

No. 881,184.

PATENTED MAR. 10, 1908.

W. HALLE.
FLYING MACHINE.
APPLICATION FILED NOV. 4, 1907.

Fig. 1.

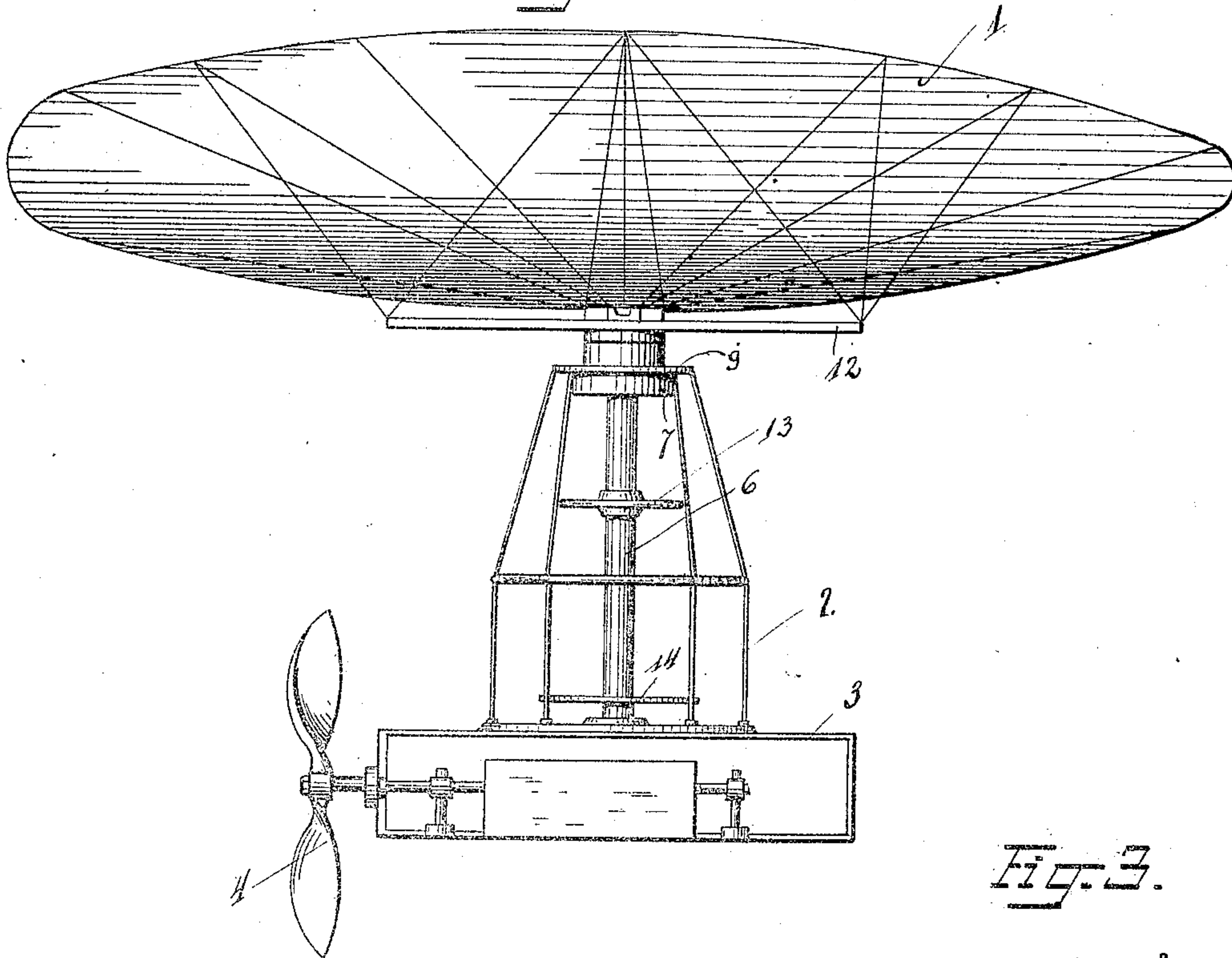


Fig. 2.

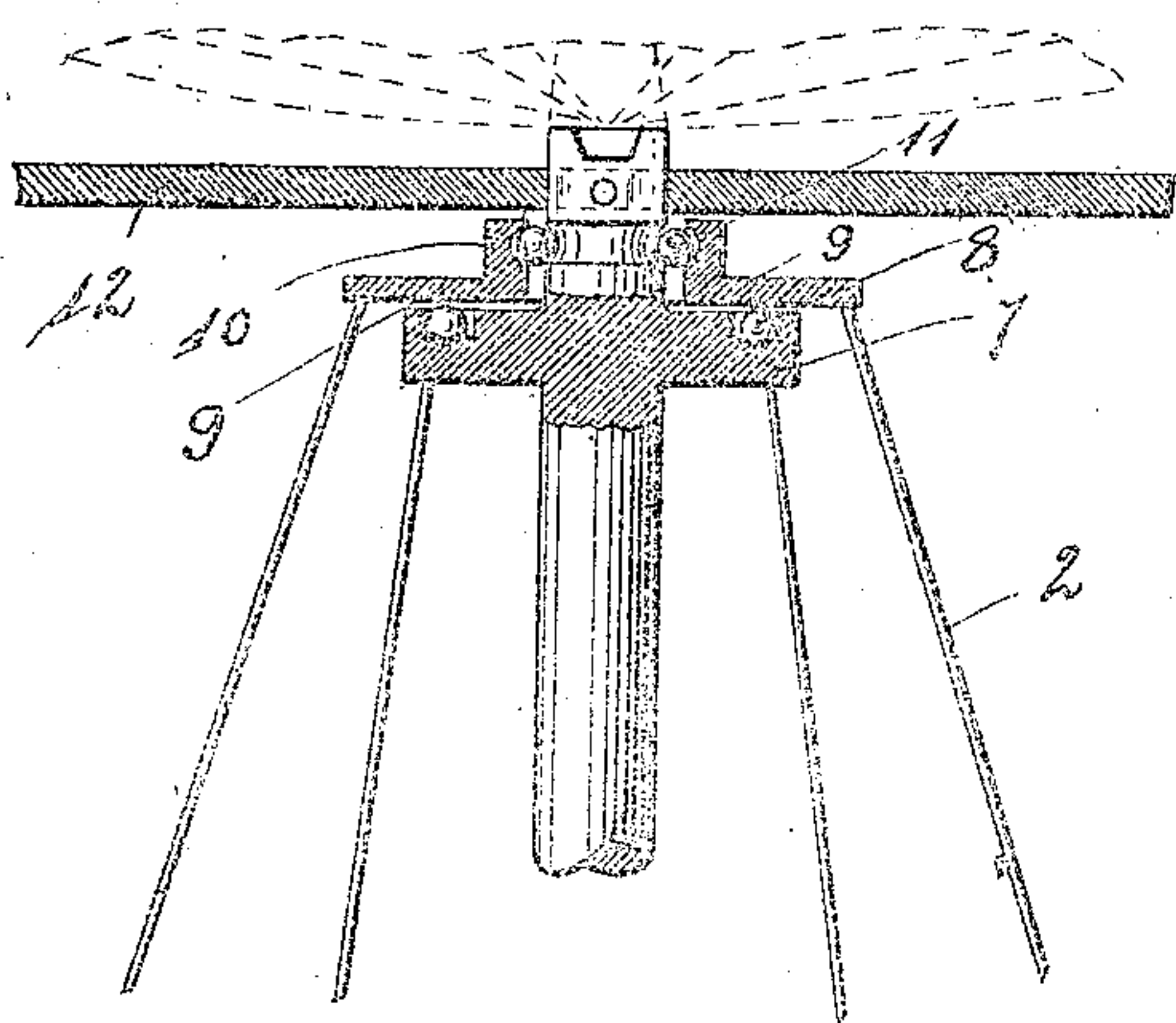
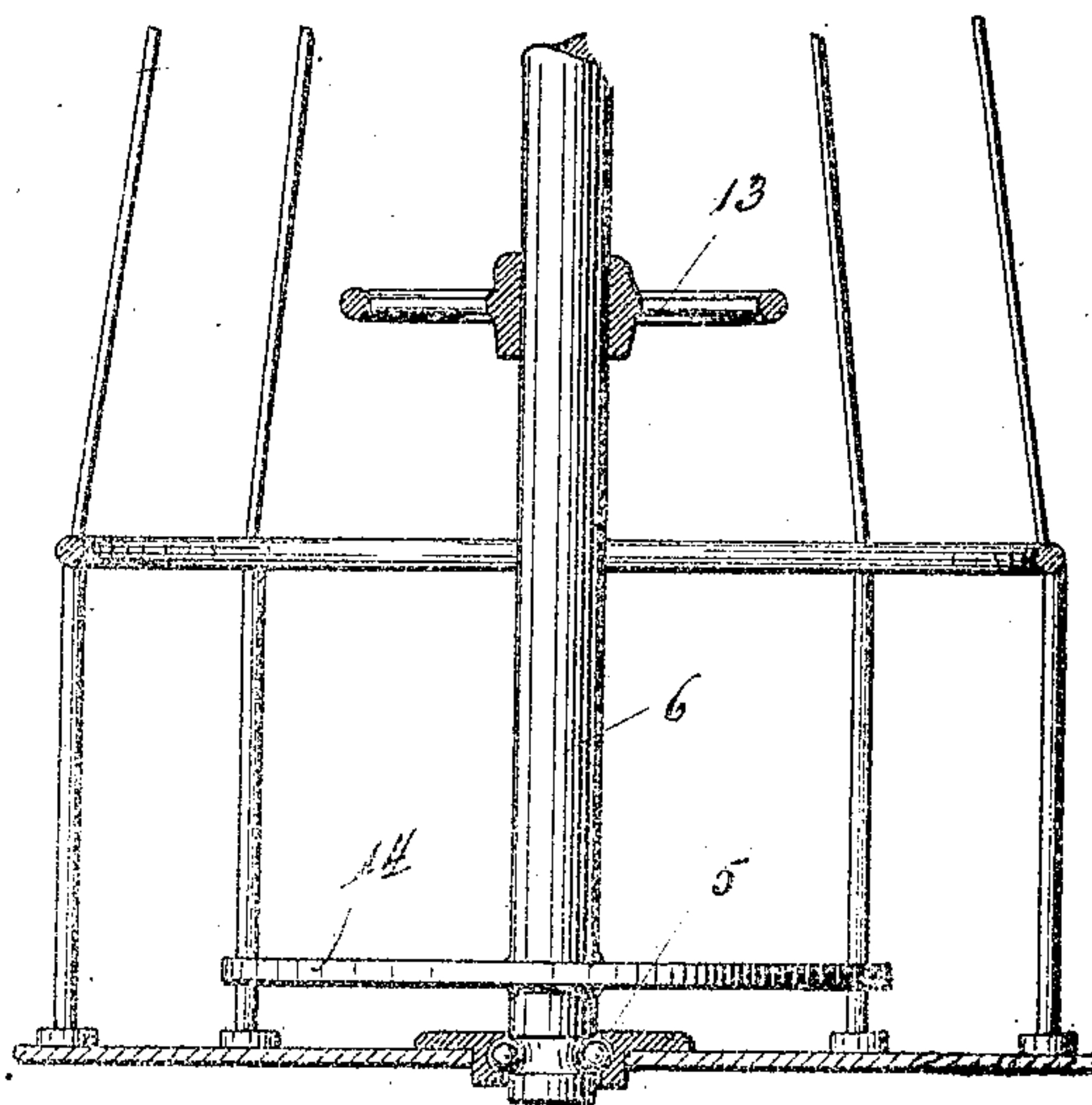


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM HALLE, OF UNION, NEW JERSEY.

FLYING-MACHINE.

No. 881,184.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed November 4, 1907. Serial No. 400,536.

To all whom it may concern:

Be it known that I, WILLIAM HALLE, a subject of the German Emperor, and a resident of the town of Union, county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Flying-Machines, of which the following is a specification.

The present invention pertains to flying machines and particularly to means for steering the same, and has for its object to provide a construction whereby the hitherto used rudder will be dispensed with.

To accomplish my object the cigar shaped balloon, instead of being directly attached to the car, is secured to a vertical shaft rotatively borne in the car of the machine and provided with a steering wheel. The operator, in turning the wheel, can thus instantaneously bring the balloon into the desired direction.

My invention will be more fully understood from the accompanying drawings in which similar reference letters denote corresponding parts and in which

Figure 1 is an elevation of the flying machine; Fig. 2 an enlarged vertical section of the upper end of the car, and Fig. 3 an enlarged vertical section of the lower end thereof.

With reference to the drawing, 1 denotes the ordinary cigar shaped balloon; 2 the car suspended therefrom, and 3 is the casing containing a motor for the propeller 4.

Extending vertically through the car 2 and borne in its bottom by ball bearings 5 is a shaft 6. At the upper end, the latter may be provided with a circular flange 7 having

ball bearings 8 against the top 9 of the car. The shaft is extended upward beyond the flange 7 and is projected through a neck 10 formed on top 9 of the car, in which it may also have a ball bearing 11.

The balloon is suitably secured to the upper end of the shaft on which a bar 12 is mounted for the attachment of the ropes passed around the balloon.

At some height from the bottom of the car, a wheel 13 is rigidly mounted on the shaft, which wheel can be reached by the operator to operate the same. To steer the machine the operator can directly turn the balloon into the desired direction by the manipulation of the wheel 13.

Adjacent to the bottom of the car a platform 14 is rigidly mounted on the shaft, from which platform the operator can turn the car, if necessary, in the same direction as the balloon.

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

In a flying machine, a car, a balloon, a vertical shaft rotatively arranged in and projecting outward of the car and carrying the balloon, a hand wheel rigidly mounted on said shaft and allowing the steering of the balloon from within the car directly and independently of the latter, and a platform secured on said shaft inside the car.

Signed at New York this 2d day of November, 1907.

WILLIAM HALLE.

Witnesses:

JOHN T. CARMODY

GEO. D. ORDMANN.