

OUR LOCAL PIONEER AVIATOR: A. LIWENTAAL

Most people in Dartmouth and Dittisham are probably unaware of the exploits of one of the earliest pioneers of 'heavier than air' flight, that took place in Dittisham in 1894, nine years before the Wright Brothers' historic first powered flight in 1903. Only one man, Sir George Cayley, is known to have flown before him in England, apart from balloons.

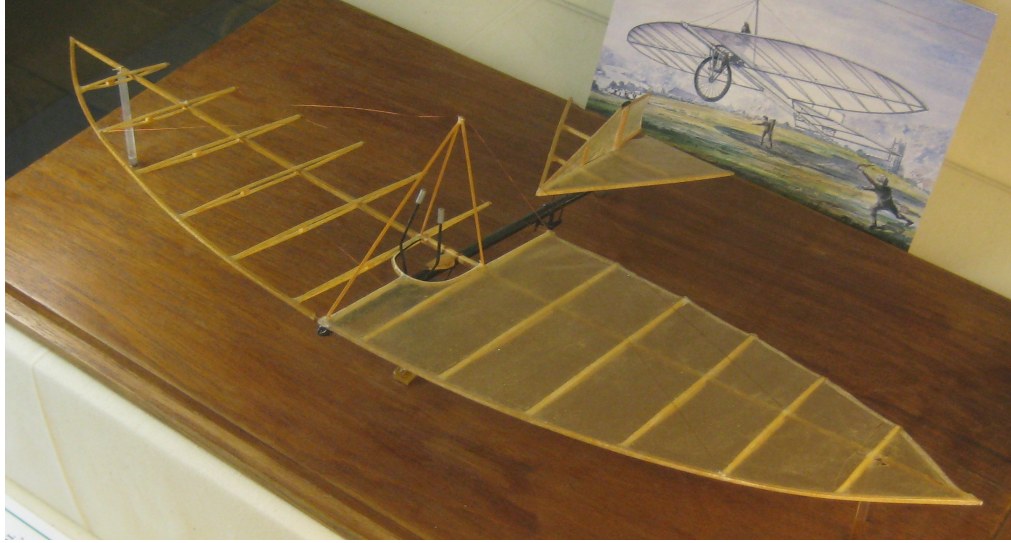
Alexandre (alias Albert) Liwentaal made at least two attempts to fly his 'Aerostat' glider from the hills above the river Dart. On one of these he succeeded in gliding several feet above the ground for a considerable distance, but on the second public trial he failed to take off and crashed into a hedge at Bozomzeal, injuring himself and completely wrecking his machine. He was treated at Dartmouth Hospital, probably the first casualty of aviation !



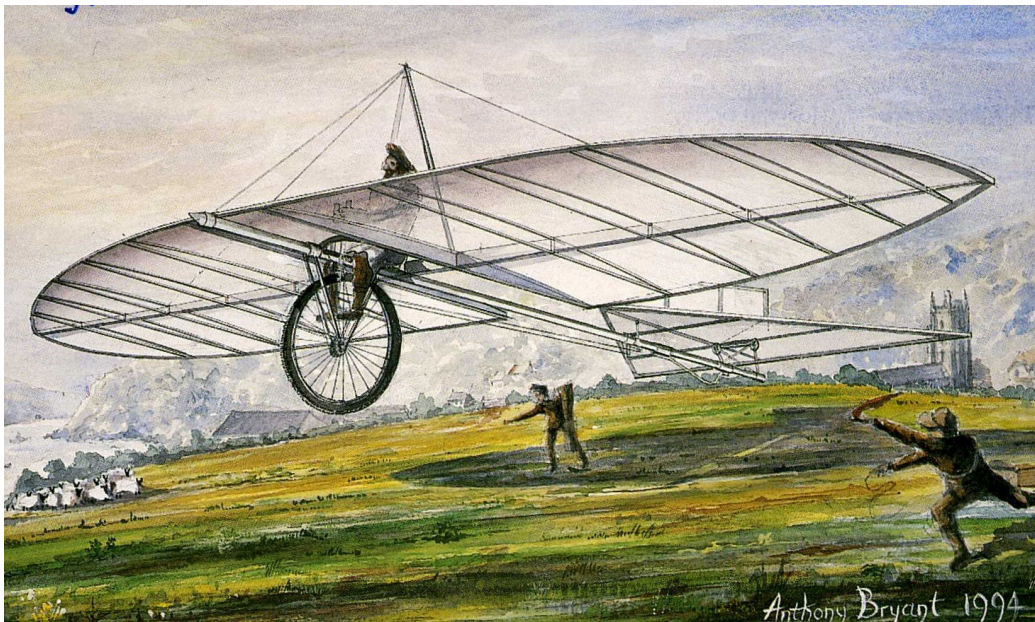
Alexandre Liwentaal was born in Lausanne, Switzerland in 1868, with an Estonian father and Swiss mother, and in his early years alternated between Lausanne, Geneva, Paris where he studied as an engineer and learnt about French balloon experiments, and Vernier in Switzerland. Between 1888 and 1890 he completed his military service and became a Lieutenant. Then in 1890 he moved to Kent in England and worked with Hiram Maxim, a notable American-born engineer who had invented the machine-gun, planned and patented powered aircraft and had money to put his ideas into practice. However Maxim's plans were

delayed by lack of a suitable light power-plant. Liwentaal wanted to pursue his own ideas and at age 24 found a job in 1892 as a shipwright working for Simpson Strickland (the fore-runners of Philips ship-builders) at Noss.

Here he lived at first in Sandquay, Dartmouth but later moved to Dunedin cottage on the quay at Dittisham, and later to Snail Cottage on the road to East Cornworthy. He was known by neighbours as Al(bert) Levento – easier to pronounce than Alexandre Liwentaal ! While working for Simpson Strickland he was able secretly to design and build his 'Aerostat' using a nearby shed owned by Lidstones. By March 1894 the glider was ready, designed with a gull's wings in mind and constructed with handmade silk on a frame of tubular steel and Norwegian pine and a movable tail operated by a lever from the 'cockpit'. The pilot sat on a bicycle saddle over the wings and the whole craft was supported on a bicycle wheel and skid. The wing span was 43 ft. and length 21 ft., and the weight 120 lbs.



A model donated by Mr. Bob Marsh can be seen in Dartmouth Museum, and there is another larger model with a 5 ft. wing span in Dittisham Village Hall, made by Henry Harvey of Bozomzeal



Details of Liwentaal's flights were reported in 1894 in several articles in the Dartmouth and Brixham Chronicle, and letters to the paper signed by A. Liwentaal. For the first trial in March the machine was taken up-river from Sandquay on a Philips' launch, and suffered first from a heavy rain shower en route to Dittisham, and then a gusty wind which damaged the tail when trying to land and assemble the craft at Gurrow (Goader) Point. The next attempt was more successful, also at Gurrow Point, when after his helpers steadied it and pushed it the machine flew 7 feet above the ground for some distance towards Dittisham Mill Creek until a gust caught it and threw it on its back; luckily the pilot was unhurt. The next known flight was at Bozomzeal overlooking Old Mill Creek, where the farmer helped to haul the patched-up glider to the top of the hill. Sadly this time it failed to take off and crashed into a hedge lower down. Liwentaal was rushed to Dartmouth Hospital with cuts and bruises, and the craft was a write-off.

However, far from being disheartened he soon began to design a larger powered machine. Meanwhile he left Dittisham for London, where he registered several patents, and pursued aviation experiments in France, Germany and Switzerland between 1895 and 1905, working with Count Zeppelin on airships; ironically in 1915 his factory in Paris was bombed by a Zeppelin ! He married a French girl in 1905, and in 1910 came back to England with 3 children, acquiring British nationality in 1914. Previously in 1909 he had flown the 'Libellule', a tandem biplane, the first flight in Switzerland. During World War I he was working on a variety of engineering projects including airships and tanks. Then in 1919 he emigrated to Montreal, Canada with his wife and four children, and carried on research in a wide field of activities including timber transport, mining and cryptography. He was killed in an accident in August 1940.

Liwentaal must not be confused with Otto **Lilienthal**, a more well-known German flier (1848-96) who designed some 18 different gliders of various types in Germany, some of which were built and flown before his death in 1896. Lilienthal's gliders are believed to have had a major influence on the Wright Brothers' design. Some historians were misled by the similarity of their names and flying accidents, until local historian H F Cowley was able to show that they were different aviators. Surprisingly Alexandre Liwentaal's exploits were not recorded by the Royal Aeronautical Society.

Details of his life were researched by, among others, Mr. Bob Marsh of Dittisham who wrote a booklet 'The Liwentaal Enigma' and by M. Jean-Claude Caillez of Geneva.

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