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V. M. VAN GIESON

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AIRSHIP

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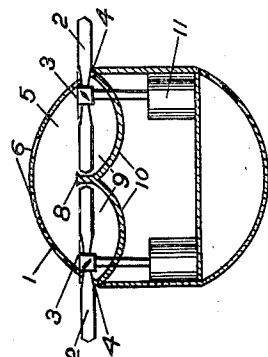
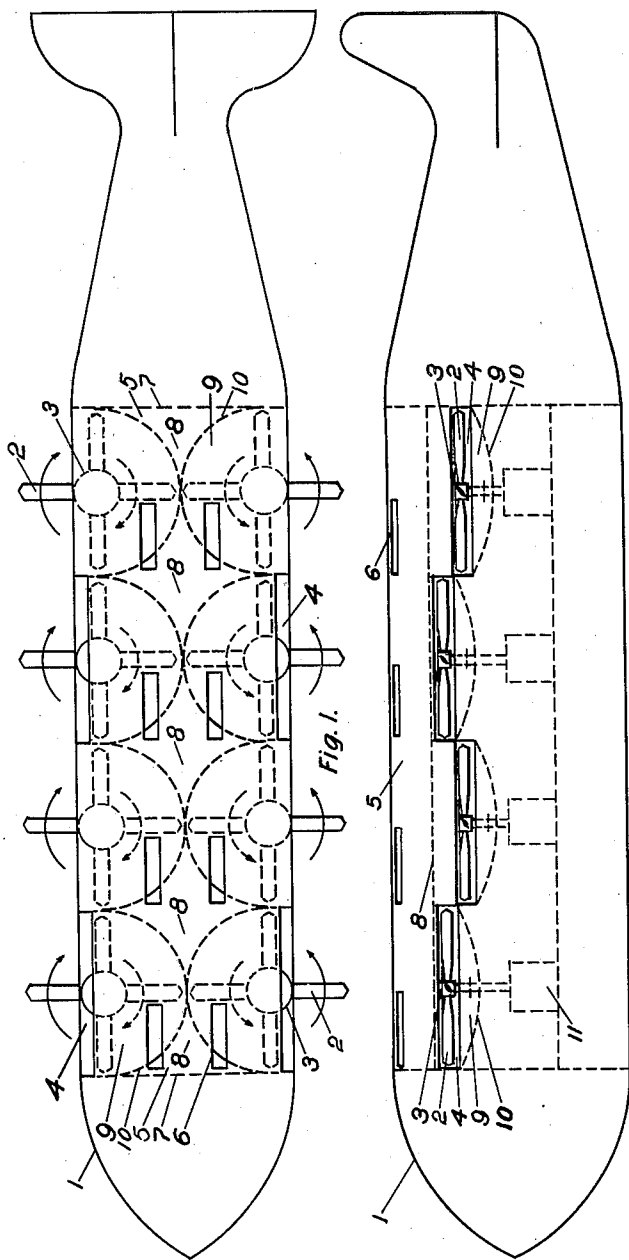


Fig. 2.

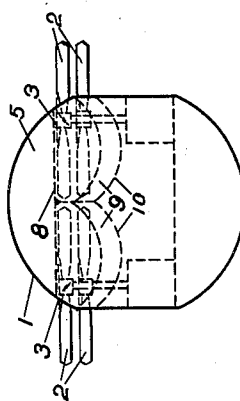


Fig. 4.

Fig. 3.

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AIRSHIP

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1 Claim. (Cl. 244—26)

The object of this invention is to propel an airship by the combination of a system of propellers operating in a, more or less, horizontal plane, and a certain amount of control over air currents admitted to the propeller blades.

Fig. 1 represents the plan of the airship.

Fig. 2 is the side elevation.

Fig. 3 is the front elevation.

Fig. 4 is a cross section thru the first pair of propellers.

The attached drawing depicts the design of an airship consisting of the following numbered parts, together with such fins and rudders as may be needed for steering and controlling same. Wings may be attached to the hull for the purpose of converting forward speed into upward lift, or for the purpose of stabilization.

Similar numerals refer to similar parts throughout the several views.

Referring to the drawing, 1 indicates a suggested design of the hull. Propellers 2, two or more in number, which may be of any conventional practical type, are mounted to operate in an approximately horizontal plane, partly within and partly without the hull 1, propellers 2 on opposite sides of the hull 1 rotating in opposite directions. Propellers 2 project thru propeller slots 4 formed in the sides of the hull 1. Motors 11, which may be of any conventional practical type or in any number, are installed to drive the propellers 2. The propellers 2 are mounted in an enclosed chamber in the upper portion of the hull 1, separated from the remainder of the space within the hull 1 by a partition, consisting of the air intake chamber end partitions 7, the air intake chamber floor 8 and the air outlet chamber walls 10, attached to the hull and attached to or continuous with each other. The part of this chamber above the propellers 2 is the air intake chamber 5 and the downwardly dished portion below each propeller 2 is the air outlet chamber 9. Air intake slots 6 are formed in the top of the hull 1 to permit air to be drawn into the air intake chamber 5. Propeller shields 3 are arranged to prevent the return of air from air outlet chamber 9 to air intake chamber 5.

In operation, the parts of propellers 2 inside of hull 1, in rotating, draw air downward through the air intake slots 6, and air intake chamber 5, and thru this action exert a lifting force on the ship. The air admitted thru the air intake slots 6, and the air intake chambers 5, is then forced by the propellers 2, thru the air outlet chambers 9, and propeller slots 4, to points directly beneath those parts of the propellers 2 operating outside of the hull 1, thus forming a base of compressed air as an aid to the action of the propellers 2. The compression is produced by the conjunction of the stream of air discharged from the air outlet chambers 9 and the stream of air outside the ship and moving backward in relation to the ship when in motion. The parts of the propellers 2 operating within the hull 1, exert a lifting force while the parts of the propellers 2 operating outside of the hull 1 impart both a forward and an upward motion.

I claim:

The combination, in an airship, of a hull, having propeller slots and air intake slots formed in the sides and top respectively; one or more pairs of propellers arranged approximately in a horizontal plane, part of each propeller operating within the hull and part of each propeller projecting through a propeller slot and operating outside of the hull, one propeller of each pair being on each side of the hull, the propellers on opposite sides of the hull rotating in opposite directions; a partition extending across said hull, attached to the sides thereof and formed with a downwardly dished portion below each propeller and forming with the upper portion of the hull a chamber whereby the rotation of the parts of the propellers which are inside of the hull draws air thru the slots into the air intake chamber, thence forces the air into the dished portions of the chamber, from which it is forced out thru the propeller slots directly underneath the parts of the propellers which operate outside of the hull, where it creates a base of moving air underneath the part of each propeller which is outside of the hull, substantially as described.

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