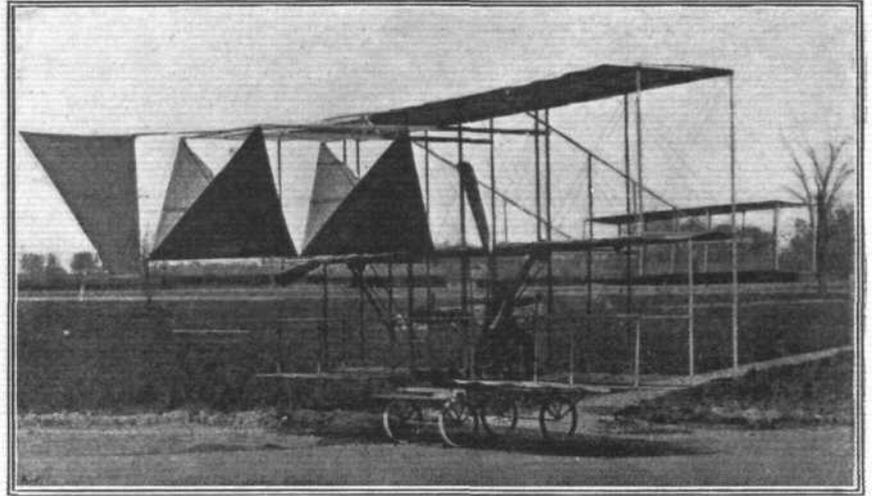


## THE BOKOR TRIPLANE.

In the accompanying photograph we illustrate the triplane with which Mr. Morris Bokor is experimenting at the American Aeronautic Society's grounds at Morris Park, New York. The three main planes measure 25 ft. from tip to tip, and are  $6\frac{1}{2}$  ft. wide, giving a lifting surface of 507 sq. ft. A further 70 sq. ft. are obtained from the horizontal rudder, the dimensions of which are 14 ft. by  $2\frac{1}{2}$  ft., while another addition is secured by the two wings which are mounted at a sharp dihedral angle behind the two upper main planes. The machine in going order with Mr. Bokor on board weighs 1,181 lbs. The middle main plane is placed 5 ft. above the lower one, while the top one is 6 ft. from the one below it.

Two 8-ft. wooden propellers, of 11 ft. pitch, are driven by chains from the 4-cylinder 4-in. motor, the gear ratio being  $3\frac{1}{2}$  to 1. One special feature of the machine is that the aviator's seat is mounted on a pendulum, with the object of obtaining automatic stability. When the machine tips to one side or the other, the flexible rear edges of the main planes are warped by means of cables from the

pendulum. Since this photograph was taken, the machine has been mounted on skids, and for starting it



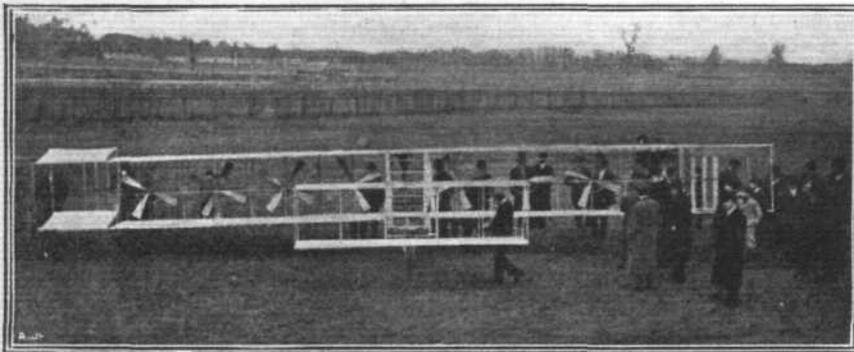
**BOKOR TRIPLANE.**—In this American design the double triangular-shaped tail and the swinging aviator's seat, which automatically warps the lower plane, are the main features.

is mounted on a little four-wheeled truck, which is left behind when the machine rises in the air.



## THE KIMBALL AEROPLANE.

ANOTHER aeroplane with which experiments are being made at Morris Park is that of Mr. Wilbur M. Kimball,



**KIMBALL BIPLANE.**—Multiple propellers between the planes, and the steering tips at both ends of the main planes, are the notable features of this American machine.

the Secretary of the Society, to which we referred in our issue of April 10th. It is of the biplane type, and is peculiar for the fact that it has eight propellers, 3 ft. 10 in. in diam., arranged between the planes, as seen in our photograph. The drive is by wire rope  $\frac{1}{8}$  inch in diameter, and the propellers are arranged in two sets of four, which are driven at a speed of 1,600 revs. per minute by a 4-cylinder motor 4-in. bore 4-in. stroke. From tip to tip the wings have a spread of 37 ft., and are  $6\frac{1}{2}$  ft. wide, and placed 4 ft. 2 ins. apart. A special feature is the square tips 4 ft. by 4 ft., which are used for steering instead of flexing the wings. The planes of the elevator, which is fitted 9 ft. 9 ins. in advance of the main planes, measure 12 ft. by  $12\frac{1}{2}$  ft., the distance between the two surfaces being 3 ft.



## AERONAUTICS IN PARLIAMENT.

INTERROGATED by Mr. Fell in the House of Commons last week, Mr. McKenna said that the question of garages for dirigibles had received careful attention.

Plans and estimates had been considered and compared with similar garages abroad, and the question of sites was under review. It was not proposed at present to erect Admiralty shelters, but garages would be erected by the contractors.

In a printed reply to Mr. C. Harmsworth, Mr. Haldane said that particulars are now ready for obtaining tenders for the erection of a shed to house a large dirigible, and it is hoped to shortly place the order. It was at present

impossible to say when it was likely to be available for use.

With regard to funds for both Army and Navy, Mr. Asquith, in reply to Mr. Rees, said that as the requirements for the year could not be estimated precisely yet, he could not say more than that funds would be forthcoming to meet such requirements.

On being asked by Major Anstruther-Gray as to what steps had been taken to provide special guns for use against airships, and whether it was proposed to experiment with such guns mounted on motor chassis, Mr. Haldane said that the Ordnance Board was at present busy with this problem.