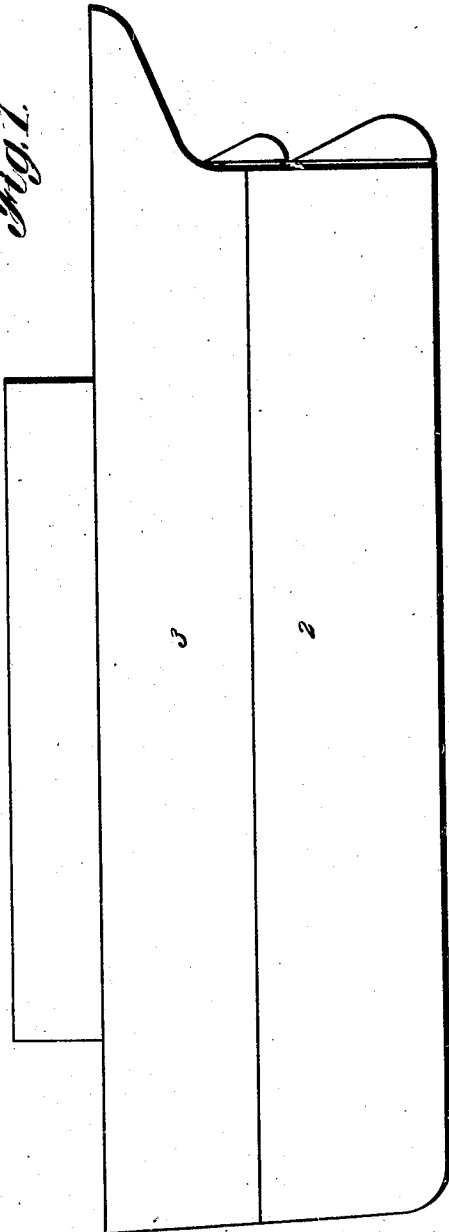


D. A. WOLFE.
SHIP STRUCTURE.
APPLICATION FILED OCT. 22, 1912.

1,061,153.

Patented May 6, 1913.
2 SHEETS—SHEET 1.

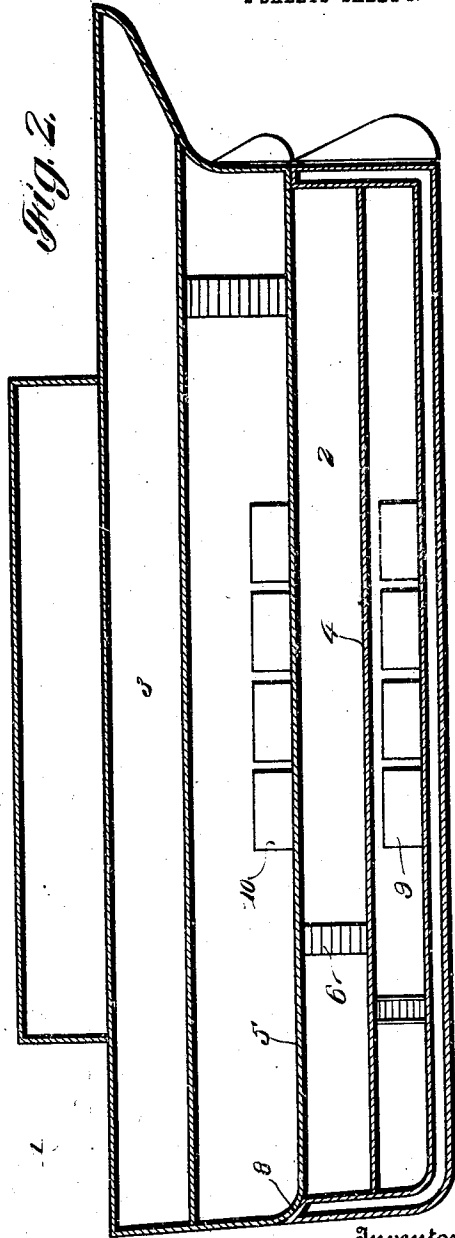
Fig. 1.



Witnesses

J. H. Crawford
A. C. Shiner

Fig. 2.



Inventor

DA Wolfe,

By

Victor J. Evans

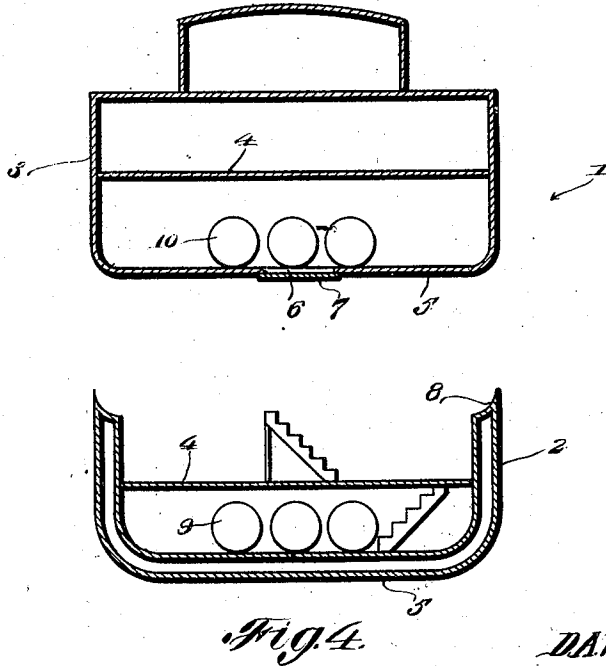
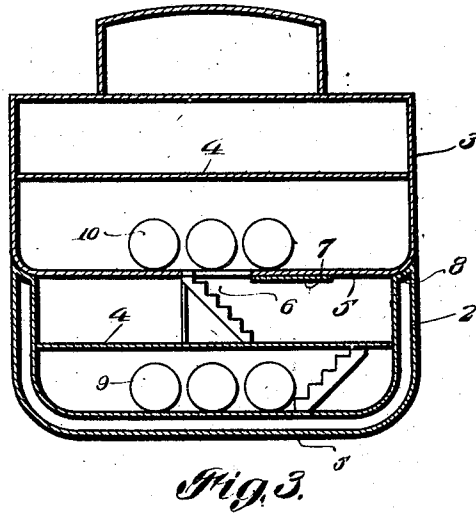
Attorney

D. A. WOLFE.
SHIP STRUCTURE.
APPLICATION FILED OCT. 22, 1912.

1,061,153.

Patented May 6, 1913.

2 SHEETS—SHEET 2.



Inventor
D. A. Wolfe,

Witnesses

J. H. Crawford.
C. C. Hines.

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

DAVID ACON WOLFE, OF TURIN, IOWA.

SHIP STRUCTURE.

1,061,153.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed October 22, 1912. Serial No. 727,234.

To all whom it may concern:

Be it known that I, DAVID A. WOLFE, a citizen of the United States, residing at Turin, in the county of Monona and State of Iowa, have invented new and useful Improvements in Ship Structure, of which the following is a specification.

This invention relates to marine vessels, and its object is to provide a vessel composed of bottom and top sections, each having a hull, the construction being such that, in the event of the penetration of the hull of the lower section to a certain degree, the space between the sections will form an air chamber to limit the inflow of water, while, in the event of irreparable damage to the lower section, the upper section will float free and safely carry the passengers and crew.

With the above and other objects in view, the invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a side elevation of a vessel constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a vertical transverse section. Fig. 4 is a view similar to Fig. 3, showing the sections separated.

Referring to the drawings, 1 designates a ship or marine vessel, which, in accordance with my invention, is longitudinally divided in a transverse direction from bow to stern, forming superposed sections 2 and 3. Each section is complete in itself, and comprises a body or hull having any desired number of decks 4 and a conventional form of bottom 5. Companionways 6 connect the decks of each section, and in the bottom of the section 3 are provided doorways or hatches 7 for the passage of the occupants of the vessel to and from the respective sections. These doors 7 may be of an automatically closing type, operated when the hull of the lower section fills with water to a predetermined extent or is released from connection with the hull of the upper section, and in any event are adapted to be closed in a watertight manner, to prevent entrance of water to the upper section in the event of accident.

The hull of the section 2 is provided with a frame seat 8 on which the bottom of the hull of the section 3 normally rests, whereby

the sections are maintained in engagement with each other under normal conditions by the weight of the top section, but, if desired, the sections may be connected by mechanical fastenings of a type to be readily released when it is desired to free the top section from the bottom section. The boilers 9 and other elements of the propelling mechanism of the vessel may be disposed for normal service in the bottom of the section 2, but if desired a second series of boilers 10 may be arranged in the bottom of the section 3 and arranged to operate auxiliary propelling mechanism, by which said section 3, in the event of its release from the section 2, may have its own driving power. The steering gear employed may be of any suitable type and duplicate sets may be used, one carried by the section 2 for normal service, and the other by the section 3 for emergency use.

In the event that the section 2 should be damaged or penetrated by collision with another vessel or other object above or below the water in such manner as to open the hull thereof, if the break is not of any considerable extent it will be understood that the entrance of water to said section will be arrested as soon as the air contained therein is compressed to a certain degree, whereby the ship in entirety will be kept afloat. If, however, the section 2 should be damaged to a great extent and sink under the weight of the water therein the section 3 will float free thereof as an independent vessel and will safely carry the passengers and crew.

The hull of the section 2 is preferably double-walled, thus diminishing liability of its penetration in the event of collision or striking an obstruction, and enabling repairs in case of partial damage to be more readily made. If desired the said section 2, or both sections, may be provided with water-tight compartments of the usual type. In case of fire in the hold, the lower section may be sunk and the upper section allowed to float off so as to save the passengers and any valuable portion of the freight which may be carried.

I claim:—

1. A ship comprising a longitudinally and transversely divided body, forming superposed sections, the lower section having spaced inner and outer walls connected at their upper edges by a concaved bridge portion forming a seat, the said upper section having rounded surfaces to engage said seat,

whereby the sections are held detachably assembled.

2. A ship comprising a longitudinally and transversely divided body, forming superposed sections, each having a hull closed at its base, the hull of the lower section embodying inner and outer walls connected at their upper marginal edges by a concaved bridge forming a seat, and the hull of the upper section having rounded portions to

engage said seat and provided with openings and doors for closing the same, whereby communication between the hulls of the two sections is afforded.

In testimony whereof I affix my signature 15 in presence of two witnesses.

DAVID ACON WOLFE.

Witnesses:

E. E. MOORE,
N. C. SKAN.