(No Model.)

R. F. S. BELISLE.

SHIP FOR SUBMARINE OBSERVATIONS.

No. 385,656. Patented July 3, 1888.

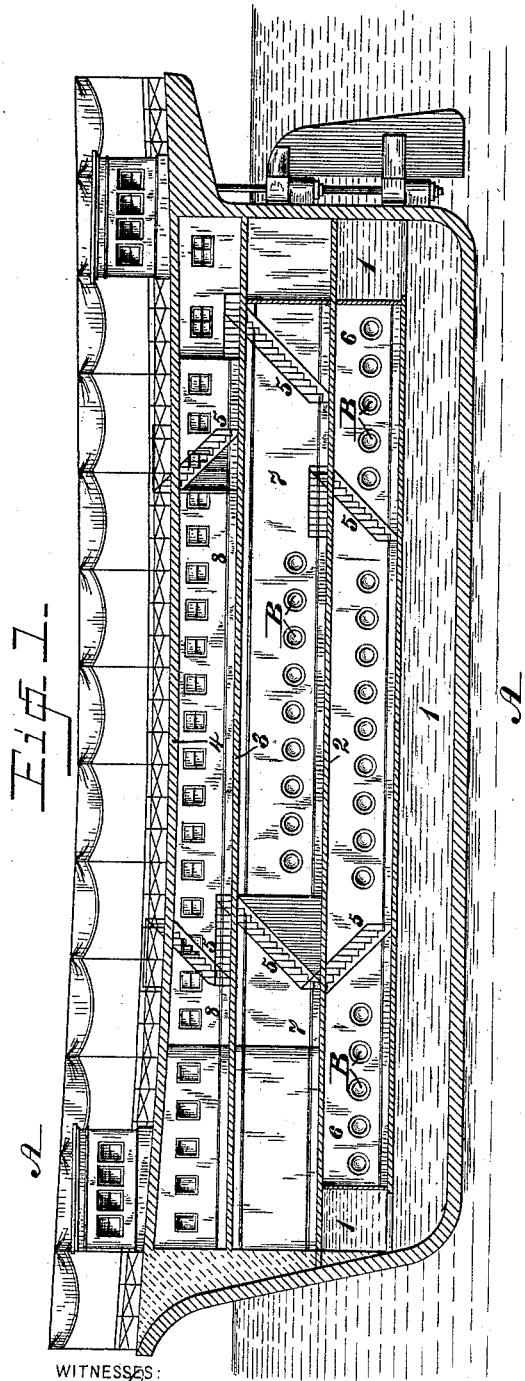

Fig. 1.

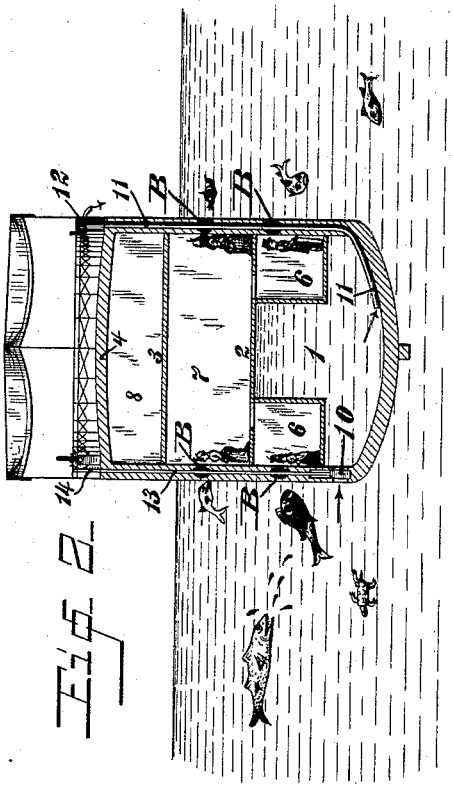

Fig. 2.

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UNITED STATES PATENT OFFICE.

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SHIP FOR SUBMARINE OBSERVATIONS.

SPECIFICATION forming part of Letters Patent No. 385,656, dated July 3, 1888.

Application filed February 27, 1888. Serial No. 265,353. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. S. BELISLE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ships for Submarine Observations, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a ship of novel construction, whereby the same is adapted for submarine observations, &c.

Figure 1 represents a longitudinal section of a ship embodying my invention. Fig. 2 represents a transverse section thereof.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A represents a ship which is formed of the hold 1 and decks 2, 3, and 4, all properly connected and braced or otherwise strengthened, said decks being accessible by means of stairs or steps 5, suitably located. Below the deck 2 are saloons or apartments 6, which are connected with said deck and the sides of the hull of the ship. The decks 2 and 3 form the saloons 7 and 8.

In the sides of the hull corresponding to the saloons 6 and 7 are bull's-eyes, lenses, or lights B, which are secured water-tight in position, and made of transparent or clear glass, so as to be plainly seen through.

The hold has secured to it a valve, 10, (one or more,) and a pipe, 11, (one or more,) the latter being connected with a pump, 12, located on the upper deck. The rod 13 of the valve 10 has an operating-rod, 14, which is accessible at either of the decks.

It will be seen that on opening the valve 10 the hold may be supplied with water, so as to sink the ship to such depth that the several lights B are below the water-line. It will now be seen that the water outside of the ship and objects therein may be seen through the lights B, thus affording amusement or instruction to those making the observations.

When it is desired to raise the ship, the pump 12 is operated, the valve 10 being closed, whereby the water is removed from the hull 1 through the pipe 11. In this condition the ship may be moved from place to place, after the manner of a barge, although, if desired, a propeller or propellers may be applied to the ship for evident purposes.

The lights in each saloon admit of viewing the water at different depths.

I am aware that it is not new to provide vessels for submarine purposes with bull's-eyes, whereby observations may be made from within the vessel and beneath the water. Neither is it new to provide a floating dock or vessel with water-inlet valves located below the water-line, but operated from an upper deck. Neither is it new to provide the holds of such docks or vessels with tubes or pipes, by means of which and mechanism in the upper portion of the vessel the water can be discharged from said hold; but I am not aware that the particular construction herein set forth and claimed is old, wherein below the lower deck are placed one or more compartments having bull's-eyes, said compartments also being normally below the water-line of the vessel.

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

A ship or vessel, substantially as described, having several decks and port-lights arranged in the sides of the hull thereof for the purpose of observation when the vessel is submerged to any desired depth, an inlet-valve near the bottom for the admission of water to the lower hold of said vessel, and discharge mechanism for relieving the vessel of the same.

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