

No. 731,143.

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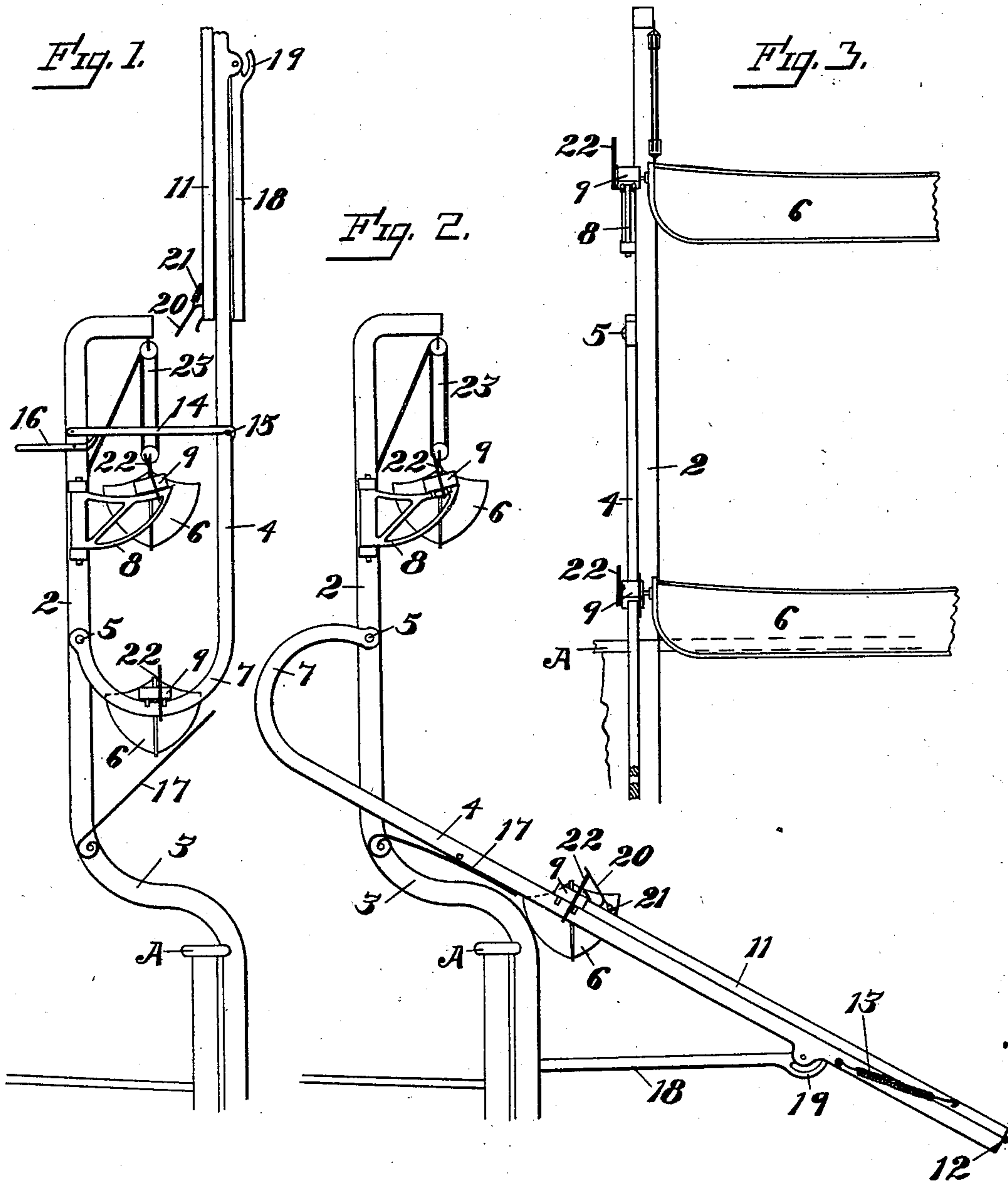
S. H. URY.

LIFE BOAT LAUNCHING APPARATUS.

APPLICATION FILED SEPT. 11, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses,  
Dudley Moss.  
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Inventor,  
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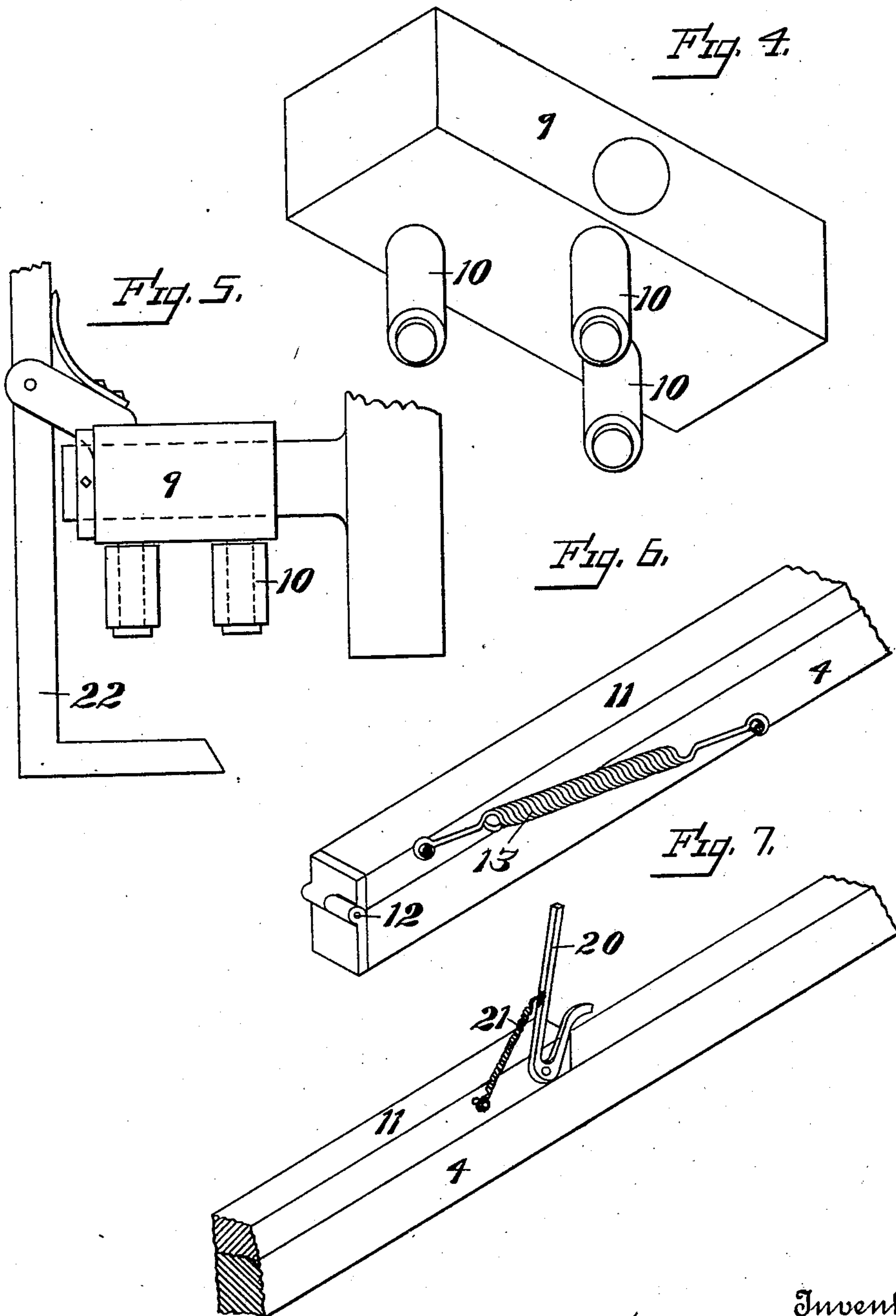
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# UNITED STATES PATENT OFFICE.

SOLOMON H. URY, OF SAN LEANDRO, CALIFORNIA.

## LIFE-BOAT-LAUNCHING APPARATUS.

**SPECIFICATION** forming part of Letters Patent No. 731,143, dated June 16, 1903.

Application filed September 11, 1902. Serial No. 122,915. (No model.)

*To all whom it may concern:*

Be it known that I, SOLOMON H. URY, a citizen of the United States, residing at San Leandro, county of Alameda, State of California, have invented an Improvement in Life-Boat-Launching Apparatus; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in devices for launching a life-boat from the sides of a vessel. Its object is to provide a simple means by which a boat may be lowered gently, safely, and rapidly.

It consists of the parts and the construction and combination of parts to be hereinafter described, having reference to the accompanying drawings, in which—

Figure 1 is an end view of my invention, showing apparatus in upright position. Fig. 2 is the apparatus in position ready to launch. Fig. 3 is a front view of apparatus ready to launch. Fig. 4 is a perspective view of shoe 9, Fig. 1. Fig. 5 is an end view of shoe 9, Fig. 1. Fig. 6 is a perspective view of lower ends of bars 4 and 11, Fig. 2. Fig. 7 is a view of upper end of bar 11, Fig. 2.

A represents a ship's rail, to which is rigidly secured the uprights 2, separated a distance approximately equal to a boat length. These uprights are crooked, as shown at 3, so as to project inwardly over the deck a space equivalent to the width of a boat. A bar 4, curved at the lower end, is pivoted to each upright just above the rail, as at 5. The boats represented at 6 are ordinarily supported between the uprights 2 and the bars 4, the lower boat on the curved horizontal portion 7 of bars 4, and the upper boat on the pivoted bracket-hooks 8 on the uprights. Each boat is provided at its ends with shoes 9, having rollers 10, engaging the sides of the supports 7 and 8. The length of the bars 4 is such that the outer end of the latter will strike the water at an incline preferably not greater than forty-five degrees. A bar 11 is hinged, as shown at 12, to the outer end of each bar 4 and is normally folded over and upon the latter by reason of a spring connection 13, secured to each member adjacent to the hinge. The bars 4 are held in vertical position when the apparatus is not in use by hooks 14, pivoted to the uprights 2 and engaging projections 15 on the

bars. These hooks are released, when it is desired to launch a boat, by means of the trip-levers 16. On the release of the hooks 15 the bars 4 fall away from the ship. Their fall is relieved by the springs 17, secured to the upright and adapted to come into frictional contact with the bent portions 7 of the bars and the latter are limited in their inward movement toward the sides of the vessel by reason of the pivoted arms 18, which normally hang pendent against the bars when the latter are in vertical position. The arc of movement of these arms is practically limited to ninety degrees by suitable stop means, as 19, and the length of the arms is such that the bars will be supported in their inclined position against the side of the ship, as shown in Fig. 2.

In operation, assume a life-boat to be supported on the curved portions 7 of the bars by the shoes 9 and a second boat to be similarly supported on the hook-brackets 8. At a signal the trip-levers 16 are actuated simultaneously to allow the bars to fall outwardly, as described. The lower boat moves on the bars 4, as on skids, till the shoes engage the ends of the folded members 11, by which it is held, until these members are lifted to allow the shoes to pass beneath. For the purpose of prying up the end of the members 11 there is provided a bell-crank lever 20 on the end of each member adjacent to the point of engagement of the shoes. One arm of a lever 20 is adapted to bear on a shoe 9 as a fulcrum, while the other arm is to be engaged by an operator situated in the bow or stern of the boat. A spring 21 ordinarily throws the lever back upon the member 11, so that the lever will not be struck by the shoe as it slides against the end of the member. The shoes are prevented from jumping the track by means of the lever-hooks 22, pivoted to the shoes and having a portion engaging the under side of the bars 4. With the boat in position against the ends of members 11 it may be loaded with passengers. When all is in readiness for the lowering of the boat into the water, the levers 20 are actuated simultaneously to pry up the ends of the hinged members 11, whereupon the shoes slide down their respective ways, with the spring connections 13 acting to press the members 11 down upon the shoes as a brake and tending to



check the too-rapid descent of the boat. As the boat strikes the water the hooks 22 are disengaged in any well-known manner from the ways and the boat is free to be rowed  
5 away out of engagement with the spring-pressed members 11, which as soon as the removal of the boat permits return again to their original folded position against the ways. The second boat is lowered from its  
10 bracket-supports 8 by means of suitable tackles 23, secured on the uprights 2. When the second boat is suspended by the tackles, the brackets 8 are turned to one side to allow the descent of the boat upon the ways. The  
15 further act of launching is the same as hereinbefore described. The boats may be lifted into position again by means of the tackles 23 and the ways folded into upright position and engaged by the hooks 14.

20 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination in a life-boat-launching apparatus, of supporting and launching  
25 means, ways pivoted to said supporting means, bars hinged to the outer ends of said ways, spring connections between said ways and their respective bars by which the latter are normally folded over upon the ways, and  
30 shoes at the ends of the boat and engaging said ways, substantially as described, slidable upon the ways.

2. The combination in a life-boat-launching apparatus of uprights secured to the ship's  
35 rail, ways pivoted to said uprights, hinged bars on the outer ends of said ways and normally folded over thereupon, means for sustaining said ways in vertical position, means for releasing the ways, and means for slidably  
40 supporting a boat on said ways.

3. The combination in a life-boat-launch-

ing apparatus of upright supports, bars having curved portions pivoted to said supports, boat-supporting means adapted to rest upon  
said curved portions when said bars are in  
45 upright position, said boat-supporting means slidable on said bars, means for releasing the bars from their normal upright position, and other bars hinged to the outer ends of said first-named bars, substantially as and for the  
50 purpose described.

4. The combination in a life-boat-launching apparatus of upright supports, ways substantially as described pivoted to said supports, means for holding the ways normally  
55 in an upright position, means for releasing the ways from their normal position, spring-stop means 17 adapted to engage the ways to ease the outward movement of the latter about their pivots, means for supporting said  
60 ways at an incline from the side of the vessel, and hinged brake-bars 11 on said ways.

5. The combination in a life-boat-launching apparatus, of upright supports secured rigidly to a ship's rail, ways having curved  
65 portions pivoted to said uprights, means for holding the ways vertical, boat-supporting shoes embracing the ways and slidable thereon, pivoted boat-supporting bracket-arms on  
said uprights, means whereby the boat may  
70 be transferred from the bracket-arms to the ways, spring-actuated brake-bars hinged to the outer ends of said ways and means for supporting the ways when in inclined position from the sides of the vessel.  
75

In witness whereof I have hereunto set my hand.

SOLOMON H. URY.

Witnesses:

JOHN F. HOPPER,

J. E. QUINN.