

ANOTHER FLYING MAN KILLED.

**Travelled 200 Yards and Rose 60 Feet
When the Machine Collapsed.**

Mr. Percy S. Pilcher, a young English inventor, has just met his death, like the German, Otto Lilienthal, through the collapse of a flying-machine. He was only 30 years of age, had been an officer in the Royal Navy, and, for some time, had been Mr. Hiram S. Maxim's assistant in his experiments in aerial navigation. Mr. Pilcher had already made several machines, on the lines worked upon by Lilienthal, before the one that proved fatal to him, and had worked out plans for propelling them by oil engines. His experiment was made at Lord Braye's country place near Market Harborough, in the presence of several persons, and demonstrated, though at the cost of his life, that his machine could be started from the ground and would stay up in the air for a time. A description of the apparatus and of the accident is given in *Engineering*.

"In the soaring experiments the propulsion of the machine was effected by a line dragged by a running horse, with a losing purchase to gain velocity. The experimenter at first ran, carrying the soarer, and as the velocity increased he was elevated along with the soarer. He had command of a life rope which he could slip if necessary and then soar down to the ground. The soarer consists of two strong wind-like concave membranes of spinnaker silk, called aeroplanes, stretched on cane frames. The fore edge of these is slightly raised, to insure lifting force when advancing. In addition there is a smaller tail plane, also framed on cane, with a contrary slope to be really a rudder, but acting in the vertical plane. There were six cordage guys from the upper edge of the tailpiece to the heads of two masts, which rose from the framed body of the soarer. When in flight the legs and body of the aeronaut were quite free, and his weight was supported on his elbows only. The proper lengths of the guys for the tailpiece were determined and fixed unalterably before leaving the ground, and any modification of slope required during flight was effected by the aeronaut muscularly altering the position of his centre of gravity in relation to the soarer. The weight of the man and the vertical pressures on the aeroplane and on the upward tail formed a continuously balanced, but also continuously varying set of forces, and all the time there was the horizontal pull of the propelling rope.

"On Saturday two attempts to start failed through the towing rope breaking. In the third attempt the machine had traversed 200 yards, and attained an altitude of between 40 feet and 50 feet, and was beginning to descend when a derangement occurred. The apparatus was precipitated to the ground, the fore edge striking and entering the soil and turning over. The poor aeronaut, entangled among the cordage, the framing and the silk, had both legs fractured and his skull contused, so that he never recovered consciousness and died on Monday morning.

"What really occurred is supposed to be that, desiring to descend, Mr. Pilcher shifted himself forward to depress the fore edge of the aeroplanes, and a greater surface of the tail was thus suddenly exposed more directly to the force of the air. The soarer being still under propulsion, the increased pressure on the tail broke the tail guy cords, and there being now no force to elevate the fore end, which supported the weight of the man, it suddenly pointed earthward and fell without resistance through about 30 feet. There are other hypotheses put forward to explain the accident in detail; after considering them all, we think what is here stated is what did really occur."