

Whether the performance had bettered that of another competitor in the same event did not appear until the times were announced twenty minutes afterwards.

The Bleriot, the Wright, and—with the exception of Paulhan's—the Voisin machines flew the lowest, while the medium height flyers were the Farman and the Curtiss biplanes, and the normal high flying machines were the Antoinette monoplanes, that usually took a comparatively long time to get launched in flight. One result of these characteristics was that we saw aeroplanes not only outgoing one another when flying side by side on a level, but speeding one over the top of another. In one thrilling moment—a "minute inoubliable," as the French say—after rounding a corner tower, three machines appeared in tier fashion. Of course we have had to wait for the Rheims meeting to behold those spectacles, and to learn that such things could happen. It does not matter to the "top dog," but the "under dog" certainly "feels the draught" of another aeroplane overhead. Henri Farman says that when he was making his record flight of  $112\frac{1}{2}$  miles, when machines were flying above him, he felt very distinct tendencies to drive him earthwards.

In regard to tactics, it is plain that these will play a very important part in the future of flying machine races. For example, the quadrangular course was marked out by four wooden towers, each of which had to be passed by competitors on their left. Now in going for a speed trial you do not want to travel an extra yard by taking a corner wide. At the same time you dare not run the risk of disqualification by going the wrong side of the tower. Gentle and negligible as one would have deemed the breezes to be at Betheny, nevertheless there were several occasions when one would see an aeroplane approaching a corner tower. When within two hundred yards of it, it would seem to be lifted slightly by an invisible hand, and cast sideways out of its course. In other words, it had been caught in a slight side gust, the motion being so fluent that the flyer appeared to be borne on springs. Such occurrences caused the competitors to tack with the utmost promptitude of which they were individually capable. Then they passed the post well before they attempted to turn. In any case, the practice of practically all except the Wright machines—that appeared relatively unaffected by side gusts, but which, in the hands of their pilots, with the possible exception of Lefebvre, described very undulating flight paths at Betheny—came very wide up to the corner, then turned as quickly as they could. With most, turning seemed to involve a certain loss of speed. Consequently, those pilots concerned each approached the turn at what was for him a relatively high altitude. Having executed the manœuvre, he would dive down to his normal height so as to pick up speed in the descent.

The control of the various machines differed extraordinarily. That of the Antoinette, that possessed a remarkable degree of fore-and-aft stability, is certainly planned on a very seamanlike system, for each part of the mechanism has a definite movement only, so that, when having to act on a sudden, there is no likelihood of the pilot making a muddle of things, as is so easily possible with the Bleriot, the Farman, or the Wright, on each of which machines one hand can execute a more or less universal-lever movement, so that, when confronted with a crisis, it is the easiest thing in the world to thrust out the hand to the wrong point of the compass, as it were. Even the fore-and-aft thrust of the steering pillar to control the elevating planes of a Voisin biplane calls

for very nice handling if you are not to make your machine stand on its head. Once launched in flight, the Antoinette needs less skill on the part of the pilot than any other machine. And the firm has a very good demonstrator in Hubert Latham. That is to say, you shall find him coming along the straight in front of the grand stand, and letting go his wheels while he lifts his cap well above his head, and replaces it more comfortably; or he will steer by resting his elbow on one of the wheels and placing his chin on his hand as though he were musing verses in mid-air. On one occasion, when he was overhauling Delagrè on a little Bleriot monoplane below him, he let go both side wheels, and, placing a hand on either side of his air-boat, raised himself so that he was able to lean over and look down on his aerial rival immediately beneath him. A little after that, too, he caused the onlookers to draw breath because he made the machine dart down as though it were going to pitch to earth head foremost, but when within about 20 feet of the ground without effort he brought it horizontal again. These are what the Americans style "stunts." Yet I do not think that in the case of the particular machine in question in calm weather they are in the nature of foolhardiness, for the Antoinette monoplane has a deal of automatic stability. But I do not imagine any of the other machines represented can approach it in that respect, though the Farman and the Voisin are better than most. The next easiest machine to control appeared to be the Curtiss biplane, which was quite extraordinarily speedy and on which the pilot takes up a position that gives him an obviously comfortable command of the machine. He really looks as though he had control of it, whereas on the Farman and Bleriot aeroplanes the intense attention that is necessary on the part of the pilot is very apparent indeed. The honest, stolid Voisins, however, provide a fairly normal and comfortable position for the pilot.

There are wide differences, too, between one aeroplane and another in point of landing. The Farman seemed to come to earth most perfectly and with least shock, for none was softer even when he had two passengers aboard; whereas the Antoinette certainly seemed to have need of all its elaborately ingenious arrangements for absorbing shock when alighting. It comes clumsily to earth. One got a very good notion as to how substantially these seemingly flimsy machines are built when such a man as Rougier alighted. A quintette of mechanics leapt at different parts of the biplane like so many cats, thrust out their feet before them, and so skidded until they had brought the flyer to a stand.

And the exigencies of space dictate that I should put a period to this gossip, too.



## M.P.'s and Aviation.

AMONG those who were very greatly impressed by all that they saw at Rheims was Sir Henry Norman, and he has since succeeded in getting many other Members of the House of Commons to share his convictions with regard to the future of flying. At the last meeting of the Committee, Sir Henry Norman proposed no less than nine of his colleagues at St. Stephen's for election as members of the Aero Club. These new Parliamentary members are Sir John A. Dewar, Bart., M.P., the Hon. Ivor Guest, M.P., Sir William H. Holland, Bart., M.P., Sir Francis Layland-Barratt, Bart., M.P., Messrs. T. H. D. Berridge, M.P., W. Burdett-Coutts, M.P., W. H. Lever, M.P., Alfred Mond, M.P., Col. J. E. B. Seely, D.S.O., M.P.