

J. M. Brooke.

Detaching.

N^o 69,069.

Patented Sep. 24, 1867.

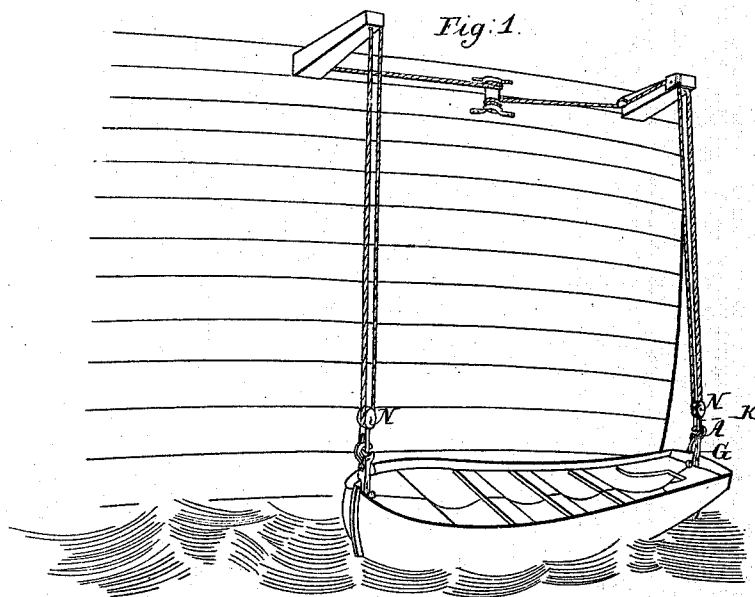


Fig. 2.

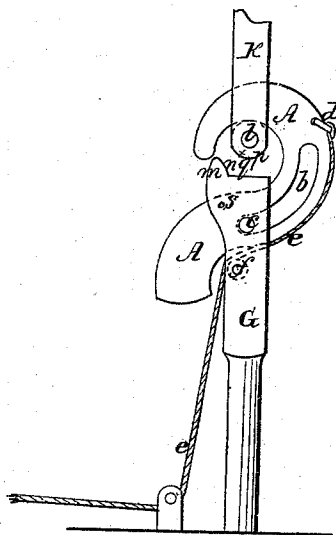
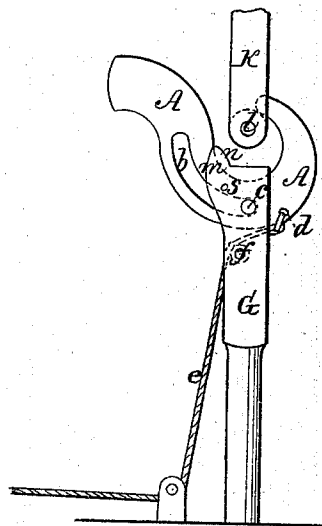


Fig. 3.



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JOHN M. BROOKE, OF LEXINGTON, VIRGINIA.

Letters Patent No. 69,069, dated September 24, 1867.

IMPROVED BOAT-DETACHING TACKLE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN M. BROOKE, of Lexington, in the county of Rockbridge, and State of Virginia, have invented a new and improved Boat-Detaching Hook; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, showing a boat in the act of being lowered and detached from a vessel.

Figure 2 is a side view, showing the hook attached to the strap of the block.

Figure 3 is a similar view of the same parts, showing the hook in the act of being detached from the strap of the tackle-block.

Similar letters of reference indicate corresponding parts in the three figures.

This invention relates to a new and improved device to be attached to the stem and stern of ships boats, for facilitating their detachment from the tackle by which they are raised and lowered, and admitting of the "casting off" of boats with ease and safety.

The nature of my invention consists of a gravitating or loaded hook, which is attached by means of a slot and pivot to a standing bolt, and which is so constructed that it will catch into a loop or strap on the tackle-block, and form a safe and strong attachment under all ordinary circumstances, and at the same time admit of being quickly and positively detached from said block when desired, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents a hook, with a curved eye or slot, *b*, through it, working on a pin or anti-friction roller, *c*, in the jaws of a standing bolt, G, which latter is permanently attached to the boat. The iron-strapped lower block N of the tackle is provided with a slotted bar, K, or its equivalent, having fitted between its lower ends a roller or pin, *l*, instead of the common hook.

Detachment is effected by turning the hook A, through an arc of about ninety degrees, about the roller-pin *c*, in the jaws of the standing bolt G. This may be done by pulling the tripping-line *e*, which is attached at *d* to the back of the hook, and which leads under this hook and over the roller *f*, and thence to any part of the boat, so that both hooks, at bow and stern, may be simultaneously detached by a single person. The lower part of the hook A is made sufficiently heavy to keep this hook in position for hooking on, as shown in fig. 2, prior to hoisting, to do which it is only necessary to press the roller *l* of the block between the chamfered point of the hook and the shoulder or lip *m* of the standing bolt G, when the hook will open to receive it, and close over it as it enters.

The form of the shoulder at *n* is such as to prevent accidental unhooking, in case the block is not properly attached to in hooking on, or in case the boat should be struck from below by a sea, in hoisting.

Should it be desired at any time to secure the hook rigidly, (equivalent to mousing,) a pin may be passed through the hook and jaws of the bolt G, as at *s*, and secured by a lanyard or its equivalent. By slightly varying the relation of the curves of the bend and eye of the hook any degree of sensibility may be given to the device, as its sensibility, or the degree of ease with which detachment may be effected, when the weight of the boat bears upon the hook, depends upon the relative positions of the centres of curvature of the bend and eye of the hook. If the centre *q* of curvature of the eye be to the left of the centre *p* of curvature of the bend of the hook, as shown in fig. 2, the tendency of the hook, with or without the weight attached, will be to maintain the position shown in fig. 2, and force will be required to effect detachment. But if the centre of curvature of the eye be to the right of the centre of curvature of the bend, the tendency is to assume the position shown in fig. 3. It then is self-detaching, and must be restrained until detachment is required. If the curves be concentric, the tendency will be to remain in any position in which the hook may be set. In all cases, however, when the weight of the boat is not bearing upon the hook, the preponderating weight of the lower part of the hook will maintain it in the position shown in fig. 2.

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

1. The hook A, with a curved slot, *b*, substantially as and for the purpose described.
2. The combination of the slotted loaded hook A *b*, stand bolt G, of a boat, and tackle-block strap *k*, constructed substantially as herein described.

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Witnesses:

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