

FOREIGN WAR-PLANES.

AN article with the above title appears in *La Nature* of March 4, and is particularly interesting at the present time when British aeronautics is attracting so much attention. The article appears to have been written in fear of the Censor, and parts of it correspond more nearly with the end of last summer than the early part of the present year. The author refers to the belief, prevalent in France some little time

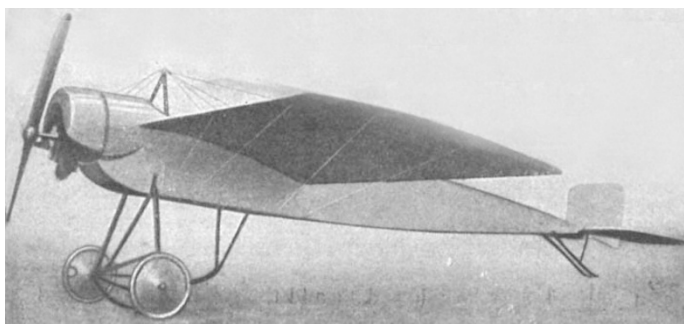


FIG. 1.—The Morane Saulnier.

ago, that British aviation was well ahead of their own, a belief widely held until, during the course of a single day, French aviators and gunners brought down seven battle-planes and a Zeppelin.

Putting aside political manoeuvres as of no importance, the author attempts to state the problems of aviation as they affect the engineer and constructor. Quite early in the course of his statement he concludes that the difficulties of flight would disappear, in peace-time, with the coming of a trustworthy light engine, but that for war purposes the problem is not so simple. A good war-plane must be strong and trustworthy; the observer must have a good field of view, particularly downwards, to assist reconnaissance and to make possible photography and bombing. In order to fight an enemy under favourable conditions, the zone of fire of the machine-gun must be as great as possible, and this implies a special shape of body. Finally, a convenient place must be found for bombs, and taken together the requirements are not easily satisfied.

As to speed, authorities differ, and there is again necessity for compromise, in this case between speed and weight-carrying. In France aeroplanes have mixed duties, whilst in England types differ more, are faster on the average than the French, but carry fewer bombs. The superiority of the Germans on speed is more apparent than real, their most recent and speedy aeroplane, the Fokker, being merely a copy of the Morane Saulnier. The similarity can be seen by a comparison of the two accompanying figures.

NO. 2426, VOL. 97]

The similarity is said to be complete almost in detail, and immediately after the Morane had been fitted with a safety device for firing through the propeller, the Fokker followed suit.

German aeroplanes are built in three distinct classes. To the first belong the scouts, mostly Albatross biplanes, which have largely supplanted the Taubes; fitted with Mercedes motors of 100 to 150 horse-power, these aeroplanes fly at from 70 to 90 miles per hour.

The second group of aeroplanes, fighters, are designed for attack and defence in the air. A new biplane (probably that known to British soldiers as "Fritz" or "Billy-two-bodies") with two bodies and central car for the machine-gun belongs to this group. Its two engines each develop 250 horse-power. The Fokker, capable of 60 to 100 miles per hour, is also one of the fighter-type aeroplanes.

The third group of German aeroplanes is intended for reconnaissance. The machines all carry wireless apparatus, and act as spotters for artillery.

Following a very brief and unsatisfactory survey of British, American, and Italian aeroplanes is a discussion of French aviation. Contrasting aviation with gunnery, the author cites the latter as an instance of an art based on scientific knowledge, whilst it is said that until an aeroplane has been made and tested it is not possible to form any trustworthy estimate of its speed, stability, or sensitiveness to controls. The defect is more important, as aviation has not any traditions; its development has been left to

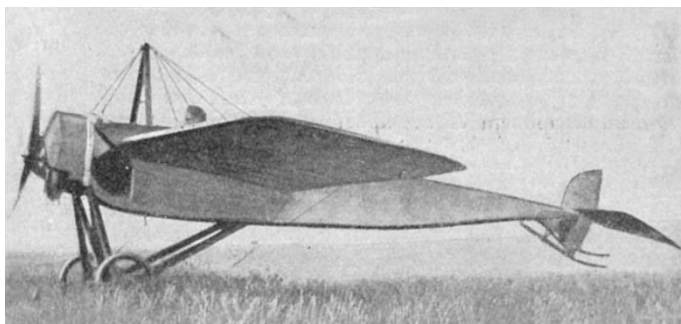


FIG. 2.—The German Fokker.

private enterprise, and up to the present without any indication of the end to be attained. The result has been to stimulate competition between constructors without collaboration. If such a picture of the position of French aeronautics is even approximately true, it is difficult to believe that Britain has yet lost her superiority in the domain of design and construction.