C. J. CHRISTENSEN.

DEVICE FOR LOWERING LIFE BOATS.

APPLICATION FILED JUNE 3, 1909.

940,512.

Patented Nov. 16, 1909.

Fig. 5.

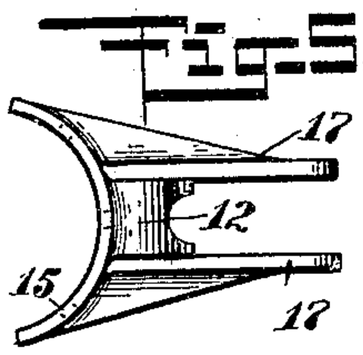
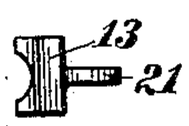



Fig. 7.



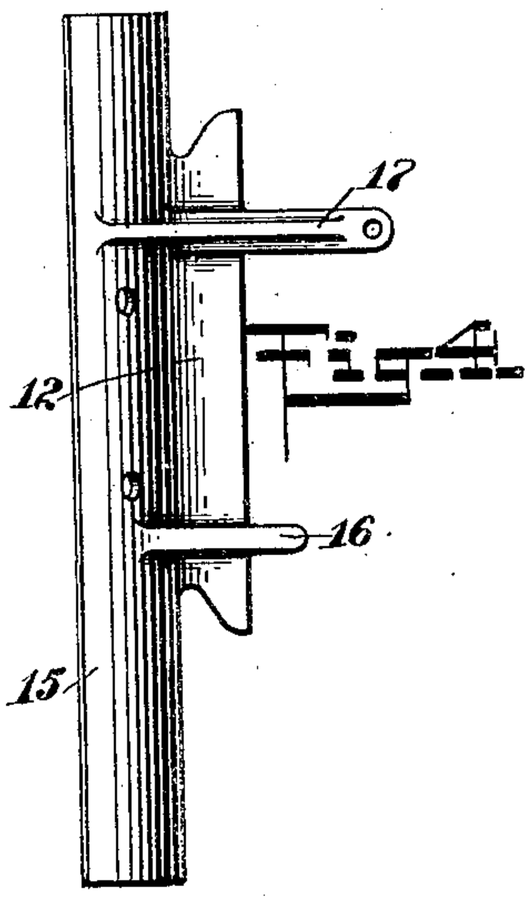




Fig. 4.

Fig. 6.

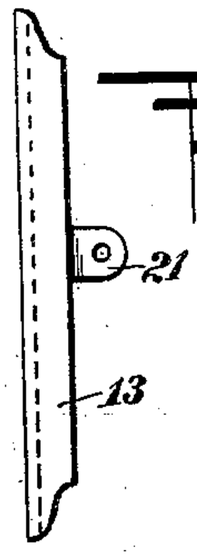





Fig. 1.

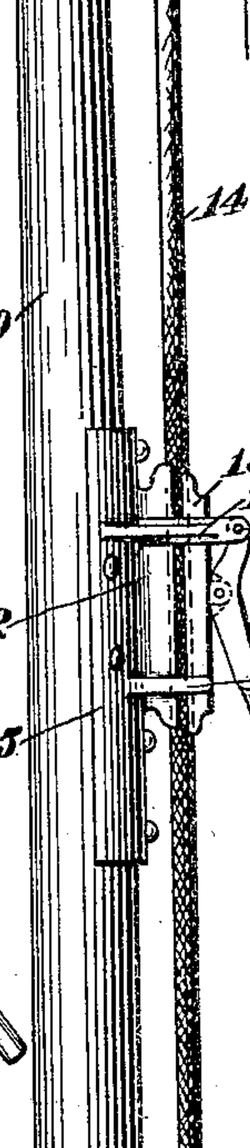
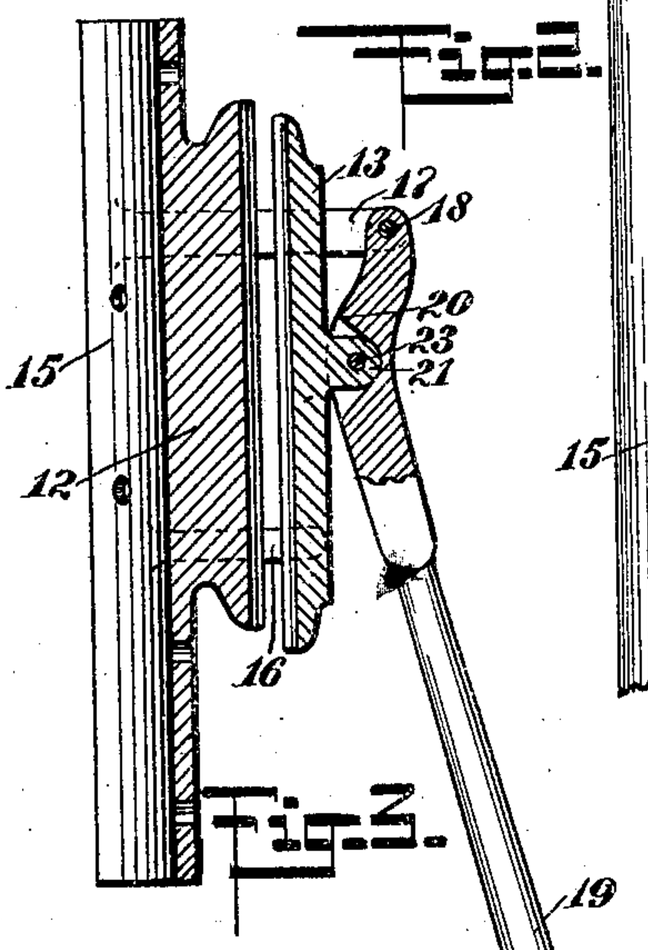



Fig. 2.



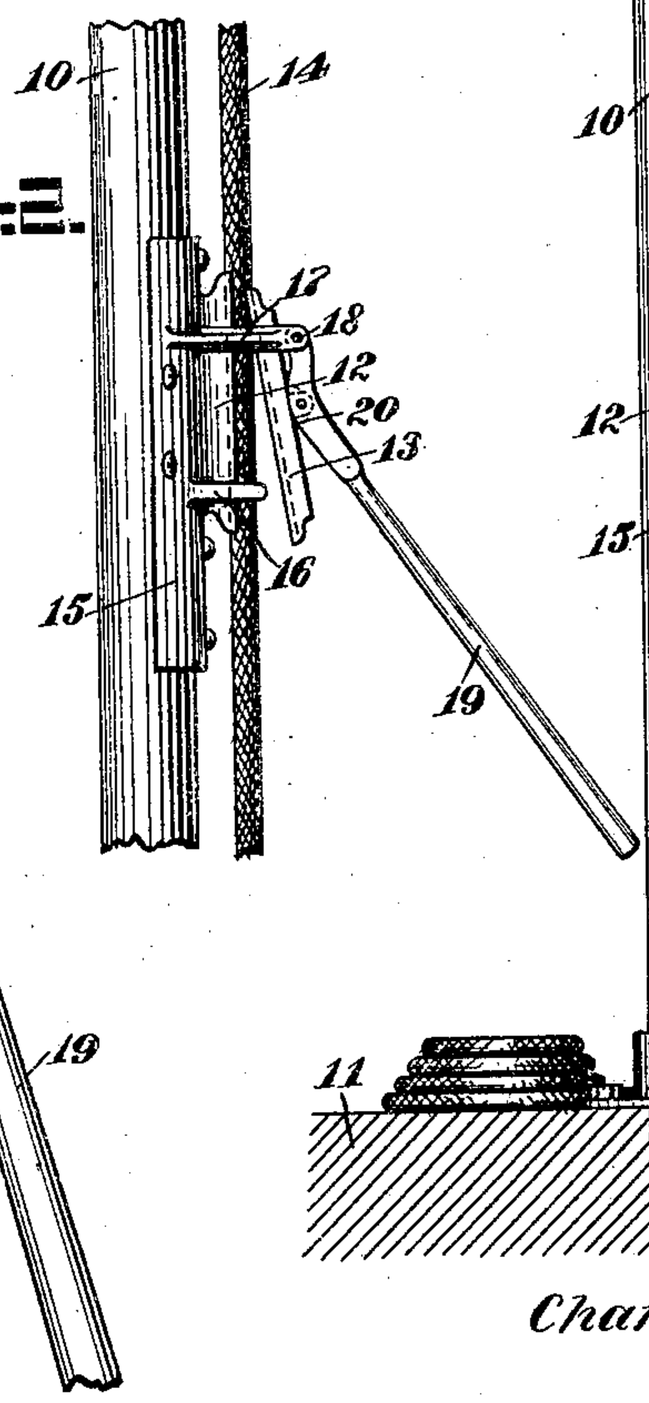




Fig. 3.




WITNESSES

F. G. Hachenberg

W. W. Cobb

INVENTOR

Charles J. Christensen

BY

Munn & Co.

ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLES J. CHRISTENSEN, OF NEW YORK, N. Y.

## DEVICE FOR LOWERING LIFE-BOATS.

940,512. Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed June 3, 1909. Serial No. 499,846.

*To all whom it may concern:*

Be it known that I, CHARLES J. CHRISTENSEN, a subject of the King of Norway, and a resident of the city of New York, Ulmer Park, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Device for Lowering Life-Boats, of which the following is a full, clear, and exact description.

The invention is an improvement in appliances for controlling the lowering of life boats from the davits of ships or vessels, etc. and has for its purpose to facilitate the launching of the boat and avoid the wearing on the ropes incident to passing the ropes about cleats and permitting them to slip thereon under the weight of the life boat, as is the usual practice. To this end I provide each suspending rope of the life boat with a rope clamp, the clamps being secured to the davits or deck of the boat and comprising two jaws between which the rope passes, and a cam lever for retracting the outer jaw and applying pressure to the rope, the lever being fulcrumed at its outer end and pivoted at the cam to the outer jaw.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a section through the deck of a ship adjacent to one of the davits, showing the latter in elevation broken away at the top and having my improved rope clamp applied thereto; Fig. 2 is a view of a portion of the davit and clamp, showing the outer or movable jaw of the clamp retracted to permit of the free movement of the rope; Fig. 3 is a central vertical section of the clamp; Fig. 4 is a side view of the inner jaw and base of the clamp; Fig. 5 is an end view of the same; Fig. 6 is a side view of the outer and movable jaw of the clamp; and Fig. 7 is an end view of the same.

For the purpose of illustrating the use and application of my invention I have shown the davit 10 as applied to the deck of a ship or vessel 11. To the outer face of the davit, when the same is turned inwardly, is secured at a convenient elevation for operation by one standing on the deck of the boat, a rope clamp having a fixed and a movable jaw 12 and 13 respectively, between which passes the usual suspending rope 14 for supporting and lowering the life boat. The jaws 12 and 13 are made relatively long and gouged or grooved on their inner faces to give a substantial bearing on the rope. The inner jaw is made integral or otherwise rigid with a base-plate 15, which is transversely curved to conform to the cylindrical surface of the davit, the base being extended beyond the fixed jaw 12 at each end and at the sides in order that sufficient surface may be provided for the bolt or rivet openings and a substantial bearing on the davit afforded.

Rigid with the base and side faces of the fixed jaw are pairs of guide posts 16 and 17 respectively, each pair of posts being located adjacent to the outer end portions of the jaws and projecting a substantial distance beyond the clamping face of the fixed jaw to direct the movable jaw 13 in its movement. The movable jaw 13 is of a width approximately equal to the width of the jaw 12 and to the distance between either pair of posts. The posts at the upper or forward end of the jaws are made relatively stronger than the other pair of posts, as can be seen by the strengthening ribs, best shown in Figs. 4 and 5, and are also slightly longer to carry the fulcrum pin 18 of a cam lever 19, the cam 20 of which is formed by offsetting the inner end portion at a substantial angle, as best shown in Fig. 3. The central portion of the cam is recessed to receive an ear 21 projecting from the outer face near the center of the jaw 13, the ear and lever being connected by a pivot-pin 23, so located as to bring the face of the cam into contact with the outer face of the jaw 13. As the cam is applied to the davit, the lever hangs downwardly so that its weight tends to force the movable jaw inwardly to the fixed jaw, and by reason of its especial mounting and connection with the movable jaw, when the lever is drawn outwardly the lower jaw will assume a downwardly and outwardly-inclined position, as shown in Fig. 2, whereby the rope can freely enter the clamp and pass therethrough when the life boat is lowered.

In lowering the boat, the davits are swung outwardly in the usual manner, which brings the clamps to the inside of the deck, where they are accessible. With an operator at each clamp, the boat may be rapidly dropped and the descent quickly checked, enabling the launching to be successfully carried out in a fraction of the time required where the suspending ropes are carried about the cleats and slipped thereon under the weight of the

boat, as is the usual practice, in addition to avoiding the great wear on the ropes caused by kinking them around and sliding them on the cleats.

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

1. The combination of rope clamping jaws, one of which is fixed and the other laterally movable to and from the fixed jaw, guides to direct the movement of the movable jaw, arranged at opposite sides of the fixed jaw and projecting beyond its clamping face, and an operating lever fulcrumed between the guides and having a cam intermediate its length pivotally connected to the movable jaw.

2. The combination of a base, a rope clamping jaw rigid with the base, guide-posts rigid with the base at the opposite sides and adjacent to one end of the said jaw, a rope clamping jaw laterally movable to and from the first-named jaw between said guide-posts, and a cam lever to operate the movable jaw, fulcrumed at its outer end between said guide posts and pivoted to the movable jaw adjacent to the cam.

3. The combination of a fixed rope-clamping jaw, guide posts arranged in pairs at the opposite sides of the clamping jaw and extended beyond the clamping face thereof, a laterally movable rope-clamping jaw guided between the posts, and an operating lever fulcrumed at its inner end between one pair of said posts and pivotally connected at an intermediate point to the movable clamping jaw.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES J. CHRISTENSEN.

Witnesses:

F. D. AMMEN,

PHILIP D. ROLLHAUS.