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LIFE RAFT.

APPLICATION FILED MAY 24, 1915. RENEWED FEB. 7, 1917.

1,226,274. Patented May 15, 1917.

Fig. 1.

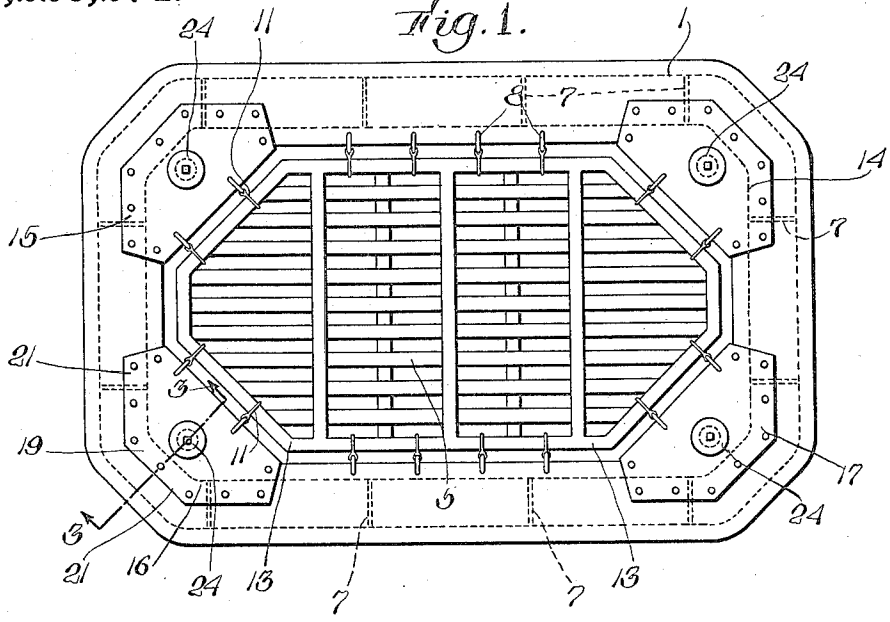


Fig. 2.

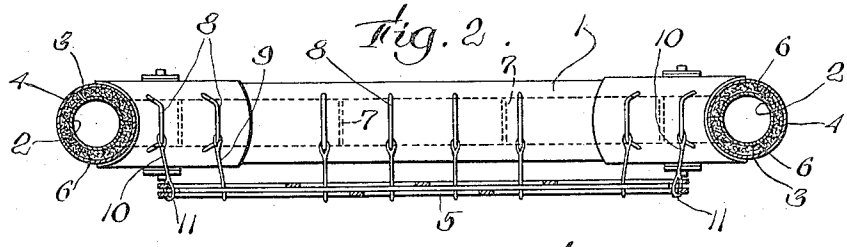


Fig. 3.

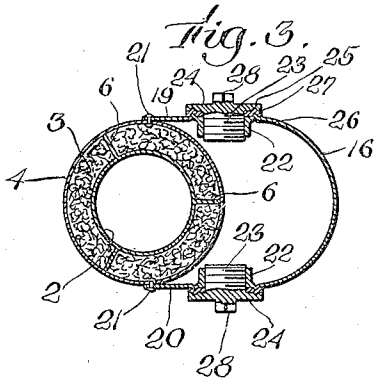
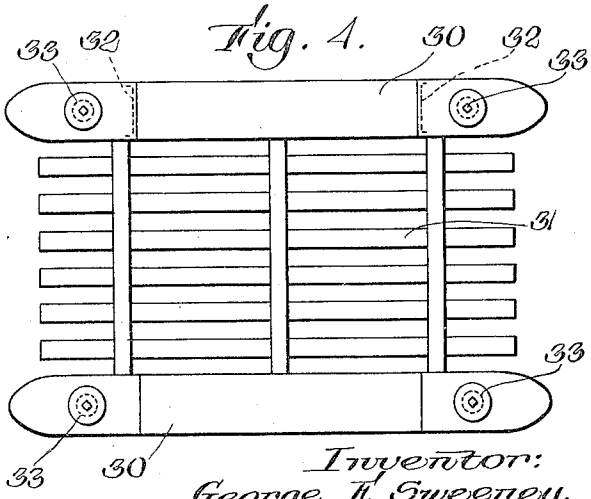


Fig. 4.



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UNITED STATES PATENT OFFICE.

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LIFE-RAFT.

1,226,274. Specification of Letters Patent. Patented May 15, 1917.

Application filed May 24, 1915, Serial No. 30,013. Renewed February 7, 1917. Serial No. 147,231.

To all whom it may concern:

Be it known that I, GEORGE F. SWEENEY, a citizen of the United States, and resident of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Life-Rafts, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My present invention is an improved life raft or life float for use as a life boat on ships and vessels. The value of life saving apparatus in the form of a life raft has been long recognized, as of particular value and usefulness in many cases where an ordinary life boat is unsuitable. A life boat must be launched right side up and carefully handled to be safely lowered from the deck of the steamer to the water. A life raft on the contrary can be either lowered or tumbled off the deck of the boat and is equally useful and valuable irrespective of how it may strike the water and with which side up. Furthermore, the life raft may be and usually is constructed with the floating portion water and air tight, so that it cannot swamp nor the raft sink, thus insuring the greatest amount of floating efficiency at all times, whereas the life boat may be filled with water, swamped, capsized, or otherwise rendered incapable of use, in spite of water-tight bulkheads, or the like. Furthermore, a life float will support a larger number of people than any other floating life saving apparatus, and yet it occupies but a relatively small space on the deck of a vessel and a considerable number of such life rafts may be piled one upon the other to still further conserve space.

The great advantage of the life boat over the life raft, however, has been that the life boat could carry supplies, water, provisions, and the like, whereas life rafts or floats as heretofore constructed were without these advantages. According to my present invention I have devised a life raft, which, while having all the advantages of the life float above briefly enumerated, will also enable supplies of water, provisions, signaling rockets, or the like, to be carried and to be readily available by the occupants of the life raft, irrespective of which side up the life raft may be floating. I may utilize any of the well-known types or forms of life raft, but prefer to employ a life float with a collapsible platform, such, for example, as that of the well-known Carley apparatus of Patent No. 627,979, and to provide receptacles as a part of the float or floats of the life raft, which receptacles will be suitable to hold provisions, water, etc., and have available openings on opposite sides so that they may be reached irrespective of how the apparatus is floating. It will, however, be understood that I can also equip the ordinary type of life raft with similar compartments and openings, which will be both water- and air-tight, and accessible from either side of the apparatus, so that it will be immaterial which side upward the apparatus floats. These compartments also constitute a bracing or strengthening portion of the float, thus combining the additional features of reinforcements together with the advantage of a water- and air-tight receptacle.

Further details of construction, novel combination of parts, and important advantages will be hereinafter pointed out and claimed.

Referring to the drawings illustrating preferred embodiments of my invention.

Figure 1 illustrates, in plan view, the Carley type of life float, provided with my invention;

Fig. 2 being a side view, partly in cross section; and

Fig. 3 being an enlarged cross sectional view on the line 3—3 of Fig. 1.

A modification is illustrated in Fig. 4 applied to the well-known type of pontoon life raft.

The collapsible and reversible type of life float illustrated in Figs. 1 and 2 has the float or body portion 1 of annular form, which float may be, and preferably will, comprise a thin metallic inner tube 2, around which tightly packed layers of cork 3 are formed, and the whole covered by canvas or similar material bound there-around, and containing an air space and providing a ring-like or annular floating body which will inclose and support the platform 5. If desired, the ring or float 1 may also be made entirely of metal without the cork or canvas, but I prefer to form the same as above explained. The inner tube may be made with longitudinal stiffening flanges 6 and a plurality of transverse bulkheads 7, if desired.

To support the floating platform 5 so that

it may be held in a depending position relatively with the life raft or ring 1, irrespective of which side upwardly that the buoyant ring 1 is floating, I provide any suitable yielding support therefor, preferably a plurality of brackets 8 secured to the inner side of the ring or float 1, to which ring ropes 9, having eye-splices 10 to fit around the brackets 8, are arranged, which ropes have their other ends suitably secured to the platform 5, as for example by having eye-splices 11 around the rim 13 of the platform.

At suitable points, preferably at the corner sections of the float 1, I provide receptacles 14, 15, 16, and 17, which may be of metal, or of similar construction of cork and canvas to that above described for the float 1. Each of these receptacles may be conveniently formed as a semi-circular section with the opened end portions 19 and 20, (see Fig. 3) overlapping the top of the float 1 and suitably secured thereto, as by bolts 21, which section is of sufficient size to be utilized for holding water, provisions, or other supplies for the number of people intended to be supported by the float. In each receptacle and on opposite sides thereof are formed watertight hatchways, of suitable diameter so that the same may enable supplies to be stored within these receptacles, and also to be readily and effectually closed. As illustrated in Fig. 3, these openings or hatchways may be made with depending flanges 22, preferably round and with their interior sections threaded to receive the correspondingly threaded barrel 23 of a cover 24. I prefer to make the under-edge portion of this cover 24 with an annular groove 25 and provide a correspondingly annular rim 26 adjacent the opening through the flange portion 22, and to fit a gasket or washer 27 of rubber or other elastic material around the opening, which will be forced into the groove 25 by the rim 26 as the cover is put in place and make the cover watertight. A square or angular head or handle 28 on the cover 24 will serve to facilitate the manipulation of the same when opening or closing it. These covers on opposite sides of each receptacle give access to the interior, irrespective of which side of float is uppermost when the apparatus is floating, and thus enables provisions, water, rockets or signaling apparatus to be carried and always ready in each life raft.

I have illustrated in Fig. 4 a somewhat similar arrangement in connection with the ordinary type of pontoon life raft, wherein the pontoons or floats 30, usually of metal, rigidly support an intermediate floating platform 31. I provide bulkheads 32, shown in dotted lines, to partition off each end of each pontoon, and fit these ends as receptacles in a manner similar to that already described with the type of float shown in Fig. 1. On each side of each of these end receptacles is formed an opening and a removable cover 33 therefor, which may be similar in construction to that already described and illustrated.

It will be readily appreciated that my invention enables a life raft to be provided at all times with provisions and other supplies for its occupants, and to have the same preserved in watertight receptacles which are accessible from either side, irrespective of which side the raft is floating on, thus combining to a large degree the advantages of both life rafts and life boats. Such floats may be equipped with oars and the like lashed on either side or accessible from either side, and one or more of such oars may conveniently be provided with a wrench handle to fit upon the head 28 of each cover to facilitate opening the same, or a wrench therefor may be lashed on each side of the apparatus adjacent the covers.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A life saving apparatus of the kind described, comprising a substantially oval shaped buoyant body adapted to be used in reversible position, a plurality of watertight receptacles carried by said body at spaced intervals, constituting a reinforcing and bracing portion of the buoyant body, and means permitting access into said receptacles from either side of the apparatus.

2. A life saving apparatus of the kind described, comprising a substantially oval shaped buoyant body adapted to be used in reversible position, a plurality of watertight receptacles carried by said body at spaced intervals, constituting a reinforcing and bracing portion of the buoyant body, and means comprising a plurality of openings and watertight covers for each opening, permitting access to said receptacles above the line of flotation in any floatable position of the apparatus.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE F. SWEENEY.

Witnesses:
MICHAEL J. JORDAN,
B. ADELAIDE MOODY.

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