Serial No. E. LANCIANI PUBLISHED 357,514 AIRCRAFT BACK-TURRET CUPULA MAY 4, 1943. Filed Sept. 20, 1940 BY A. P. C. Dec 8, 1941 FIG. 3 FIG.4 FIG.2 FIG.5

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CUPOLA FOR A BACK-TURBET FOR AIRCRAFTS

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Application filed September 20, 1940

The present invention refers to a cupola or hood for a turret to be placed on the back of the fuselage of an aircraft, whose particular shape offers important advantages as to good visibility and limited resistance to the relative wind.

The cupola according to the invention is characterized by the fact that its sections in the longitudinal direction have the shape of the back of an airfoil, whilst the sections at right angles curvature and with the concavity turned downwards.

The shape designed for the hood forming the object of the invention is illustrated in Figs. 1, respectively, a plan view, a diametral section along A-A, a diametral section along CC, a shorter section along BB and another short section along DD.

Said cupola forms almost entirely a surface 20 whose sections parallel to the vertical plane passing per CC are similar to those represented by

Fig. 3 and the sections parallel to the vertical plane passing per AA are similar to the cambered back of an airfoil of optimum penetration, shown in Fig. 2.

On the side where the operator is handling the gun, the surface is cut-out for an amplitude of about 90° and is formed of two plane walls: an horizontal one (element 1) and another inclined by 45° (element 2) matching with the profile of with the above have a symmetrical polycentric 10 the hood so as to form a continuous surface offering full protection from the relative wind.

> The aiming is being done exclusively through the wall inclined by 45°.

The machine-gun on the contrary is mounted 2, 3, 4 and 5 of the attached drawing, showing 15 in the other half of that side of the cupola, the barrel of the weapon coming out through a proper slot in the inclined wall (not shown in the drawing).

> In practice the details in shape and construction may vary without exceeding the limits of the invention.

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