

Mechanical Considerations.

Machinery has a rooted objection to reciprocating motion as a rule, and we do not envy anyone who tries to make an engine work properly when its task is to flap up and down unwieldy great wings. If the flaps could be performed very slowly, the problem might not perhaps be so difficult, but even although a slow downstroke might be made effective by virtue of large wing area, a slow up-stroke is out of all question if the machine is going to drop bodily through the air with an acceleration due to gravity, which will

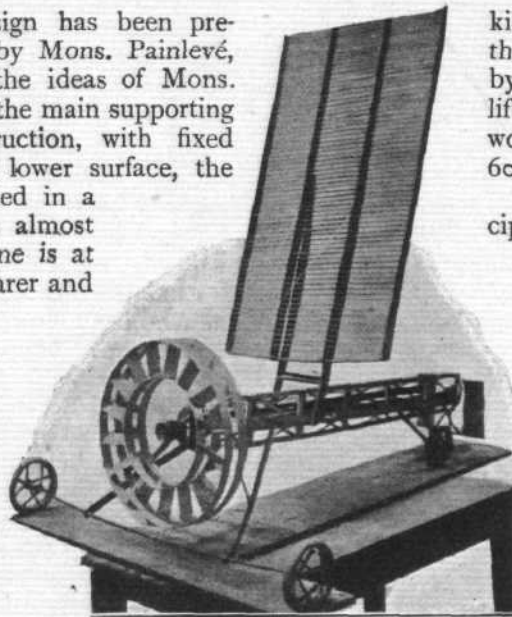
make it fall through an altitude of about 16 ft. during the first second. It might be possible to get over the difficulty by having two or more pair of wings on the machine, so that there is always a certain minimum direct lifting effect in action, but this would introduce still further complications which are outside the scope of the present article, the main object of which has been to point out that a simple flat surface does not even approximate to the action of a bird's wing, and that it would be a very difficult matter to make a machine, constructed with such flappers, climb straight up into the air.



A CURIOUS DESIGN FOR A FLYER.

A MODEL aeroplane of peculiar design has been presented to l'Academie des Sciences by Mons. Painlevé, this machine having been built to the ideas of Mons. Maurice Carron. As will be seen, the main supporting surface is of venetian-blind construction, with fixed aluminium lathes having a concave lower surface, the entire group of planes being carried in a frame which normally assumes an almost horizontal position when the machine is at rest, but which automatically rises nearer and nearer to the perpendicular the faster it is propelled through the air by the two oppositely-revolving propellers which are carried close up together on the main framework beneath. A lifting force of 12 kilogs. per sq. metre is claimed by the inventor, who also reckons that the resistance is no more than half that of most other types of machines.

With a machine weighing 200



M. Carron's model "lattice" flyer.

kilogs. (with its operator) he deems that a venetian blind, 4 metres by 2 metres, would have an effective lifting surface of 16 sq. metres, and would be self-supporting at a speed of 60 kiloms. per hour.

The general "venetian blind" principle adopted in this design was first used by the Englishman, Phillips, in 1862.

The chief feature of novelty in the Carron model is therefore the kite-like suspension of the load, the blind acting kite-fashion upon the framework with its freight and machinery beneath. It will of course be understood that the operator and the motors are intended to be situated upon the main girder which carries the tractor-screws in front and the rudders at the rear.



PHANTOM AIRSHIPS AND SCARE HEADLINES.

AN absurd degree of credence has been accorded by a certain section of the daily Press during the past week or two to what were evidently ridiculously exaggerated statements that emanated from various parts of the country concerning the appearance of mysterious airships by night. Clever though the ruse has been, it was evident from the very first that either a practical joke was being played or that a bold advertising scheme was on foot. The lengths to which speculation of the wildest kind were allowed to go was neither beneficial to the new industry nor calculated to enhance the dignity of the British public in the eyes of foreign nations. Apart from that, however, the game played with illuminated toy balloons of orthodox cigar-shape, towed by cars, in the still watches of the night, was well conceived from an up-to-date advertiser's standpoint, and was carried out

with conspicuous ingenuity and adroitness, while apparently a well-known firm of automobile engineers may be suspected of deep complicity in it. From Mr. C. D. Clayton we learn, at any rate, that:—

"The airship which has been causing considerable comment by its mysterious passages turns out to be Sizaire Mors airship of Messrs. Jarrott and Letts, Ltd., and which was found wrecked on Chalk Hill Down, Dunstable, in the early morning of May 25th, being discovered by L. White, who has been rewarded with the sum of £5."

And to this we need but add that the following notice is said to have been found attached to the expired monster by its lucky finder:—

"In the event of an accident.—This airship is the property of Jarrott and Letts, London, who will pay the sum of £5 to the finder, provided he first sends a telegram to "Jemidar," London, stating where the airship is to be found."



BACK NUMBERS

OF "FLIGHT."

THE publishers have pleasure in announcing that they have secured a few of the back issues of FLIGHT, and any of our new readers who may wish to complete their sets may obtain the first twenty-one numbers for 2s. 9d. post free, from the Publishers, 44, St. Martin's Lane, W.C.