

No. 702,399.

Patented June 17, 1902.

L. BROWN.
LIFE BOAT.

(Application filed June 7, 1901.)

(No Model.)

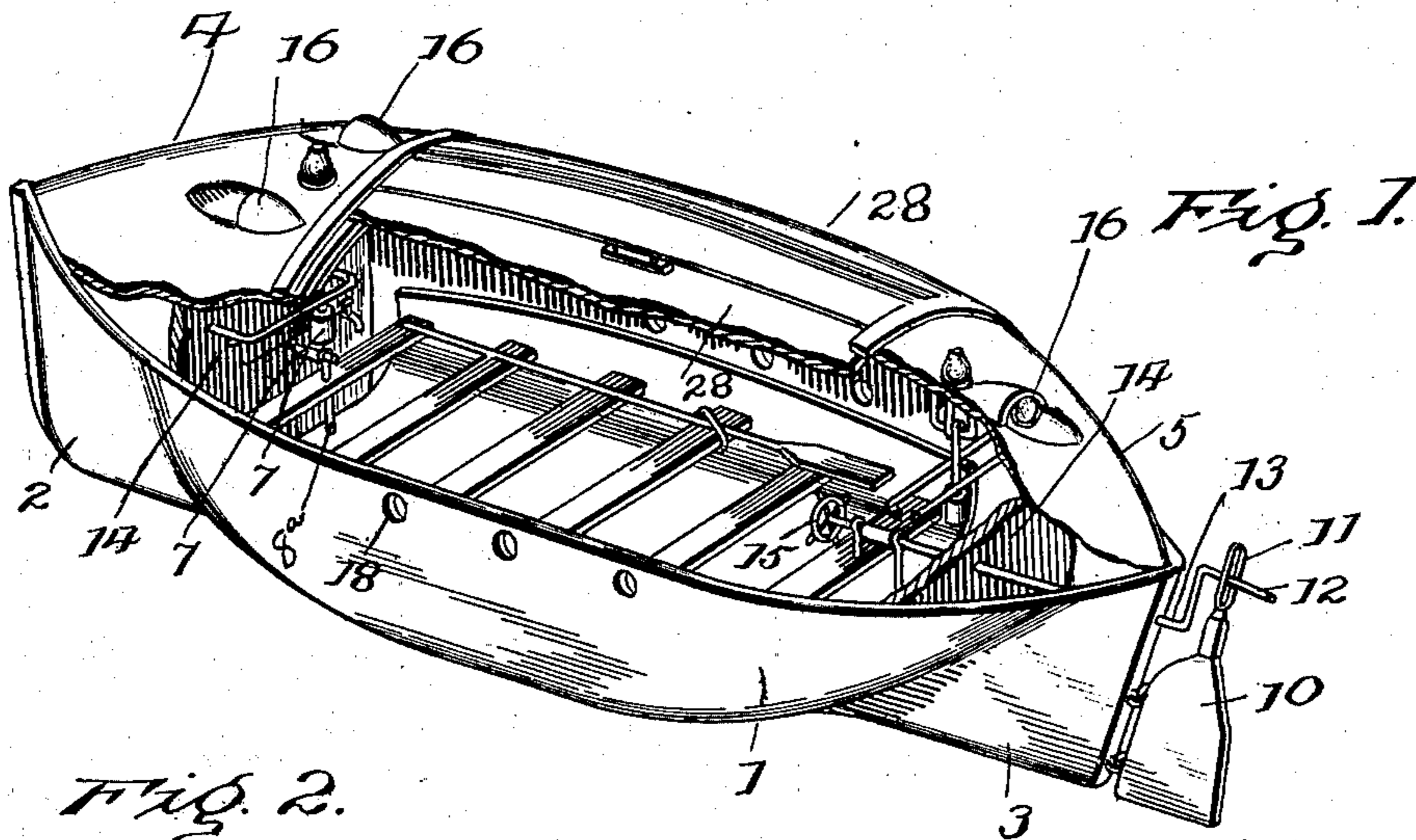


Fig. 2.

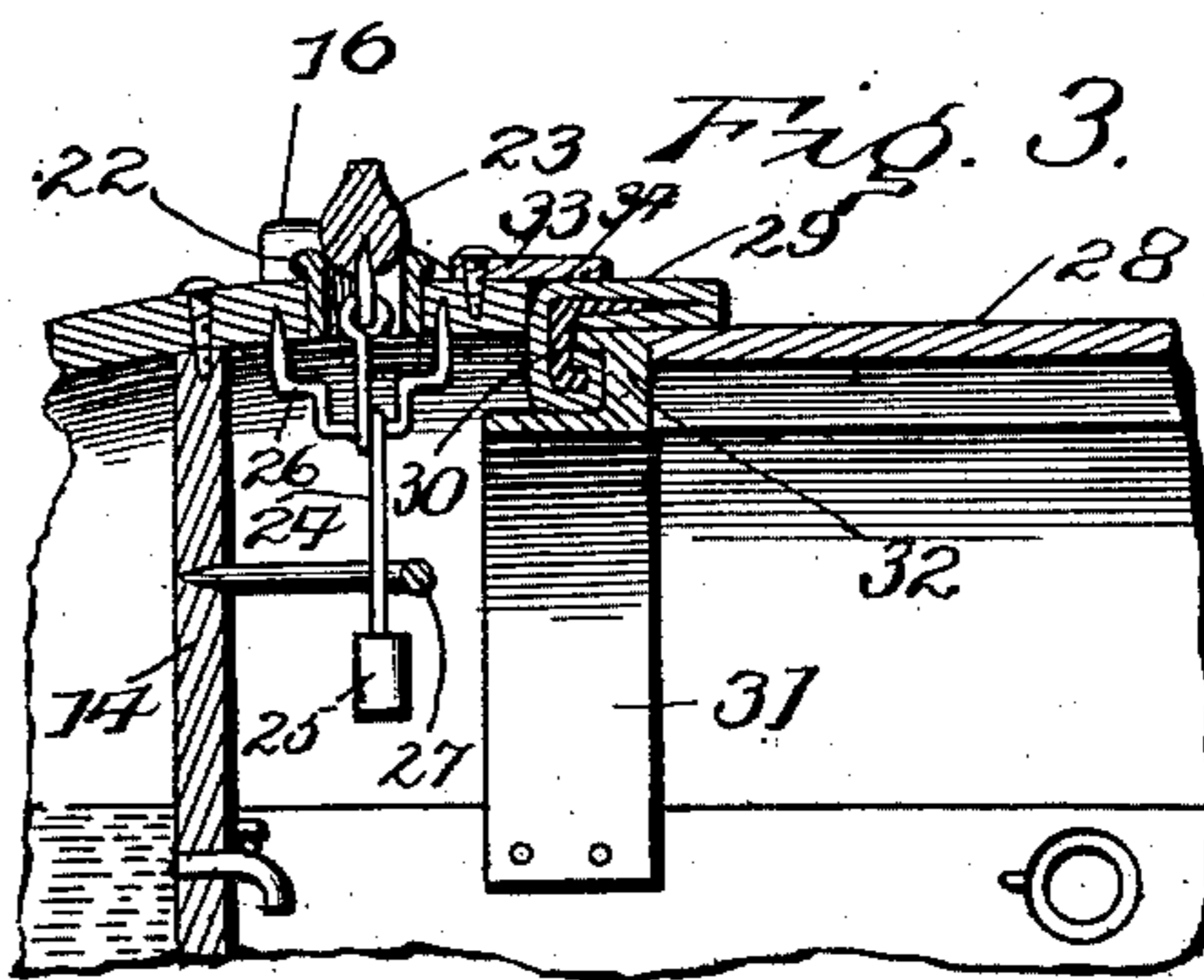
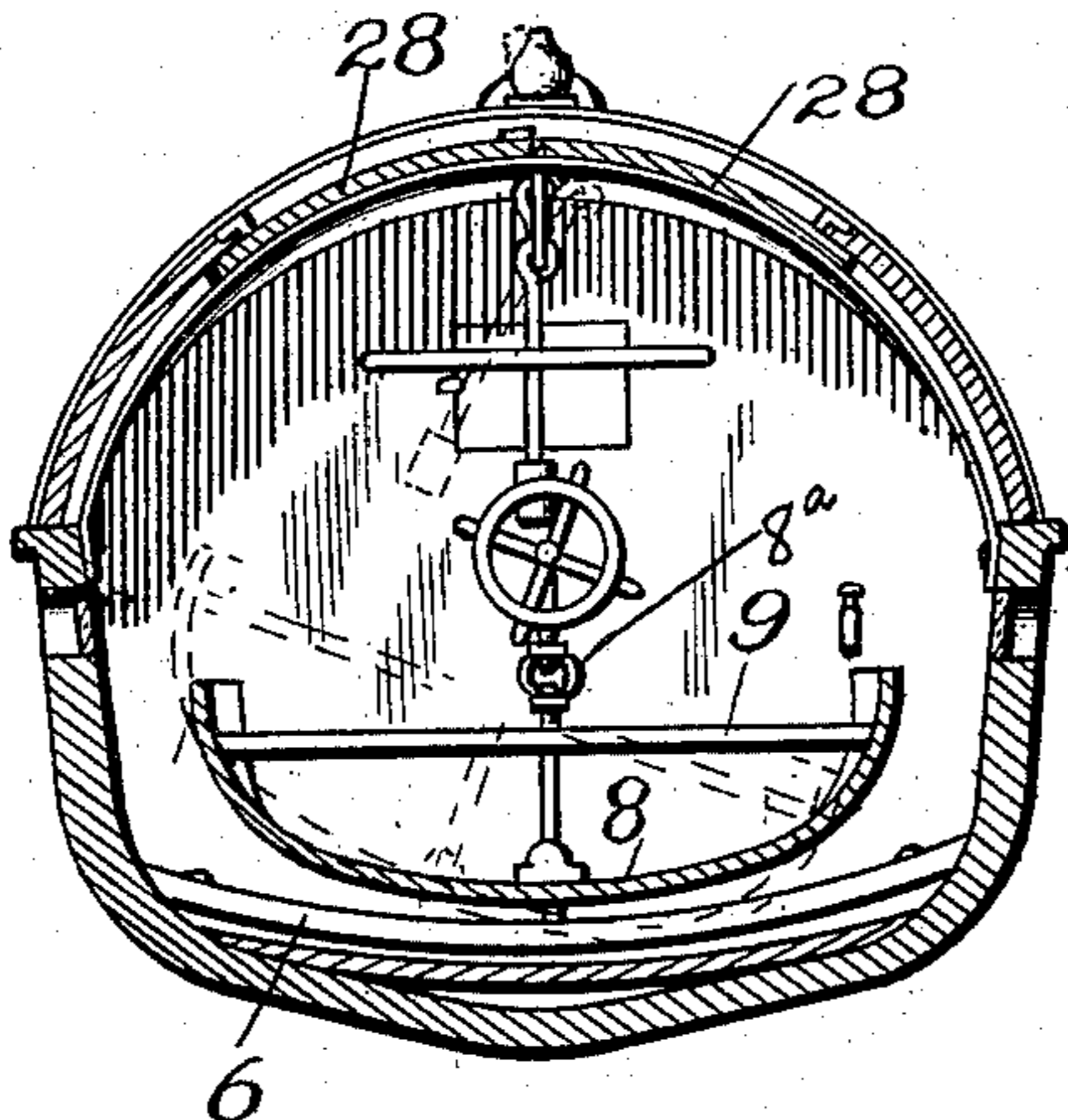


Fig. 3.

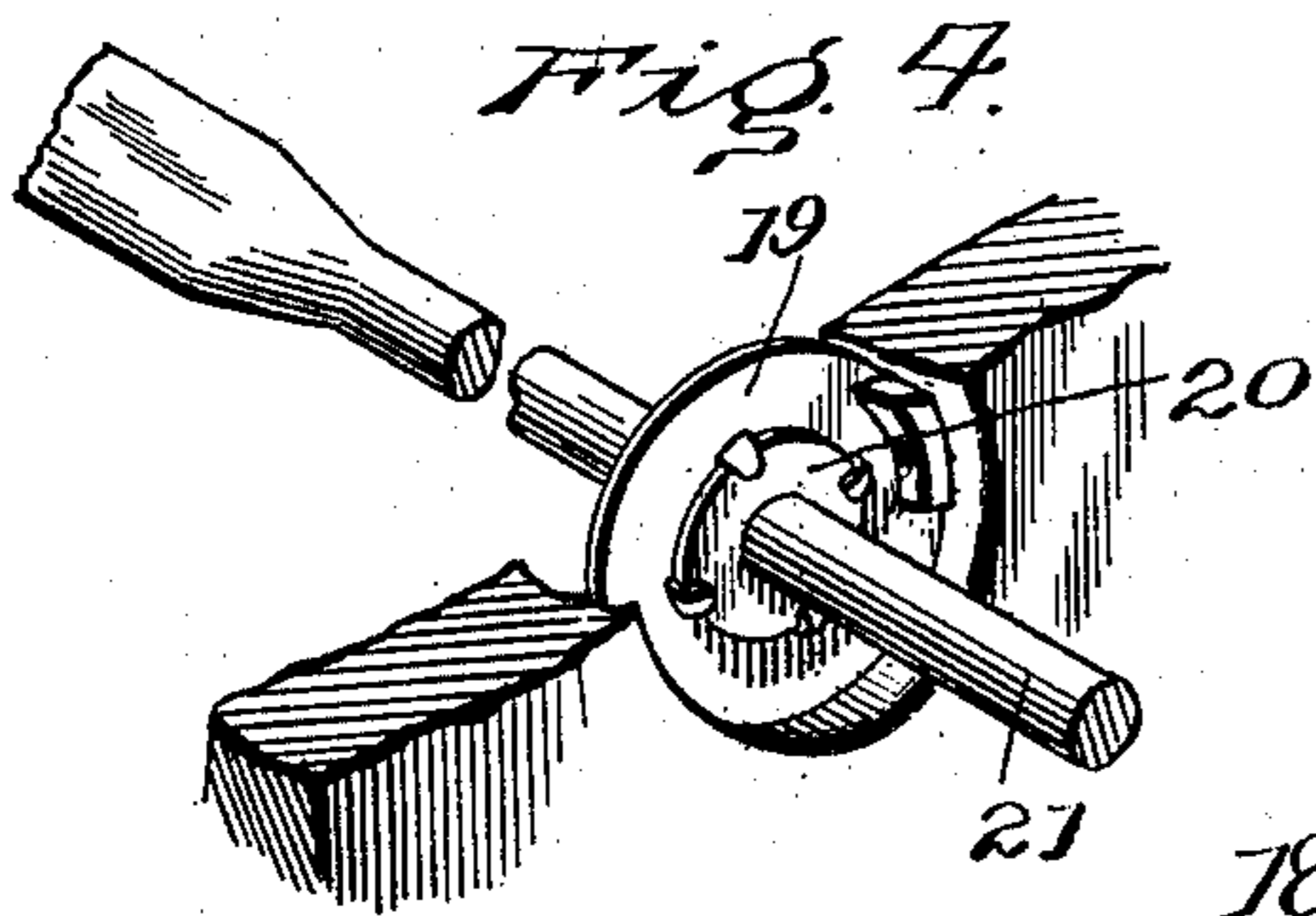


Fig. 4.

Fig. 5.

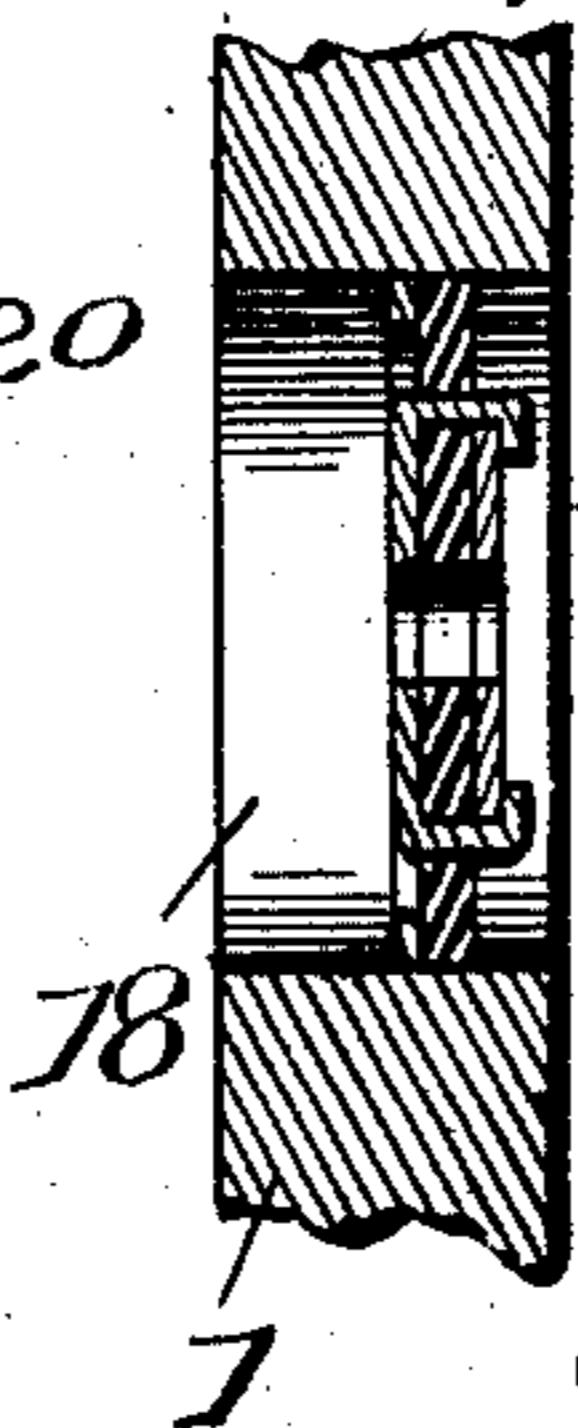
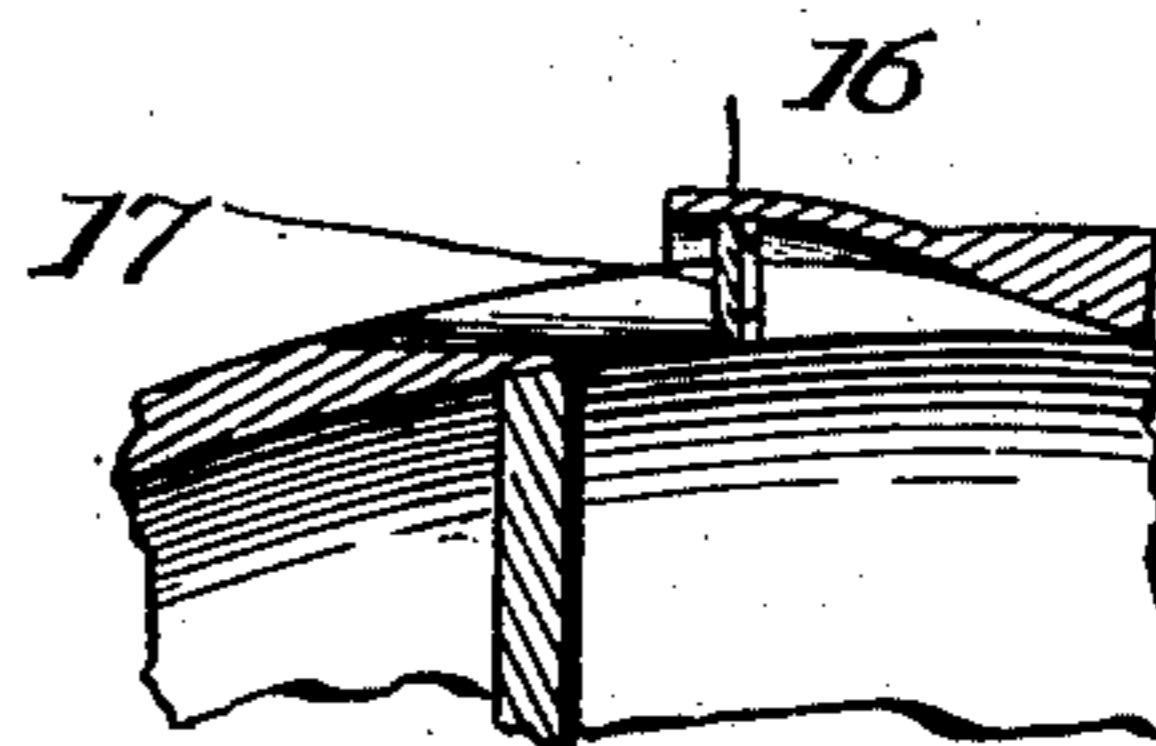


Fig. 6.



Inventor

Lemuel Brown.

Witnesses

Wm. J. Jacobi
A. G. Miller.

W. J. Fitzgerald
Attorneys

UNITED STATES PATENT OFFICE.

LEMUEL BROWN, OF SAUGATUCK, MICHIGAN.

LIFE-BOAT.

SPECIFICATION forming part of Letters Patent No. 702,399, dated June 17, 1902.

Application filed June 7, 1901. Serial No. 63,653. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL BROWN, a citizen of the United States, residing at Saugatuck, in the county of Allegan and State of Michigan, have invented certain new and useful Improvements in Life-Boats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to boat construction which while primarily designed as a life-boat will be found to be very desirable and efficient for other uses.

My object is to provide a boat of the character specified which will prove practically non-capsizable.

A further object of my invention is to insure that the interior of the boat will be properly ventilated without liability of the inflow of water.

Other objects and advantages will be made fully apparent from the following specification, considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of my invention complete, showing one side of the boat partly broken away. Fig. 2 is a central transverse section thereof. Fig. 3 illustrates a longitudinal section of a portion of my improved boat. Figs. 4 and 5 illustrate in perspective and vertical section, respectively, means for preventing the inflow of water, though permitting an oar to be employed for propelling the boat. Fig. 6 is a longitudinal section of a portion of the boat, taken on a line with one of the vision-points.

In order to conveniently refer to the several parts of my invention and accessories designed to cooperate therewith, numerals will be employed, the same numeral referring to the same part throughout the several views.

In materializing my invention I provide a body portion, as indicated by the numeral 1, as is common, with the front extension 2 and the dead-wood 3. The body portion also is preferably inclosed at each end, as indicated by the numerals 4 and 5, said ends being preferably cut off from the interior of the boat and utilized as receptacles for fresh water or for ballast, as preferred. The boat is also provided with the false bot-

tom 6, secured in position in any preferred way, while at each end of the interior compartment I erect the brackets 7, designed to afford a support for the movable floor-section 8, said movable floor being preferably formed as an auxiliary boat, the floor being watertight. A suitable number of cross-bars or seats 9 are also provided in order to conveniently seat any persons occupying the interior, a turnbuckle being provided in rod 8^a to adjust the height of floor-section 8. By thus pivotally mounting the movable floor-section 8 I am enabled to compensate for the rocking movement of the boat, it being obvious that the movable floor-section proper will remain substantially in a horizontal position with respect to the transverse plane of the body of the boat. The movable rudder 10 is mounted in position as is common and provided at its upper end with the slotted bar 11, designed to receive the end 12 of the crank 13, said crank being extended through the partition 14 to the interior of the boat, the extreme end of the crank-shaft being provided with the controlling-wheel 15, whereby the rudder may be placed under the complete control of the operator. Suitable vision-points 16 are also provided, a detail construction of which is illustrated in Fig. 6, it being understood that the opening in the vision-point 16 is to be closed by a disk 17, of glass or other transparent substance. I prefer to provide upon the sides of the boat-body a series of apertures 18, which may be filled with heavy glass, or a disk 19 may be properly secured therein. The disk 19 is provided with a central aperture designed to be closed by a suitable covering of some flexible material, as rubber, as indicated by the numeral 20, said cover of rubber being held in position in any preferred way. The covering of rubber is also provided with a central aperture adapted to receive the handle 21 of the oar, the flexibility of the rubber permitting the oar to be freely used, yet at the same time excluding the water.

In order to insure that the interior of the boat will be provided with proper ventilation and at the same time exclude the water, I provide the form of valve indicated in Fig. 3 and consisting of a suitable opening formed in the upper portion of the boat, said open-

ing being preferably provided with a collar 22 of some flexible substance, as rubber, adapted to form a seat for the valve or ball 23, which latter is pivotally connected to the
 5 controlling member 24, the lower end of which is provided with the weight 25. The stem 24 is wrapped loosely around the contiguous part of the bracket 26, while the upper end thereof is pivotally connected in any preferred way to the valve 23, and it is obvious
 10 that when the boat shall rock laterally that the weight will so act upon the valve as to draw the same downward tightly into engagement with its seat when the boat is in a tipped
 15 condition. It is also obvious that since the shaft 24 is of proper length to hold the valve above its seat when said shaft is in a vertical position it will be impossible for air to enter through the seat excepting when the boat is
 20 in an upright condition. When the boat is tipped laterally, however, the weight will so act upon the valve 23 that it will be drawn downward tightly in engagement with its seat, and thereby insure an exclusion of the water,
 25 a very important and desirable desideratum. A suitable guiding-bracket 27 is also provided, so as to properly circumscribe the movement of the lower or free end of the shaft 24.
 30 In order to render the interior of the boat conveniently accessible, I provide in the upper portion of the middle section thereof or that portion between the partitions 14 any preferred or suitable form of doors 28, as more
 35 clearly illustrated in Figs. 1 and 2, the meeting edges of the doors being suitably provided with a proper form of locking members, whereby they may be tightly secured together as desired. In order to insure that
 40 the water will be excluded from the meeting edges of the door, they may be properly reinforced with soft yielding substance, as rubber. The ends of the doors 28 are each provided with the reinforcing water-excluding
 45 members 29, preferably formed of suitable sheet metal so bent upon itself as to inclose a section of rubber 30. Each end of the boat near the compartment 14 is provided with the arch-section 31, having the upwardly-extend-

ing flange 32, designed to engage the packing 30 of rubber in such a way as to insure the exclusion of the water. The water is excluded from between the door 28 and the flange 32 by the soft yielding substance on the door above referred to. A metallic flange 55 33 is also secured upon the outer side of the boat in any preferred way and designed to engage the reinforcing member 29, said flange having upon its lower edge suitable packing of rubber, as indicated by the numeral 34. 60

It will be understood that my improved boat may be made any preferred size and of any desired material, and while I have described the preferred construction and combination of parts I wish to include all substitutes and equivalents that may be considered to fall fairly within the scope of my invention. 65

What I claim as new, and desire to secure by Letters Patent, is— 70

1. The herein-described life-boat comprising a central compartment and end sections, a false bottom, a pivotally-mounted floor-section in the form of an auxiliary boat suspended from above and above the false bottom, 75 and means for adjusting the height of said floor-section and allowing it to rock to compensate for the rocking movement of the boat, all substantially as shown and described.

2. In boats of the character specified, a water-tight opening comprising the disk 19 suitably secured in the wall of the boat and having a central opening and a yielding closure for said opening formed of rubber or the like said closure adapted to serve as a water-tight 85 closure and affording the sole support for an oar having an opening adapted to tightly receive the handle of an oar whereby the oar may be operated without admitting water to the boat all substantially as specified and for 90 the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LEMUEL BROWN.

Witnesses:

JOHN H. SCHUMACHER,
FRANK PRIEST.