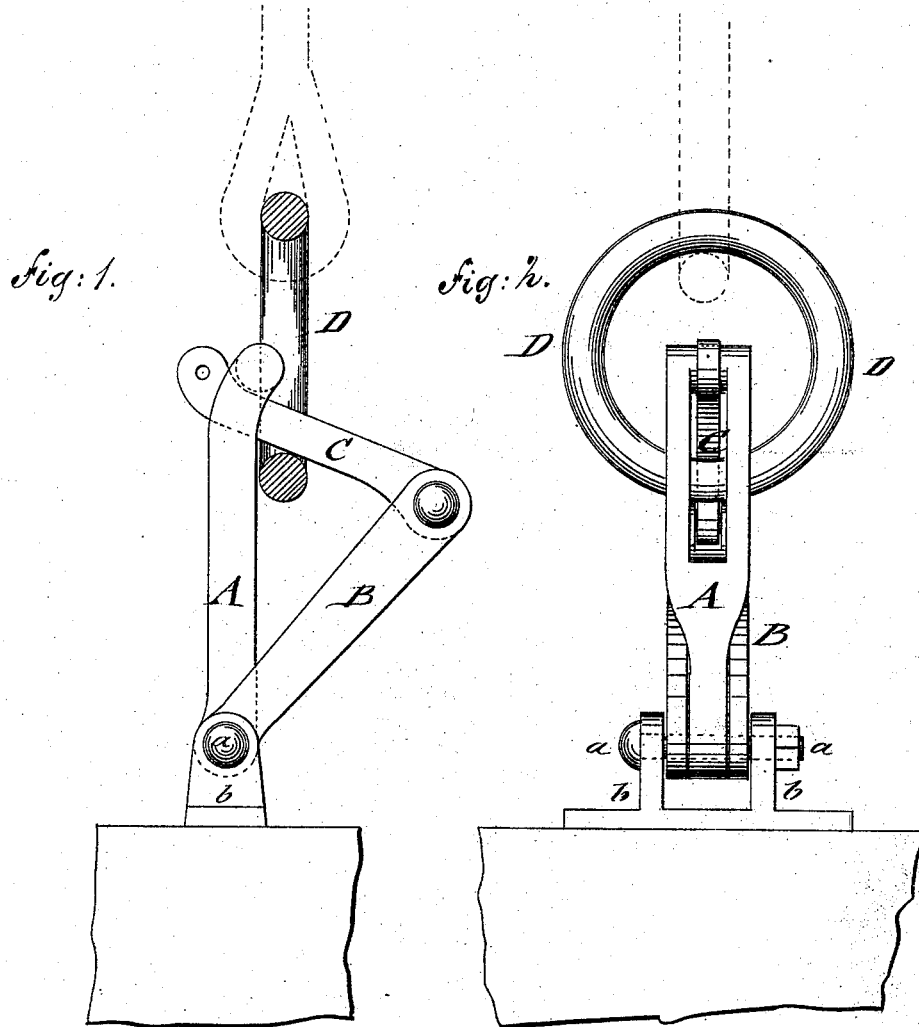


W. A. BRICE.

BOAT-DETACHING APPARATUS.

No. 182,553.

Patented Sept. 26, 1876.



WITNESSES:

Geo. N. ...
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UNITED STATES PATENT OFFICE.

WILLIAM A. BRICE, OF LONDON, ENGLAND.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

Specification forming part of Letters Patent No. 182,553, dated September 26, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, WILLIAM A. BRICE, of London, England, have invented a new and Improved Boat-Detaching Apparatus, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view, and Fig. 2 an end view, of my improved device for detaching boats.

Similar letters of reference indicate corresponding parts.

The invention relates to a cheap and simple device for detaching boats in perfectly reliable and automatic manner when the same reach the water, so that thereby the great number of accidents occurring from insufficiently constructed and badly-working detaching mechanisms may be avoided, and the danger and loss of lives be in a considerable measure reduced.

The invention consists of a boat-detaching apparatus that remains intact and locked as long as there is strain on the suspending-rings, but that is instantly released when the strain is taken off by the raising of the boat by the wave.

In the drawing, A represents a main piece or link of my boat-detaching apparatus, that is applied at its lower end to a strong pivot-bolt or cross-pin, *a*, turning in lugs or bearings *b* attached to the boat.

The upper part of link A is recessed or slotted for admitting the entering of the lock-piece C, that is pivoted at the lower end to the swinging arm B. The free end of lock-piece C is curved upward to bear on the rounded-off top part of link A, and bind securely to the same when the ring D, at the ends of the boat-suspending rope, presses on the under side of the lock-piece, and is carried by the strain of the weight of the boat into the corner formed by the link A and lock-piece C, so as to positively lock them together, and prevent their release as long as there is any strain on the ring.

The swinging arm B is pivoted by its forked ends to the pivot-pin *a* at both sides of link A, and by its upper end to the connecting-pin

of the lock-piece, forming, with the link and lock-piece, a hook device of triangular shape as long as the suspension-ring bears on the lock-piece. The boat is suspended at each end by such a hook mechanism, the ropes being carried up over pulleys to a drum, whose motion may be readily controlled and checked by suitable mechanism, so as to produce the uniform and continual descent of the boat. The lowering of the boat should be so timed that it meets the wave, and, if necessary, follows the same in downward direction. The moment the boat is fully hugged by the wave, and borne up by the same, the strain is instantly taken off the hooks, so that they open automatically, as the dropping of the rings allows the lowering of the lock-piece, and permits, by the downward motion of the heavy arm, the escape of the lock-piece from the link. The opening of the hook devices frees the suspending-rings, and surrenders the boat to the waves in a perfectly reliable manner.

The positive working of the hook device, in connection with the simplicity of its construction—which requires no oiling, greasing, or looking after of any kind, and which furnishes no chance of getting out of order and preventing it from working at the very moment when most required—provides a boat-detaching device that may, by its cheapness, be uniformly adopted, and be instrumental in reducing the large loss of life incidental to the present imperfect methods of lowering boats.

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

The combination of the pivoted and slotted main piece or link A, swinging connecting-piece B, and lock-piece C, that bears with its curved free end on the rounded-off top part of the main link, to readily lock or release the same, substantially as described.

WILLIAM ALEXANDER BRICE.

Witnesses:

CHAS. H. UPTON,
H. A. UPTON.