Aug. 9, 1932. W. R. DEAN 1,870,714

LIFEBOAT SECURING MEANS

Filed April 29, 1930 2 Sheets-Sheet 1

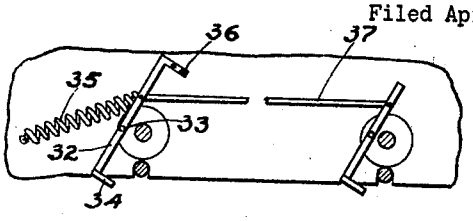


Fig. 3.

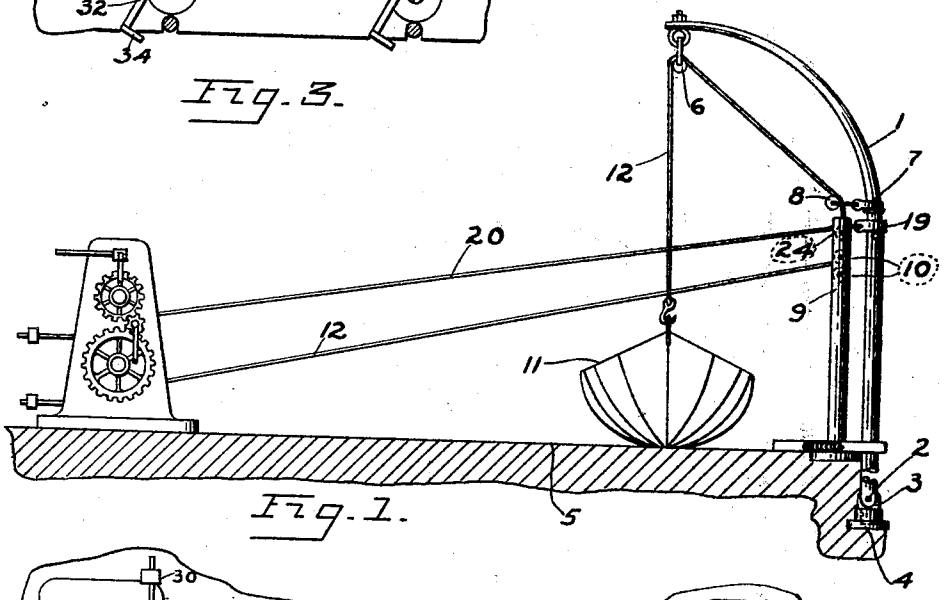


Fig. 1.

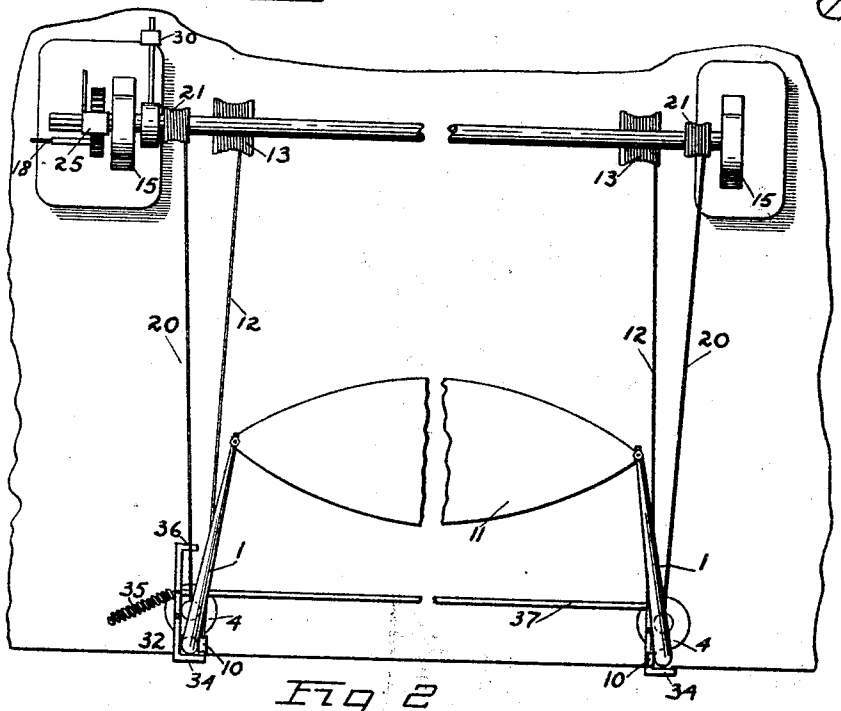


Fig 2

INVENTOR.
W. RAY DEAN
BY
Munn & Co.
ATTORNEYS.

Aug. 9, 1932. W. R. DEAN 1,870,714

LIFEBOAT SECURING MEANS

Filed April 29, 1930 2 Sheets-Sheet 2

Fig. 4.

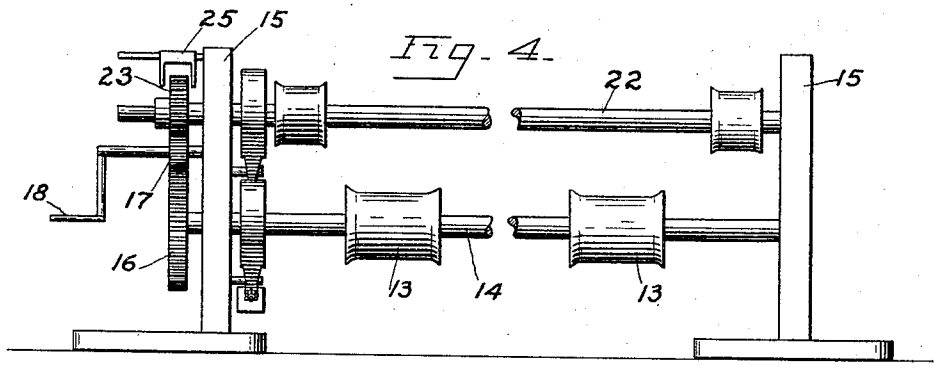


Fig. 5.

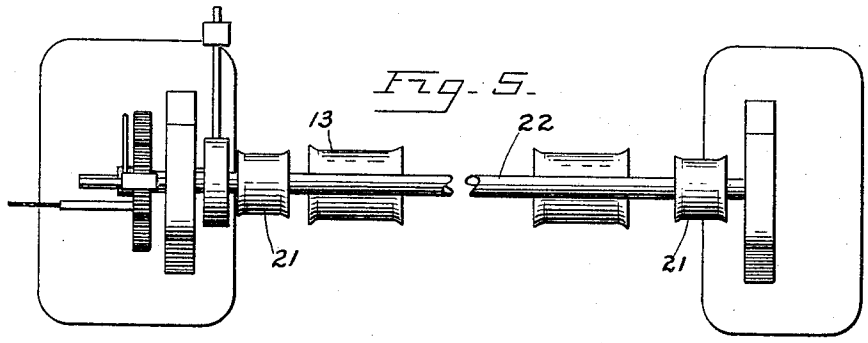
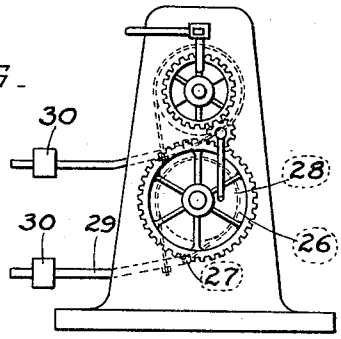


Fig. 6.



INVENTOR.
W. RAY DEAN
BY Munn & Co.
ATTORNEYS.

Patented Aug. 9, 1932 1,870,714

UNITED STATES PATENT OFFICE

WILBUR RAY DEAN, OF BANDON, OREGON

LIFEBOAT SECURING MEANS

Application filed April 29, 1930. Serial No. 448,307.

The present invention relates to improvements in life boat securing means, and its principal object is to provide means for securing a life boat relative to a ship in such a manner that when the life boat is to be lowered in case of emergency it may be landed a considerable distance away from the ship so as to avoid danger of collision with the ship.

A further object of the invention is to provide a life boat securing means that allows the life boat to be operated very expediently and quickly by the efforts of a single person.

More particularly it is proposed in the present invention to provide davits for supporting the life boat which are hinged so that when the life boat is to be lowered the davits may be swung on their hinges away from the ship whereby the danger of collision during the lowering operation is practically averted. It is further proposed in the present invention to provide winches for operating the life boat securing device, independent winches being provided for raising and lowering the boat relative to the davits and for lowering and raising the davits themselves.

It is further proposed in the present invention to provide means whereby the winches may be operated either together or separately. It is further proposed to provide means for locking the hinged davits in their normal position, the said means being made to be quickly releasable in case of emergency.

Further objects and advantages of my invention will appear as the specification proceeds.

The preferred form of my invention is illustrated in the accompanying drawings, in which

Figure 1 shows my arrangement in end elevation;

Figure 2 shows the same arrangement in top plan view;

Figure 3 shows a detailed view of a locking means in plan view;

Figure 4 an elevation of the winches used for operating my mechanism;

Figure 5 a top plan view of the winches, and

Figure 6 an end view of the winch mechanism shown in Figures 4 and 5.

While I have shown only the preferred form of my invention, I wish to have it understood that various changes or modifications may be made within the scope of the claims hereto attached without departing from the spirit of the invention.

Referring to the drawings in detail, it will be seen that two davits 1 of conventional form with a straight lower section, and a curved upper section are pivoted as shown at 2 to its supporting member 3, which latter is swiveled in a base 4 suitably supported in the side of the ship in operative proximity to one of the decks shown at 5. From the upper end of each davit is supported a sheave 6 and an intermediate section of each davit supports a ring 7 which serves as supporting means for a second sheave 8. A standard 9 is mounted in close proximity to each davit and has two rollers 10 mounted therein. The life boat 11 is normally disposed underneath the upper ends of the davits when the latter are turned inwardly and a rope 12 connects each end of the boat with a winch indicated at 13, the rope passing over the sheaves 6 and 8, and between the rollers 10 so that the boat may be raised or lowered by operation of the two winches 13. The latter are mounted on the shaft 14 supported in two frames 15 and having a gear wheel 16 at one end which meshes with a pinion 17 adapted for manual operation by means of a crank 18.

A second ring 19 is revolvably mounted on each davit 1 and is connected through the rope 20 with a second winch 21, the two latter winches being mounted on a shaft 22 supported in the two frames 15 and having a gear wheel 23 adapted for meshing with the pinion 17 so that when the latter is rotated both of the shafts 14 and 22 are rotated for operation of the two ropes 12 and 20. The rope 20 passes over a roller 24 supported in the standard 9.

The gear wheel 23 is slidable on the shaft 22 and may be disengaged from the pinion

17 by operation of a conventional actuating means such as the fork indicated at 25.

Each of the two shafts 14 and 22 is preferably provided with suitable brake mechanism shown in detail in Figure 6, the brake in each case comprising a brake band 26 fastened to a pin 27 with one end, and extending around a drum 28 and connected with its free end to a handle 29, which is also pivoted at 27. A weight 30 on the handle 29 insures normal braking action.

For holding the davits in their normal vertical positions I provide suitable locking means illustrated in detail in Figure 3, each locking means comprising a lever 32 pivoted to the top of the deck or some other suitable support as at 33 so that a finger 34 extending from one end of the lever may close the recess in which the davit is mounted when pulled into operative position by means of a spring 35. When it is desired to release the davits the operator pushes the lever over against the tension of the spring 35 and then fastens the other end of the lever in the position shown in Figure 3 by means of a bolt 36 or any other suitable device. The two levers are interconnected for common action by a link 37.

The operation of the device will be readily understood from the foregoing description. Normally the various parts are in the position shown in the various figures, particularly in Figures 1 and 2. In case the life boat is to be used the persons to be saved enter the same and an operator raises the boat slightly by operation of the winches 13, and thereupon pushes the boat outward, which causes the davits to turn on their axes and to move the boat over the edge of the ship. The operator then proceeds to lower the boat, which he may do by simultaneous operation of both sets of winches, the feeding out of the rope 20 allowing the davits to swing away from the ship into substantially horizontal position, while the feeding out of the rope 12 allows the boat to be lowered relative to the davits. It will be noted that in this manner the boat is spaced from the side of the ship by the full length of the davits, and that the danger of collision of the boat with the ship is made very remote thereby. For pulling the boat into position, such as shown in Figure 1, the operation just described is merely reversed, the end crank being used for pulling the ropes in the desired direction. It should be understood that while in the above specification, I have principally referred to manual operation of the crank 18, operation by motor power may be substituted whenever the size of the boat is such as to make operation by manual labor inefficient.

I claim:

Life boat securing means for a ship comprising a davit hinged to the edge of the ship with freedom of revolving motion and having a sheave supported in the upper end thereof, a standard mounted adjacent the davit and having sheaves supported therein, winches mounted in spaced relation to the davit and the standard, a cable connecting one of the winches and the davit and guided over one of the sheaves in the standard for lowering and raising the davit and a second cable connecting the other winch and a boat disposed under the davit and guided over a sheave in the standard for lowering and raising the boat.

Signed at Bandon in the county of Coos and State of Oregon this 17th day of April A. D. Nineteen hundred and thirty.

WILBUR RAY DEAN.