

Brief von S. P. Langley an A. M. Herring  
handschriftlich, unvollständige Abschrift

Original: Univ. of Chicago, Sammlung Chanute  
Übersetzung veröffentlicht in „Otto Lilienthal's Flugtechnische Korrespondenz“  
Otto-Lilienthal-Museum Anklam 1993

Berlin, den 6. August 1895

I called on Lilienthal at 12 noon. He spoke but little English or French, and we had some difficulty in understanding each other.

He thinks the method of flapping wings, altogether superior to that of the screw, because the former does not disturb the air below it. He showed me one of his flying models, -that is the wings without the rudder or tail. It spreads, he says, about 13 metres square, and weighs 20 kilos.

It was made of sticks of pollard willow [Weidenruten]. It is very crooked and irregular wood. The linen was stretched as tight as a drumhead.

I could not describe the curves as I had no opportunity of measuring, but the aspect of the whole was heavy and clumsy. -However, «Handsome is as handsome does.»

Mr. Lilienthal said he was getting ready a carbonic acid gas-engine. He showed me one of his storage cylinders, marked as weighing 3 1/2 kilo, containing (I should guess) not much over 150 cubic inches. This, he said, would furnish power for 100 flaps of the wings, or about 2 minutes flight. I do not know the pressure.

Although I was only part of two days in Berlin, I managed to go out to Lilienthal's place, and see him take several flights. They were interesting, but I did not feel that I learned much.

Lilienthal's "Hill" is an open field, about 6 miles from Berlin, and consists of a mound of solid earth, with a slope of about 30° at the top, and less at the bottom. It is about 15 metres in total height. This is solid soft earth for 12 metres, but there are 3 metres more, built of wood, hollow, and covered with turf.

His flying machine, as I have said, looks unnecessarily heavy. He carries it up, with an assistant till he comes to the top of the solid part, where he turns round, and with his face towards the proposed line of flight, he puts his arms through the supports, the hands grasping a bar, palms up. In this position, which the continued aid of the assistant, he backs up the rest of the ascent. On the summit he bends forward until his arms and the rest of his body form almost a right angle with his legs; he poises himself a moment, and, still stooping forward, runs down the turf covered part, leaving it with a jump, which sends him into the air. He sails down, nearly parallel with the curved slope of the hill, and comes to his feet on the ground at a distance of nearly fifty metres, on the level.

I saw him do this four or five times. His best «flight» was about 50 metres for a fall of 12, while he had already sacrificed 3 in getting up his run.

He also tried before me a second pair of wings, superposed on the first (this he does not want mentioned). The results were the same.

I asked him why he did not put up a platform on the top of his hill, and get up his flight by an initial fall. He said he had tried this, but had given it up on account of the eddy produced at the beginning. He was of the opinion that it was possible to fly indefinitely in a strong wind, but very dangerous; the particular danger being that the wind would catch one wing more than the other, and that he would be turned around, lose his velocity and drop. I quite understood this danger myself

As I have stated, he says he is building a carbonic gas engine of two horse, which will give 100 flaps of the wings in two minutes.

He said that he had had a letter from you, and enquired after you...