

in one fluid. There is no reason, however, why stability cannot be greater than it is in existing machines; two fundamental errors in design should be changed now, namely, the use of the horizontal rudder to prevent stalling and the use of the vertical rudder as an offset to the warp.

For some years I have been convinced that these offsets are evidences of bad design, and apparently other students are coming around to my opinion.

32. It is twenty-two years since Langley published his valuable work on plane surfaces, yet although the Wrights were the first to fly, no research work worthy of the name has been done in this country, and the only scientific progress the world has made had its start in Eiffel's laboratory researches.

33. I hope that this paper will awaken an interest in the theory of aeronautics to the end that engineers will give some of their time, and, where able, some of their money, to any proposition which will put aeronautics upon a firm foundation in this country. It is to be regretted that, although aviation had its start here through the work of Langley, Chanute and the Wright Brothers, we are at the present time far behind France so far as real scientific progress is concerned.

34. What is necessary is several well-equipped laboratories and able men who can devote all their time to research work. Before aviation is placed upon a firm foundation a correct theory of design must be worked out, and this can be accomplished only by thorough research work in the laboratory.

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## FOREIGN AVIATION NEWS.

### New Records Passed.

At a meeting last week the Commission Sportive Aeronautique accorded official recognition to the record of 6 h. 42 m. 49 s. for pilot and passenger made in a closed circuit at Deauville by Gaubert on Aug. 30th. They also passed Prevost's speed records which were made at Rheims on Sept. 27th, together with the records which superseded them on Sept. 29th. The latter are from 10 to 200 kiloms. and from  $\frac{1}{4}$  to 2 hours.

### Brindejone Secures Pommery Cup.

THE C.S.A. also decided that Brindejone des Moulinais was the winner of the Pommery Cup by his flight on a Morane-Saulnier monoplane from Villacoublay to Warsaw, 1,382 kiloms.

### Mme. Pallier's Fine Flight.

By her flight of 290 kiloms. in 3 hrs. 40 mins., on an Astra-Nieuport biplane, on Monday, at Mourmelon, Mme. Pallier has secured first place in the competition for the Coupe Femina, having beaten Mdle. Dutrieu's record of 254.130 kiloms. Mme. Pallier made 29 circuits of the 10 kilom. course, but there appears to be some doubt as to whether the first lap will count as the official timekeeper was not present at the start.

### Rost after Height Honours.

AT Etampes, on Monday, Rost on his Deperdussin monoplane

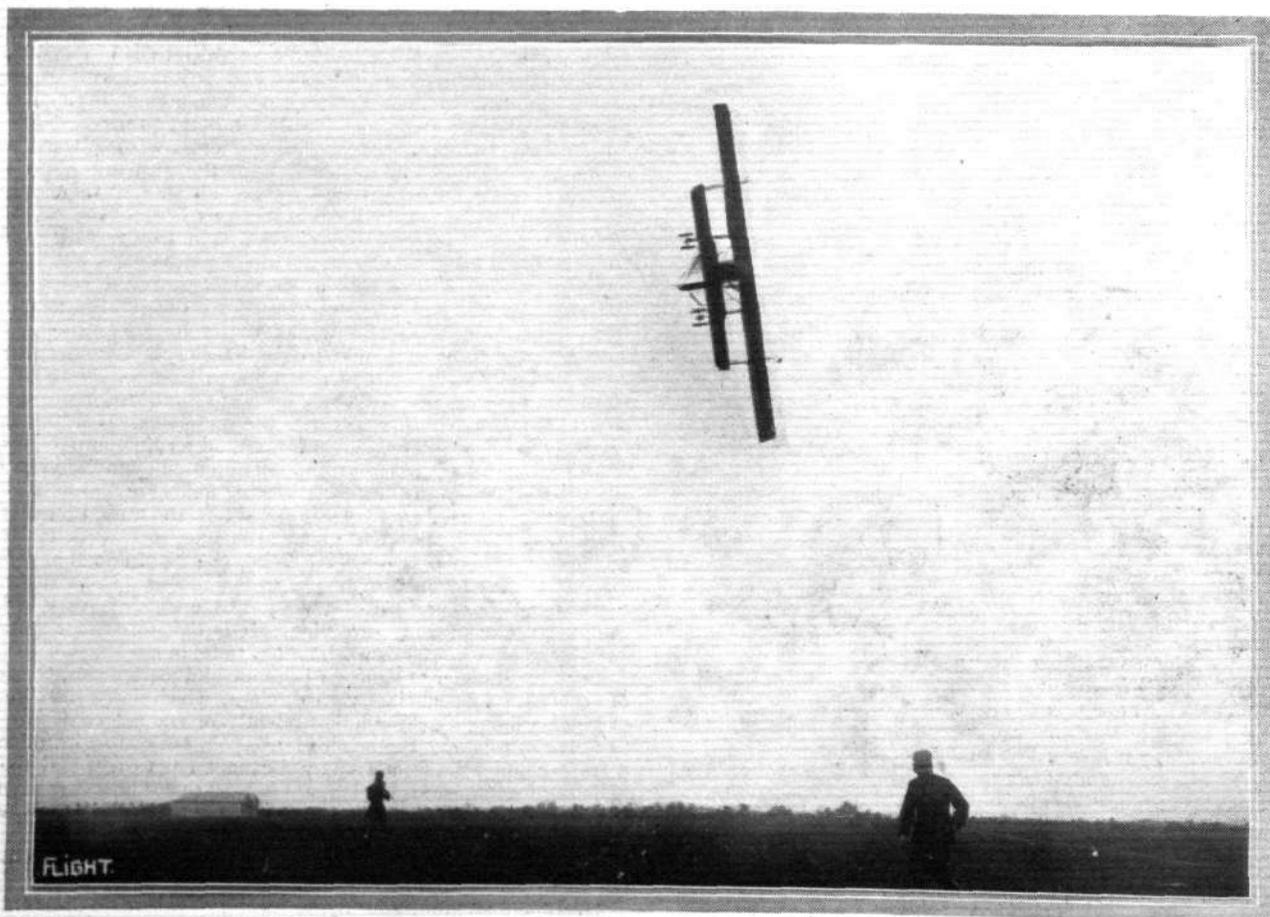
made an attack on Perreyon's world's height record of 5,980 metres. He climbed to 4,950 metres and then gave up the attempt. He will, however, have another try at the earliest opportunity.

### Guillaux Suspended for Ten Years.

At a fully attended meeting of the Commission Sportive Aeronautique on Friday, the case of the mistake which arose in connection with Guillaux's last flight for the Coupe Pommery was considered at length. Guillaux took full responsibility for the error and expressed his regret. It was eventually decided that he should be suspended for ten years.

### Helen's Try for the Michelin Cup.

ANOTHER matter considered at this meeting of the C.S.A. was the stop made by Helen on the 28th inst., and it was decided that as he rolled for part of one of the circuits on that day, that disqualified him from proceeding further. As a precaution, Helen made another entry on the 31st ult., and the C.S.A. decided that his score should count from that date. He, therefore, loses the credit of the 4,797 kiloms. which he had flown between the 22nd and the 30th October. According to the new mode of reckoning, he had covered 5,330 kiloms. up to Sunday, and in order to beat Fourny's record he will have to fly 533 kiloms. a day up to the 28th inst.



**CHEVILLARD IN ITALY.**—At Pordenone, Chevillard repeated his wonderful banking exhibitions on the Henry Farman, and the above sample of his work there, with Mr. Santout as a passenger, has been sent us from Italy.