

R. GENDTS.

AIRSHIP.

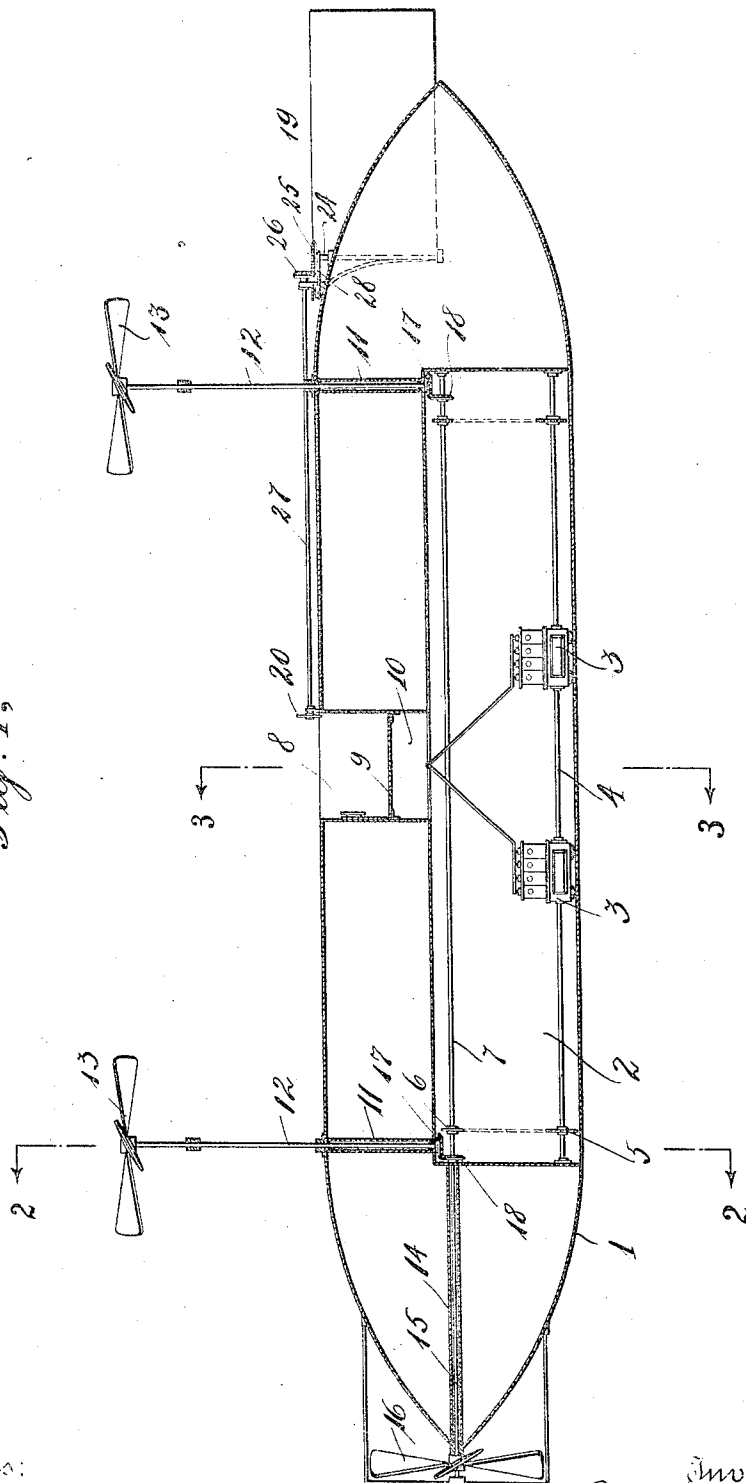
APPLICATION FILED APR. 29, 1909.

Patented May 10, 1910.

2 SHEETS—SHEET 1.

957,205.

Fig. 1.



Witnesses:
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Inventor:
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By his Attorney
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2 SHEETS—SHEET 2.

Fig. 4.

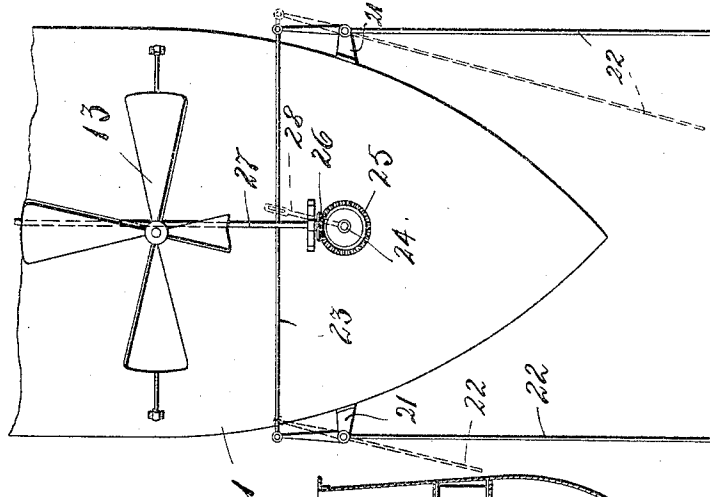


Fig. 3.

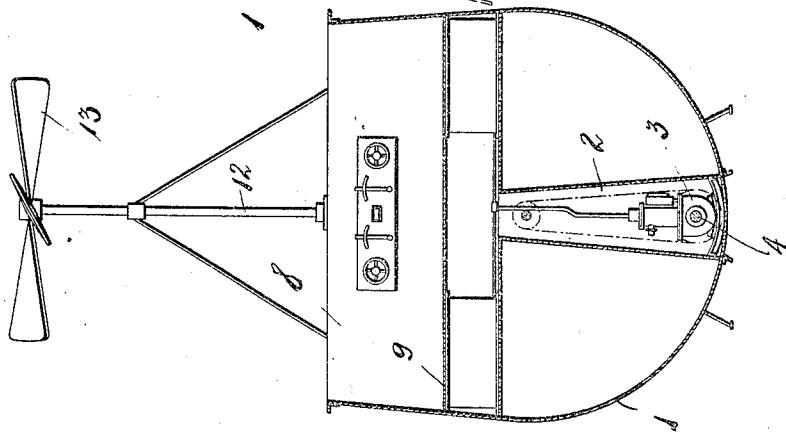
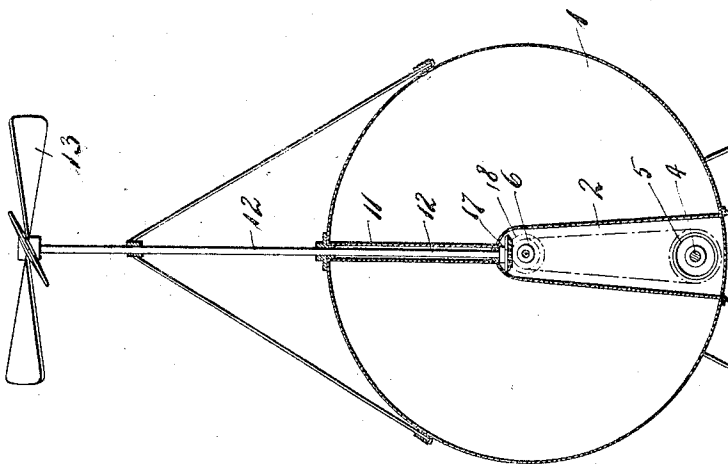


Fig. 2.



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UNITED STATES PATENT OFFICE.

RUDOLF GENDTS, OF NEW YORK, N. Y.

AIRSHIP.

957,205.

Specification of Letters Patent.

Patented May 10, 1910.

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To all whom it may concern:

Be it known that I, RUDOLF GENDTS, a subject of the German Emperor, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Airships, of which the following is a specification.

The present invention relates to airships of the class known as "lighter than air" and of rigid system. It particularly pertains to airships which consist of a cigar-shaped metal gas balloon, and has for its object to simplify the construction such as to dispense with the car which hitherto has been suspended from the balloon and in which the motors for driving it are arranged.

It also has the object to provide appropriate means for steering and propelling the airship.

In order to make my invention more clear the same is illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal section through the airship; Fig. 2 a cross section on line 2—2 of Fig. 1; Fig. 3 a cross section on line 3—3 of Fig. 1, and Fig. 4 a top plan view of the rudder end of the airship.

In the drawing 1 denotes the cigar-shaped gas balloon which may be made of aluminum and may receive the gas directly, or as in the Zeppelin system, contain a number of balloonettes. Extending centrally and longitudinally in said balloon is a compartment 2 which at the bottom of the balloon is widest and is gradually narrowed in upward direction. This compartment may be made of suitable length and height sufficient to contain the motors 3, 3, the transmission shaft 4, transmission gearings 5, 6 and the driven shaft 7. It may be tightly closed against the compartment or compartments surrounding it and containing the gas, or gas balloonettes.

In the center above the compartment 2 a box-shaped space 8 is formed which takes the place of the suspended car with ordinary airships, and is adapted to receive passengers or to form the stand for the driver or captain. This space may be somewhat widened, as seen from Fig. 3. Between the bottom 9 of this space and the top of the compartment 2 a space 10 may be provided

to contain fuel tanks, gas reservoirs, or the like.

Extending upward through vertical tubings 11 provided in the gas balloon are spindles 12 which carry propellers 13 serving for the propulsion of the airship in vertical direction. Through the longitudinal tubing 14 a spindle 15 extends outward which carries the propeller 16 serving for the propulsion of the airship in forward direction. The transmission of movement from the motors to the spindles 12 and 14 may be attained by suitable gears 17, 18.

The rudder 19 may be made to be manipulated from within the space or car 8 by means of a steering wheel 20. The same may be constructed as an ordinary rudder, but I prefer to arrange the same as follows: Fulcrumed or hinged in brackets 21 projecting from the rear point of the airship are at each side thereof rudder blades 22. The forward upper ends of the rudder blades are connected with one another by a rod 23. Mounted upon the spindle 24 borne on the upper surface and at the rear end of the airship is a beveled gear 25, with which meshes a gear 26 mounted on the steering spindle 27. The rod 23 by a crank arm is connected with the spindle 24, so that by the rotation of the spindle 27 by means of the wheel 20, movement from the gear 25 will be transmitted to the paddles or blades 22 into one or the other direction, in consequence of which the airship will be steered accordingly.

What I claim and desire to secure by Letters Patent is:—

1. In an airship, the combination with motors, transmission gearings and propellers, of a rigid cigar-shaped gas balloon containing a lower compartment to receive the motors and the transmission gearings, an upper open compartment to serve as a passenger car, a pair of rudder blades, gears for transmitting movement to the latter; a central steering spindle carrying at one end one of said gears and terminating at its other end into the open compartment, and a steering wheel mounted on said free end.

2. In an airship, a rigid balloon having an upper compartment open at the top and serving as a passenger car, a pair of lateral

rudder blades, a rod connecting said rudder blades together, a central longitudinal spindle extending from the upper margin of the car rearward, a vertical shaft carried by the rear end of the body of the ship, a gear on said shaft, a second gear carried by the spindle and meshing with the said first gear and a crank arm connecting the

latter with the connecting rod of the rudder blades.

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

RUDOLF GENDTS

Witnesses:

ELLIS V. LEVY,
MAX D. ORDMANN.