N° 28,900



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PROVISIONAE SPECIFICATION.

Improvements in Compound Boats.

I, James Dundas White, of 50, Clanricarde Gardens, London, Barrister-at-Law, do hereby declare the nature of this invention to be as follows:—

My invention relates to compound boats. The main object of my invention is to provide a compound boat which shall combine great stability with small displacement, and in which each of the hulls shall have sufficient freedom to roll, pitch, and adjust its heading, so as to avoid those excessive strains which have hindered the development of this type of boat. Further objects of my invention are to keep the several hulls directed in the line of their progress and

to prevent them from "diving."

In carrying out my invention I provide a horizontal framework, on which may be a deck. This framework is supported at three places by three vertical posts, each of which is rigid with it and strongly trussed to it, and projects below it. The lower ends of these three posts rest respectively on three hulls, each post being joined to its hull by a universal joint, which allows the hull 15 to roll, pitch, and adjust its heading through sufficient angles. In each hull the joint is placed so low down as to make the pressure of the superincumbent weight operate as ballast. In each hull the joint is well forward of the centre of lateral resistance, so as to keep the hull heading in the direction of its progress, and well aft of the centre of buoyancy, so as to prevent "diving." 20 Preferably, also, the joint is well forward of the centre of gravity of the hull, so that any lifting tendency may raise the bow first. To meet these requirements, the hulls are designed with full lines forward and fine lines aft, on what is commonly called "the cod's head and mackerel's tail" principle. Each vertical post passes to the lower part of the corresponding hull through a well 25 in that hull, which well is shaped preferably like an inverted cone frustum and bulkheaded off from the rest of the hull-space. Except for this well, each hull is preferably a watertight pontoon. In each hull the joint is on or immediately above the keel, and the surrounding well is large enough to allow for the various movements. In each hull the well may be covered and made water-tight by a flexible waterproof covering which will not interfere with the movements of the hull.

The range of the movements of each hull may be restricted by check-lines,

preferably of wire rope with spring buffer stops.

When the compound boat is equipped for sailing, the mast or masts and sails are mounted on, supported from, and worked from the horizontal framework.

When the compound boat is equipped with mechanical power, the engines are preferably placed on the horizontal framework and the thrust communicated to that.

The hulls may be of the ordinary type, or they may be constructed on the hydroplane principle.

Dated this 10th day of December, 1909,

J. D. WHITE.