## A LILIENTHAL APPARATUS IN DUBLIN.

PROFESSOR FITZGERALD, of Trinity College, Dublin, lately purchased from Herr Lilienthal one of his aerial soaring machines, to be exhibited as one of the attractions at a forthcoming bazaar in aid of a hospital.

The machine consists of an aeroplane about 24 ft. across by 8 ft. in breadth, with a tail composed of four small fans, and is intended to glide downward against the wind when mounted and directed by an operator, in the same way as in the experiments of Herr Lilienthal, which are probably well known to our readers.

The first experiments occurred in the college grounds on April 2, in the presence of many students and spectators. They are thus described by the *Dublin Telegraph* of April 3, 1895:

"It was a quarter past one exactly when the professor, doffing his coat, prepared for his task. The preliminaries were simple. Eager volunteers at the word of command raised from the ground the machine—which is 24 ft. long and 8 ft. wide—and placed it *in situ*—that is, they gently lowered it over the professor's head and shoulders, till the same appeared through a square aperture in the centre. The professor then seemed to be wearing at his waist an enormous white skirt,* of the most advanced ballet artiste type, fitting admirably, while the peculiar-shaped tail suggested an exaggerated 'dress improver.' There was a fairly strong breeze on, and the onlookers expected an instant manifestation. This, however, did not come. The professor seemed for a minute or two at a loss; but at last, realizing that something was expected, he made a short run with the machine, but it did not soar, or do anything save stick close to its occupant. The experiment was repeated with like result. Needless to say there was much disappointment, especially among the uninvited guests outside the college wall, who were prepared to cheer loudly if the professor rose in the air.

"After a little delay a long table, 3 ft. high, was got by two college porters, and with the aid of the bystanders Professor Fitzgerald mounted and made ready for another try. This was effected by his running along the table to the end, and jumping off, machine-clad as before, when he seemed to 'land' below, on his legs, with about the same force as if unencumbered.

"Undeterred by these failures another essay was made. This time cords were attached to the framework, and several parties pulled it forward, till the professor, keeping pace, had to run; and, sure enough, after 20 or 30 yds. had been traversed, the machine 'lifted' about 2 ft. from the ground, and, sustained by a rather brisk wind, carried itself and the experimentalist at that very moderate altitude for a short—in truth, a very short—distance.

"However, the outside spectators, who wanted something of a show for their expenditure of time and patience, were satisfied and applauded vigorously. A repetition of the process produced a similar effect, and when Professor Fitzgerald disencumbered himself of the machine, it was felt all round that it had a certain potency of 'soaring' when the conditions were more favorable for the display."

A further experiment was made on April 5, by which time a sloping platform about 2 ft. wide had been erected, leading from the ground to the parapet of a pavilion. Professor Fitzgerald, clothed in the machine, backed up the platform for a short distance, and then ran down to the ground, but did not gain sufficient speed to soar, although the wind was favorable. Again and again the experiment was repeated, each time with a longer run, but without success, as the platform was evidently too narrow to admit of rapid and unobstructed movement. Two enthusiastic students had each a try, but little if any work was obtained. Finally, a small disaster brought the day's proceedings to a close. While one of the students was placing himself in position on the sloping plank and fixing the machine at a certain angle, a gust of wind tipped it up, and the whole business, man and machine, fell over inside the pavilion rails, scattering a group of onlookers, who were quite unprepared for the incident, and slightly damaging the machine.

This doubtless was soon repaired and the experiments renewed, although accounts of the same have not yet come to hand. It is very evident that, as Herr Lilienthal has all along insisted, it requires a good deal of skill and practice to learn to manage one of these machines in so yielding and fluctuating a medium as wind.

* Like the Saracen who experimented at Constantinople in 1178.