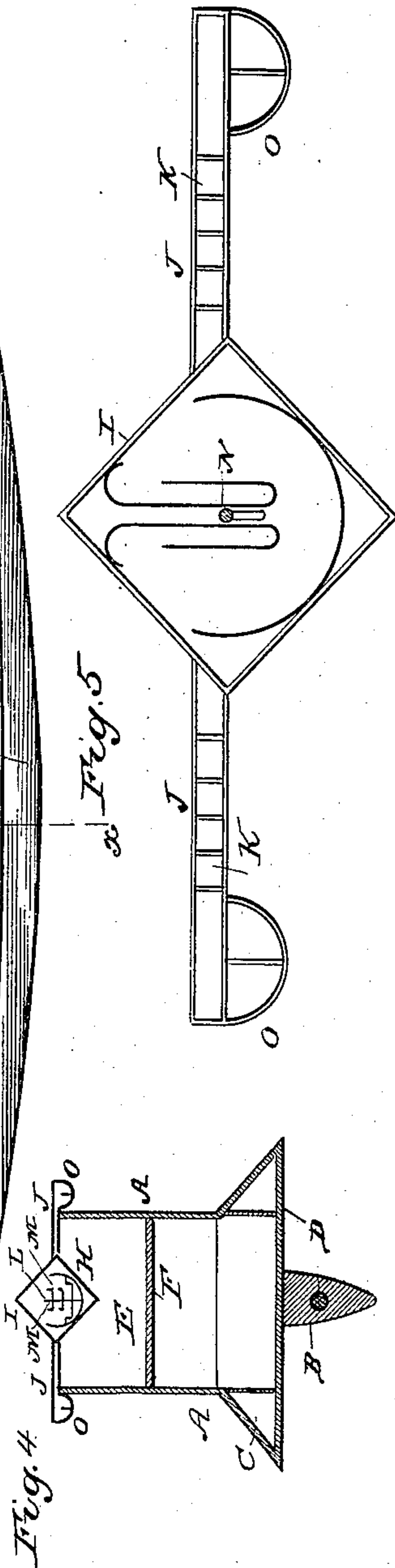
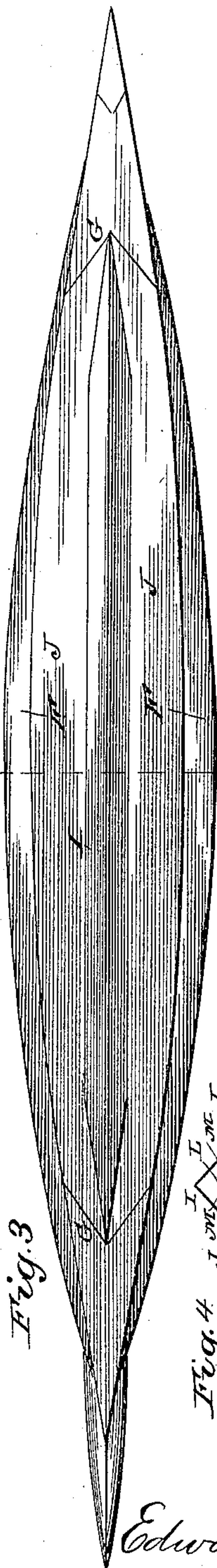
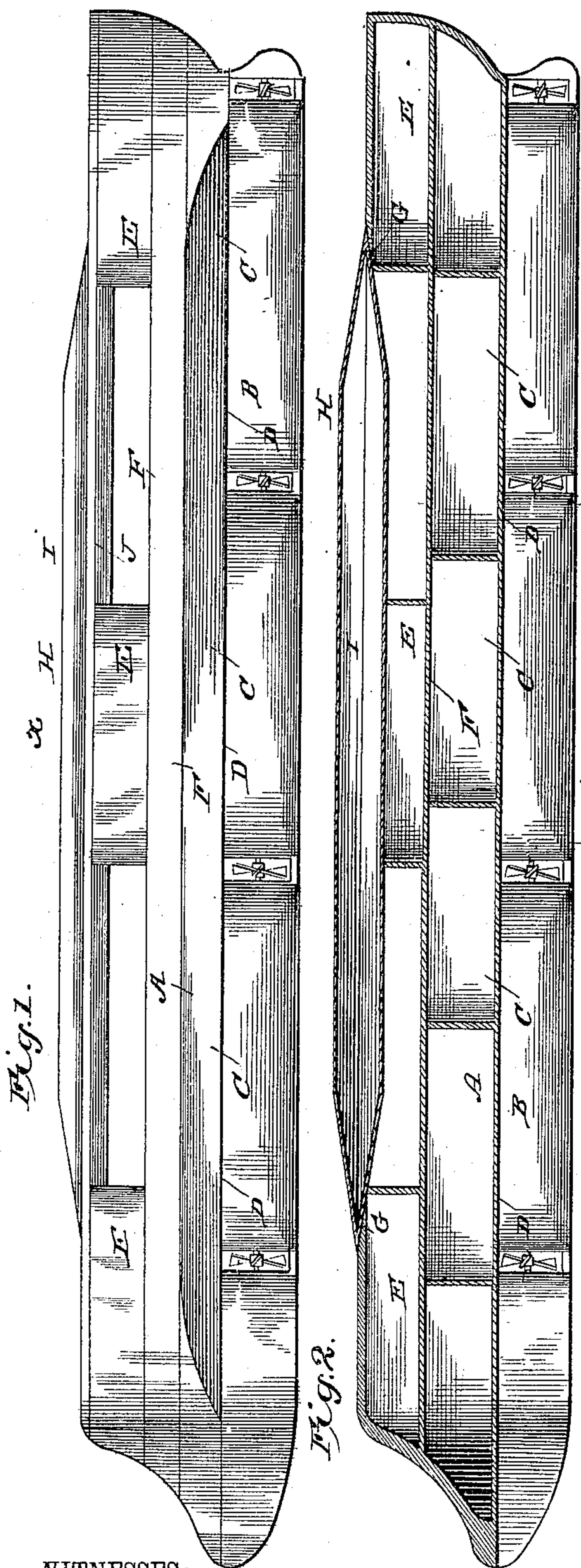


(No Model.)

E. SWINDELL.
CONSTRUCTION OF SHIPS.

No. 323,831.

Patented Aug. 4, 1885.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD SWINDELL, OF APALACHICOLA, FLORIDA.

CONSTRUCTION OF SHIPS.

SPECIFICATION forming part of Letters Patent No. 323,831, dated August 4, 1885.

Application filed April 3, 1885. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SWINDELL, a subject of the Queen of Great Britain, and a resident of Apalachicola, in the county of Franklin and State of Florida, have invented certain new and useful Improvements in Construction of Ships; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of a vessel constructed or equipped with my improvements. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a top view. Fig. 4 is a vertical transverse sectional view taken on the line *xx* in Fig. 3; and Fig. 5 is a transverse sectional view, on a larger scale, of the life-raft detached from the vessel.

The same letters refer to the same parts in all the figures.

This invention relates to sea-going vessels; and it has for its object, first, to increase the buoyancy and steadiness of the vessel, thereby promoting the general safety; secondly, to provide the vessel with a detachable life-raft, which shall form a permanently-occupied part of the same, but which in case of emergency shall become automatically detached and form a life-saving apparatus.

With these ends in view the invention consists in the improved construction and arrangement of details, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates the hull or body of the vessel, and B is the keel of the same, for the detailed construction of which, as well as for the arrangement of the propellers, I have this day filed a separate application for Letters Patent.

The hull is constructed with laterally-extending bulk-heads C C, the bottoms of which, D D, are on a level with the bottom of the hull proper. These bulk-heads, which may be divided into water-tight compartments, may be advantageously utilized as coal-bunks or for other storage purposes. These bulk-heads perform several additional important func-

tions, viz: They serve as guards in case of collision, to prevent injury to the main body of the hull; they tend, by their increased width, to steady the vessel, the motions of which are thereby rendered easier, without detracting from the speed, and they also serve to some extent to brace and strengthen and increase the tenacity of the hull proper.

E E designate the saloons, which are built upon the main deck F of the vessel, and in the detailed construction of which no particular novelty is herein claimed.

The roofs or tops of the saloon structures are formed with seats G for a detachable or separate structure, H, forming a life-raft. The said raft comprises a central longitudinal body, I, which may be square in cross-section, substantially as shown in the drawings hereto annexed, and placed in an angular position, so that it will rest safely in the seats provided for its reception. The said body is provided with laterally-extending flanges J J, which are to be divided into water-tight compartments K and packed with water-tight metallic casks or with buoyant material of any kind, which will cause the said raft to float safely whenever it shall be launched.

The central portion of the raft is to be divided by suitable transverse partitions, L L, into separate compartments or state-rooms, in which the bunks M M are mounted to swing upon longitudinal shafts N, which will cause the said bunks to remain in an approximately-horizontal position, no matter what may be the position of the raft. The under sides of the laterally-extending flanges of the raft are provided at or near their outer edges with ribs O O, which will have a tendency to promote steadiness of motion as well as to increase the buoyancy of the raft.

In ordinary practice the life-raft is retained by its own weight in position in the seats provided for its reception. Any suitable means of communication may be established between the saloons and the raft, which latter is to be equipped with sliding hatches or other suitable means for closing the companion-ways tightly and safely in case of emergency. In rough weather the seas which may wash over the main deck of the vessel will do so without affecting the raft, which may, however,

under such circumstances be connected with or secured to the main hull by means of any suitable fastenings, which may be readily cast or cut loose in case of emergency. In case of the ship foundering, the fastenings may be cast loose, and the raft will then become automatically detached, and, being buoyant and unencumbered by unnecessary weight, will perform all the functions of a life-boat, but in a far safer and more effective manner.

This invention, while especially intended and adapted for passenger-vessels, may be effectively and successfully adapted to war-vessels by making such alterations in the construction and arrangements of parts as will readily suggest themselves. Thus the parts which have herein been described as the saloons would be constructed so as to form turrets, and various other obvious changes would be made. I would also have it distinctly understood that, with regard to the detailed construction of the raft, I do not limit myself to the details herein shown, but reserve to myself the right to all such modifications as may be resorted to without departing from the spirit of my invention.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the hull of a vessel, provided at its ends and at its middle with cabins or saloon structures having their tops formed into seats, with a life-raft consisting of a central longitudinal body and laterally-extending wings, the seats in the roofs of the saloon structures corresponding in shape to the parts of the life-raft resting upon the same, as and for the purpose shown and set forth.

2. The combination, with the life-raft having the central body, I, and wings J, of the vessel having the saloon structures E E E at the ends and middle of its decks formed with seats G in their tops for the reception of the life-raft, the said saloon structures and life-raft having registering-openings provided with suitable water-tight doors or hatchways for effecting communication between the saloons and the raft, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

EDWARD SWINDELL.

Witnesses:

WM. BAGGER,
AUGUST PETERSON.