

No. 757,384.

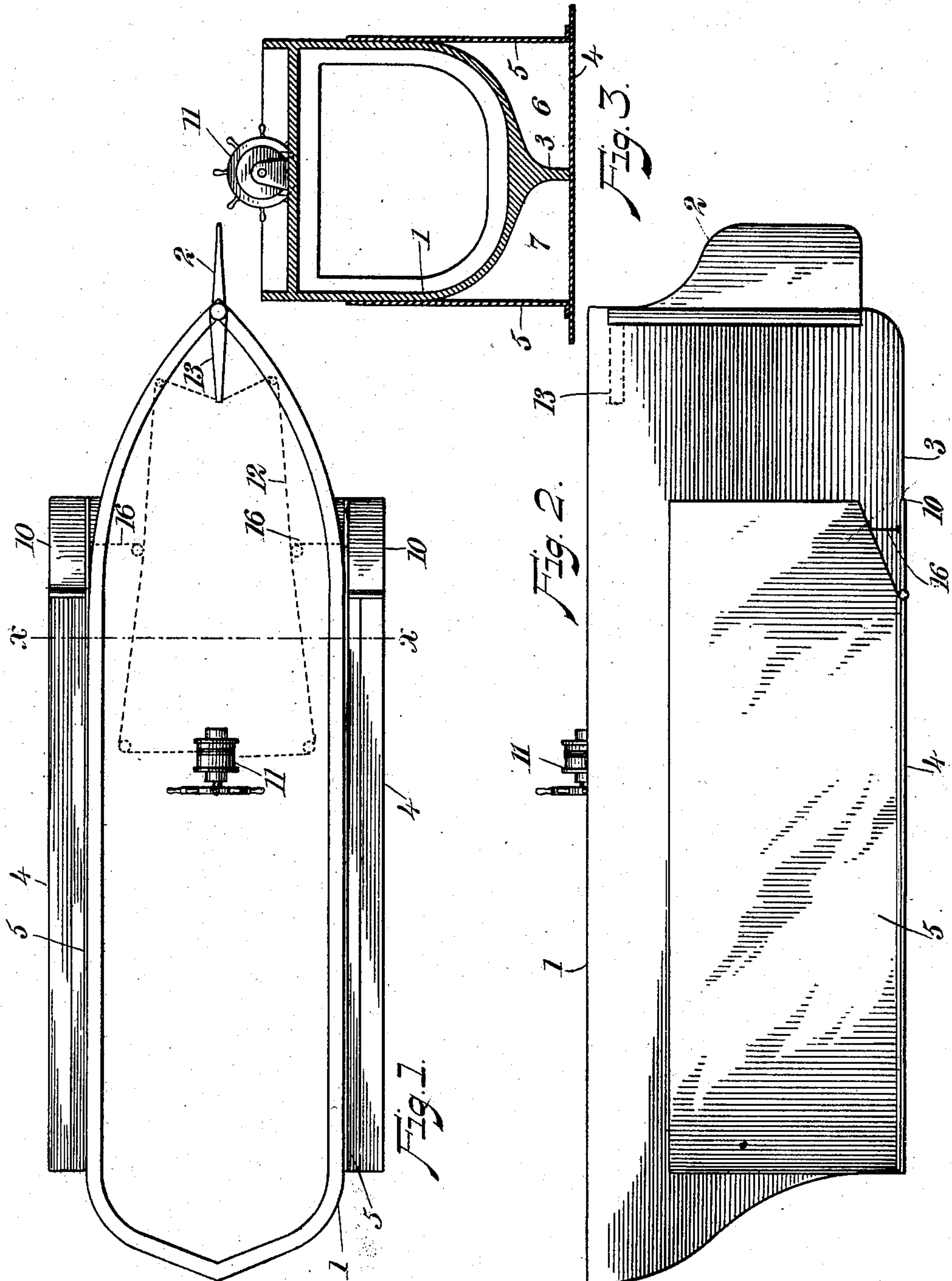
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W. H. YOUNG.

STEERING AND STEADYING MECHANISM FOR BOATS.

APPLICATION FILED FEB. 14, 1903.

NO MODEL.



WITNESSES:

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STEERING AND STEADYING MECHANISM FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 757,384, dated April 12, 1904.

Application filed February 14, 1903. Serial No. 143,310. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY YOUNG, a citizen of the United States, and a resident of Troy, in the county of Rensselaer and State of New York, have invented a new and Improved Steering and Steadying Mechanism for Boats, of which the following is a full, clear, and exact description.

This invention relates to improvements in steering and steadying mechanism for marine vessels, the object being to provide a simple means whereby the boat may be easily steered and also prevented to a great extent from rocking and pitching.

I will describe a steering and steadying mechanism for boats embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a boat, showing the steering and steadying mechanism embodying my invention applied thereto. Fig. 2 is a side elevation thereof, and Fig. 3 is a section on the line *x x* of Fig. 1.

Referring to the drawings, 1 designates the hull of the vessel, and 2 is the rudder, placed at the stem or bow thereof, as I find by so placing the rudder, instead of at the stern, as is the usual practice, the boat is much more readily directed through the water. Extended across the under side of the hull and secured to the keel 3 is a bottom plate 4. This plate extends nearly the whole length of the hull and is somewhat wider than the same. Side plates 5 are attached at their lower edges to the bottom plate 4 and at their upper portions are secured to the sides of the hull. By this arrangement water-chambers 6 7 are formed, respectively, at opposite sides of the keel. As a means to help keep the vessel on an even keel I may provide at the front ends of the chambers upwardly-swinging doors or plates 10. From a drum 11 on the vessel a rope 12

extends around pulleys suitably placed and connects with the tiller 13, extended inward from the rudder-post. The rope 12 will of course have a sufficient number of turns around the drum to cause a friction between the parts. A rope 16 connects the upwardly-swinging doors or plates 10 and after passing around pulleys is wound around the drum 11. It will be understood that the plates 10 are never moved to close the ends of the chambers. By this arrangement of cables when the steering-wheel is turned the rudder of course will be shifted or deflected, and the water passing through the chambers will steady the vessel in going about, thus preventing undue rocking and pitching of the vessel.

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

1. The combination with a boat-hull, of a plate extended across the bottom of the hull, and side plates extended from the first-named plate some distance from its edge to connections with the sides of the hull, thus forming chambers open at both ends for the passage of water.

2. The combination with a boat-hull, of a plate extended across the bottom thereof and secured to the keel, side plates extended from said first-named plate to connections with the sides of the hull, swinging doors at the forward ends of said plates, and means for operating said doors.

3. The combination with a boat-hull, of a plate extended across the bottom thereof, side plates connecting said first-named plate with the sides of the hull, vertically-swinging doors at the forward ends of said plates, and means for operating the doors.

4. The combination with a boat-hull, of a plate extended across the bottom thereof, side plates connecting said first-named plate with the sides of the hull, a rudder arranged at the stem of the hull, and means for operating the said rudder.

5. The combination with a boat-hull, of a plate extended across the bottom thereof and

secured to the keel, upwardly-swinging doors
at the forward end of the hull, a rudder ar-
ranged at the stem of the hull, and means for
operating said rudder and simultaneously clos-
5 ing the door at one side and opening the door
at the other side of the hull.

In testimony whereof I have signed my name

to this specification in the presence of two sub-
scribing witnesses.

WILLIAM HENRY YOUNG.

Witnesses:

FREDERICK JOSIAH YOUNG,
THOMAS VIVIAN McKERNON.