FLIGHT

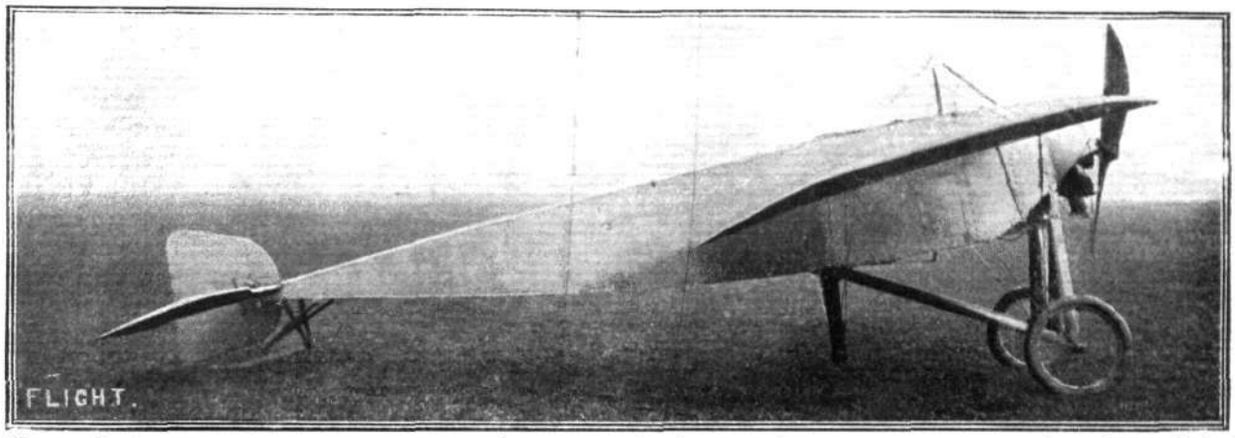
# THE MORANE-SAULNIER RACING MONOPLANE.

IT is a common opinion among those who had the good fortune to attend the last Aviation Salon in Paris, that the Morane-Saulnier stand was showing machines above the ordinary. In all four types exhibited—a school machine, a two-seater military monoplane, a racer, and a veritable monoplane man-o'-war—were incorporated very excellent and very practical ideas, more especially in the latter two.

So short a time elapsed between the separation of Messieurs Léon Morane and R. Saulnier from the Borel firm and the production of their first machine, the one at present under review, that we must confess we were most agreeably surprised, when this racer was first tested at Villacoublay, to see Védrines, without any preliminary tuning-up process, take the machine up to over 1,000 ft., and fly for 20 mins. at the extraordinary speed of 78 m.p.h., this with a motor of only 50 h.p.

Identical with the endeavours of almost every constructor at the present time, the chief aim of the designer has been the minimisation of head-resistance, an all-important point when high speeds are to be considered. The main body, enclosed throughout its complete length by a covering of fabric, possesses a fairly accurate stream-line form, and is deep enough in the front to accommodate the pilot so that his head alone protrudes above the cockpit, his body being protected from that rush of air which would otherwise have such an adverse effect on his own personal comfort and on the facility of the machine to cleave the air with a minimum of disturbance.

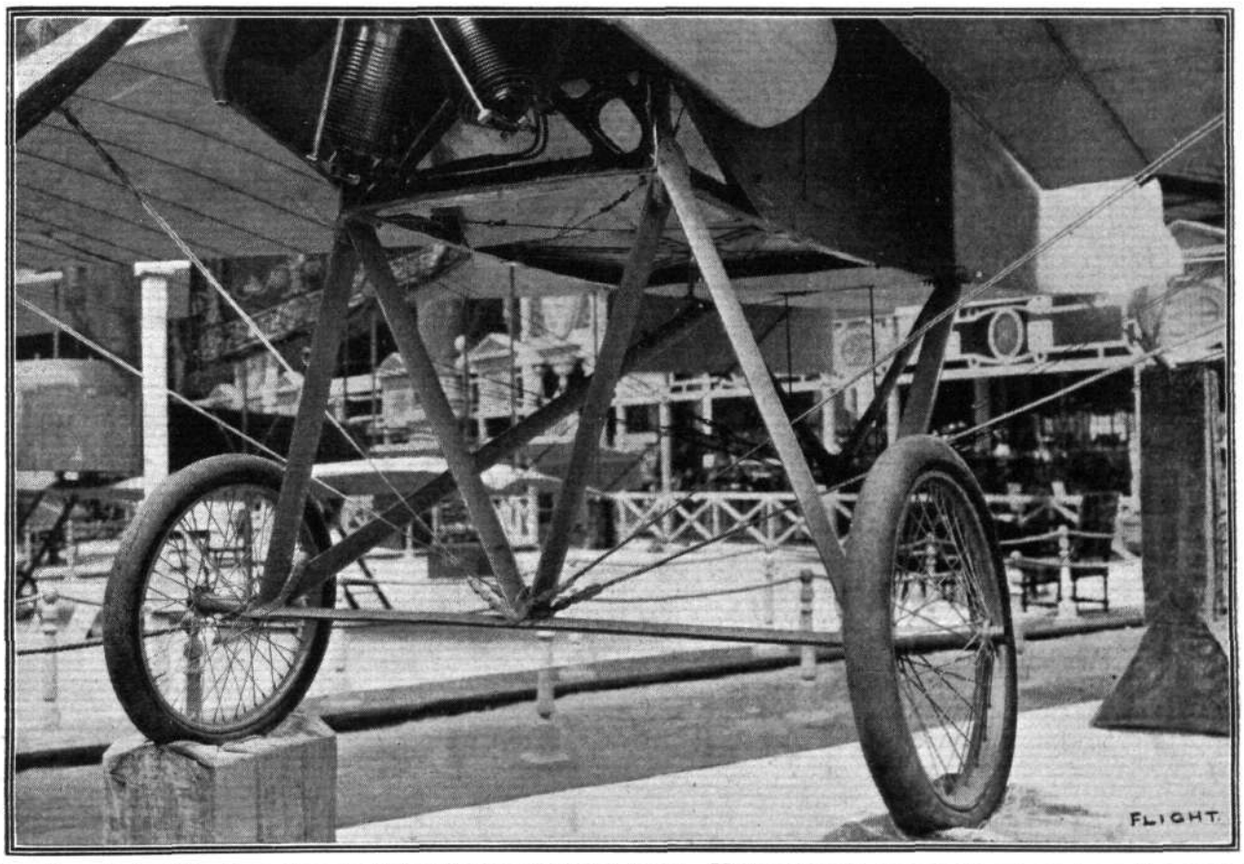
As regards the motor, a Gnome of 50 h.p., the same point has received consideration, and by means of a roughly stream-line casing, which also forms a shield to prevent any lubricating oil and exhaust products being thrown off in the direction of the pilot, much of the resistance presented to forward advance by the rapidly-revolving motor has been avoided, not, as some might imagine, at the expense of efficient cooling.




**The Morane-Saulnier racing monoplane, as seen from one side, showing the approximate stream-line shape of the body.**

The motor is mounted *port-à-faux*, that is, it protrudes from the front of the main body, and is not supported on both sides of the crank-case.

Almost revolutionary is the design of the landing-gear, as, in




**The all-steel rigid landing chassis of the Morane-Saulnier racer. Notice the staying of the wings from the apex of the central inverted triangle—a good point.**