

James Foster, Jr. imp'd detaching

Eye Bolt.

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PATENTED AUG 2 1870

Fig. 1.

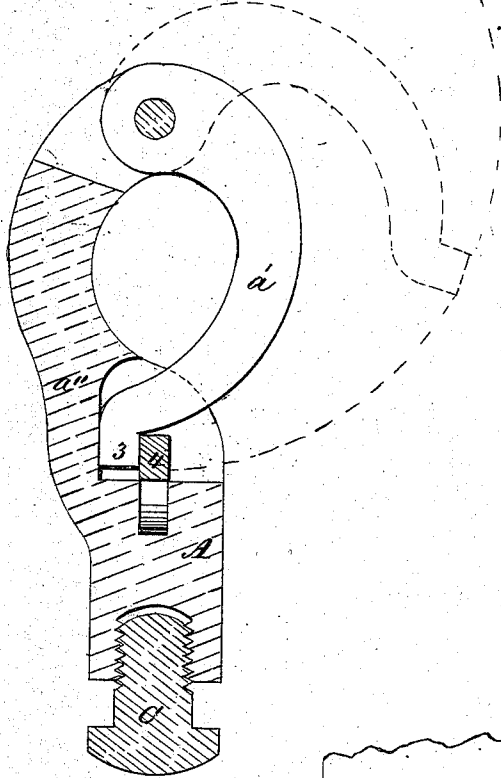


Fig. 2.

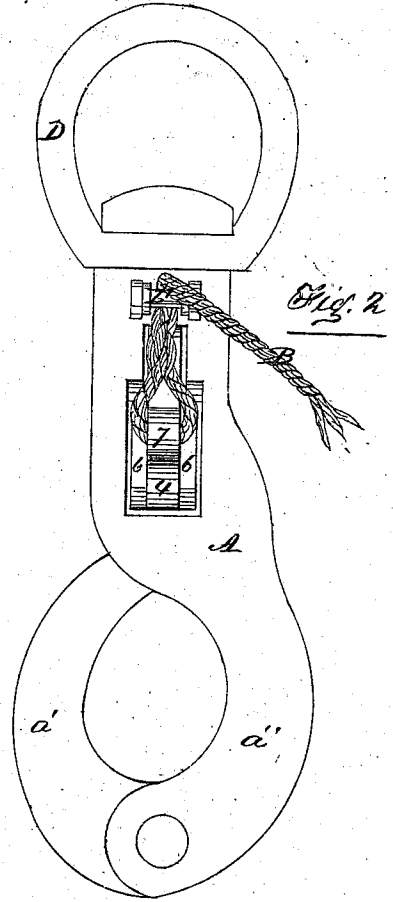
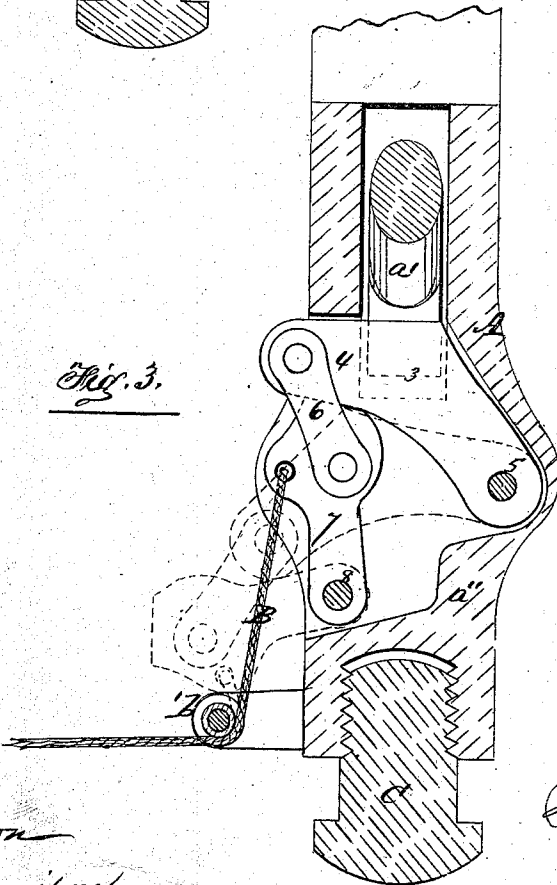


Fig. 3.



Witnesses:

*Wm. Morrison
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Inventor:

James Foster, Jr.

United States Patent Office.

JAMES FOSTER, JR., OF CAMDEN, NEW JERSEY.

Letters Patent No. 105,931, dated August 2, 1870.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same

I, JAMES FOSTER, JR., of the city of Camden, in the State of New Jersey, have invented a certain Improved Eye-Bolt for suspending and detaching ships' boats from the davit-tackle, of which the following is a specification.

Nature and Objects of the Invention.

The nature of my invention consists in the combination with an eye-bolt, having a hinged or swinging jaw, of a pair of coupled tumblers, constructed and arranged to operate substantially as hereinafter described and set forth, the object of my invention being to afford a more reliable and easily-operated device for safely securing a boat to and detaching it from the davit-tackle of a ship, as occasion may require.

Description of the Accompanying Drawing.

Figure 1 is a vertical section of the improved eye-bolt, in the position in which it is intended to be when bolted fast to the boat.

Figure 2 is a side elevation of the same, in the position which it will assume when suspended from the tackle-block of a ship's davit.

Figure 3 is a vertical section of a part of the same, in a plane at right angles to the plane of fig. 1.

General Description.

The eye-bolt A has a swinging jaw, *a'*, which is constructed and pivoted to the shank *a''*, so that said jaw will open and close freely, and, when closed, form a loop or eye.

The free end of the jaw *a'* has a lip, 3, which, when the said eye is being closed, enters a recess in the shank *a''*, and, when fully entered, the inner end of a tumbler, 4, which is pivoted to the shank *a''* at 5, can be readily caused to pass across in front of the said lip 3, (see figs. 1 and 3,) and thus prevent the lip end of said jaw from being withdrawn from the slot in *a''* until the said tumbler 4 is withdrawn from its front. The outer end of this tumbler 4 is coupled by an inclined link, 6, to the outer end of another tumbler, 7, the inner end of which latter is pivoted to the shank *a''* at 8, so that, when the latter tumbler 7 is drawn outward, the former tumbler 4 is withdrawn thereby from the front of the lip 3 of the jaw *a'*, and thus the jaw *a'* released; (see the dotted lines in fig. 1.)

The tumbler 7 is drawn outward by means of a lanyard, B, which, passing behind or against a friction-pulley, *b'*, is intended to be extended down behind an upright and beneath a horizontal covering-board, not shown, to any point within reach of the operator in the boat, so that when the boat, supposed to be suspended from the davit tackle-blocks, connected respectively to one of these detaching eye-bolts, fixed in each end of the boat, in upright positions, by means of the screw-bolt C, or otherwise, has reached the water, the two ends of the said boat can be quickly and simultaneously detached from the tackle.

In reattaching the boat, the jaw *a'* is passed through the hook, eye, or ring of the respective tackle-blocks, the tumbler 4 drawn outward to let the lip of the jaw pass into the slot, and then pushed in again by hand, so as to cross the front of the lip 3, and thus retain the jaw *a'* closed.

The tumblers 4 and 7, and the coupling-link 6, are constructed and arranged so that, when the tumbler 4 has been pushed inward across in front of the lip 3, to hold the jaw *a'* in its closed position, the one end of tumbler 7 will abut against the edge of tumbler 4, and thus keep the latter from releasing the jaw until the tumbler 7 is pulled from said position, and so, also, that the link 6 will at the same time be inclined inward, and thus tend to keep the tumbler 7 from being moved outward by accident.

It will be understood, without further description, that this detaching eye-bolt will serve the purpose intended, whether it be suspended from the davit-tackle, (by means of a swivel-loop, D,) in the position shown in fig. 2, or fixed in the ends of the boat, in the upright position shown in fig. 1.

Claim.

I claim as my invention—

The coupled tumblers 4 and 7, in combination with an eye-bolt, having a hinged or swinging jaw, *a'*, the said parts being constructed and arranged to operate substantially as and for the purpose hereinbefore set forth.

JAMES FOSTER, JR.

Witnesses:

BENJ. MORISON,
WM. H. MORISON.