No. 678,745. Patented July 16, 1901.

C. B. DE LAMARRE & N. TALTAVULL.

BOAT.

(No Model.) (Application filed Oct. 24, 1900.)

Fig. 1.

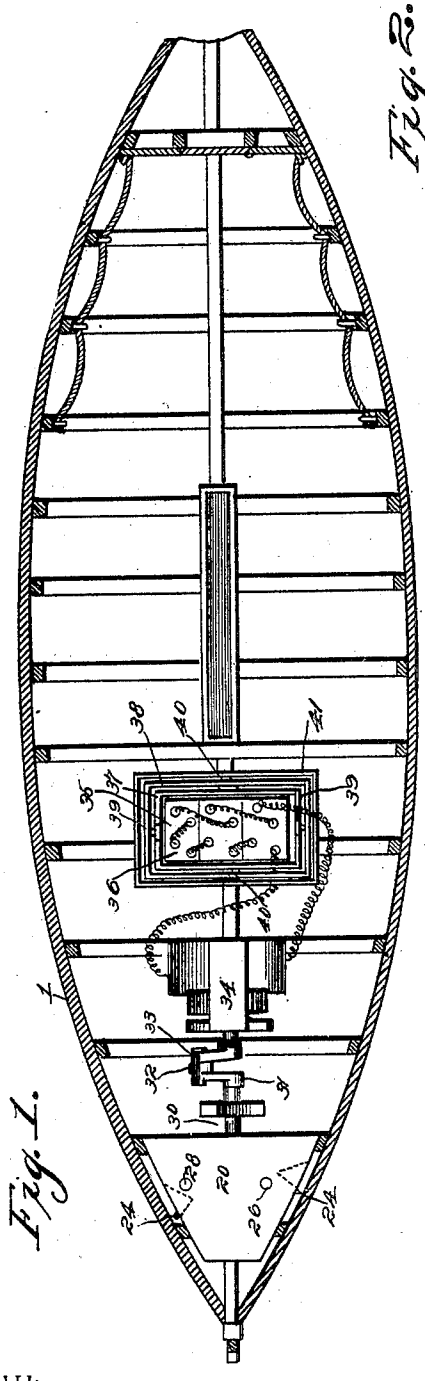


Fig. 2.

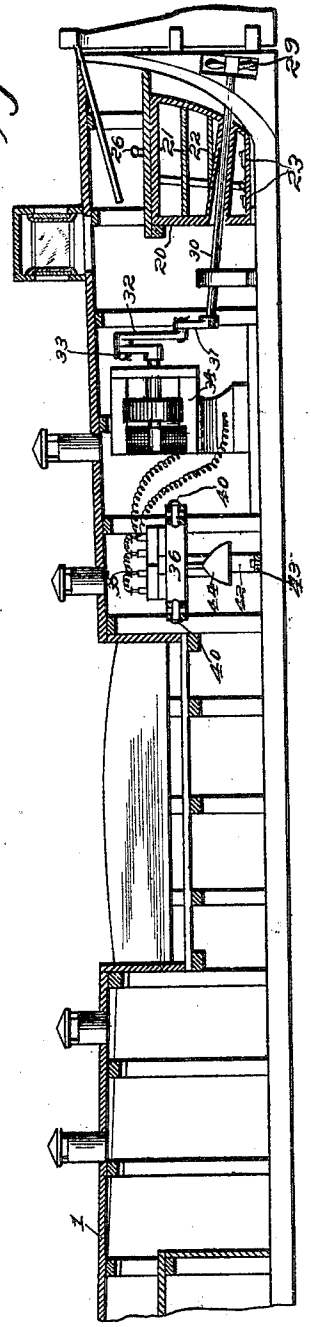
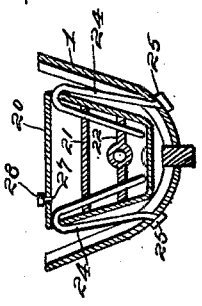


Fig. 3.



Witnesses
Fred. C. Maynard.
T. J. Riley

C. B. de Lamarre and N. Taltavull, Inventors
By C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES B. DE LAMARRE AND NICOLO TALTAVULL, OF BILOXI, MISSISSIPPI.

BOAT.

SPECIFICATION forming part of Letters Patent No. 678,745, dated July 16, 1901.

Application filed October 24, 1900. Serial No. 34,184. (No model.)

To all whom it may concern:

Be it known that we, CHARLES B. DE LAMARRE and NICOLO TALTAVULL, citizens of the United States, residing at Biloxi, in the county of Harrison and State of Mississippi, have invented a new and useful Boat, of which the following is a specification.

The invention relates to improvements in boats.

The object of the present invention is to improve the construction of boats and to provide a simple and comparatively inexpensive one designed, primarily, for use as a life-boat and capable of bailing itself automatically.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a horizontal sectional view. Fig. 2 is a longitudinal sectional view. Fig. 3 is a sectional view on the line 6 6 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a boat designed primarily for use as a life-boat; but the improvements herein shown and described may be advantageously applied to pleasure-boats and similar crafts.

The boat is self-bailing, and to effect this result it is provided at its stern with a water-tank 20, constructed of suitable material, preferably sheet metal, and provided with horizontal partitions 21 and 22, having suitable openings to permit water to flow from the upper compartments or spaces to the lowermost one. The tank is provided at its bottom with suitable valves 23, arranged to open inwardly and adapted to permit any bilge-water to readily enter the tank. At each side of the tank is arranged a siphon 24, consisting of a metal tube or pipe and having one of its legs arranged in the interior of the tank, and the outer leg is extended below the inner one and communicates with a discharge-port 25, leading to the exterior of the boat. The inner leg of the siphon is open and is arranged adjacent to the side wall of the tank and extends from the top thereof to the bottom of the same. The tank is provided at its top with a valve 26, and it has an opening 27, around which is arranged a threaded flange for the reception of a cap 28. When there is a smooth sea and the siphons are inactive, the water may be expelled from the tank by means of air-pressure. A suitable air-pump is connected with the valve 26 for supplying the tank with compressed air, which will force the water from the tank through the siphon-tubes. The pitching of the boat from bow to stern will cause any bilge-water to flow to the stern and enter the tank through the bottom valves, so that the bailing apparatus will effectually remove all water from the boat. When there is no water in the tank, the screw-cap 28 may be placed on the threaded flange to close the opening, and the tank will then serve as an air-compartment and increase the buoyancy of the boat. When the boat pitches backward and forward and the water is forced through the valve-opening at the bottom of the tank, the air within the latter will be compressed to a greater or less extent and the interior pressure of the tank will cause the water to flow through the siphon-tubes when the stern of the boat is elevated by the backward and forward pitching. As soon as the lower ends of the outer legs of the siphon-tubes rise above the surface of the water the tank will discharge a portion of the liquid contents, and the continued backward and forward pitching of the boat will operate to bail the latter.

The boat is provided with a suitable propeller 29, fixed to a propeller-shaft 30, extending into the stern of the boat and arranged longitudinally of the latter and passing through the tank, which is provided with a suitable tube for the reception of the shaft. The propeller-shaft, which is journaled in suitable bearings, preferably provided with antifriction balls or other devices, is provided at its inner end with a crank 31, connected by a pitman 32 with a crank 33 of an electric motor 34, which is supplied with electricity from a series of storage batteries 35 of any desired construction. The storage batteries are arranged in a suitable tray 36, supported within a frame 37, which is arranged within the frame 38. The frame 36 is provided at its ends with pivots 39, and the frame 37 is provided at opposite sides with pivots 40, arranged in suitable bearings of an outer frame

41. The outer frame 41 is provided with a suitable support 42, preferably in the form of a yoke, consisting of standards and a connecting bottom cross-piece, which is provided with a central pivot 43. The frames 37, 38, and 41 are oblong, but the batteries may be arranged in any other form, and the horizontal pivots 39 and 40 are arranged at right angles to each other to permit the inner frame to maintain a horizontal position when the boat is rocking and pitching. In order to hold the inner frame and the storage batteries in a horizontal position, the tray is provided with a central depending weight 44, extending below the pivots of the inner frame and adapted always to remain plumb. Other means may be employed for propelling the boat; but electricity is preferable to steam or gas engines or oars on account of its easy management, the small space it occupies, its lightness, and its cheapness.

It will be seen that simple and efficient means are provided for automatically bailing the boat and that the rolling of the boat is utilized for expelling the water.

What we claim is—

1. A boat having a water-tank provided with a tube communicating with the exterior of the boat and arranged to discharge water therefrom, said tank being also provided with an inwardly-opening valve adapted to permit water to be forced into the tank by the pitching of the boat, substantially as described.

2. The combination of a boat, a water-tank arranged within the same, and provided with an inwardly-opening valve arranged to permit water to be forced into the tank by the pitching of the boat, and a pair of siphons arranged at the sides of the tank and composed of inner and outer legs, the outer legs communicating with the exterior of the boat, substantially as described.

3. The combination of a boat, a tank arranged within the boat and having partitions and provided at its bottom with an inwardly-opening valve arranged to permit water to be forced into the tank by the pitching of the boat, and a pair of siphons arranged at opposite sides of the tank and having their legs at the inner and outer sides thereof, the outer legs being extended below the inner ones and communicating with the exterior of the boat, substantially as described.

4. The combination with a boat, of a tank having an inwardly-opening valve arranged at the bottom of the tank and adapted to permit water to be forced through it by the movement of the boat, and a tube extending from the tank to the exterior of the boat and adapted to discharge water from the tank, substantially as and for the purpose described.

5. The combination with a boat, of a tank provided with horizontal partitions having openings to permit water to settle to the bottom of the tank, said tank being also provided at its bottom with an inwardly-opening valve adapted to permit water to be forced into the tank by the pitching of the boat, and the siphon-tubes arranged at the sides of the tank and having their inner legs extending from the bottom of the tank to the top of the same, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

CHARLES B. DE LAMARRE.
NICOLO TALTAVULL.

Witnesses:
R. S. LEMON,
EDWARD FRENCH.