J. T. KINNEY.

SHACKLE FOR BOAT LAUNCHING AND LASHING DEVICES.

APPLICATION FILED OCT. 11, 1910.

1,068,905. Patented July 29, 1913.

2 SHEETS—SHEET 1.

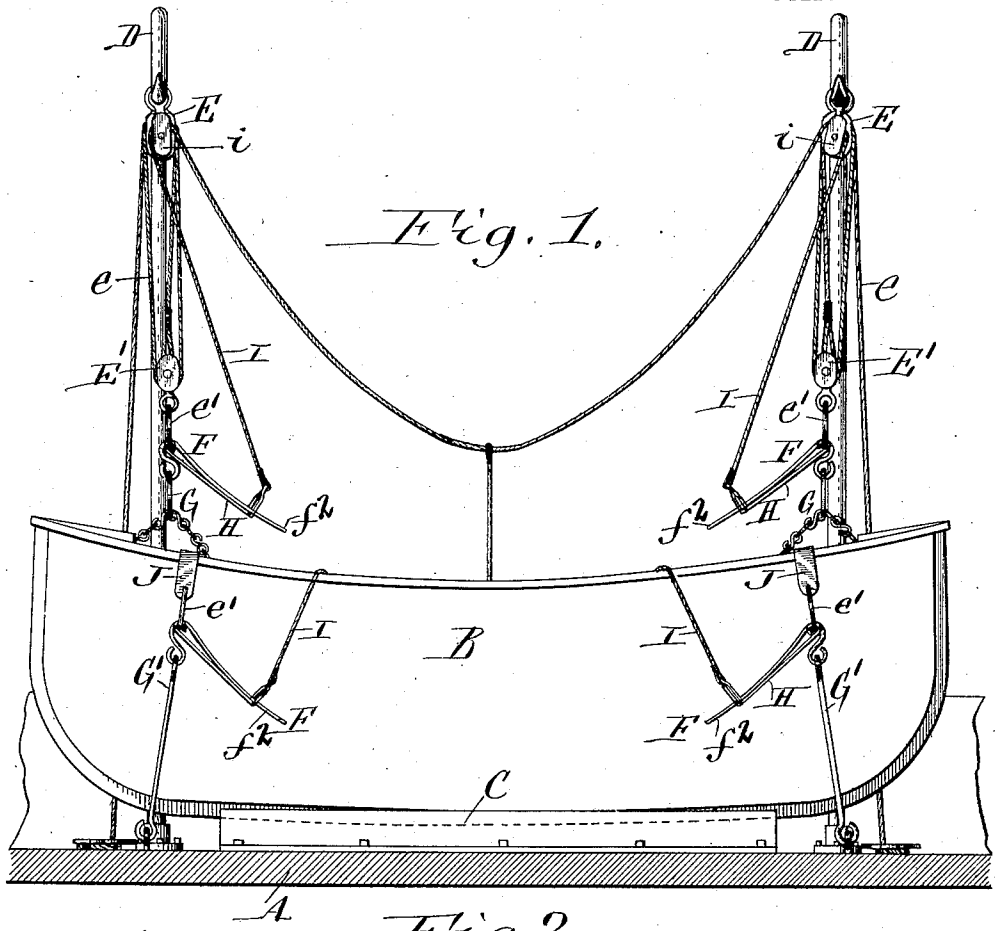


Fig. 1.

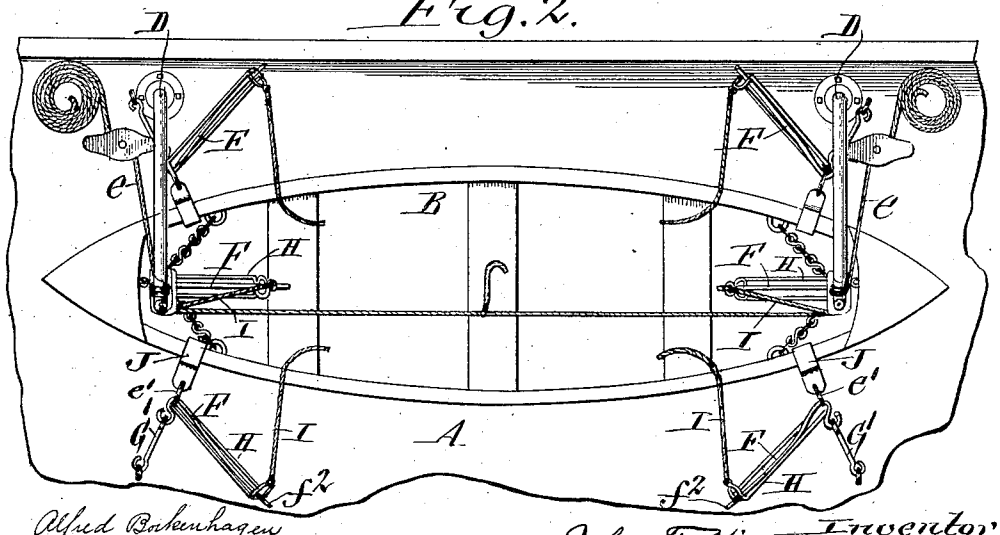


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

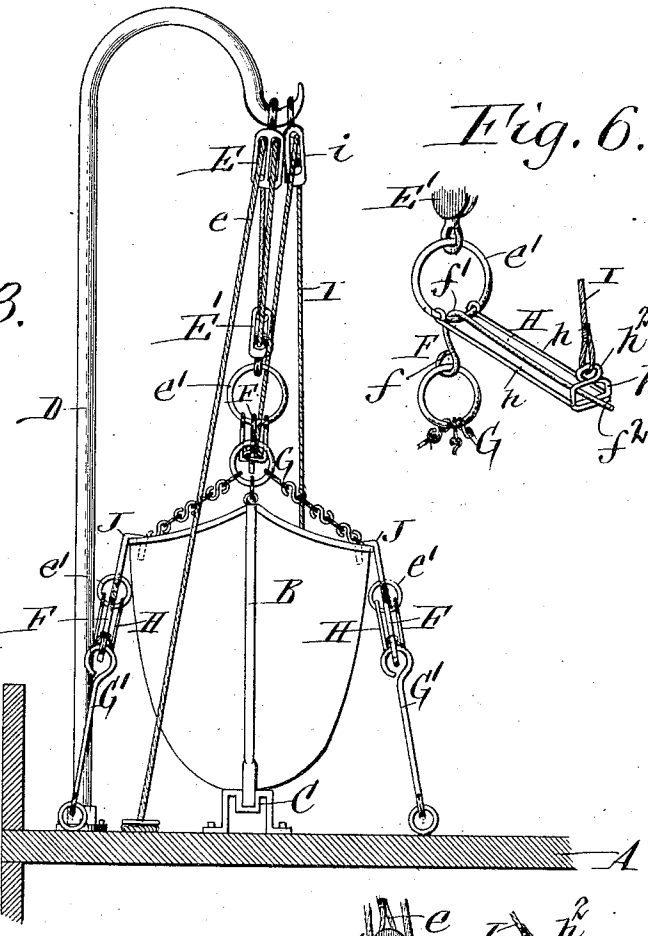


Fig. 6.

Fig. 4.

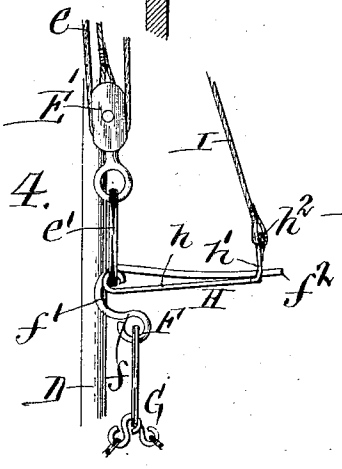
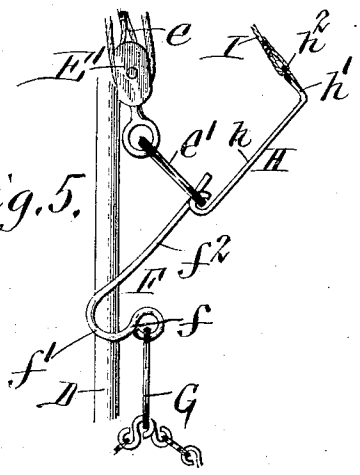


Fig. 5.



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UNITED STATES PATENT OFFICE.

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SHACKLE FOR BOAT LAUNCHING AND LASHING DEVICES.

1,068,905. Specification of Letters Patent. Patented July 29, 1913.

Application filed October 11, 1910. Serial No. 586,462.

To all whom it may concern:

Be it known that I, JOHN T. KINNEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Shackles for Boat Launching and Lashing Devices, of which the following is a specification.

The object of this invention is the production of a shackle which may be used for lashing a life boat to its cradle, for detachably connecting the boat with the launching tackle and for other purposes which require articles to be securely fastened when not in use but permit quick, safe and reliable release of the article which has been fastened.

My invention has the further object to so construct the releasing device that the operation of same is not liable to be interfered with by ice and snow in winter time.

This is particularly important in the case of life boats which must be lowered evenly from the davits and released simultaneously from the lowering tackle at opposite ends of the boat to prevent spilling the occupants of the boat into the water.

In the accompanying drawings consisting of 2 sheets: Figure 1 is a side elevation of a life boat showing my improved shackle applied to the lashing and launching devices. Fig. 2 is a top plan view thereof. Fig. 3 is an end elevation of the boat and the lashing and launching devices and the deck or wharf in section. Fig. 4 is a fragmentary elevation of one of the shackles, on an enlarged scale, the parts being represented in the position which they occupy when the coupling hook is partly released. Fig. 5 is a similar view showing the hook almost wholly released. Fig. 6 is a detached fragmentary perspective view of the hook releasing device.

Similar letters of reference indicate corresponding parts throughout the several views.

A represents a support which for instance may be the deck of a ship or the floor of a wharf, and B is a life boat which is adapted to be secured to this deck or floor and launched therefrom into the water. When not in use the boat rests by its keel in a cradle C which is secured to the deck or floor.

The launching mechanism may be varied in construction but that shown in the drawings comprises two davits D, D mounted at their lower ends on the deck or floor, upper fall or pulley blocks E connected with the upper ends of the davits, lower fall or pulley blocks E^1 adapted to be connected with the ends of the life boat, and a fall or hoisting line *e* passing around one pair of the upper and lower pulley blocks E, E^1.

My improved shackles are utilized for detachably connecting the lower pulley blocks with the boat and each of these shackles is preferably constructed as follows:

F indicates a coupling hook having a short shank *f* which is pivoted on a support G, a bight f^1 extending backwardly from the pivotal connection between the shank and support and a long bill f^2 extending forwardly from said pivotal connection. The support G in the case of a boat launching device preferably consists of one or more chains which are attached to one end of the boat, as shown in Figs. 1, 2, 4, 5 and 6.

The bill of the hook is passed into a coupling ring e^1 on one of the lower fall blocks until the bight of this hook engages this ring and the bill thereof inclines downwardly, as shown in Fig. 1.

For releasing the coupling hook from the coupling ring when required the following means are provided.

H represents a releasing member which comprises two longitudinal bars *h*, *h* arranged lengthwise on opposite sides of the bill of the hook and pivotally connected at their inner or rear ends with the coupling ring, so that they can swing vertically, a releasing eye or loop h^1 arranged at the front or outer ends of said longitudinal bars and adapted to receive the front end of the bill of the coupling hook, a lifting eye or loop h^2 arranged on the upper side of the releasing eye, and a releasing line I connected with the lifting eye, as shown in Figs. 1, 2 and 3.

When it is desired to release the boat from the fall tackles both the releasing lines I are drawn together which is preferably effected by uniting these lines, as shown in Figs. 1 and 2. In the case of a boat launching device the releasing lines preferably pass over pulleys *i* on the davits, as shown in Figs. 1, 2 and 3.

During the first part of the pull on each releasing line the releasing member H is raised into a substantially horizontal position, as shown in Fig. 4, but in this position

the hook still supports the load. Upon continuing the pull on the releasing line the bill of the coupling hook is inclined upwardly, as shown in Fig. 5, thereby causing the hook to be disengaged from the releasing member, whereby the boat is disconnected from the fall or hoisting tackle. This mechanism holds the boat reliably on the fall tackle while lowering the boat but permits of positively releasing both ends at the same time when ready for launching the boat, this being particularly necessary when launching a boat in a high sea.

The side bars and eyes of each releasing member are preferably constructed from a single piece of wire which is bent into suitable shape to form a skeleton like or open work structure. By making the releasing member in this form the same is not liable to become clogged with ice or snow but is always in condition for operation in case of emergency.

When my improved shackle is embodied in the means for lashing the boat to the deck or floor the coupling ring e^1 is connected with a hook J which engages over the gunwale of the boat and the shank of the coupling hook is connected by means of a rod G^1 with the floor or deck, as shown in Figs. 1, 2 and 3.

The operation of the shackle for disconnecting the coupling ring and hook in the case of the boat lashing is the same as in the boat launching tackle.

Inasmuch as the releasing member H is permanently attached to the ring e^1 of the launching tackle said member cannot become displaced relatively to the coupling hook and therefore is always in working condition.

I claim as my invention:

1. The combination with two parts to be connected, of a shackle for coupling the same comprising a coupling hook pivotally connected by its shank to one of said parts and engaging its bight with the other part, and a releasing member removably engaging the bill of said hook and comprising two longitudinal bars arranged on opposite sides of the bill of the hook, a support which is connected with said other part and with the rear ends of said bars, and a releasing eye which is arranged at the front ends of said bars and which receives said bill.

2. The combination with two parts to be connected, of a shackle for coupling the same comprising a coupling hook pivotally connected by its shank to one of said parts and engaging its bight with the other part, and a releasing member of skeleton form removably engaging the bill of said hook and comprising two longitudinal bars arranged on opposite sides of the bill of the hook, a support which is connected with said other part and with the rear ends of said bars, a releasing eye which is arranged at the front ends of said bars and which receives said bill and a lifting eye arranged on the releasing eye.

3. The combination with two parts to be connected, of a shackle for connecting the same comprising a coupling hook having a bill and a shank pivotally connected to one of said parts, a coupling ring which is connected with the other of said parts and receives said hook, and a detaching device comprising a skeleton member pivoted at its inner end to said ring and engaging its outer end with the bill of said hook, and a releasing line connected with the outer end of said releasing member.

4. The combination with two parts to be connected, of a shackle for connecting the same comprising a coupling hook having a bill and a shank pivotally connected to one of said parts, a coupling ring connected with the other of said parts and receiving said hook, and a detaching device comprising two longitudinal bars arranged on opposite sides of the bill of the hook and pivotally connected at their inner ends with said ring, a releasing eye arranged at the outer ends of said bars, a lifting eye arranged on said releasing eye, and a releasing line connected with said lifting eye.

Witness my hand this 7th day of October, 1910.

JOHN T. KINNEY.

Witnesses:
M. MITCHELL,
WM. J. KINNEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."