F. W. MARTIN.

LIFE BOAT.

APPLICATION FILED OCT. 12, 1912.

1,067,262. Patented July 15, 1913.

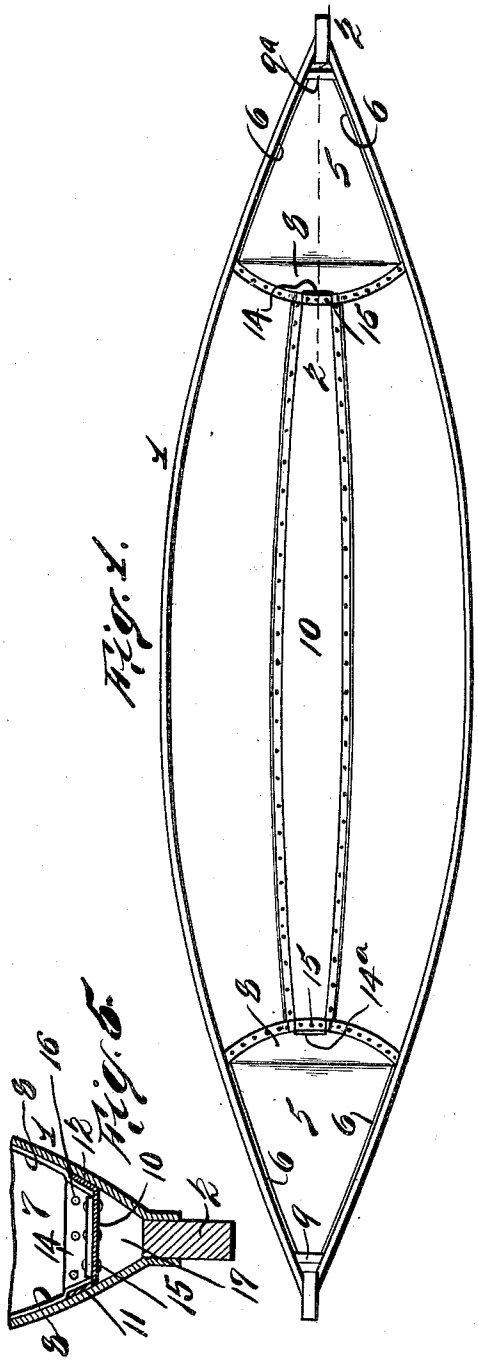


Fig. 1.

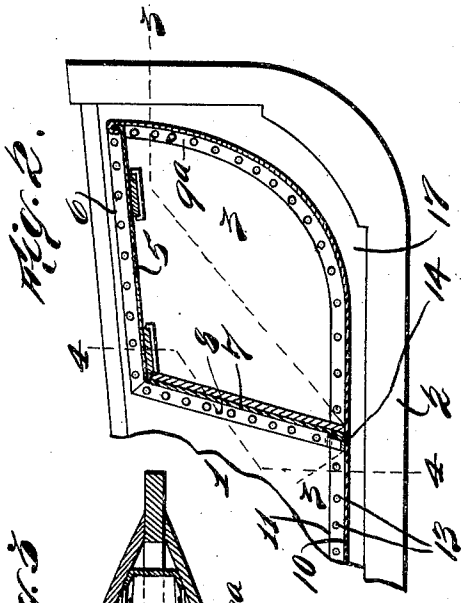


Fig. 2.

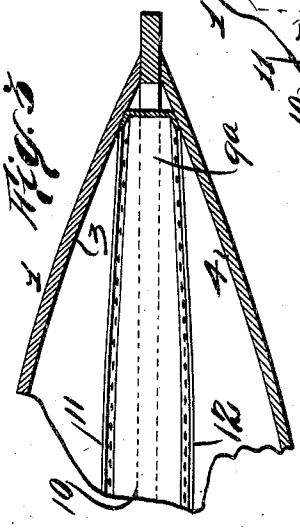


Fig. 3.

Fig. 5.

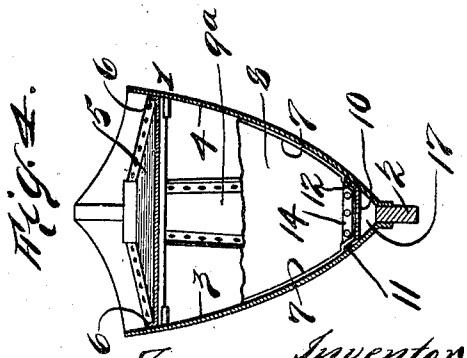


Fig. 4.

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UNITED STATES PATENT OFFICE.

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LIFE-BOAT.

1,067,262. Specification of Letters Patent. Patented July 15, 1913.

Application filed October 12, 1912. Serial No. 725,388.

To all whom it may concern:

Be it known that I, FREDERIC W. MARTIN, a citizen of the United States, residing at Astoria, Long Island, New York, have invented certain new and useful Improvements in Life-Boats, of which the following is a clear, full, and exact description.

This invention relates to improvements in life-boats more particularly of the general construction shown in my United States Letters Patent No. 1,011,464, dated December 12, 1911, but of course the present improvement is not alone adapted to the construction shown and claimed in said patent.

The present improvement embraces a connecting member between the two air chambers at the ends of the life-boat, such connecting member being so arranged and proportioned as to provide tension and stiffening means for the life-boat, adapted to prevent collapse thereof, as for instance when the boat is supported by the davits and contains passengers, the weight of whom might otherwise collapse the boat when lowering the same into the water.

A further object of the invention is to provide means for generally strengthening life-boats and rendering them tight, without reference to the structure of the boat between the keel and the hull, as under the present invention there might be a leak adjacent the keel and yet the structure of the improved boat is such that the same can float.

These being among the objects of the present invention, the same consists of certain features of construction and combinations of parts to be hereinafter described and then claimed with reference to the accompanying drawings showing a suitable embodiment of the invention, and in which—

Figure 1 is a plan of the improved boat; Fig. 2 is an enlarged detail vertical section on the line 2—2 Fig. 1; Fig. 3 is a section on the line 3—3 Fig. 2; Fig. 4 is a transverse section on the line 4—4 Fig. 2; and Fig. 5 is an enlarged detail view of a preferred joint involved in this improvement.

Referring to the drawings, the hull 1 of the boat is usually composed of suitable sheet metal and is provided with a keel 2, while at each end of the boat there is an air chamber preferably of the construction shown. Each air chamber comprises opposite side portions 3—4 formed of portions of the hull, and a top sheet 5 which is provided with side flanges 6, together with an end sheet 7 provided with side flanges 8. Between the end sheets 7 of the two air chambers, space is provided in the hull for the passengers, which space is usually equipped with seats. The flanges 6, 8, are riveted or otherwise suitably secured to the sides of the hull, and the outer end of the top sheet 5 of each air chamber is spaced a suitable distance from the keel 2 while the lower end of the end sheet 7 of each air chamber is also spaced a suitable distance from said keel. Air chambers are provided with apron-strips 9, 9^a, of sheet metal which is formed or bent so as to conform approximately to the inside curvature of the keel. These apron-strips are at the ends and bottoms of the air chambers and are riveted or otherwise suitably secured to the sides of the hull.

Preferably the apron-strips 9, 9^a, of the two air chambers are formed integrally with and as continuations of a preferably imperforate plate or web 10 which is so secured to the hull as to provide a tension and stiffening member therefor, and furnishes as it were, a supplemental backbone to the boat. Said tension and stiffening plate or web 10 extends longitudinally of the boat at a distance above but in proximity to the keel and is there provided with side flanges 11, 12 which are secured by rivets 13 or otherwise, to the sides of the hull. It will be noted that the said plate or web 10 is not of such size or area as to take up any of the available passenger space within the hull. The joint between the end sheets 7 of the air chambers and the tension and stiffening plate or web 10 is preferably constructed as shown in Figs. 2 and 4, and more particularly in detail in Fig. 5.

Angle plates 14, 14^a, are located in the corners formed by the lower ends of the end sheets 7 of the air chambers and the plate or web 10, and the flanges of said angle plates are secured as by rivets 15 to the said plate or web and by rivets 16 to the said end sheets. Incidentally it may be noted that the said angle plates 14, 14^a secure the lower ends of the apron strips 9, 9^a to the lower ends of the end sheets 7 of the air chambers. It is clearly obvious that the said angle plates may be secured in the corners between the end sheets and the apron-strips, and that the latter are not necessarily formed integrally with and as continuations of the tension and stiffening plate or web 10.

It is furthermore obvious that other slight changes and modifications may be made in the present invention without departing from the spirit and scope thereof.

It is obvious that there are several advantages incident to the improved construction described and shown; the joints involved between the plate or web 10 and the air chambers and the hull are water-tight, and the said plate or web provides a tension and stiffening member to preclude collapsing of the boat.

In order to permit painting of the surfaces which are surrounded by the apron-strips, plate or web, the keel, and the side portions of the hull located between said parts, the space defined by them is preferably formed as a channel 17 extending along and above the keel and at its outer ends opening up through the top of the boat. It is clear that the walls of the channel 17 may be readily painted with the usual waterproof paint by simply causing a sufficient amount to flow in through the channel from end to end until all surfaces and interstices are covered, when the surplus paint may be permitted to flow out of the end openings of the channel.

What I claim as new is:—

1. In a life-boat, the combination of a hull provided with air chambers at both ends, which chambers have underwalls extending along above the keel of the boat, and a tension and stiffening plate or web connecting the said underwalls of said air chambers and secured along its sides to the bottom of said hull and in proximity to but spaced away from the keel.

2. In a life-boat, the combination of a hull provided with air chambers at both ends, said air chambers each having an apron-strip secured at its ends to the air chamber walls and the sides of which are secured to the sides of said hull, a tension and stiffening plate secured along its sides to the bottom of said hull and in proximity to the keel, and flanged means for securing said plate to the walls of said air chambers.

3. In a life-boat, the combination of a hull provided with air chambers at both ends having bottom apron-strips, a tension and stiffening plate or web integral with said apron-strips and secured along its sides to the bottom of said hull and in proximity to the keel, and flanges extending from the walls of said chambers and secured to said strips.

4. In a life-boat, the combination of a hull provided with air chambers at both ends, and an imperforate tension and stiffening plate or web connecting the lower ends of said air chambers and having side flanges riveted to the bottom of said hull and in proximity to but spaced away from the keel.

5. In a life-boat, the combination of a hull provided with air chambers at both ends, said air chambers each having an apron-strip secured at its ends to the air chamber walls and the sides of which are secured to the sides of said hull, and a tension and stiffening plate or web connecting the lower ends of said apron-strips and secured along its sides to the bottom of said hull and in proximity to said keel, said apron-strips and said tension and stiffening plate or web being separated from the keel by a channel extending from the top of said air chambers along the keel, and the upper ends of said channel opening upwardly through the top of the boat.

Signed at New York city, N. Y., this 11th day of October 1912.

FREDERIC W. MARTIN.

Witnesses:
MOSES ELY;
ABRAM BERNSTEIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."