

(No Model.)

J. SAMPLE.  
LIFE SAVING BUOY BOAT.

No. 385,961.

Patented July 10, 1888.

Fig. 1.

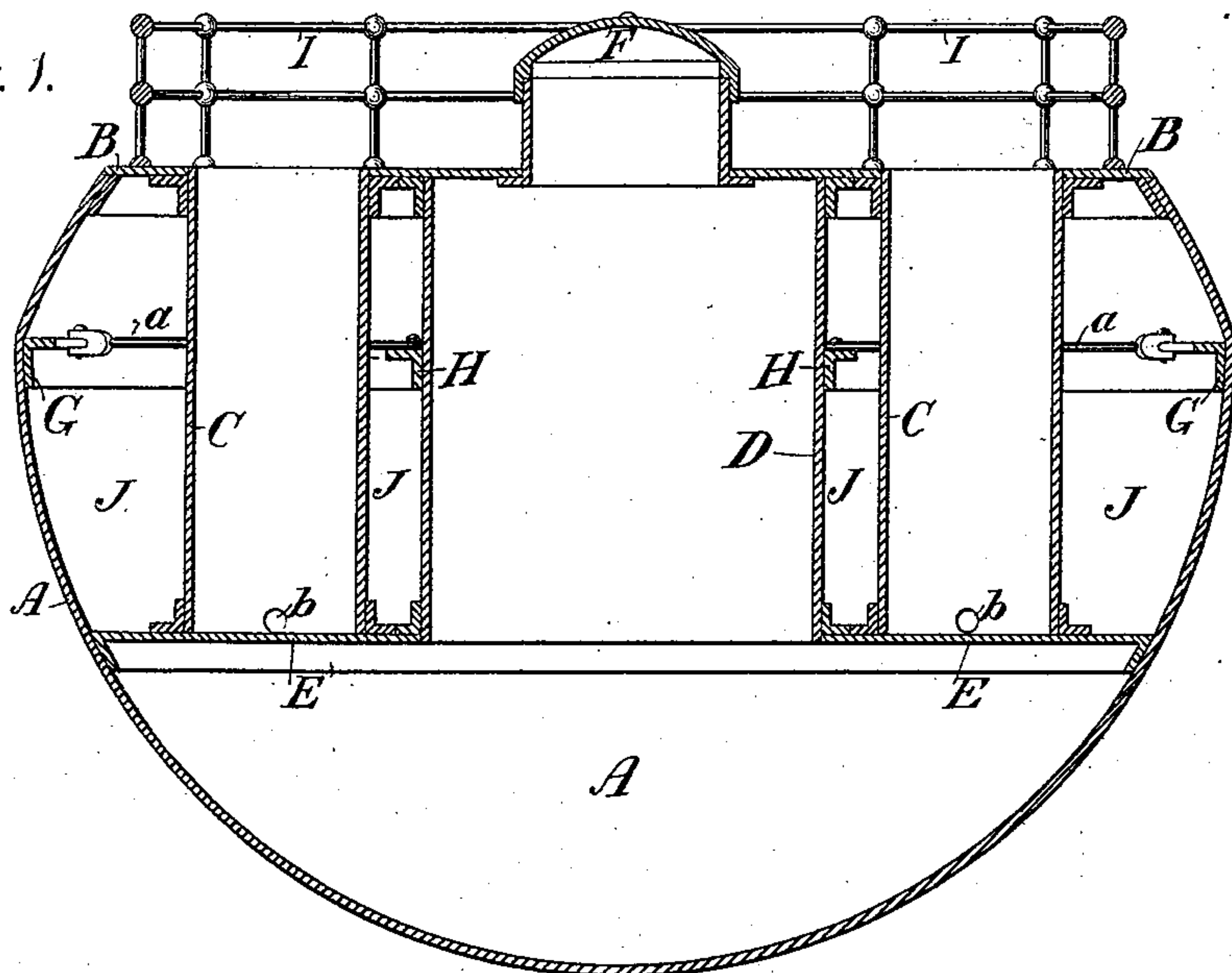
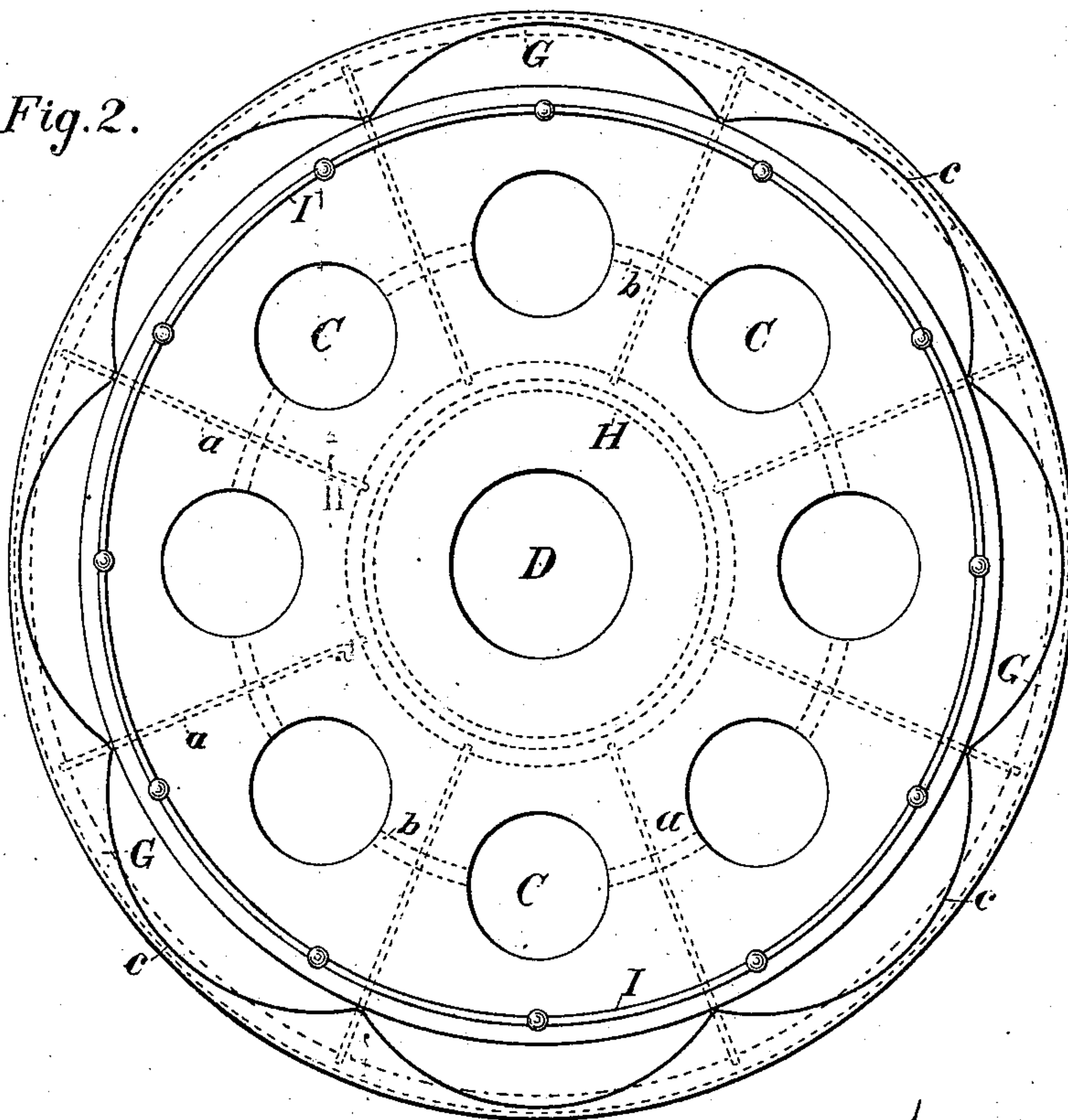


Fig. 2.



Witnesses:  
Chas. Raley  
F. 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 sub-  
ject of the Queen of Great Britain, residing at  
12 Harrison Place, Jesmond, Newcastle-on-  
Tyne, in the county of Northumberland, Eng-  
land, have invented certain new and useful  
Improvements in Life-Saving Buoy-Boats for  
Ships' Use, of which the following is a speci-  
fication, reference being had therein to the ac-  
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, ac-  
cording to my invention, is preferably hemi-  
spherical in form, and is constructed of thin  
steel or iron plate, either pressed or built up  
of alternate plates riveted or otherwise at-  
tached 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  
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  
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  
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  
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  
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 add-  
ing to the weight. The tubes C are connected  
by tubes b close to the lower edge, where they  
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-  
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 attach-  
ing slings for maintaining the life buoy-boat  
in a vertical position on deck.

It will be apparent that the water-tight air-  
space J J will prevent the boat from sinking,  
even though the tube D and the space below  
it in the interior of the hemispherical hull  
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-  
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 accom-  
plished in cases of great emergency. As an  
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-  
boat to keep said boat in the track of vessels.

To further aid the steerage and manipula-  
tion of said boat, I may provide a keel and rud-  
der, which, however, may also be detachable  
into separate parts, and form no portion of the  
actual hull.

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

1. A metallic life-saving buoy-boat consisting



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 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 secured 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 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, 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 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.*