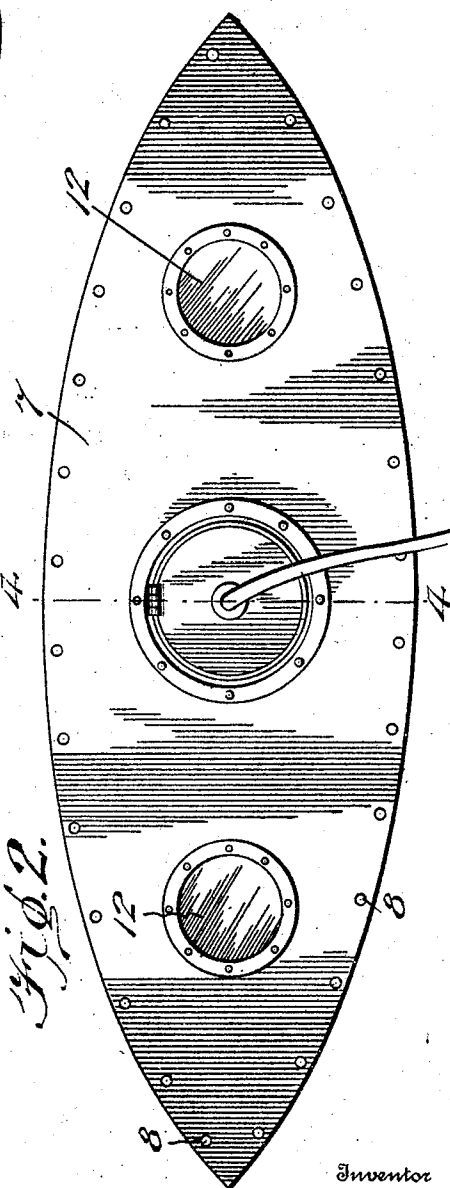
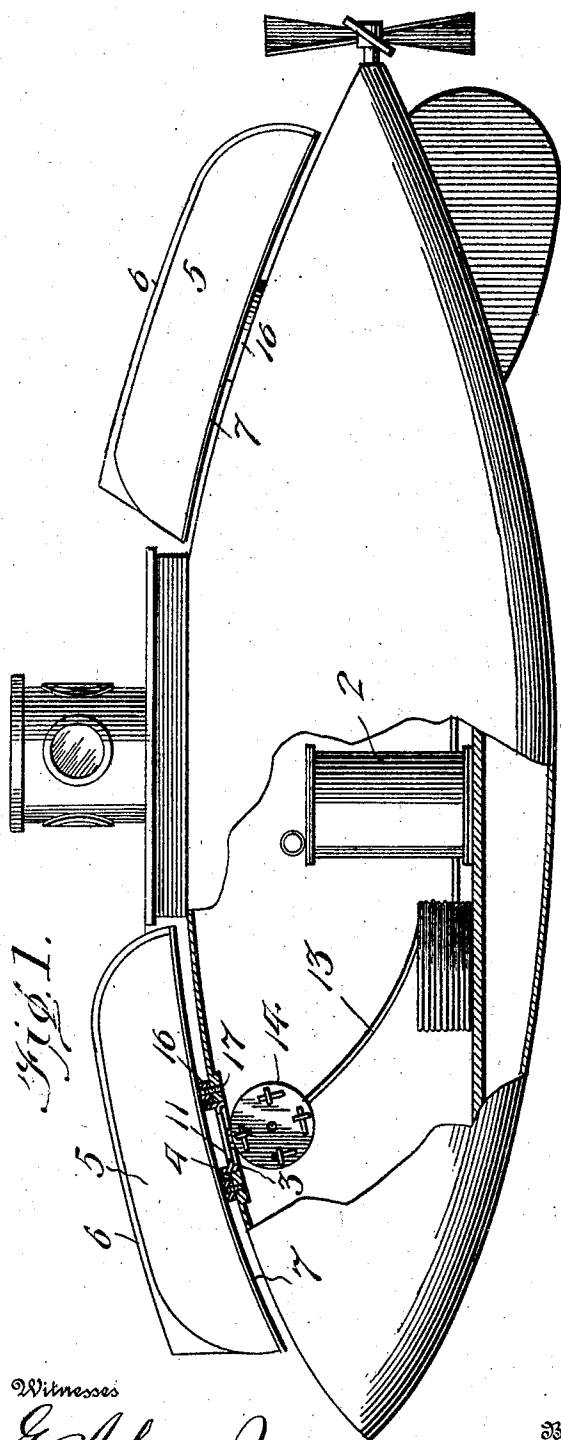


No. 805,975.

PATENTED NOV. 28, 1905.

J. A. MARLEY.
LIFE SAVING BOAT.
APPLICATION FILED FEB. 18, 1905.

2 SHEETS—SHEET 1.



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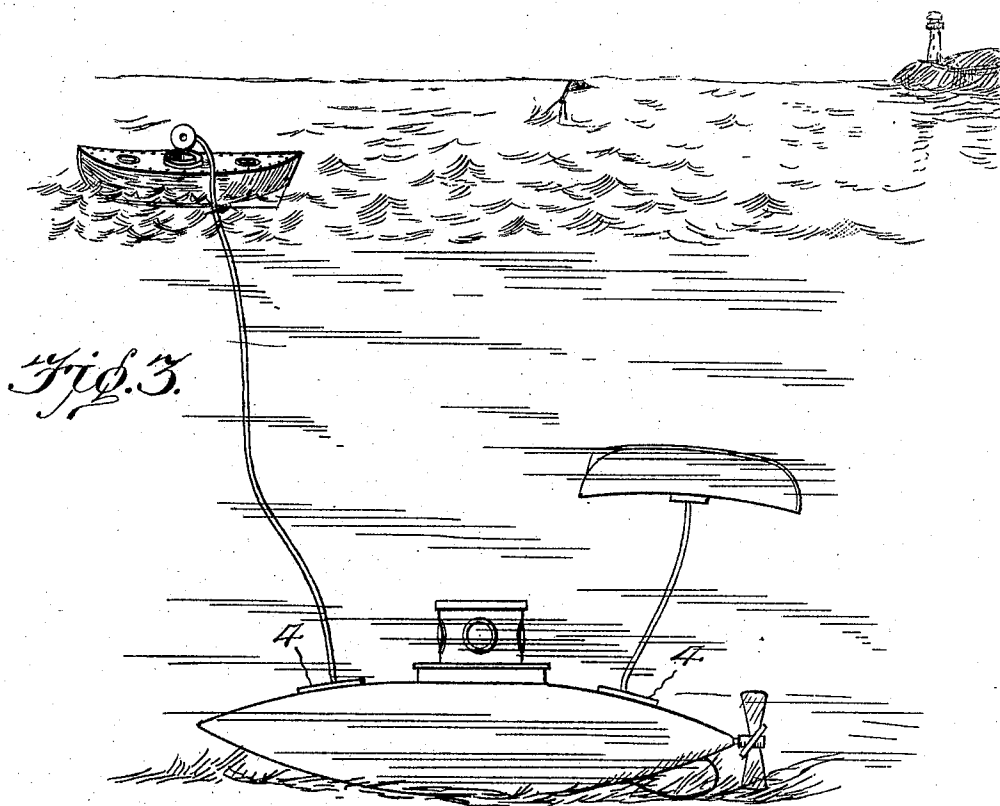


Fig. 3.

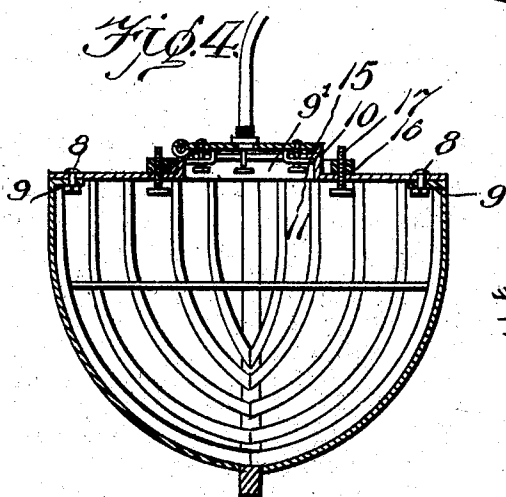


Fig. 4.

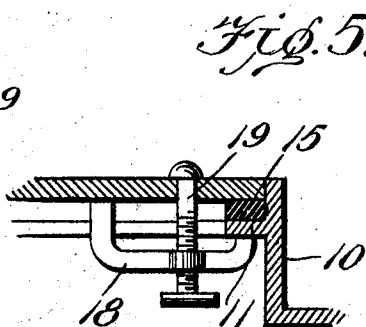


Fig. 5.

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UNITED STATES PATENT OFFICE.

JESSE A. MARLEY, OF NEW YORK, N. Y.

LIFE-SAVING BOAT.

No. 805,975.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed February 18, 1905. Serial No. 246,290.

To all whom it may concern:

Be it known that I, JESSE A. MARLEY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Life-Saving Boats, of which the following is a specification.

This invention relates to life-boats designed especially for use in connection with submarine vessels, and has for its objects to produce a comparatively simple inexpensive device of this character which will be normally attached to and in communication with the interior of the vessel and one whereby in the event of the vessel failing to rise after being submerged persons thereon may escape from the vessel and be saved through the medium of the life-boat.

A further object of the invention is to provide a simple efficient coupling for attaching the boat to the vessel and forming a water-tight joint at the passage of communication between said parts and one wherein air will be supplied to the occupants of the life-boat during its upward passage through the water.

A further object of the invention is to provide a boat of the class described which upon reaching the surface will automatically right itself and one having a removable water-tight cover for preventing entrance of water to the boat while rising to the surface, said cover having transparent water-tight ports and being adapted for removal after the boat has reached the surface and righted.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a submarine vessel equipped with my improved life-boat. Fig. 2 is a top plan view, on an enlarged scale, of one of the life-boats. Fig. 3 is a view illustrating the vessel submerged and one of the life-boats in the act of rising to and the other resting upon the surface of the water. Fig. 4 is a transverse section taken on the line 4 4 of Fig. 2. Fig. 5 is an enlarged detail view.

Referring to the drawings, 1 designates a submarine vessel of the usual or any appropriate construction and material having upon its interior a compressed-air tank or reservoir 2 and provided upon its normally upper wall adjacent its ends with openings or man-

holes 3, embraced by marginal outturned flanges 4.

The vessel 1 is in accordance with my invention equipped with one or more, preferably two, life-boats 5, composed of thin sheet metal and each having a weighted keel 6 and a removable deck or cover 7, detachably secured in place by means of fastening members or bolts 8, engaged with inturned marginal flanges 9, provided on the boat, there being provided at the center of the cover 7 an opening or manhole 9, designed to communicate with and surrounded by an outstanding marginal flange or throat 10, which enters the manhole 3 when the life-boat is in normal position upon the vessel, there being upon the interior of the throat 10 an inwardly-extending flange or seat 11, while at opposite sides of the manhole 9 and adjacent its ends the cover has formed therethrough glazed or other transparent water-tight ports 12 for a purpose which will hereinafter appear.

Coupled at one end to the air-tank 2 is a flexible tube or duct 13, having its other end coupled to a valve or closure 14, hinged or otherwise pivotally connected to the flange or throat 10 and adapted when closed to rest upon the flange or seat 11 for closing the manhole 9, there being disposed upon the flange 11 a rubber or other packing-gasket 15 to produce a water-tight joint.

Surrounding and spaced from the outer wall of the flange 10 is a packing ring or annulus 16, of rubber or other appropriate material, attached to the cover 7 by means of attaching members or screws 17, arranged at intervals around the manhole 9 and designed for engagement with the wall of the vessel 1 to detachably connect the life-boat thereto, attention being directed to the fact that when the boat is in position the flange 4 on the vessel enters the space between the flange 10 and annulus 16, thereby forming a water-tight joint, while the closure or valve 14, which normally remains in open position, as illustrated in Fig. 1, is equipped with locking or clamping members 18, disposed at intervals around the margin of the valve and adapted for engagement with the flange 11 to maintain the valve in closed position, these members being attached to the valve by means of clamping elements or bolts 19, which may be manipulated for drawing the valve tightly to closed position.

In practice and as before stated the valves

14 normally stand in open position, thereby permitting free communication between the vessel 1 and boats 5 through the passages or manholes 9. In the event of the vessel 1 becoming damaged or being otherwise prevented from rising after being submerged the occupants of the vessel enter the life-boats 5 through the passages 9 and close the valves 14, securing the latter in closed position by means of the locking or clamping members 18 19, air having been previously turned on at the tank 2 to be supplied to the life-boats through the medium of the ducts 13. Having entered the boats and closed the valves, the boats are released from the vessel by unscrewing the attaching members 17, thus permitting the boats to rise freely through the water, as indicated at the right-hand side of Fig. 3, this action being aided and accelerated owing to the boat becoming filled with air, admitted as above explained. Upon reaching the surface the weighted keel 6 will cause the boat to automatically right itself, and occupants of the boat will be apprised of the fact owing to light entering through the transparent ports 12, whereupon the cover 7 may by unfastening the bolts 8 be readily detached and discarded to thus permit the boat being rowed by means of oars with which it is equipped or otherwise maneuvered as usual in connection with boats of ordinary construction.

From the foregoing it is apparent that I produce a simple inexpensive device admirably adapted for the attainment of the ends in view and one which in practice will wholly obviate loss of life due to submarine vessels becoming damaged or being otherwise prevented from rising to the surface. In attaining these ends it is to be understood that minor

changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

1. The combination with a submarine vessel, having one of its walls provided with an opening, a life-boat detachably coupled and having an opening designed to register with the opening in the vessel, a valve for closing the opening in the life-boat, and a flexible air-duct coupled to the valve, said duct being led through the opening in the vessel and communicating with an air-supply source in the latter.

2. The combination with a vessel, of a life-boat detachably coupled thereto and having an opening communicating with the vessel, said boat being weighted to automatically right itself, means for closing the above-named opening, and a flexible air-duct connected with the boat and communicating with an air-supply source.

3. The combination with a vessel, of a life-boat detachably coupled thereto and having an opening communicating with the vessel, said boat being weighted to automatically right itself and having a removable cover, means for closing the above-named opening, and a flexible air-duct connected with the boat and communicating with a source of supply within the vessel.

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

JESSE A. MARLEY.

Witnesses:

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G. LIVINGSTON BAYARD.