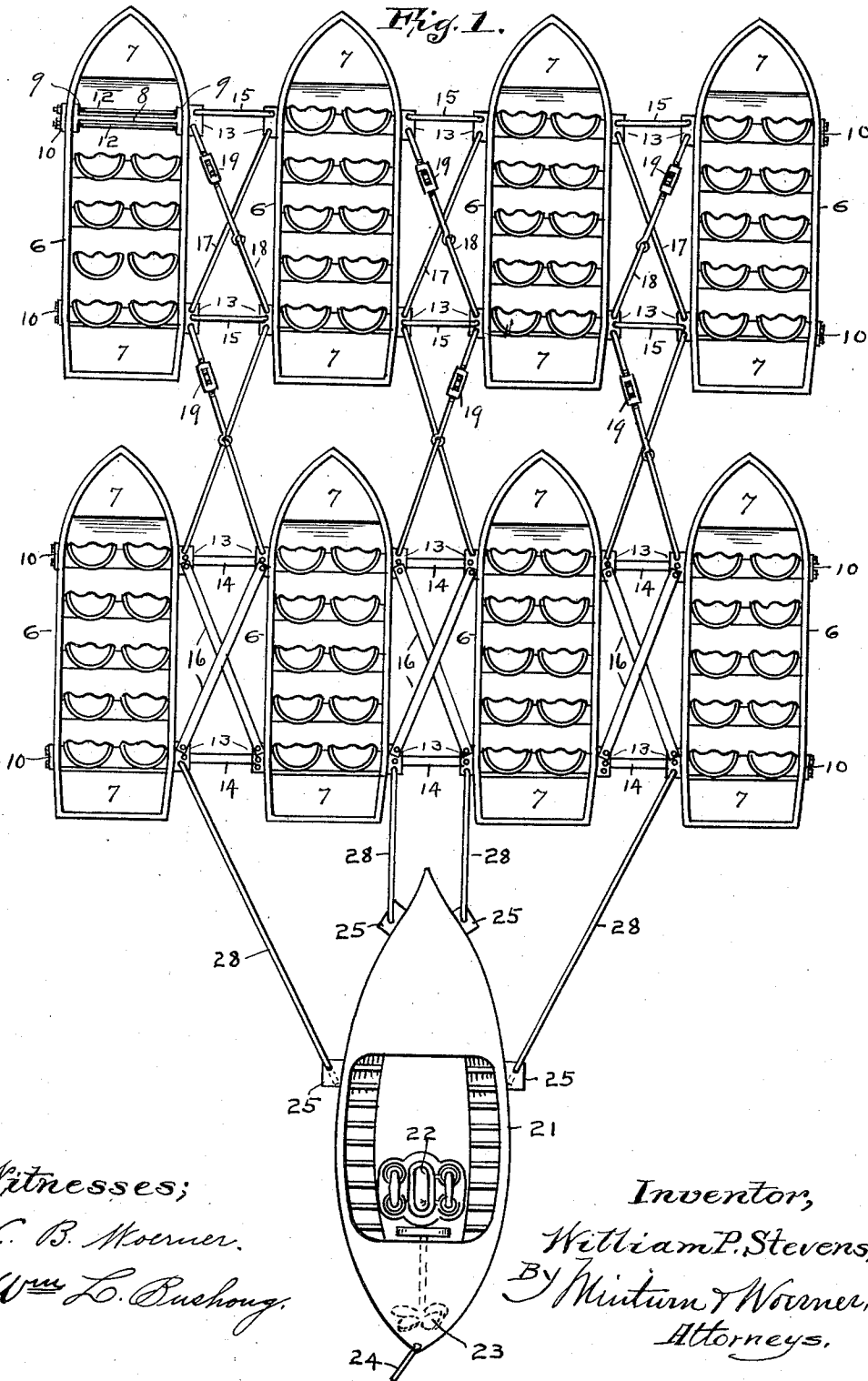


W. P. STEVENS.
 FLOTILLA JOINING AND STEERING MECHANISM.
 APPLICATION FILED JULY 28, 1911.

1,038,676.

Patented Sept. 17, 1912.

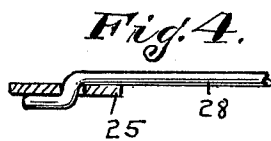
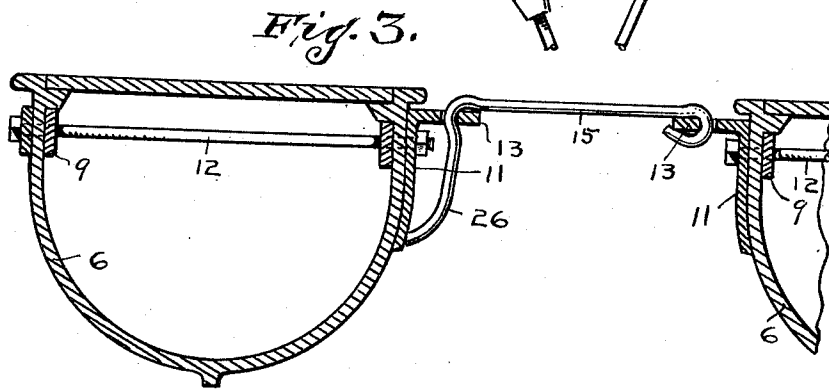
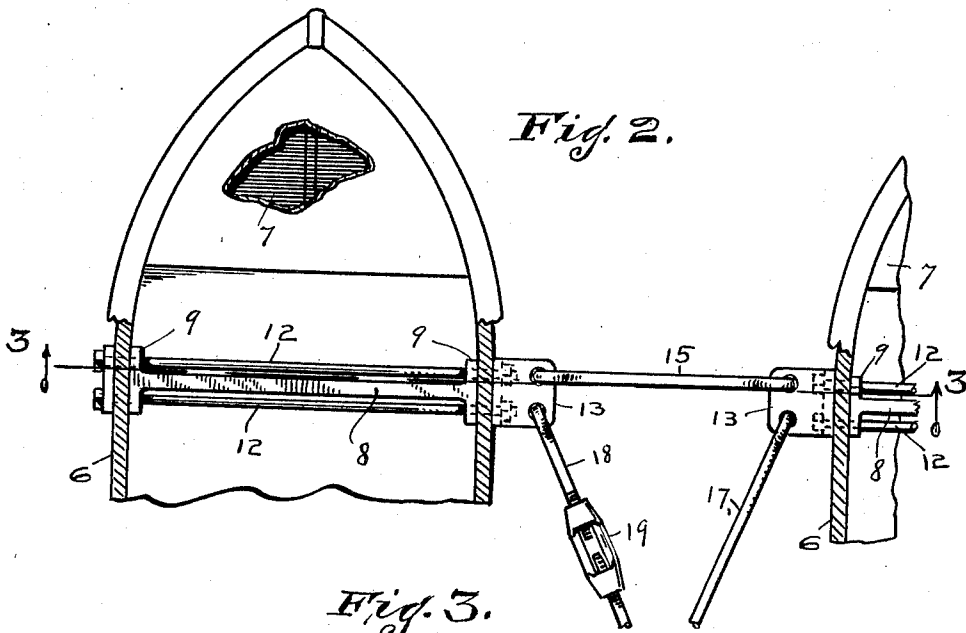
2 SHEETS—SHEET 1.



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Witnesses;
 L. B. Moerner
 Wm L. Rushong.

Inventor;
 William P. Stevens,
 By Murtum & Woerner,
 Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM P. STEVENS, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-FIFTH TO
CHARLES L. SCHMIDT.

FLOTILLA JOINING AND STEERING MECHANISM.

1,038,676.

Specification of Letters Patent. Patented Sept. 17, 1912.

Application filed July 28, 1911. Serial No. 641,067.

To all whom it may concern:

Be it known that I, WILLIAM P. STEVENS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Flotilla Joining and Steering Mechanism, of which the following is a specification.

This invention comprises a flotilla of separate boats and is especially adapted for carrying passengers for pleasure at parks and public places having a body of water of sufficient area.

The object of the invention is to provide an attractive water craft which will accommodate a large number of passengers and carry them readily over quite shallow water.

Another object is to enable small parties to segregate themselves from the crowd and still retain the convenience, economy, and safety of transportation of the combined conveyance.

Another object is to operatively unite a plurality of boats abreast of each other and to join together two or more of such rows into a column thereby forming a connected flotilla which is adapted to be moved as a unit and steered and controlled by a single motor-boat.

A further object is to provide means for varying the number of boats in a flotilla at will; to provide means for preventing the rocking or capsizing of the individual boats and to improve and simplify the details of construction in various ways which will be hereinafter fully described and pointed out in the appended claims.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of a fleet of boats connected with each other and with a motor-boat in accordance with my invention. Fig. 2 is a detail in plan view of the prows of two boats showing front seats removed and the gunwale partially removed to illustrate the underlying construction; Fig. 3 is a vertical section on the line 3—3 of Fig. 2.

Fig. 4 is a detail in side elevation of the rod connecting the motor-boat with the flotilla and shows the manner of bending the end of the rod to retain it, and Fig. 5 is a detail in side elevation of the attachment of the flat tie bars to the boats.

Like characters of reference indicate like parts throughout the several views of the drawings.

My flotilla will comprise a plurality of individual boats 6, each here shown as having a seating capacity for ten people. The boats will have air-tight compartments 7 at prow and stern to keep them from sinking in case of accident and the side of each boat will be braced by transverse bars 8 having integral end plates 9 to bear against the inner walls of the boat. Each boat preferably has two braces located under the front and rear seats respectively. Plates 10 and 11 are secured to the outer sides opposite plates 9 and the outside plates of each boat are held in place by bolts 12 which extend through them and through the plates 9 and across the boat whereby, by means of nuts on the bolts 12, the boat sides may be clamped against plates 9 and brace bars 8.

The plates 11 have horizontal perforated extensions 13, to which transverse bars 14 and 15 for connecting the boats in rows abreast of each other are attached, and also to which diagonal brace bars 16 for the rear row and rods 17 and 18 for the row in front, are fastened. The bars 14 and 16 for the rear row are preferably flat, as shown, in order to hold this row of boats, to which the motor-boat is directly attached by connecting rods, rigidly against tilting side movement liable to be caused by unequal impulses from the motor-boat, particularly when the direction of the latter is changed in steering the flotilla. The diagonal bars 16 will preferably have the under side plates 20 secured to their ends to contact with the under side of plate 13 while the end of the bar contacts with the upper side. The two parts thus formed are bolted to plate 13 and by this means the plate 13 will be clamped between

the two flat-sided members and will thus be held against vertical movement. This will prevent the tipping of the boats to which plates 13 are bolted, but will permit horizontal play necessary for steering purposes. The bars 15, 17, and 18, for the row of boats in front of the one in direct connection with the motor-boat, will preferably be round in cross-section and will have end hooks to pass through suitable perforations in plates 13. This provides a desired flexibility of attachment for all of the boats not in direct drive from the motor and which would be desirable for the rear row were it not for the special conditions arising from their more direct connection with the motor-boat, as above described. The top diagonal brace 18 is in two linked parts to afford flexibility where it crosses the brace 17 and it is provided with a turn-buckle 19 as a means for tightening it, and also for readily loosening it so it can be unhooked from plates 13 and removed, thereby loosening its associated bars, to permit the ready removal or addition of individual boats to the flotilla. To prevent tipping of the outer boats I continue the ends of bars 15 to form the members 26 which contact with the boats well down their sides, as shown in Fig. 3, to keep them from swinging in that direction. The plates 11 will be extended down to form bearings for the ends of members 26.

21 is a motor-boat of usual and well known construction having an engine 22 and moved by a propeller wheel 23 and steered by a rudder 24. It has plates 25 on its outer sides to which push rods 28 are attached and the front ends of the rods are secured to the rear plates 13 of the rear row of boats in the manner as shown in Fig. 1. The rear ends of rods 28 are bent down at right angles forming a member which is passed through plate 25 and is again bent to the rear at right angles forming a member which bears against the under side of plate 25 and prevents the detachment of the rod except when its front end is raised.

While I have here shown two rows of boats with four boats in each row it is obvious that there may be a greater or less number of boats in the rows and only one row or more than two rows without departing from the spirit of this invention; also, that the boats may be utilized for conveying freight instead of passengers and that they may be varied in size according to the capacity desired; also that the grouping of the boats may be otherwise than in straight rows in front of the motor-boat, and that they may be pulled as well as pushed by the motor-boat.

I therefore do not desire to be limited to the exact construction shown and described, but

What I do claim as new and wish to secure by Letters Patent, is—

1. In a flotilla, a motor-driven boat, means for steering said boat, a plurality of other boats on each side of the path of the motor-driven boat, means for flexibly connecting the plurality of other boats together to be propelled and steered as a unit means connected with said last means for limiting the rocking movement of the boats, and means connecting said unit with the motor-driven boat to cause the unit to be moved and steered by the latter and to maintain the boats of said unit on each side of the path of the motor-driven boat.

2. In a flotilla, a plurality of boats, means for connecting the boats with each other to form a flexible unit adapted to be propelled and steered as such, said means having extensions to limit the rocking movement of the boats, a motor-boat, means for steering the motor-boat, and means for connecting said unit with the motor-boat to propel and steer the unit by the movement of the motor-boat.

3. In a flotilla, a plurality of boats, bars connecting the boats with each other side by side in rows, means connected with said last means for limiting the rocking movement of the boats, means for connecting said rows in a column, a motor-driven boat, means for steering the latter, and means for connecting said column of boats with the motor-driven boat whereby the column of boats will be propelled and steered by the motor-driven boat.

4. A plurality of boats, plates on the sides of the boats having horizontal perforated members, bars having hooked ends passing loosely through said perforated members some of said hooked ends being extended downwardly to form stops to contact with the sides of the boats below the horizontal members and limit the rocking of the boats.

5. A plurality of boats abreast of each other, transverse bars and oblique braces holding the boats in that position, the upper ones of said oblique braces being in two jointed pieces.

6. A plurality of boats abreast of each other, transverse bars and oblique braces holding the boats in that position, the upper oblique braces being in two jointed parts and a turn-buckle to tighten the jointed brace.

7. A plurality of boats, plates on the sides of said boats having horizontal perforated member, bars having bent ends passing loosely through the perforations of said horizontal members connecting said members to unite the boats into a flexible unit, and means on said bars to limit the rocking movement of the boats.

8. A plurality of boats abreast of each

other in rows and plurality of rows in a column, plates on the sides of said boats, and transverse bars, and also diagonal bars, attached at their ends to said plates to join the boats into a unit.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana,

this, 24th day of July, A. D. one thousand nine hundred and eleven.

WILLIAM P. STEVENS. [L. S.]

Witnesses:

F. W. WOERNER,

J. A. MINTURN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."