

THE HANDLEY PAGE WING

First Public Demonstration

It is now about a year since Mr. Handley Page first told us of his discovery in the matter of high-lift wings, but owing to the slowness with which the mills of Patent Offices are wont to grind, it has not hitherto been permissible to publish any information relating to the new wing. The patents have now, however, been published, and this was made the occasion for a public demonstration at the H.P. aerodrome at Cricklewood on October 21. It should be pointed out, however, that the machine with which the demonstration was made did not represent the latest progress in the design of the new wing. On the contrary, the machine used was the same on which the first full-scale experiments were carried out many months ago, and represents the idea in its crudest form only. It appears desirable to make this statement, since otherwise an erroneous impression might be created, which would tend to depreciate the merits of the new discovery.

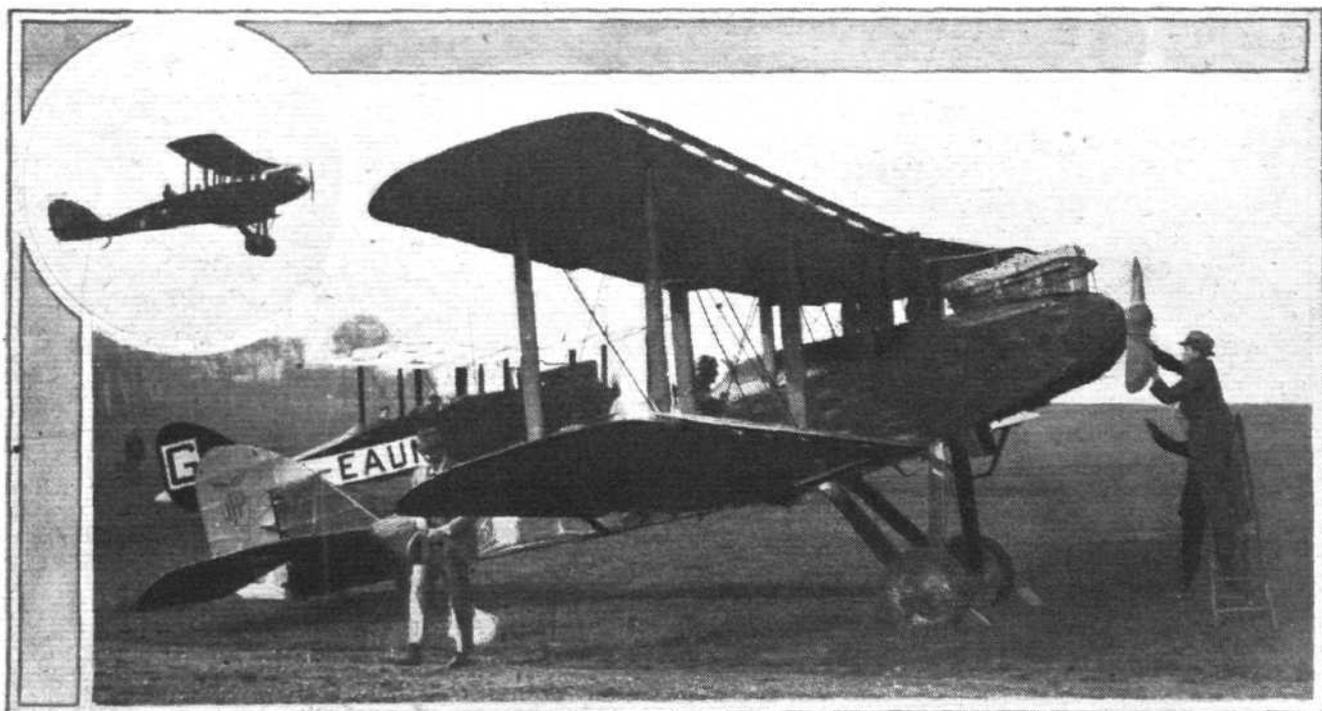
The demonstration which took place at Cricklewood was given by Major Foote, who had, by the way, never previously flown the machine. Starting simultaneously was another Airco 9, which obviously required a much longer run before getting off. The Airco 9 fitted with the H.P. leading edge got off after a surprisingly short run. What particularly impressed one in the climb was the angle at which the machine rose. In point of fact its climb was probably a little slower than that of the

standard machine, but its climbing *angle* was certainly steeper. This points to the advisability of adopting the suggestion made by Mr. R. F. Mann in our correspondence columns recently that the climb of a machine should be measured by the angle, as well as by the time taken to reach a given height. In this case the standard machine took less time to reach a certain height than did the one fitted with the H.P. leading edge, but the *angle* of climb of the latter machine was undoubtedly the greater. For a commercial machine at any rate it is the *angle* of climb that counts, rather than the *rate* of climb, and the Airco 9 with the H.P. attachment would certainly get out of a smaller field than would the standard machine.

The behaviour of the "faked" machine in the air was much the same as that of the standard machine, excepting that the horizontal speed was obviously not improved by the attachment. It should be remembered, however, that the false leading edge was rigidly attached in this machine, thus offering much greater resistance than will the more modern development in which the leading edge can be moved back so as to lie flush with the main leading edge. In that case the wing resistance is hardly affected at all, while with the leading edge in the "out" position the lift is very much increased. It was noticed that when the machine was flying horizontal and the pilot throttled down the engine, the machine



THE HANDLEY PAGE WING: Capt. G. de Havilland and Mr. Handley Page in front of the de H. 9 to which the H.P. device is fitted



THE HANDLEY PAGE WING: The Airco 9 fitted with the H.P. device. Inset the machine in flight. The false leading edge and its supporting brackets can be clearly seen