

## A BICYCLE WITH WINGS.

### Mr. Freymann Expects His Flying Machine to Fly.

Oscar Freymann is the inventor of a brand new flying machine which has several novel features, and which, from his success in experimenting with a model, bids fair to make a decided advance toward the solution of the problem of aerial navigation. A full-sized machine is now being constructed, under the inventor's supervision, and he expects that it will be finished and ready for trial in about two months. Although the experiments with the model were made a year ago, Mr. Freymann decided to keep them secret until he should have filed plans of his invention in the Patent Offices in Europe and America. This was not done until recently, and no description of the machine has heretofore been published.

Speaking broadly, Freymann's machine is a return to the principles upon which inventors have generally worked before Herr Otto Lilienthal, of Berlin, cut away from them two or three years ago, and contrived a machine by means of which he succeeded in flying or rather in soaring, over considerable distance. Lilienthal postponed for future development the application of motive power, and contented himself with an aeroplane capable merely of sustaining him for a time, while the soaring depended upon the force of gravitation on one hand and the force of the wind on the other. Lilienthal always soared against the wind, while Freymann says that with his machine it will be possible to fly both with the wind and against it.

The mechanism of the machine is comparatively simple, as may be seen by the accompanying cut. The wings are moved forward and upward and then downward and backward by



Another Flying Machine.

means of steel rods connected with two wheels, which are revolved together by chains running from the pedals. The lever, which is grasped by the right hand, is connected by steel wires with the overhead structure, part of which is movable in such a manner as to change the general plane of the wings. The lever grasped by the left hand is connected in a similar manner with the rudder. The entire mechanism is under the control of these three things. Gravitation and the wind are expected to do the rest.

The expense of building the trial machine will be about \$600. In quantities they should be manufactured for \$200 to \$800 apiece, so that if the machine is successful there is no reason why any well-regulated family should be without one.