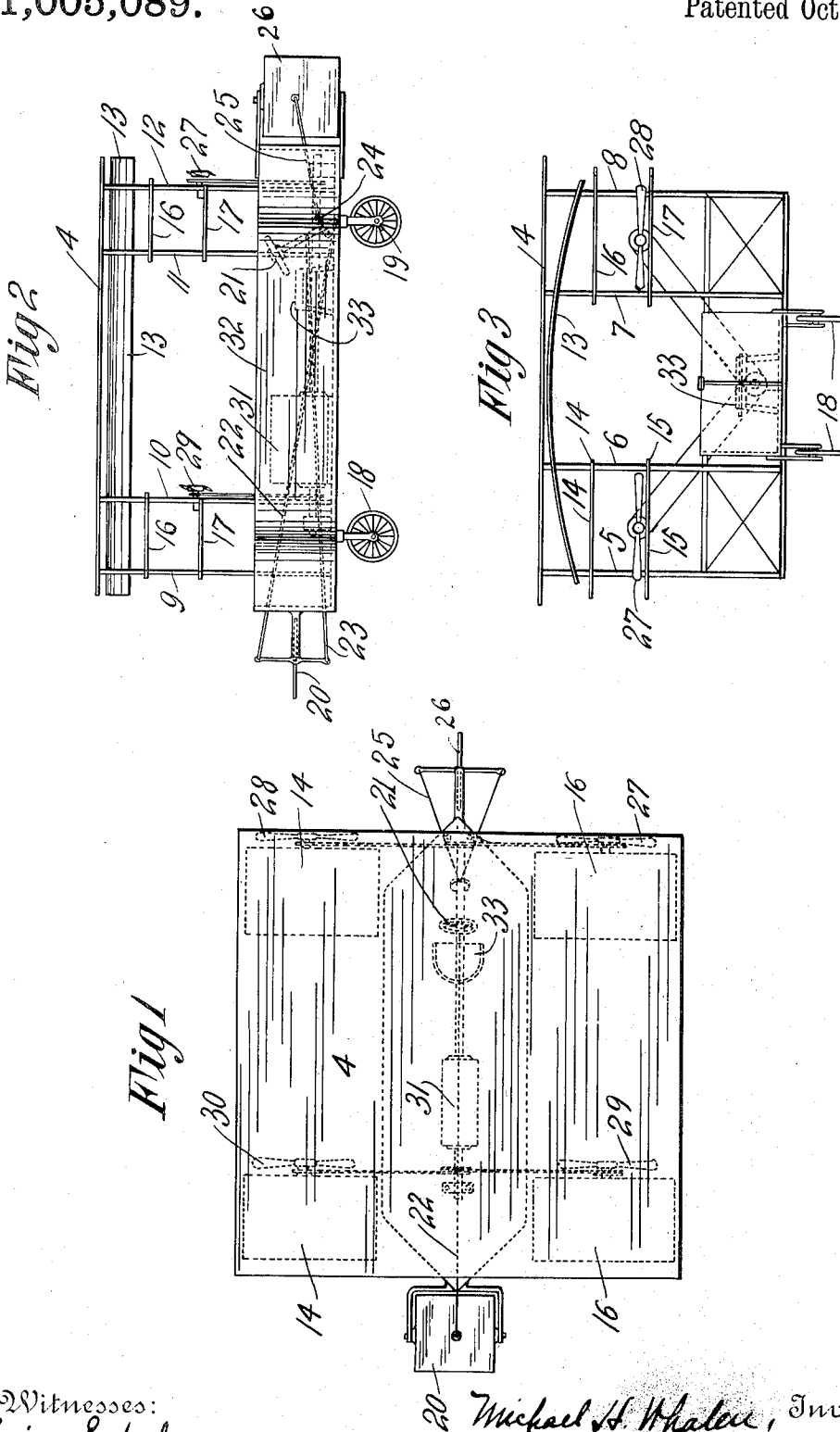


M. H. WHALEN.
AERONAUTICAL DEVICE.
APPLICATION FILED AUG. 4, 1910.

1,005,089.

Patented Oct. 3, 1911.



Witnesses:
Louise Underle.
Ang. P. Jurgensen

Michael H. Whalen, Inventor
By his Attorney
Shaw & Co.

UNITED STATES PATENT OFFICE.

MICHAEL H. WHALEN, OF NEW YORK, N. Y.

AERONAUTICAL DEVICE.

1,005,089.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed August 4, 1910. Serial No. 575,604.

To all whom it may concern:

Be it known that I, MICHAEL H. WHALEN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Aeronautical Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in flying machines and has particular reference to the general arrangement of the supporting surfaces.

To this end the invention is more particularly set forth in its preferred form in the accompanying drawings in which—

Figure 1 is a plan view looking downwardly upon a preferred form of the invention. Fig. 2 is a side elevation of the same, and Fig. 3 is a view looking from left to right at Fig. 2.

4 is the upper surface of the machine supported upon the longitudinal rows of uprights 5, 6, 7, and 8 and the transverse rows of uprights 9, 10, 11 and 12. 13 is a curved surface below the main surface also secured to the uprights 6 to 12 inclusive and 14, 15, 16 and 17 are also subtended surfaces secured to said uprights as shown.

The machine is supported upon the wheels 18 and 19 and is provided with an elevating plane 20 at the stern secured to the wheel 21 by the cables 22 and 23, so that as the wheel 21 is thrown forward, the machine dips downwardly and when pulled toward the operator causes the machine to rise in front. To the standard of this wheel is also secured another wheel 24 upon which the cable 25 is mounted, so that upon turning the wheel to the right or left, the forward rudder 26 is operated accordingly and the lateral course of the machine is controlled.

27, 28, 29 and 30 are the propellers preferably chain connected to a motor such as 31 as shown. The body of the machine may also be inclosed by walls of fabric such as 32 if desired.

In operating the machine the operator mounts the seat 33 and keeps the wheel 21 slightly forward so as to keep the front of

the machine on the ground until the proper speed is attained, after which by moving the wheel slightly backward the machine will gradually leave the ground and is then subject to control as stated. In mounting the machine, the wheel 19 is provided with a slightly longer bearing than the wheel 18 so as to leave the front of the machine slightly elevated when at rest.

Of course it will be understood that various modifications may be made without departing from the spirit of the invention as set forth in the claims.

Having described my invention, what I claim as new, and desire to secure by Letters Patent is:

1. In a flying machine, main supporting surfaces comprising a substantially flat surface at the top of said machine and a surface curved upon its longitudinal axis beneath the same, said surfaces extending entirely across and fore and aft of said machine to the front and rear controls thereof, an elevator comprising said rear control, and a rudder comprising said front control, and superimposed supporting surfaces at the sides and at the front and rear of said machine.

2. In a flying machine, main supporting surfaces comprising a substantially flat surface at the top of said machine and a surface curved upon its longitudinal axis beneath the same, said surfaces extending entirely across and fore and aft of said machine to the front and rear controls thereof, an elevator comprising said rear control, and a rudder comprising said front control, a pilot wheel, and connections between said wheel and said front and rear controls whereby the forward and backward movement of said wheel operates said rear elevator and the lateral movement of the same operates said front rudder.

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

MICHAEL H. WHALEN.

Witnesses:

LOUISE ENDERLE,
THOMAS A. HILL.