T. H. Mortimer.

Boat Detaching.

No. 85,685. Patented Jan. 5, 1869.

Fig. 1.

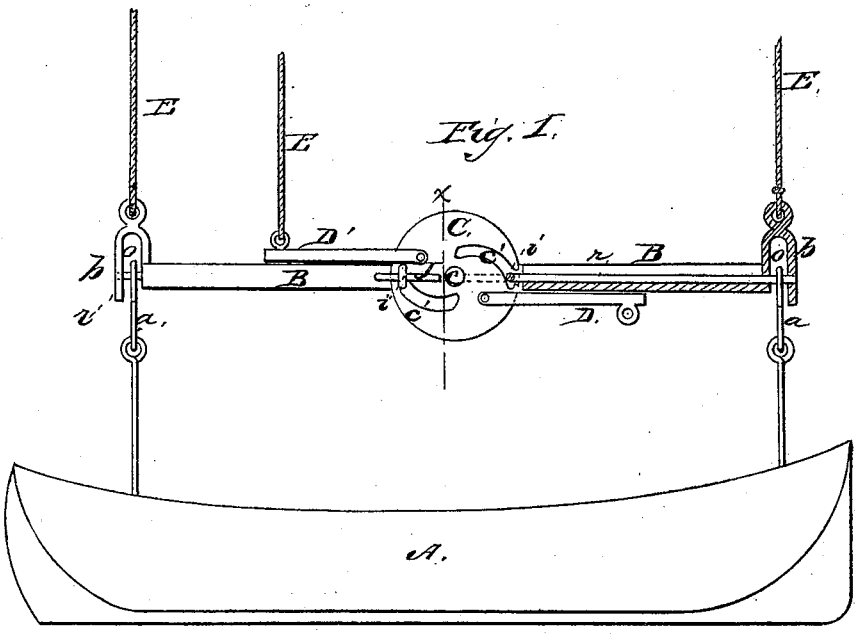
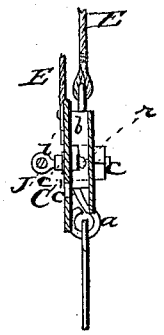


Fig. 2.



Witnesses.
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THOMAS H. MORTIMER, OF CHARLESTON, SOUTH CAROLINA.

Letters Patent No. 85,685, *dated January* 5, 1869.

BOAT-DETACHING APPARATUS.

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, THOMAS H. MORTIMER, of the city and district of Charleston, and State of South Carolina, have invented a new and improved Device for Detaching Boats; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view.

Figure 2 is a vertical section through the line *x x* of fig. 1.

This invention has for its object to provide a simple, cheap, and effective device by which boats at sea can instantly be detached from the davit-tackle when lowered into the water.

In the drawings—

A is the boat, provided at each end with a hook, *a*.

B is a rod suspended permanently from the davits or cranes, by ropes E E, and supporting the boat.

By raising and lowering the rod B, the boat can be hoisted up or lowered into the water.

The body of the rod is nearly in the shape of a hollow or deeply-grooved semi-cylinder, divided at the centre by the locking and unlocking-device, hereinafter explained.

The rod at its ends terminates in a stout flat plate, *b*, bent into the form of a "goose-neck," as shown in fig. 1.

A stout rod, *r*, slides longitudinally in the cavity of rod B, its end capable of projecting across the space *o*, into a hole near the end of the plate *b*. It is always thrown into this position for attaching the boat, the latter operation being effected simply by engaging the hooks *a a* over it in the bend of the goose-neck.

This being the method of attaching the boat to the bar B, it follows that when the rods *r r* are withdrawn towards the centre of the bar B, the hooks are instantly disengaged and the boat detached.

The device for simultaneously withdrawing or thrusting out the rods *r r*, consists of a circular plate, C, capable of being rotated on a spindle, *c*, and provided with two curved eccentric slots *c' c'*, constructed and arranged in the plate, as shown in fig. 1, operating in connection with a pin, hook, or arm, *i*, from each rod, which projects through the slot on that side of the spindle.

By rotating the plate C partially around its axis, to the right, as seen in the drawings, the arm *i* is forced towards the centre of the plate, withdrawing the rods simultaneously, and detaching the boat. By rocking the plate back towards the left, the arms are forced back to the position shown in fig. 1.

Arms D D' may be attached to the plate, for the purpose of rocking it more easily, and one of them, D, may be operated by the person in the boat, by means of a cord, so that he can detach the boat when he pleases. One of the arms, D', may, if preferred, have a tripping-cord, *e*, attached to it, which will raise the arm when the boat is lowered to a certain point, and thereby automatically detach the boat.

Fig. 1 shows the boat just reaching the point in its descent when the tripping-cord begins to operate. If the boat be lowered any further, the cord will rock the plate C, and disengage the apparatus from the boat.

The arms *i i* may be provided with a loop or eye at their outer end, travelling on a guide-rod, J, in order to cause the rods *r r* to move back and forth in a straight line, or the bar B may be made a hollow cylinder between the plate C and the ends, in which case the rods *r r* will be confined in position, and made to travel in a line with the axis of bar B.

It will be observed that the eccentric slots cause the plate to operate the rods *r r* with increasing power, as they approach the point where they disengage the hooks *a a*, and drop the boat.

The whole device is very simple, strong, and durable, and operates easily and with but a single motion of the levers D D'.

It can be got up at a slight expense, and when permanently attached to the davits or cranes, will not be in the way in the slightest degree.

If it is not desired to use it at any time, the ropes E E can be unlocked from the bar B, and the latter stowed away with the boat on deck, or in any other convenient place.

Having thus described my invention,

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

1. The plate C, having the eccentric slots *c' c'*, when connected with the bar B and rods *r r*, in the manner and for the purpose set forth.

2. The combination of plate C and rods *r r* with the levers D D', or either of them, and the rope *e*, substantially as and for the purpose set forth.

3. The arrangement of the bar B, having the curved flanges *b b* on its ends, with the rods *r r*, arms *i i*, rotating slotted plate C, levers D D', tripping-rope *e*, and tackle and fall E E, substantially as described.

To the above specification of my improvement, I have signed my hand, this 24th day of August, 1868.

THOS. H. MORTIMER.

Witnesses:

J. W. LA BRUCE,

I. HUGER DAWSON.