

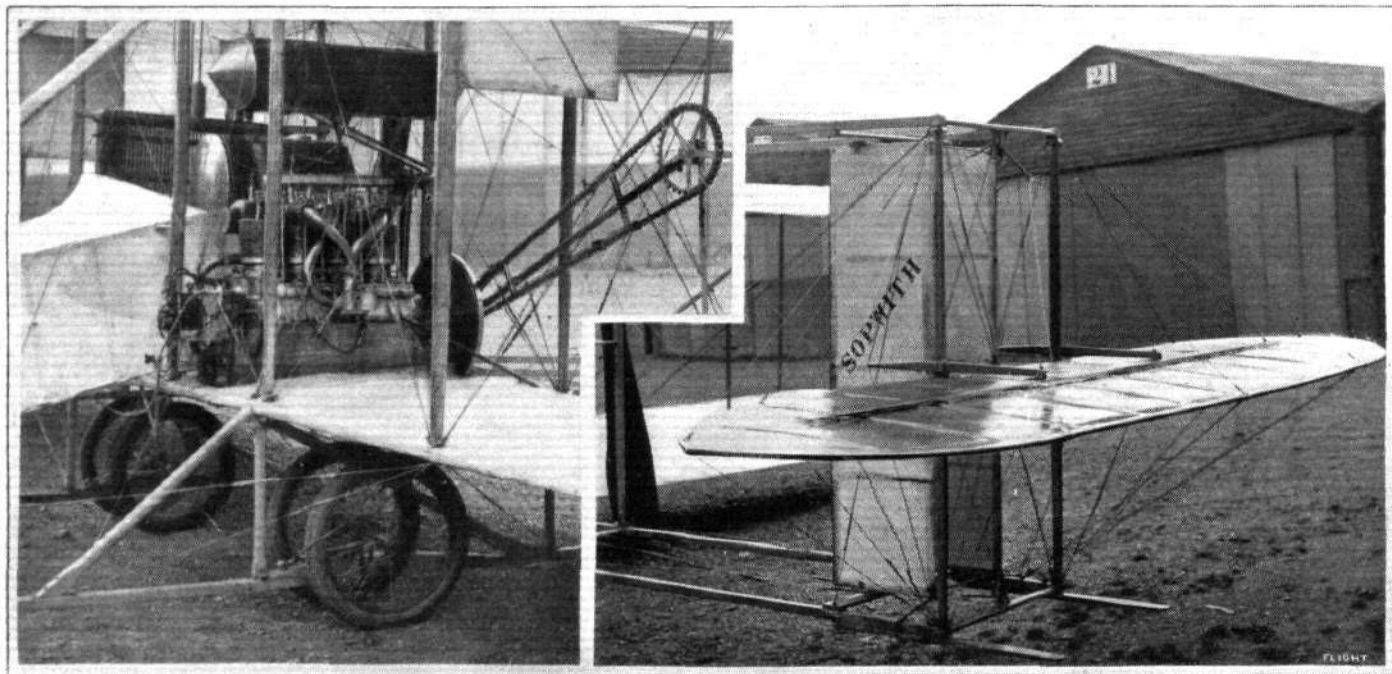
THE SOPWITH-WRIGHT BIPLANE.

THAT excellent performance of Hawker recently with the Sopwith-Wright biplane in his flight for the British Michelin No. 1 draws attention both to a man and a machine comparatively little known. We say little known, because the pilot at any rate is a newcomer among the men whose names have been prominent in the front rank, and although the machine bears the most famous name in the world of flight, nevertheless, the Wright design is by no means so familiar to English students of aeroplane construction as ought to be the case, having regard to the pre-eminence of its originator.

This particular example of the Wright design, as modified by Sopwith, himself among the foremost British pilots, possesses the peculiarity of having a Farman instead of a Wright control, and for this reason alone an especial interest attaches to it and demands that

been reconstructed in his own factory. It has, as our illustrations show very clearly, a small nacelle, somewhat resembling in appearance the familiar sidecar with which so many motor bicycles are nowadays provided. Behind this little shield the pilot is protected from the wind, which is especially a point of importance in the Wright machine seeing that ordinarily every inch of the pilot's body is exposed, and flying any machine in winter weather is a bitterly cold job at the best.

With the exception of the features that have just been mentioned, the reconstructed machine serves as an example of standard Wright practice; it has the same type of main planes with their front spars forming the leading edges and their struts mounted on flexible joints, which from the first has been a characteristic feature of the Wright design.



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Views showing the British-built A B C engine and the tail of the Sopwith-Wright biplane.—The twin rudder is mounted on a single pivot at each end, the horizontal tail plane is fixed, and has a flexible trailing edge for use as an elevator.

it should find an early place in our gallery of machines even were the present occasion less opportune than it is.

It was during last year that Sopwith had the original of this machine made for him in America by Burgess, the well-known boat builders, who are constructing Wright biplanes under licence. He had the Farman lever and rudder bar control, with which he was already familiar, fitted to the machine instead of the Wright interconnected warp and rudder control with which the Wright machines are ordinarily supplied, and he also was the first we believe to place a Gnome rotary engine on this type of aeroplane. As now flying, however, the Gnome rotary is replaced by the splendidly successful British-built A B C engine, which drives the twin propellers made by the Bristol Co. through the usual pair of chains, one of which is crossed.

In the present machine, there is nothing, we believe, of the original aeroplane as purchased by Sopwith, the whole of it having



Good Work on the New Bristol.

ON Thursday last week Mr. Gordon England, at Filton, went out for the first time on one of the new Bristol tractor biplanes in which pilot and passenger sit in tandem. He made a really fine flight, remaining up for about half an hour and landing well. The machine answers the controls perfectly and shows a fine speed. On Friday, England ascended at 1.45 p.m., and flew for quite half an hour, the outstanding feature of his trip being the beautiful *vol plané* in landing.

Whilst quite two miles away from the ground from which he started, his engine failed, and, from a height of about 1,200 ft., England effected a remarkably fine landing, thus giving evidence of the gliding angle of the biplane. Later in the afternoon

Diagonal wires turn the whole structure into a box girder, but the arrangement of wires between the rear spars differs from that in front, because the extremities of the rear spar are flexed in the process of wing warping.

The tail, which is carried on a light box girder outrigger, consists of a twin rudder mounted on a common pivot and the fixed horizontal plane with a flexing trailing edge that serves as an elevator. With the Farman system of control on this machine, elevating is performed by moving the control lever forward, while wing warping results from moving it sideways. The rudder is operated independently by foot. In the standard Wright control, the rudder is operated by a movement of the handle of the warping lever, which is hinged to the lever itself so that the rudder can be operated independently from, or simultaneously with the warp. The elevator in the Wright system is under independent lever control.



he was again out, this time reaching fully 2,500 ft., and flying for well over half an hour.

Saturday morning again saw the aviator in the air, his flight lasting for about three-quarters of an hour, during which he flew three very wide circuits and reached an altitude of 3,500 ft.

Humours of Aviation.

A CERTAIN American aviator's wife was taking her first trip with her husband in his airship. "Wait a minute, George," she said, "I'm afraid we will have to go down again." "What's wrong?" asked her husband. "I believe I have dropped one of the pearl buttons off my jacket, I think I can see it glistening on the ground." "Keep your seat, my dear," said the aviator, "that's Lake Erie."—*Evening Standard*.