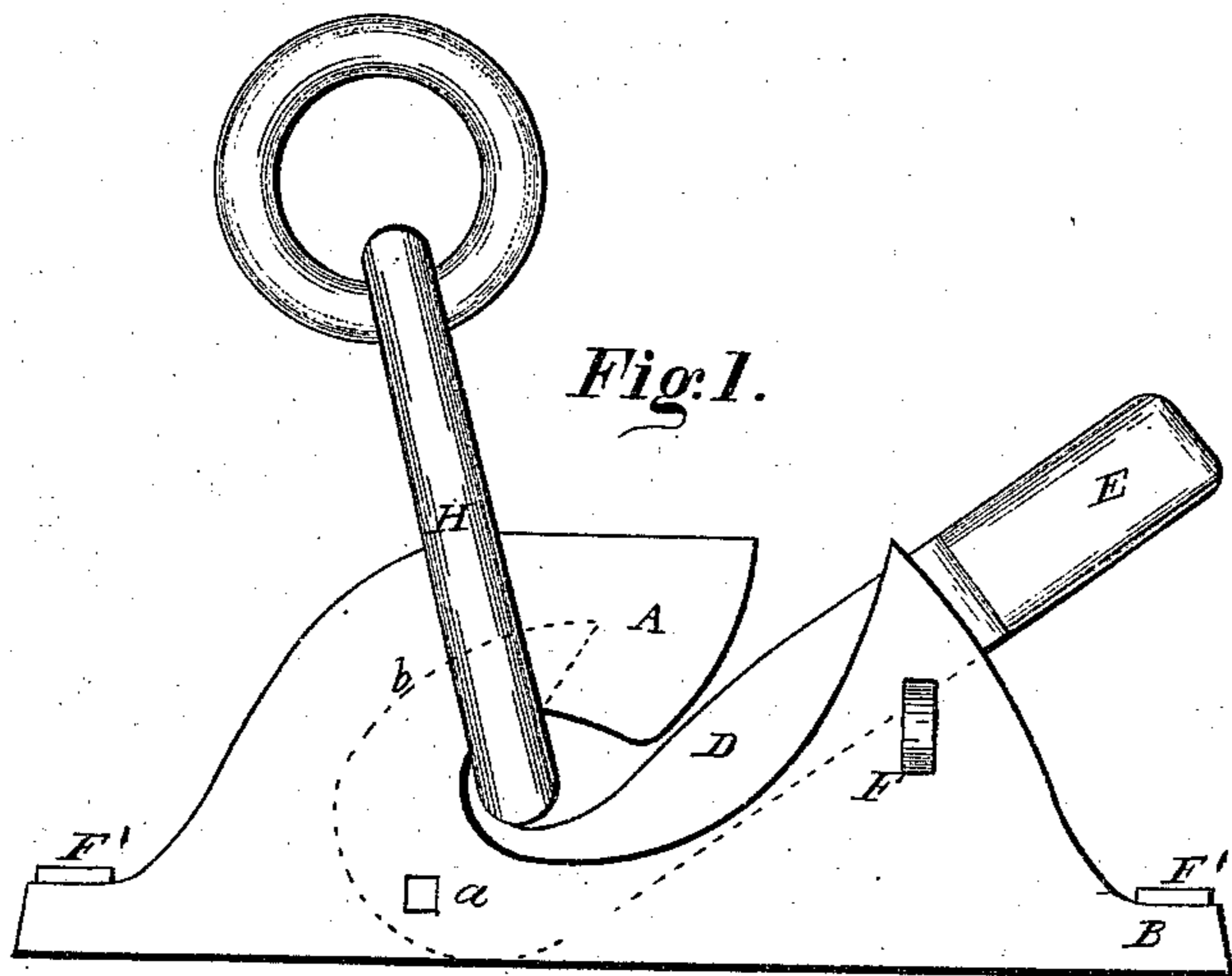


F. E. HARMON.
Boat Detaching-Hooks.

No. 150,415.

Patented May 5, 1874.



Witnesses.

J. A. Broome.
A. H. Cornell.

Inventor.

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UNITED STATES PATENT OFFICE.

FRANCIS E. HARMON, OF ASHTABULA, OHIO.

IMPROVEMENT IN BOAT-DETACHING HOOKS.

Specification forming part of Letters Patent No. **150,415**, dated May 5, 1874; application filed March 2, 1874.

To all whom it may concern:

Be it known that I, FRANCIS E. HARMON, of Ashtabula, in the county of Ashtabula and State of Ohio, have invented a certain new and Improved Boat-Detaching Apparatus, of which the following is a full and complete description, reference being had to the accompanying drawings making part of this specification.

Figures 1 and 2 are side views of the apparatus. Fig. 3 is an end view. Fig. 4 is a top view.

Like letters of reference refer to like parts in the several views.

The object of this invention is to provide an easy and ready way of detaching a boat from the tackle of the davits when a strain is exerted upon the ropes in consequence of the boat being drawn along upon the water by the vessel, so that an ordinary hook could not be unhooked to release the boat without first causing sufficient slack of the ropes to admit of its being detached from the ring.

The construction of the above-said apparatus, and the operation of the same, are as follows:

In the drawing, A represents a hook, of which B is a base, whereby it is fastened to a boat. In said hook is formed a chamber, C, Fig. 3, in which is fitted a tongue, D, pivoted therein at the point *a*, Fig. 1. The inner end of the tongue is in the shape of a hook, as indicated by the dotted lines *b*, whereas the opposite end terminates in a handle, E, whereby the tongue is operated. F F are a pair of standards or guides, between which the tongue is held and guided in its vertical movements.

The practical operation of the above-described device is as follows: The apparatus is secured in a fore-and-aft position at either end of the boat or plane of the common eye-bolt by means of the bolts F' passing through the base B into the dead-wood, and perpendicular relation to the keel, and so that the open part of the hook will be in either case toward the bow of the boat.

In launching a boat from the davits, the instant it strikes the water it falls behind in consequence of the headway of the vessel, thereby causing a tension of the tackle, so that an ordinary hook cannot be detached

from the ring; hence a degree of slack must be obtained to the tackle to allow the hook to be turned out. To obtain this slack in rough weather, or where the vessel has considerable headway, is often a very difficult matter, frequently causing vexatious delays, and danger of swamping the boat. To avoid this trouble is the purpose of my invention.

Instead of a hook being attached to the davit-tackle, a ring, H, is secured thereto, which is hooked into the hook A, as shown in Fig. 1. The ring is prevented from slipping therefrom by the tongue D, which is held to the end of the hook by a safety-pin, *a'*, Fig. 4. In order to detach the ring from the hook the safety-pin is withdrawn. The ring is then forced from the hook by depressing the lever or handle E by placing the foot upon it, which will cause the tongue to press on the ring and force it out from the hook so far as to permit it to slip over the end and out therefrom, as shown in Fig. 2.

By this device the casting off of the boat can be easily and readily effected without making any slack of the tackle, though the strain upon it may be very great.

When no strain is exerted upon the tackle, in consequence of the boat lying easily upon the water, the ring will detach itself, as the weight of the handle will tilt the tongue forward, so that the ring will slip out from the hook, the pin being in all cases withdrawn before the boat is launched.

I am aware that a hook, ring, and pivoted tongue have before been used, and I do not, therefore, broadly claim such device; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The chambered head or hook A and tongue D pivoted therein, and provided with a handle or lever, E, the tongue being arranged in relation to the hook, to release the link from the same when pressure is removed, as and for the purpose set forth.

2. The tongue D, having handle or lever E, in combination with the hook A, having recess, guides F F, and safety-pin *a'*, substantially as and for the purpose herein set forth.

FRANCIS E. HARMON.

Witnesses:

W. H. BURRIDGE,
C. W. REED.