F. MYLIUS.

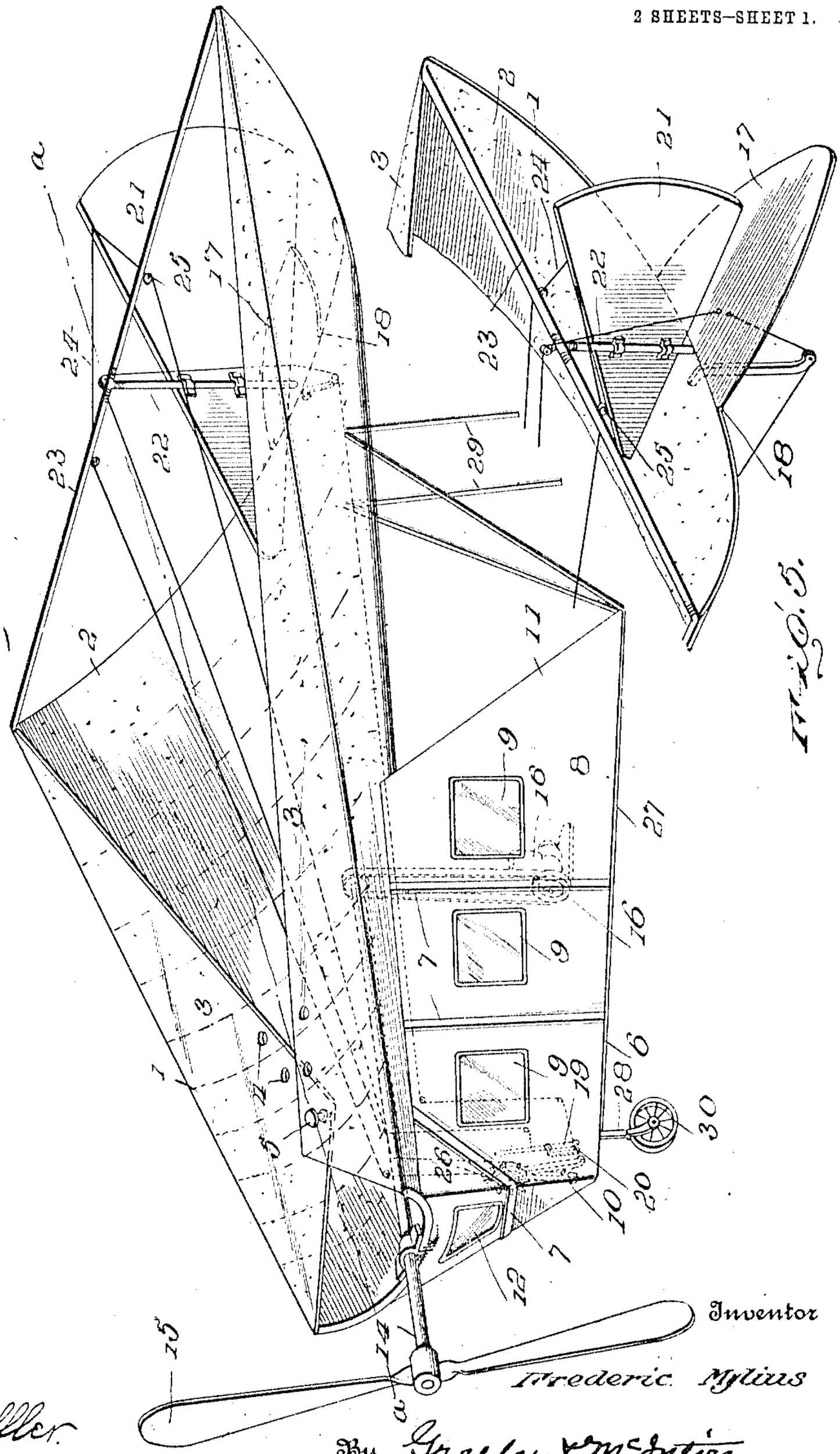
AIRSHIP.

APPLICATION FILED SEPT. 28, 1910.

983,750.

Patented Feb. 7, 1911.

2 SHEETS—SHEET 1.



Witnesses

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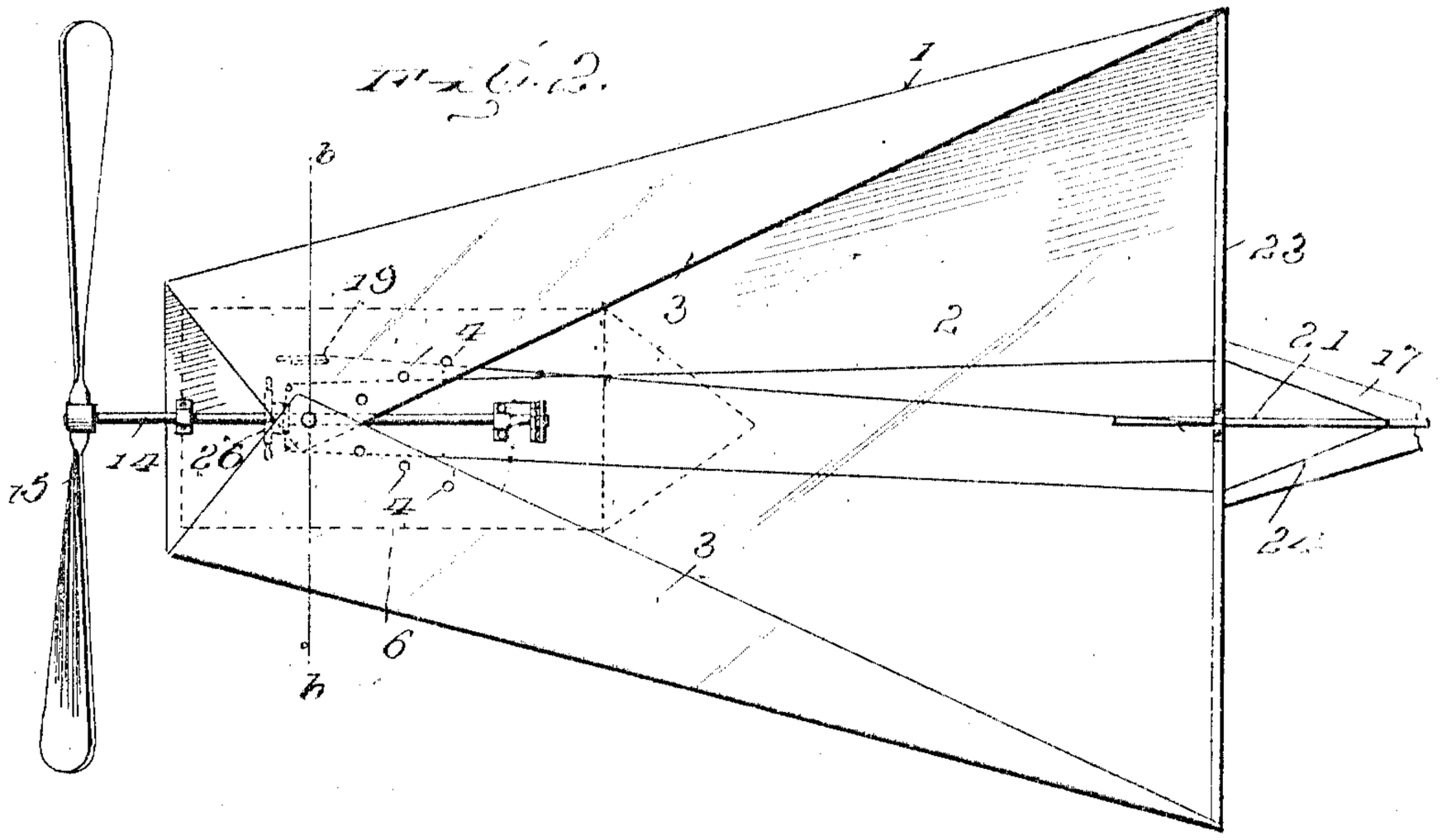

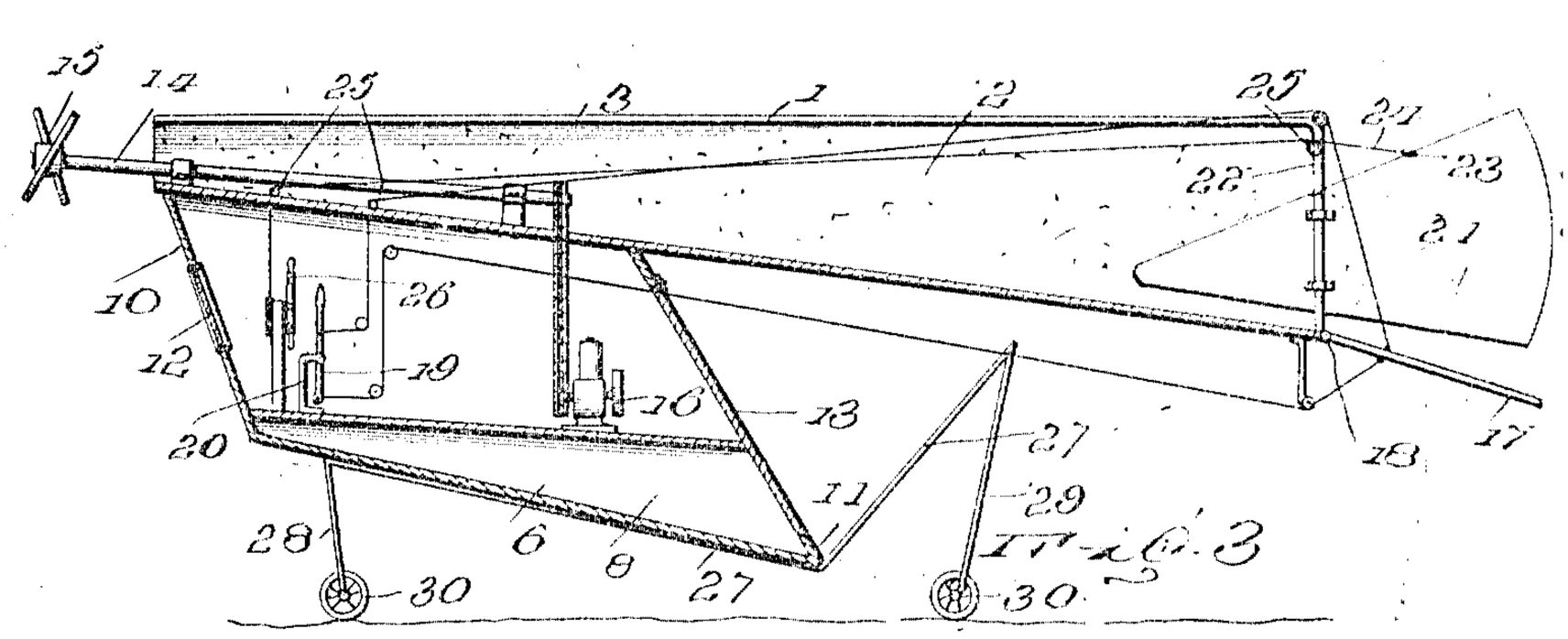

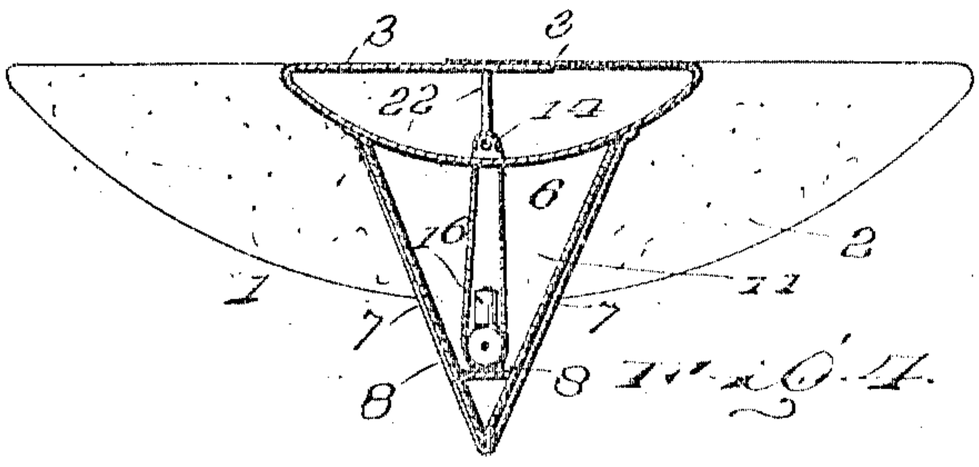

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UNITED STATES PATENT OFFICE.

FREDERIC MYLIUS, OF ATLANTA, GEORGIA.

AIRSHIP.

983,750. Specification of Letters Patent. Patented Feb. 7, 1911.

Application filed September 28, 1910. Serial No. 584,274.

To all whom it may concern:

Be it known that I, FREDERIC MYLIUS, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Airships; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in air ships, and has for its primary object the provision of a safe and easily controlled machine of the monoplane type, which, when in propulsive force, will preserve a lateral stability with a rising tendency, and which, upon losing its propulsive force, will automatically preserve a safe angle of descent.

A further object of this invention is the provision of a machine of the class described, which will be comparatively simple in construction, cheap to manufacture, and will perform all of the desired functions of such a device.

In effecting these several desiderata, this invention resides in the novel features of construction, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of my improved air ship; Fig. 2 is a plan view thereof; Fig. 3 is a longitudinal sectional view taken on the line *a*—*a* of Fig. 1; Fig. 4 is a transverse sectional view taken on the line *b*—*b* of Fig. 2, and Fig. 5 is a perspective view of the rudder and elevating plane.

Referring to the drawings by characters of reference, the numeral 1 designates generally my improved air ship, the stability of which is produced by a peculiarly formed plane 2. This plane is warped so as to be concavo convex in cross sections and slightly tapered toward its forward end, while its opposite edges are provided with inwardly extending longitudinal flanges 3, each being formed with a series of apertures 4, adapted to register and receive bolts 5, for the purpose of holding the plane 2 in its warped position, and providing a means for adjusting the curvature of the same.

A car 6 of any desired shape or size, and formed of any light durable material, is suspended below the plane 2 by means of straps 7, or the like, and serves, not only to accommodate the operator of the machinery, but to protect the controlling mechanism and to aid in balancing the plane 2. While the car 6 may be of any shape, still, in order to prevent any retarding of the speed by its contact with the air, it will be preferably formed with downwardly converging side walls 8, provided with suitable windows 9, and rearwardly slanting front and rear walls 10 and 11. The front wall 10 has a window 12 formed therein, through which the operator can see to properly steer, while access may be had to the said car through a door 13, located in the said rear wall 11.

A propeller shaft 14 is mounted in brackets upon the upper face of the plane 2, and carries keyed upon its forward end a propeller 15, of any customary type. The opposite end of this shaft 14 is operatively connected to a motor 16, contained within the car.

A horizontally disposed substantially triangular shaped elevating plane 17 is hinged, as at 18, to the rear end of the plane 2, and operatively connects with a lever 19, pivoted to a segment 20, mounted within the forward end of the car 6. A rudder 21, corresponding somewhat in shape to this elevating plane 17, is mounted for lateral movement upon a vertical standard 22, located upon the plane 2, adjacent the elevating plane, and has rigidly secured thereto, at a point behind the standard 22, a cross arm 23, to the opposite ends of which cables 24 are fastened. These said cables 24 pass over pulleys or guides 25 into the car and to a steering wheel 26, situated within convenient reach of the lever 19.

A frame 27 is secured to the plane 2 and car 6, and is provided with a depending front leg 28 and rear legs 29, suitably braced and carrying upon their lower offset terminals, wheels 30, upon which the machine rests prior to and after flying.

The operation is as follows: The air ship 1 is first placed upon a clear tract of land and the motor started. As the machine is propelled over the ground, obviously the proper tilting of the elevating plane 17, through the medium of the lever 19 and its connections, will cause the same to rise above the ground at any angle, governed by the extent of the said tilting. The course of travel may be directed either to the right or left by the wheel-controlled rudder 21,

From the previously described peculiar formation and shape of the plane 2, it will be manifest that should the motor stop running while the ship is in mid air, the machine will glide gracefully to the ground, assuming a safe angle of descent, no matter in what position the rudder 21 or elevating plane 17 happen to be turned.

Having thus fully described this invention, what is claimed as new and what I desire to secure by Letters Patent is:

1. In an air ship, the combination with a car provided with downwardly converging side walls and rearwardly slanting end walls, of a plane concavo convex in cross sections, inwardly extending flanges formed upon the edges of the plane for adjusting the curvature thereof, and means for propelling and steering the same.

2. In an air ship, the combination of a car provided with downwardly converging side walls and rearwardly slanting end walls, a plane concavo convex in cross sections and forwardly tapered, flanges formed upon the edges of the plane, whereby the curvature can be changed, a propeller carrying shaft mounted upon the plane, and a rudder and elevating plane secured thereto, whereby the same can be steered.

3. The combination of a plane concavo convex in cross sections and forwardly tapered, of a car provided with downwardly converging side walls and rearwardly slanting end walls, flanges formed upon the edges of the plane, whereby the curvature thereof can be changed, a propeller carrying shaft mounted longitudinally upon the plane, a substantially triangular shaped rudder mounted upon the plane, an elevating plane hinged thereto, means operating within the car for driving the propeller shaft and controlling the rudder and elevating plane.

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

FREDERIC MYLIUS.

Witnesses:

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LUCIEN HARRIS.