A SUCCESSFUL AEROPLANE WITH FOLDING WINGS

With wings that fold back over the body like those of a gigantic beetle, a curious, insect-like appearance is presented by the new French aeroplane illustrated herewith. Moreover, differentiating it from the host of freak folding contrivances that have preceded it, the present machine, the de Marçay-Mooney monoplane, is the first with folding wings that has actually flown.

As is shown in the illustrations, the principle of construction is simplicity itself, each wing being pivoted, at its point of attachment to the body, to a vertical pillar that, besides constituting a hinge, also serves as a mast or strut, from which the bracing wires to the wings are strung.

A wheel alongside the driver's seat controls the wing positions, and by revolving this wheel the change is effected from wings fully spread to the closed position over the body. In both positions there is provision for securely locking the wings in place—a point of particular importance in the flight position.

No attempt is made to allow for swinging the wings during flight, the novel design having for its sole purpose the more compact stowing of wings while the machine is on the ground, to facilitate storage, and also to allow the vehicle to be run along narrow roads or across other than clear fields, in search of suitable ascending areas. This land travel can be accomplished either by towing, as with a horse or automobile, or by the thrust of the aeroplane propeller, the latter ordinarily permitting it to proceed under its own power, in the manner of the not altogether uncommon "wind wagon." Steering on the ground is effected by the wheels of the alighting gear, which are made movable, and connected up to a steering gear, with this particular purpose in view.

The machine is propelled by a revolving motor, of well-known type, and except for its single unique feature is quite conventional in design, as is sufficiently proved by the fact that it has accomplished numbers of successful flights at the French flying fields. The wings, for example, are controlled by warping in the usual manner, and the tail has much in common with both the Nieuport and the "fan-tailed" Blériot. The running gear rather suggests that of the Bréguet, which is similarly steerable on the ground, and the fuselage is a characteristic four-bar, tapered box girder, covered in
"Beetle" Monoplane from Rear, Folded Back with Wings

with fabric and providing seating for the driver between the wings.

Though there is no intent on the part of the designers to embody this improvement in the present machine, it has been often pointed out by different authorities that folding wings of the type under discussion undoubtedly approximate the means used by the birds for varying speed, and that when it is discovered how to apply these in a practical way, without longitudinal shifting of the center of gravity, the long-desired variable-speed aeroplane will have become a reality.