J. C. Cottingham,

Detaching Boats.

No. 110,116. Patented Dec. 13, 1870

Fig 1

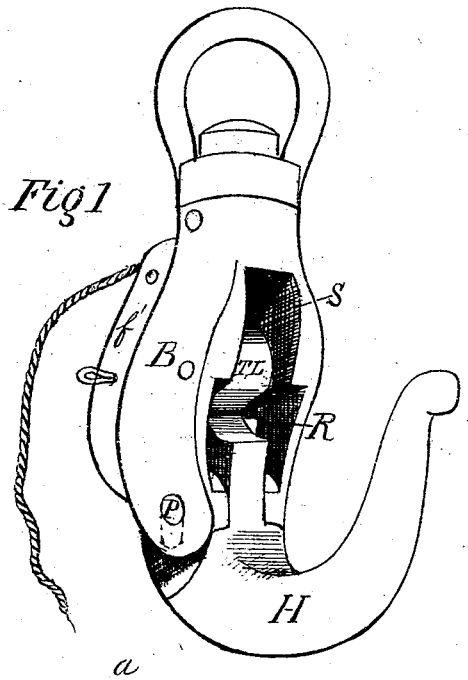

Fig 2

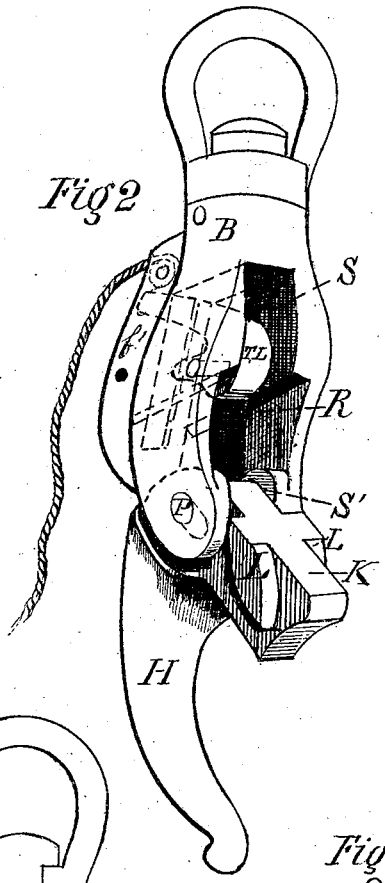

Fig 3

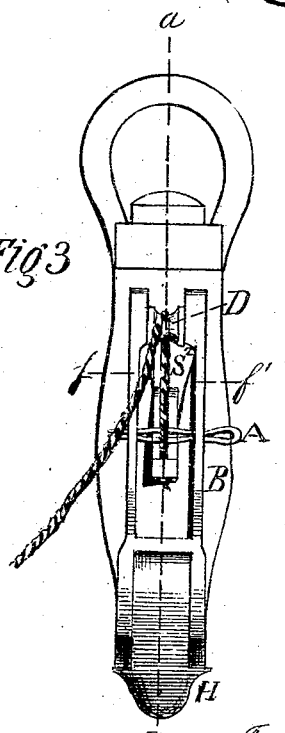

Fig 4

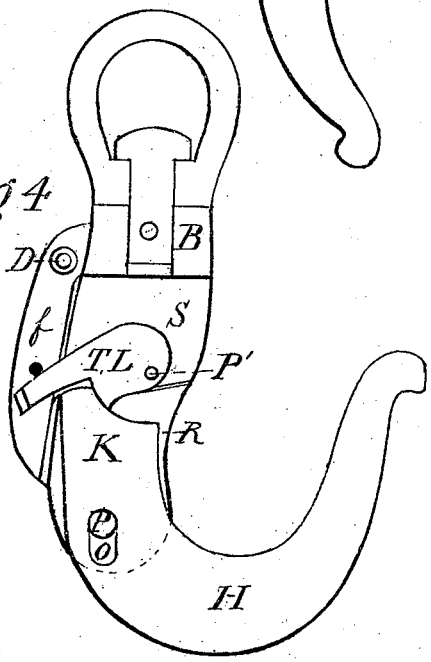

Fig 5

Witnesses { Joseph Evans. / Frank Hunt

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JOHN C. COTTINGHAM, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 110,116, dated December 13, 1870.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

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

I, JOHN C. COTTINGHAM, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Trip-Hooks, of which the following is a specification.

The object of my invention is to provide a simple and effectual trip-hook for safely lowering a boat from its davits, and releasing the same from the ring or eye-bolts at both ends of the boat simultaneously, without endangering the lives of the occupants of the boat when it touches the water during a heavy sea.

Figure 1 is a perspective view of my invention, with the hook raised and in proper position.

Figure 2 is a perspective view, showing the position of the hook when detached from the ring or eye-bolt.

Figure 3 is a back view of the hook when the same is in the position as shown in fig. 1.

Figure 4 is a sectional view on the line *a–b*.

Figure 5 is a detached view of the steady-pin.

To enable those skilled in the art to make and use my invention, I will now proceed to describe the same.

The body B of the hook is made in the form as shown in the drawing, and has formed in it at the proper depth a recess, R, which terminates above and below into slots, S and S^1, as shown by dotted lines, fig. 2.

On the back part of the body B, between the flanges *f* and *f'*, is an elongated slot, S^2, as shown in figs. 3 and 4.

On the lower part of the body B and slot S^1, and fitting in the recess, is a hook, H, which is held in proper position by means of the pin P, on which it turns.

The shank K of the hook is made flat, and has formed on both sides, near the upper part, lugs L, fig. 2, said lugs being so formed in order that the shank will pass freely into the recess R, where it has a slight hold.

The opening O in the hook H, through which the pin P passes, is made slightly oblong, in order to allow the hook to slightly rise or fall in the recess R and slot S^1.

Pivoted and working in the slot S, and held in proper position by means of the pin P^1, is a trip-lever, T L, the arm of which extends through the elongated slot S^2, and is protected and moves between the flanges *f* and *f'*.

The trip-lever is curved so as to allow the upper part of the shank K, when passing into the recess R, to raise the trip-lever and permit it to fall over and catch on the upper part of the shank K, as shown in figs. 1 and 4, and thus hold it in position.

On the upper part, and between the flanges *f* and *f'* is placed a pulley, D, fig. 3, which revolves on and is held in place by a pin, P^2.

In operating the hook, the cord or rope, which is secured to the end of arm of the lever T L, passes up and around the pulley D.

It will be seen from the above description that in lowering a boat from the davits, and to disengage it from the hooks, drawing on the cord or rope attached to the end of the arm of lever T L, will raise the lever and disengage it from the shank K of the hook H, thus causing the hook to drop and assume the position as shown in fig. 2.

The steady-pin A, fig. 5, and in position in figs. 1 and 3, is to prevent the raising of the lever by means of the cord or rope when it is not required thus to use it.

Having thus described my invention, its construction, and operation,

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

The arrangement of the body B, hook H, shank K, lugs L, trip-lever T L, and pulley D, all constructed and operating as and for the purpose specified.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN C. COTTINGHAM.

Witnesses:

JOSEPH EVANS.

FRANK STOUT.