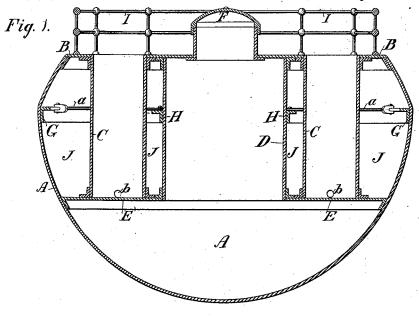
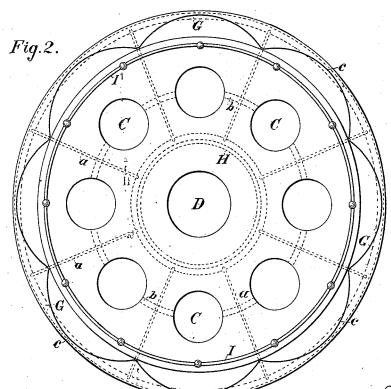
## J. SAMPLE.

## LIFE SAVING BUOY BOAT.

No. 385,961.

Patented July 10, 1888.





Witnesses: Lha!Raley-T. Blanchet:

James Sample
Inventor.
per A. Harvey
Attorney.

## UNITED STATES PATENT OFFICE.

JAMES SAMPLE, OF NEWCASTLE ON-TYNE, COUNTY OF NORTHUMBERLAND, ASSIGNOR OF ONE-HALF TO RALPH RHENIUS EVANS DRAKE-BROCK-MAN, LONDON, ENGLAND.

## LIFE-SAVING BUOY-BOAT.

SPECIFICATION forming part of Letters Patent No. 385,961, dated July 10, 1888.

Application filed October 13, 1887. Serial No. 252,257. (No model.)

To all whom it may concern:

Be it known that I, James Sample, a subject of the Queen of Great Britain, residing at 12 Harrison Place, Jesmond, Newcastle on-5 Tyne, in the county of Northumberland, England, have invented certain new and useful Improvements in Life Saving Buoy-Boats for Ships' Use, of which the following is a specification, reference being had therein to the actor companying drawings.

My invention consists in the construction of a life buoy-boat for saving life at sea, which is formed in such a manner that it retains its stability in the roughest sea and cannot founder by reason of waterlogging, and, while being of sufficient capacity for holding several persons, the space occupied by it on board ship is comparatively small and the opera-

tion of launching easily performed.

The lower part of the hull of the boat, according to my invention, is preferably hemispherical in form, and is constructed of thin steel or iron plate, either pressed or built up of alternate plates riveted or otherwise attached together to form water-tight joints.

By reference to the accompanying drawings, Figure 1 represents a sectional elevation, and Fig. 2 a plan, of a life buoy-boat constructed

according to my invention.

The lower part of the hull A is shown as an entire plate, with a deck of metal plate, B, riveted or otherwise secured to the upper edges of said hull A. Said deck B is pierced with a number of circular holes, into each of 35 which is fitted a metal tube, C, of sufficiently large diameter to permit an ordinary person to stand within it with ease, and of such depth as to allow said person to have the waist level with the deck B. A central orifice is fitted to with a similar tube, D, of larger dimensions, which communicates with the interior of the hemispherical hull A. A plate, E, is secured to the hull-plate, and also to the lower ends of the tubes C and D, by riveting or equivalent 45 means. A perforated cap or cover, F, is fitted to said tube D, which serves the purpose of a store-room, wherein food and necessaries may be kept for supporting life when adrift at sea. A water-tight cover may be fitted to the cap

50 F, to keep said stores dry when the sea is so

rough as to break over the deck of the life buoy-boat. A flanged ring, G, is riveted or otherwise secured to the inner circumference of the outer shell, A, and a similar flanged ring, H, around the tube D. Iron rod stays 55 a are jointed to the rings G and H, said stays serving to strengthen the hull of the boat without impairing its elasticity or unduly adding to the weight. The tubes C are connected by tubes b close to the lower edge, where they 60 are secured to the plate E, so that any water collecting therein may be removed by means of a small hand-pump placed in one of said tubes C or connected with one of the pipes between the tubes C. A hand-rail, I, is at- 65 tached to the rim formed by the junction of the deck B with the hull A, and life lines c are suspended from suitable ring bolts. Similar rings are provided for the purpose of attaching slings for maintaining the life buoy-boat 70 in a vertical position on deck.

It will be apparent that the water-tight airspace J J wil prevent the boat from sinking, even though the tube D and the space below it in the interior of the hemispherical hull 75 forming the store room be filled with water by

any accident

The whole apparatus may be placed upon the deck of a sea-going vessel upon ordinary boat-chocks and secured by slings from roll-80 ing out of position. Being extremely light in comparison with its capacity for stowage and displacement, the operation of launching the life buoy-boat is easily and quickly accomplished in cases of great emergency. As an 85 auxiliary equipment, I may provide a sail, oars, and a mast which may be detachable in two or more parts, so that they may be stowed in the tubular store-room D. These accessories will enable the persons on board the life buoy-90 boat to keep said boat in the track of vessels.

To furthe, aid the steerage and manipulation of said boat, I may provide a keel and rudder, which, however, may also be detachable into separate parts, and form no portion of the 95

actual hull.

Having fully described my invention, what I desire to claim and secure by Letters Patent

1. A metallic life-saving buoy-boat consisting 100

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of an approximately semispherical hull, A, water-tight upper deck, B, having a series of circular openings, water-tight mean deck, E, having a central opening, a central cylindrical 5 tube, D, secured water tight to the edge of the opening of the mean deck E, provided with a cap and a water-tight cover, F, a series of smaller tubes, C, disposed circularly around the central tube and standing upon and seto cured water-tight to the mean deck, and open at the top and secured water-tight to the upper deck, a flanged ring, G, secured to the hull, a flanged ring, H, secured to the exterior of the cylinder D, stays a, connected to said 15 flanged rings, and a railing, I, at the edge of the main deck, substantially as set forth.

2. The combination, in a metallic life saving buoy-boat, of the hull A, main deck B, having circular openings for the reception of tubes, a mean deck, E, having a large circular opening, a central cylinder, D, secured at its lower edge water-tight to the edge of the opening in the mean deck and at its upper edge to the main deck, a series of tubes or cylinders, C, standing upon and secured water-tight to the mean deck E, and their upper edges secured water-tight to the edges of the openings

in the upper deck, a flanged ring, G, secured internally to the hull, a flanged ring, H, secured externally to the central cylinder, D, 30 stay-rods a, passing between the tubes or cylinders C, having their ends secured to the flanged rings G and H, and a railing, I, secured upon the upper deck, substantially as set forth.

3. In a metallic life-saving buoy-boat, the combination of a series of tubes or cylinders, C, open at the top and secured water-tight at their upper edge to the edges of openings in the upper deck, and their bottom secured water-tight to the mean deck, and the tubes b, connecting adjacent cylinders near their bottoms with one another, so as to form a communication, substantially as set forth.

In testimony whereof I affix my signature in 45

the presence of two witnesses.

JAMES SAMPLE.

Witnesses:

JAMES SHORT, H. F. NICHOLLS,

Clerks to Messrs. Mather, Cockcroft & Co., Solicitors, Bank Chamber, Mosley Street, Newcastle-on-Tyne.