## THE FRENCH AEROPLANE CONTEST. BY OUR PARIS CORRE-PONDENT.

The Concourse of Aviation, which was held in Paris on the 11th of February and the two following days, proved to be an event of considerable interest. It was held in the immense Galerie des Machines, the Machinery Hall building left over from the Exposition. It contained sufficient space for this kind of trials. seeing that the apparatus which were entered were mostly in the shape of small models, and the present concourse is intended to be a preliminary one in order to bring the different inventions before the public, and will be followed by a series of tests on a large scale in the open air. The concourse was held under the supervision of the Aero Club of France, and it is intended as one step in the movement which is now on foot to promote the question of aeroplanes and flying machines in general which are heavier than air, as opposed to the dirigible balloon. M. Ernest Archdeacon, whose aeroplane we intend to illustrate, is one of the leading spirits in this movement. The present concourse attracted a considerable number of persons and was quite a success, especially for a first attempt. In the gallery at one end of the hall was

erected a high scaffolding of 125 feet, from which the aeroplanes took their flight. On either side were exposed the apparatus which took part in this concourse. Most of these were models which varied from two to ten feet in length. None of them were intended to be mounted by an aeronaut, but were constructed so as to fly in a straight line as nearly as possible, and to keep their balance in the air. Some of them had small propellers which were worked by a spring or by clockwork. One form had a small gasoline motor. Aeroplanes of a single surface or divided surfaces were to be seen. Several forms of kites were also exhibited.

Some of the aeroplanes succeeded in making a good sail, and landed in a more or less straight line at a considerable distance. This is a very good performance when it is considered that they are not controlled by the

aeronaut during their flight and the least fault in balancing or the smallest current of air is sufficient to make them deviate. Others kept up their equilibrium in the air, but sailed in a spiral path. Some of them turned several times in a spiral before reaching the ground. It would be premature to base any very definite conclusions from this first series of trials, which is rather of a nature to awaken general interest in the question and to prepare for the open-air con-



At the Foot of the Launching Tower.



Launching the Paulhan-Peyret Aeroplane.

course of larger apparatus. The Paulhan-Peyret aeroplane, which is here illustrated, attracted considerable attention. It is one which has already made a series of tests on a large scale in the open air, in Capt. Ferber's aerodrome. It is built on the Langley system

as to general principles, having two sets of double surfaces or wings separated by an intervening space. The inventors add a smaller plane in front to assist in lifting the apparatus. Contrary to the opinion of many persons, they consider the two surfaces as having an equal sustaining force, and in consequence they distribute the load equally, placing it between the sets of planes. Up to the present, their experiments have borne out this idea. This aeroplane was tried during last October, mounted by one of the aeronauts. Its total length, front rudder included, is 20 feet. The trellis-work support is 16 feet long. The total width of the aeroplane is 16 feet. The wings are each 6 feet wide, and the total surface of the aeroplane is 25 square yards. The front rudder has a surface of two square yards. As to the weight, the apparatus alone weighs 90 pounds, or 240 pounds with the aeronaut. This figures about 10 pounds per square yard of surface. In the flight, the results were as follows: For a difference of level of 5 feet, a flight of 40 feet; for 6 feet, a flight of 50 feet.

The Brazilian government has embarked upon an extensive naval building scheme comprising twenty-

nine vessels. The programme is composed of three battleships, each of 13,900 tons displacement; three armored cruisers, each of a displacement of 9,500 tons; six torpedoboat destroyers; twelve torpedo boats; three submarines; a transport of 6,000 tons; and one training ship of 3,000 tons. The battleships are to be of similar design to the two battleships built in England for the Chilian navy and subsequently acquired by the British Admiralty. They will have a speed of 19 knots, while the cruisers will be of 21 knots speed, and the destroyers 30 knots. The submarines will be approximately of the same design as those now being constructed for the British navy by Vickers, Sons & Maxim, of Barrow-in-Furness. : The work of construction is to be spread over a period of about ten years, and all the vessels are to be constructed in Great Britain, probably by

Vickers, Sons & Maxim and Sir W. G. Armstrong, Whitworth & Co., Ltd., of Newcastle-on-Tyne, respectively. The Brazilian government has already stipulated that Vickers-Maxim improved armor is to be adopted on the vessels.



Gellet's Mechanical Bird.



The Paulhan-Peyret Aeroplane under Way.







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Side View of the Paulhan-Peyret Aeroplane.

Front View of Paulhan-Peyret Aeroplane.

SCENES FROM THE FRENCH AEROPLANE CONTEST.