V. WISNIEWSKI.

PROPELLING MEANS FOR AERIAL AND LIKE VESSELS.

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1,063,309.

Patented June 3, 1913.

Fig. 1.

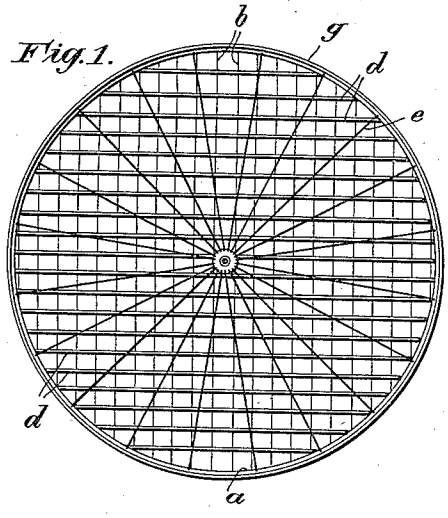
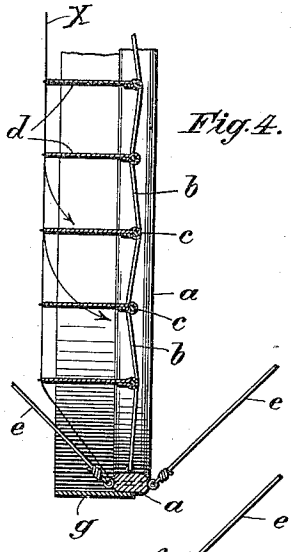


Fig. 4.



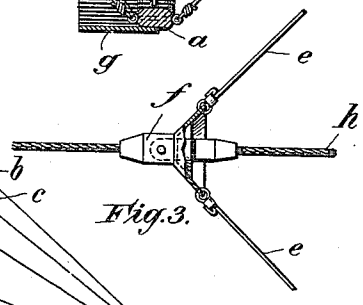
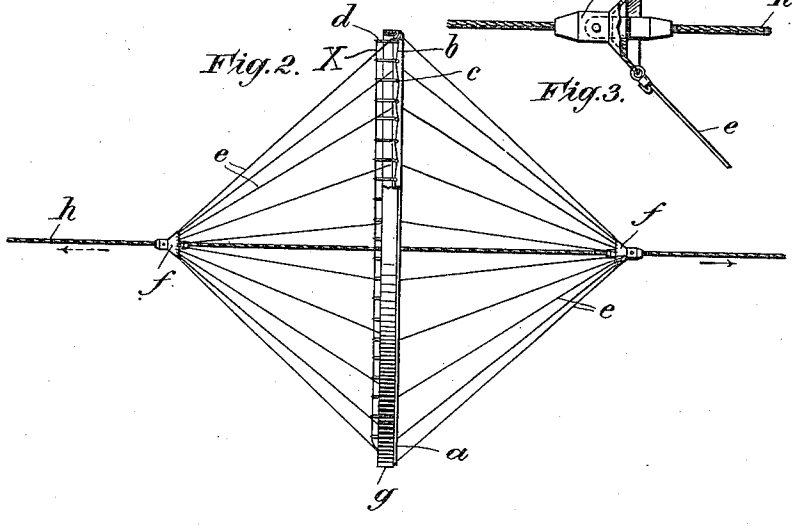


Fig. 3.

Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

VINCENT WISNIEWSKI, OF BERLIN, GERMANY, ASSIGNOR TO LUFTSCHIFFSANTRIEB GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, OF BERLIN, GERMANY, A CORPORATION OF GERMANY.

PROPELLING MEANS FOR AERIAL AND LIKE VESSELS.

1,063,309. Specification of Letters Patent. Patented June 3, 1913.

Application filed October 23, 1912. Serial No. 727,407.

To all whom it may concern:

Be it known that I, VINCENT WISNIEWSKI, architect, a subject of the German Emperor, and resident of Berlin, Germany, have invented new and useful Improvements in Propelling Means for Aerial and Like Vessels, of which the following is a specification.

The present invention relates to a propelling plane with flaps arranged like a Venetian blind and intended for airships, flying machines and water vessels, and to be reciprocated in a rectilinear direction by means of cables.

The object of the present invention is to provide a propelling plane which will combine a maximum strength with a minimum weight at a given diameter. This object is obtained by the present invention in the following manner: A circular frame is covered with a network of wires extending at right angles to each other and forming squares. To the horizontal network wires are hinged flaps like in a Venetian blind, said flaps being adapted to close or lie against the wires of the frame when the frame is moved in one direction and to open and permit the air to pass when moved in the opposite direction. The flaps are connected together through the medium of a strand or cord, whereby the several flaps will operate simultaneously as will be understood.

The frame of the propelling plane is attached to the operating cable by means of wires or cables in such a manner that these wires or cables are at the same time tightened by the pulling or operating cable. The sectional area of the frame is preferably made larger in the direction of its operation. The frame is further provided with a flange to catch the wind and is adapted to travel on guide carriages moving on rails.

In the accompanying drawing a propelling plane as hereinbefore described is exemplified.

Figure 1 is a front elevation; Fig. 2 is a side elevation; Fig. 3 shows the manner in which the cable may be attached; and Fig. 4 shows the arrangement of the flaps.

The frame *a* is made, for airships, of wood glued together in several layers, for water vessels, of metal. The vertical wires *b* are interwoven with the horizontal wires *c*. The flaps *d* are made for airships preferably of canvas or goosefeathers, for water vessels of greased leather or metal. The bracing wires or cables *e* are attached to the operating cable *h* by means of a cable lock *f*. The flange *g* may be made of metal. The several flaps are connected to operate together through the medium of a cord or wire X.

Claim:

A device of the character described comprising a circular frame; a plurality of transversely crossing wires secured to said frame; a plurality of flaps disposed in parallel relation transversely of the frame and secured to the adjacent parallel wires of the frame; a ring secured to the circular frame and providing an annular flange to scoop the wind; an operating cable passing through the circular frame axially thereof; and a plurality of bracing strands connecting said circular frame and the cable, said strands disposed equidistant and secured on the circular frame and having their respective ends disposed to opposite sides of the frame and gathered and connected to the operating cable.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this 12th day of October 1912.

VINCENT WISNIEWSKI.

Witnesses:
WALTER SCHILL,
HENRY HASPER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."