May 3, 1927. 1,627,019

C. DORNIER

FLYING MACHINE

Filed Oct. 13, 1924

Fig. 1.

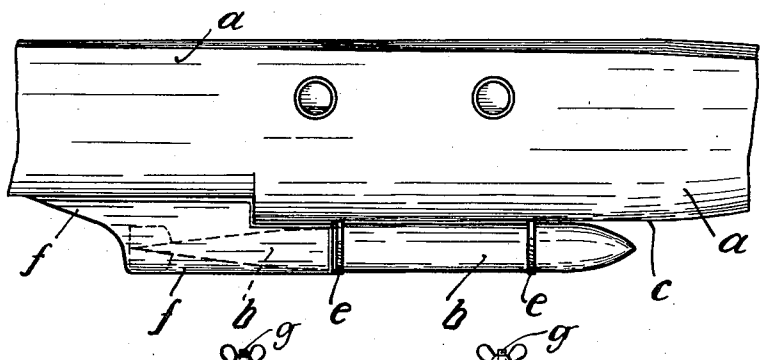
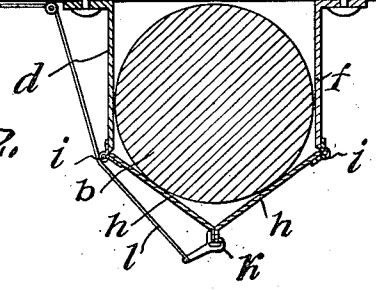


Fig. 2.



Inventor:
Claudius Dornier
by
Attorney.

Patented May 3, 1927. 1,627,019

UNITED STATES PATENT OFFICE.

CLAUDIUS DORNIER, OF FRIEDRICHSHAFEN-ON-THE-BODENSEE, GERMANY, ASSIGNOR OF ONE-HALF TO THE FIRM DORNIER METALLBAUTEN GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, OF FRIEDRICHSHAFEN-ON-THE-BODENSEE, GERMANY.

FLYING MACHINE.

Application filed October 13, 1924, Serial No. 743,418, and in Germany October 18, 1923.

My invention refers to flying boats and it concerns more particularly the combination, with the hull of such boats, of torpedoes to be fired from these hulls. It is an object of my invention to so combine a torpedo with the hull of a flying boat that the shape of the hull is not changed to any material extent and the air resistance of the craft is not materially increased.

Hitherto it has been proposed to store a torpedo away in a groove-like cavity of the boat's bottom. However, as the upper wall of the cavity projected into the interior of the boat's hull, the space available therein was materially reduced. Moreover, the starting capacity of the machine as well as its air resistance are unfavorably influenced by the irregular form of the boat's bottom, and further the weight of a boat's hull of this kind is greater than the weight of a normal hull.

According to the present invention all these drawbacks are avoided by locating the torpedo or a plurality of torpedoes on the outside of the bottom of the hull proper and providing a casing for the rear part of the torpedo, this casing being so shaped as to offer the least resistance to air and to starting in water. Thus the rear part of the torpedo comprising the propeller and driving mechanism is surrounded by the casing, while the rest of the torpedo body is freely suspended below the boat's hull.

The casing may be used for fixing the torpedo in place and it can be arranged so as to be opened and closed partly or entirely. In a preferred form the cover is connected with the boat's hull in an easily removable manner so that it can be disconnected and thrown off after the torpedo has been fired. In view of the fact that a torpedo has a form which offers very little resistance to propulsion it is preferable to throw off the cover immediately after starting. If this shall be done, the cover is preferably designed in such manner as to float on the water in order to facilitate its recovery.

By thus attaching torpedoes to the hulls of flying boats it is possible to fit out any normal flying boat with a torpedo without in any way changing the construction of the hull and without rendering it unfit for ordinary use.

In the drawings affixed to this specification and forming part thereof two modifications of a flying boat's hull embodying my invention are illustrated diagrammatically by way of example.

In the drawings—

Fig. 1 shows the middle portion of a flying boat's hull with a torpedo attached to it.

Fig. 2 is a cross-section of the hull's bottom, casing and torpedo, drawn to a larger scale.

Referring to the drawings *a* is the hull of a flying boat, *b* is the torpedo disposed underneath the bottom *c* of the hull and *d* is a cover attached to the bottom by screw bolts *g* and serving as a housing for the torpedo. The bottom of this casing has the form of converging flaps *h*, *h* connected to the casing by hinges *i* and locked in closing position by means of a lever *k* governed by a rope or wire *l*. By pulling the wire, the lever *k* allows the flaps *h* to swing out so as to uncover the rear portion of the torpedo, which is suspended from the hull by means of belts *e* or the like. By loosening the screw bolts from within the boat the casing can be disengaged from its bottom.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for any modifications will occur to a person skilled in the art.

I claim:—

1. Flying boat comprising a hull, a casing attached to the hull's bottom and adapted to accommodate the rear portion of a torpedo and separate means for suspending the torpedo from the hull's bottom.

2. Flying boat comprising a hull and a casing removably attached to the hull's bottom and adapted to accommodate the rear portion of a torpedo.

3. Flying boat comprising a hull and a casing attached to the hull's bottom and adapted to accommodate the rear portion of a torpedo, said casing being designed so as to be capable of floating on the water.

4. Flying boat comprising a hull, a casing in several parts movably attached to the hull's bottom and adapted to accommodate the rear portion of a torpedo.

In testimony whereof I affix my signature.

CLAUDIUS DORNIER.