

No. 670,659.

Patented Mar. 26, 1901.

S. BERGSTEIN.

HOISTING OR LOWERING DEVICE FOR BOATS.

(Application filed May 25, 1900.)

(No Model.)

Fig. 1.

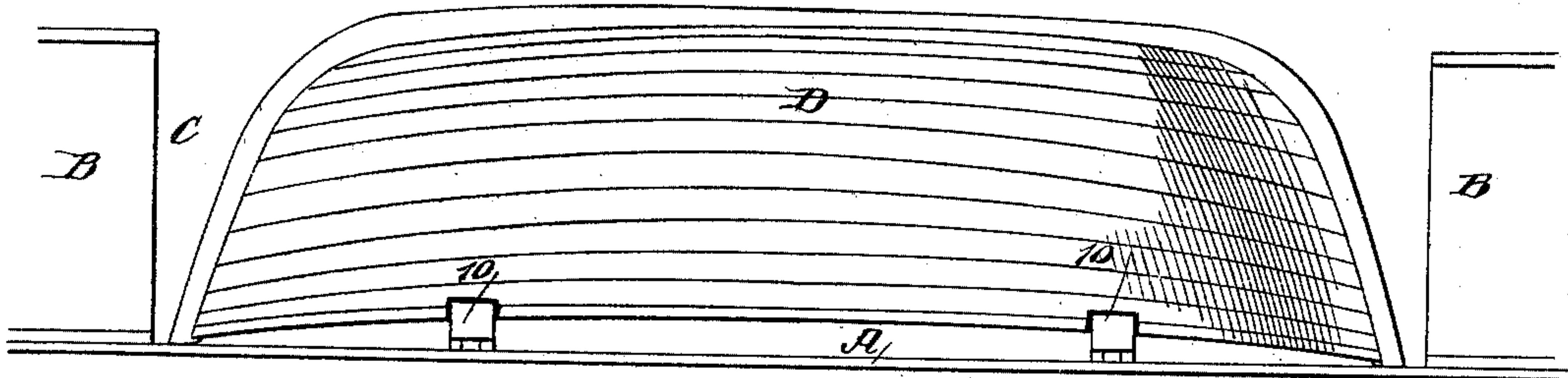


Fig. 2.

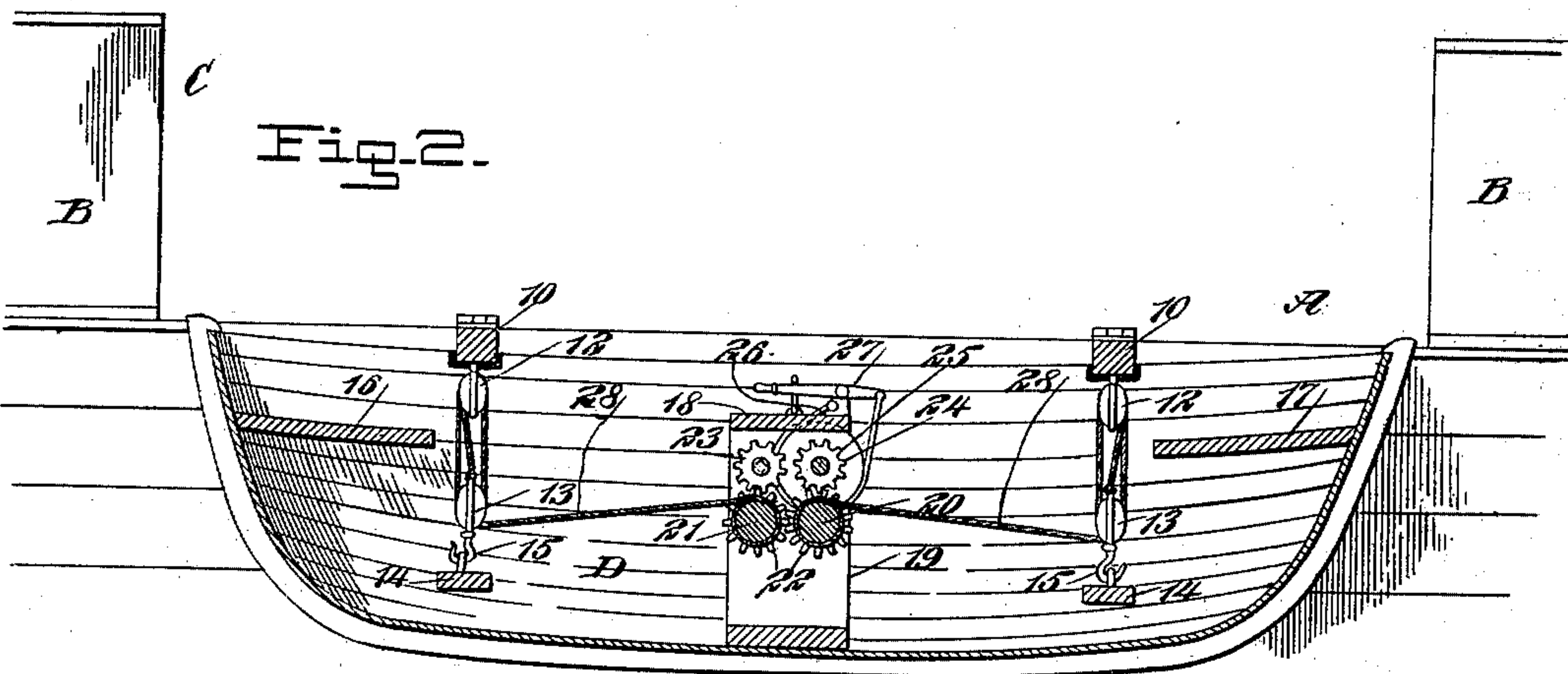
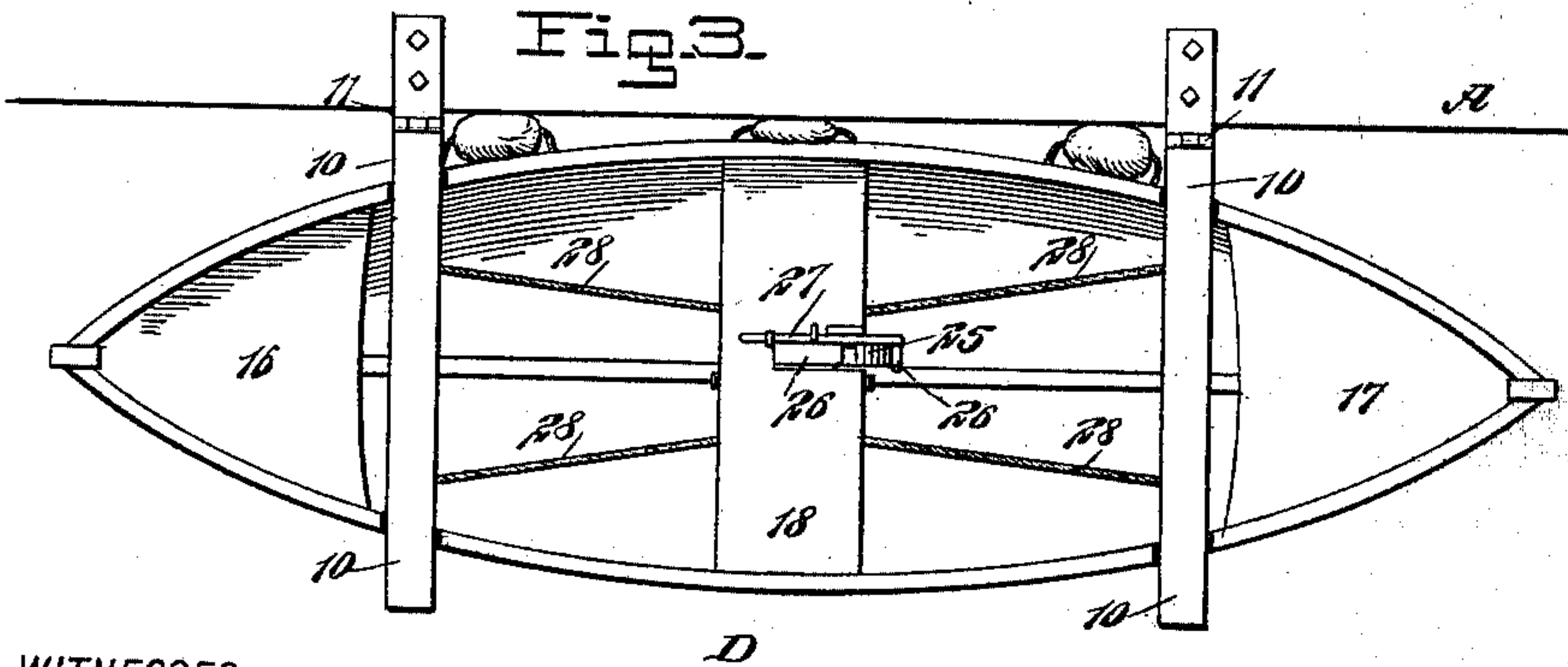


Fig. 3.



WITNESSES:

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HOISTING OR LOWERING DEVICE FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 670,659, dated March 26, 1901.

Application filed May 25, 1900. Serial No. 17,943. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL BERGSTEIN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Launching Device for Life or Small Boats, of which the following is a full, clear, and exact description.

The invention is an improvement in the class of davits which are so hinged as to be adapted to swing outward into horizontal position when it is required to launch the boat.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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 figures.

Figure 1 is a side elevation of a portion of a vessel's hull and a side elevation of a boat upturned on the deck and connected with the improved davits. Fig. 2 is a side elevation of a portion of a vessel's hull and a vertical section through the davits and boat suspended therefrom, the boat being shown in position for lowering; and Fig. 3 is a plan view of the boat in the position shown in Fig. 2, illustrating also a portion of the deck-line of the vessel.

A represents the deck of a vessel, B a side rail resting on the deck or above the same, and D represents a boat which when not in use is upturned on the deck within an opening C made in the rail. The davits 10 are connected by hinges 11 or equivalent means to the deck A at the opening C in the rail, and the said davits are so attached to the deck that they may be folded inboard, resting on the deck, or be carried outboard to a horizontal position. The boat D is detachably connected to the davits by tackle arranged as shown particularly in Fig. 2, in which blocks 12 are connected with the under portions of the davits 10, which blocks 12 are associated with corresponding lower blocks 13, and these latter blocks 13 are attached by hooks 15 or their equivalents to cross-bars 14, forming a portion of the structure of the lower portion of the boat D. The gunwales of the boat are provided with notches to receive

the davits, as shown in Figs. 1 and 2. The boat D is shown as provided with bow and stern seats 16 and 17 and with a midship-seat 18, the tackle being located between the bow and stern seats. A casing 19 is erected below the midship-seat 18, and in this casing two drums 20 and 21, placed side by side, are suitably mounted, and these drums are provided with meshing gears 22, as is shown in Fig. 2. A pinion 23 engages with the gear of the drum 21, for example, and to this pinion 23 or the shaft of said pinion a crank-handle is attached, so that the drums may be operated to wind up the tackle thereon and hold the boat D close to the davits 10, and these davits may simply rest upon the gunwale of the boat or may be made to enter recesses in the gunwale, as may be found desirable. The gear of the other drum 20 is in mesh with a pinion 24, suitably mounted in the casing 19, and this pinion 24 is attached to or connected with a brake-wheel 25, controlled by a suitable strap-brake 26, which strap-brake is shown as attached at one end to a lever 27, fulcrumed upon a suitable support secured upon the midship-seat 18, as is also shown in Fig. 2, and the opposite end of the brake 26 is secured to said support. The lever 27 may be held by any suitable catch or fastening device in such position as to hold the brake applied to the brake-wheel 25. The drums and friction brake-wheel being arranged under the middle seat are out of the way, while the hand-lever 27 is above the seat, so as to be instantly accessible. Ropes or cables 28 are attached to the lower blocks 13, and these ropes or cables are passed around the pulleys of the upper and lower blocks 12 and 13 and are thereupon carried to an engagement with adjacent drums 20 and 21. Preferably the cables or ropes 28 are so attached to the drums that they may be readily cast off therefrom.

When the boat D is not required, the davits 10 are carried inboard and rest on the deck, as shown in Fig. 1, and the boat carried by the davits will likewise rest on the deck in an upturned position. Whenever the boat D is required, it is simply necessary to cast off the boat, throwing it over the side of the vessel at the opening C in the rail B. The boat will then drop outboard to the

horizontal position shown in Figs. 2 and 3. After the boat has received its load the officer or any designated person need simply release the brake 26, whereupon the boat will
5 immediately drop to the water, and when the tackle is cast off from the cross-bars 14 and drums 20 and 21, which operation is quickly effected, the boat may be rowed away from the side of the vessel. In an emergency,
10 however, if there is not sufficient time to effect a casting off of the tackle without endangering the launched boat the ropes 28 may be cut.

It will be understood that suitable cushions
15 may be placed between the outer surface of the inner side of the boat D and the hull of the vessel, so that in a heavy sea the boat will not be crushed by contact with the vessel's hull, and these cushions or fenders are
20 preferably attached to the boat.

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

1. The combination, with two parallel dav-

its, each hinged to the deck as described, 25 whereby they are adapted to swing outward into horizontal position, of a boat whose gunwale is provided with notches to receive the davits, and tackle detachably connecting the
30 davits and boat, for holding the latter immovable on the davits, until required to be released, as specified.

2. The combination, with a ship's deck having the rail cut out as shown, of davits which are secured to the deck within the rail-open- 35 ing thus formed, and hinged and adapted to swing outward into horizontal position, and tackle attached to the foldable portions of the davits and adapted for detachable connection with a boat, as shown and described. 40

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

SAMUEL BERGSTEIN.

Witnesses:

J. FRED. ACKER,
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