Feb. 6, 1923.

1,444,150

S. GADOMSKI.
SHIP STABILIZER.
FILED MAY 11, 1922.

2 SHEETS-SHEET 1

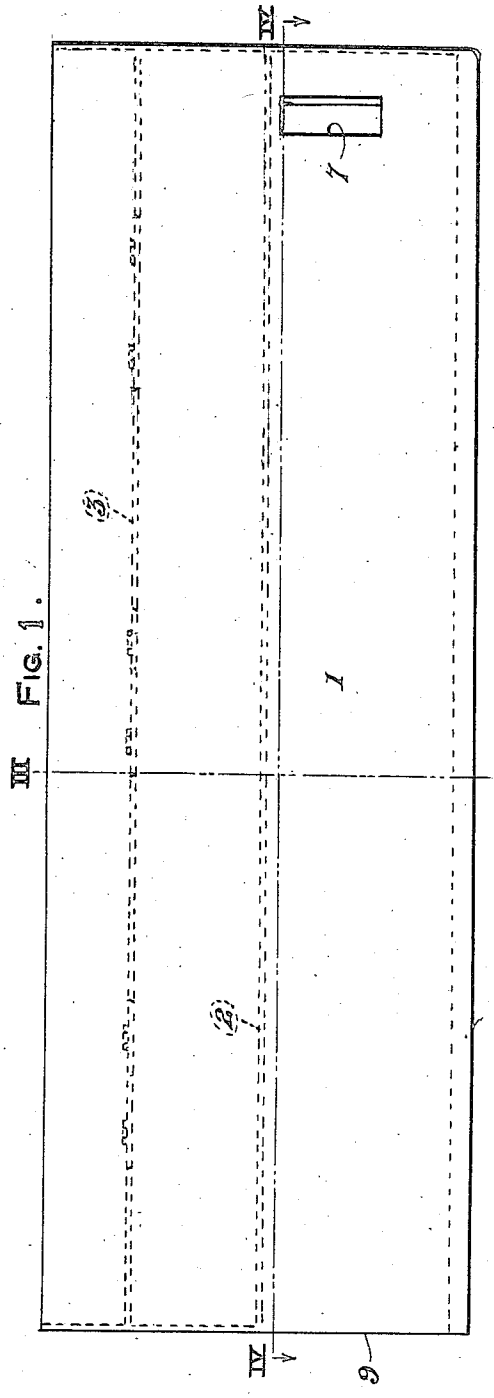


FIG. 1.

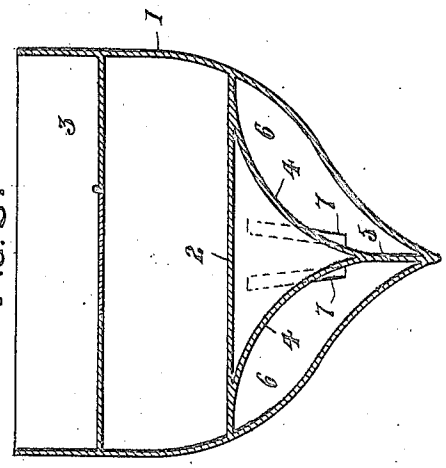


FIG. 3.

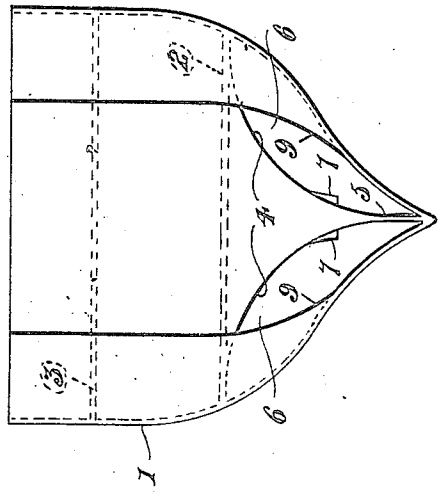


FIG. 2.

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2 SHEETS-SHEET 2

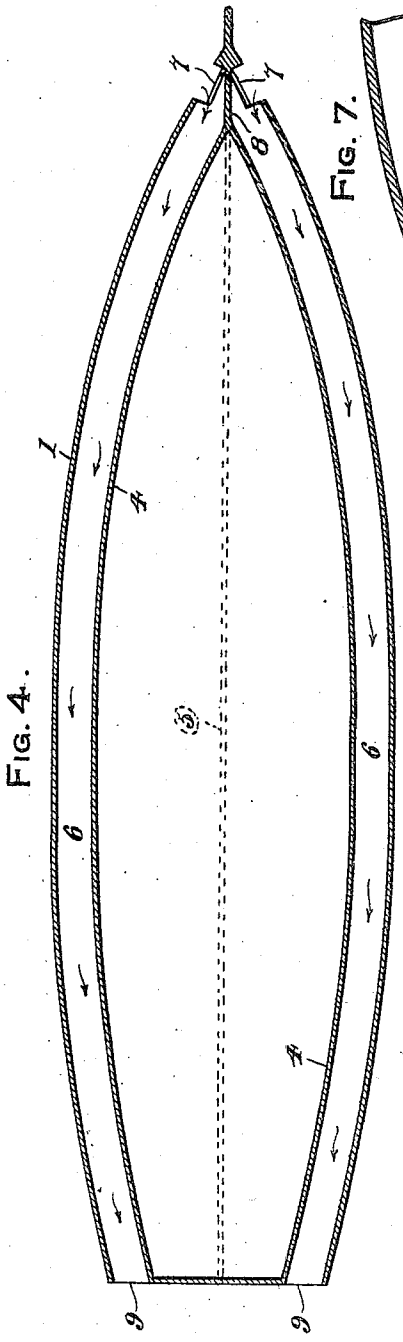


FIG. 4.

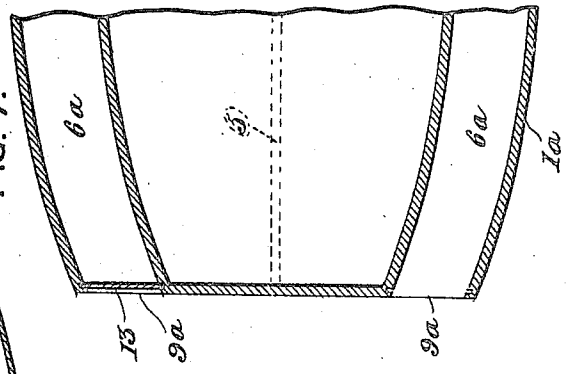


FIG. 7.

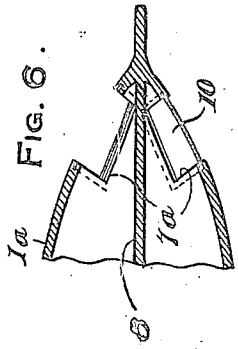


FIG. 6.

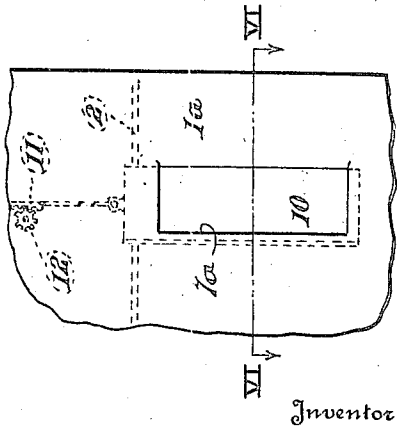


FIG. 5.

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Patented Feb. 6, 1923. 1,444,150

UNITED STATES PATENT OFFICE.

STANLEY GADOMSKI, OF CHICAGO, ILLINOIS.

SHIP STABILIZER.

Application filed May 11, 1922. Serial No. 560,169.

To all whom it may concern:

Be it known that I, STANLEY GADOMSKI, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ship Stabilizers, of which the following is a specification.

This invention relates to certain new and useful improvements in ship stabilizers and has particular reference to that type of stabilizer employing water as a ballast.

The primary object of the invention resides in the provision of a stabilizer for ships wherein a water passage or compartment is provided in the side walls of the ship beneath the water line thereof, the compartments being open at their forward ends adjacent the bow of the ship with sliding closure gates for the rear ends of the compartments to control the passage of water therethrough.

The invention further embodies in a ship stabilizer of the type above set forth, the provision of gates for the front and rear ends of the stabilizing water compartments whereby either of the side compartments may be filled with water for stabilizing the ship and compensating for laterally positioned freight carried thereby.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views:

Fig. 1 is a side elevational view of a ship provided with a stabilizer constructed in accordance with the present invention,

Fig. 2 is a rear elevational view of the stern of the ship showing the outlet for the stabilizing water compartments,

Fig. 3 is a cross sectional view taken on line III—III of Fig. 1, showing the side stabilizing compartments,

Fig. 4 is a longitudinal sectional view taken on line IV—IV of Fig. 1 showing the side stabilizing compartments and the inlet and outlet ends therefor,

Fig. 5 is a fragmentary side elevational view of a modified form of stabilizing water compartment and ship showing a closure gate for the entrance opening thereof,

Fig. 6 is a detail sectional view taken on line VI—VI of Fig. 5, and

Fig. 7 is a horizontal fragmentary sectional view of the rear end of the ship showing one of the gates in its closed position and the other gate shifted to an open position with the stabilizing compartment open.

Referring more in detail to the accompanying drawings, and particular to Figures 1 to 4, there is illustrated a ship embodying side walls 1 and deck portions 2 and 3. The space within the body of the ship beneath the lower deck 2 carries longitudinally extending partition walls 4 joined together as shown in Fig. 3, to form a keelson 5 secured to the keel of the ship as illustrated, the partition walls 4 dividing the space beneath the deck 2 into laterally positioned stabilizing water compartments 6. Each side wall 1 of the ship at the bow end thereof is cut away as at 7 to provide an entrance opening for each compartment 6, the forward ends of the compartments being separated by the wall 8 as clearly shown in Fig. 4. The rear wall of the ship is cut away as at 9 to provide separate outlets for the compartments 6 thereby permitting the free passage of water through the side compartments, adding to the weight of the ship beneath the water line thereof for purposes of stabilizing the same.

In the form of the invention shown in Figures 5 to 7, the bow end of the side wall 1^a is cut away to provide an entrance opening 7^a that is closed by a sliding gate 10 having a rack bar 11 secured to the upper end thereof as shown in Fig. 5 and operable by a pinion 12. The rear ends of the side compartments 6^a are open as at 9^a and are closed by sliding gates 13 as shown in Fig. 7 that are operable in a manner similar to the gates 10.

From the above detailed description of the invention, it is believed that the construction and operation thereof will at once be apparent, it being noted that in the form of the invention shown in Figs. 1 to 4 the side ballast compartments 6 are open at both ends to allow a free passage of water at a point below the water line of the ship for the purpose of stabilizing the same.

In the form of the invention shown in Figures 5 to 7, either of the compartments

6a may be filled with water for ballast to stabilize the ship and compensate for the lateral positioning of freight within the ship.

While the form of the invention herein shown and described is what is believed to be the preferred embodiments thereof, it is nevertheless to be understood that various forms, modifications and arrangements of the parts may be made without departing from the spirit and scope of the invention as claimed.

What I claim is:—

1. In a ship having a keelson and a keel, partition walls extending upwardly at an acute angle from the upper end of said keelson, and side walls extending upwardly at an acute angle from said keel, the upper ends of said partition walls forming a juncture with said side walls at the central portions of the latter for devising water compartments for stabilizing the ship.

2. In a ship, a keelson, a keel, partition walls extending upwardly at an acute angle from the upper end of said keelson, side walls extending upwardly at an acute angle from said keel, the upper ends of said partition walls forming a juncture with said side walls at the central portions of the latter for devising water compartments for stabilizing the ship, and sliding gates cooperating with each end of said water compartments for controlling the inlet and outlet of the water to and from the compartments.

3. In a ship, a keelson, a keel, partition walls extending upwardly at an acute angle from the upper end of the keelson, side walls extending upwardly at an acute angle from said keel, the upper ends of said partition walls forming a juncture with said side walls at the central portions of the latter for devising water compartments for stabilizing the ship, gates associated with each end of said water compartments for controlling the inlet and outlet of the water to and from the compartments, rack bars associated with the upper ends of said gates, and pinions cooperating with said rack bars for sliding the gates in vertical direction.

In testimony whereof I affix my signature.

STANLEY GADOMSKI.