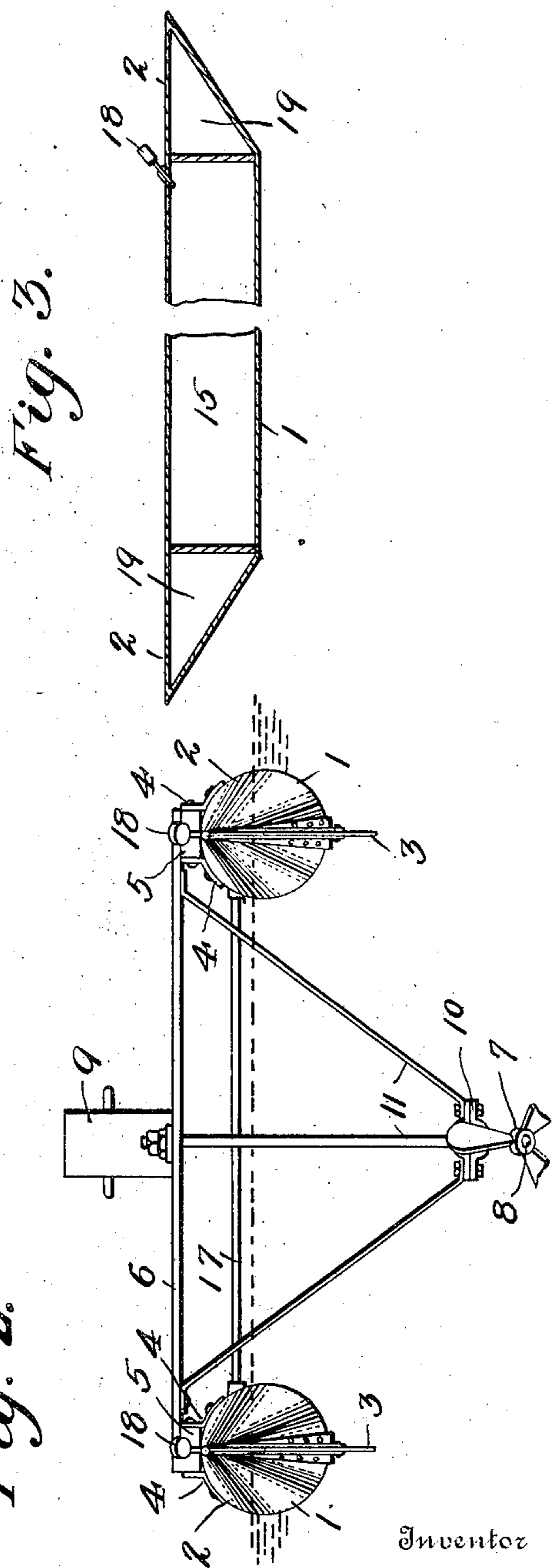
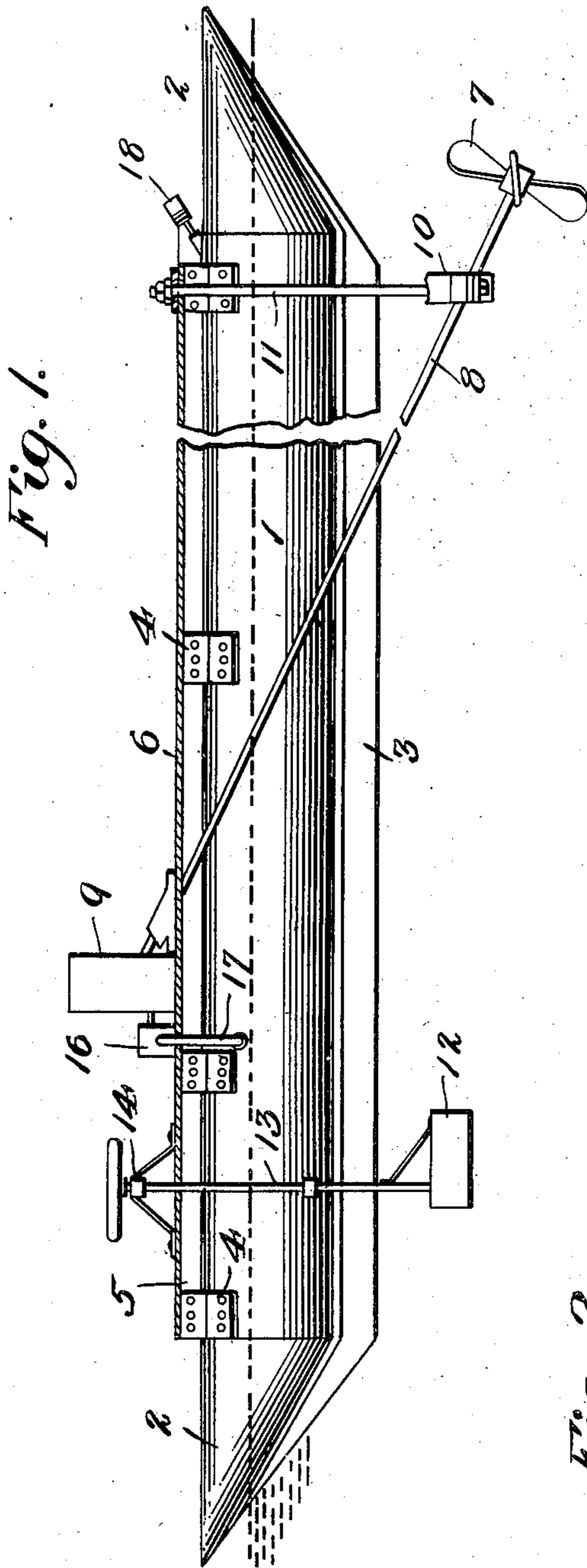


944,209.

Patented Dec. 21, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE

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## BOAT.

944,209.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed July 20, 1909. Serial No. 508,612.

*To all whom it may concern:*

Be it known that I, WILLIAM J. REED, a citizen of the United States, residing at Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Boats, of which the following is a specification.

My invention relates to boats and has for its object the improvement of the construction of boats used for carrying passengers and freight consisting in providing two air tight cylindrical tubes spaced apart and mounting the deck on top of the tubes so that it clears the surface of the water, each tube having its ends provided with tapered portions forming compartments separate from the compartment inclosed by the body of the tube and with a keel extending the full length thereof and tapered to a point bow and stern.

My invention also consists in arranging the propeller midway between the stern ends of the buoyant tubes and as the water between the tubes is not disturbed by the passage thereof over the water the propeller is rotating in a solid body of water instead of the disturbed mass in boats of ordinary construction where the propeller is under the stern of the boat.

Still another feature of my invention consists in placing the rudder near the bow of the boat instead of under the stern so that it does not interfere with the operation of the propeller and has a solid mass of water to operate in.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a central longitudinal sectional view of my improved boat, Fig. 2, a rear view, and Fig. 3, a longitudinal sectional view of one of the tubes.

In the drawings similar reference characters indicate corresponding parts in all of the views.

The buoyancy of my improved boat depends upon the air tight tubes 1 spaced apart and having their ends provided with points 2 with their top surface on the same

level as the tubes while their bottoms and sides are tapered to a point.

3 indicates a keel secured to the underside of each tube 1 and points 2 and having its ends tapered to the ends of said points.

4 indicates angular plates secured to the top of each tube 1 in pairs and spaced apart, and 5 the deck supporting beams secured between said plates.

6 indicates the deck secured to beams 5.

The propeller 7 is secured to the rear end of shaft 8 and driven by motor 9 located on deck 6 forward of midship, the rear end of the shaft being journaled in a box 10 supported by brackets 11 secured to the underside of the deck.

The rudder 12 is, as shown, located near the head end of the vessel, the rudder post 13 extending through the deck 6 and having its upper end supported by a standard 14.

The body of each tube 1 is constructed in a single air tight compartment 15 and an air-pump 16 is provided and connected by means of tubes or pipes 17 with the compartments 15, 18 indicating a pressure gage connected with each compartment 15 to indicate the air pressure therein. The points 2 have compartments 19 therein separate from compartments 15 and containing air under ordinary atmospheric pressure.

By locating the rudder near the bow end of the boat an advantage is secured in that the rudder plays in a solid mass of water undisturbed by the bulk of the boat and by being to the rear of the forward ends of points 2 it is protected from injury by striking obstructions.

The propeller, being located between tubes 1, has a solid mass of water to operate in as the water between the tubes is not disturbed and furthermore the suction of the propeller is avoided so that instead of the boat going up hill at all times while in motion under the influence of the propeller, the boat proceeds on even keel and its draft being very slight skims over the surface of the water at a high speed comparable to the strength of the motor.

Having thus described my invention what I claim is—

5 A boat comprising two tubes spaced apart and filled with compressed air, the ends of the tubes pointed, a keel secured to the underside of each tube and tapered to the pointed ends thereof, a deck secured to the upper sides of the tubes and clearing the plane of said upper sides, a propeller lo-

cated midway between the tubes at the stern, 10 and a rudder secured midway between the tubes near the head end of the boat.

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

WILLIAM J. REED.

Witnesses:

EDWIN F. CARPENTER,

WALLACE W. NASH.