

## **The Parsons' Connection with Gledhow Hill and Roundhay**

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In this issue of 'Oak Leaves', the article by Joan Newiss and Murray Mitchell about Gledhow Hill mentions it was owned by an engineer, Richard Clere Parsons, from 1884 to 1887. Directories and Electoral Rolls confirm that he lived there during these years.

I found out that R C Parsons was an older brother of Charles Algernon Parsons, the man who invented the modern steam turbine, one of the greatest engineers and industrialists of modern times. Steam turbines driving electrical alternators is still the main way electricity is generated in power stations all over the world, a century later.

The Parsons came from a wealthy Irish aristocratic family. In their earlier years Richard and Charles Parsons were partners of James Kitson at the Airedale Foundry in Hunslet and lived in north Leeds.

The brothers could trace their Parsons roots through several generations of Irish landed gentry, although their parents had Yorkshire connections. Their father, William, the third earl of Rosse, was born in York and their mother was a wealthy Yorkshire woman who had land in Heaton and Shipley.

William was an amazing person and an astronomer of some substance. In the 1840s, showing great inventiveness and tenacity, he built a huge 72" reflecting telescope. It weighed twenty tons, cost between one and two million pounds, in today's money terms, and it was unsurpassed in size until well into the next century. His stature in his chosen field was such that one of the craters of the moon, Rosse Crater, is named after him. For a while he was President of the Royal Society.

This famous telescope is on view to the public in the grounds of the ancestral home of the Parsons at Birr Castle in Offaly, Ireland. The castle is still a private residence, the home of the seventh Earl of Rosse, Brendan Parsons and his family. R C Parsons renamed Ethel Hill, Birr House, after his family home.

The boys received a good education. Their father engaged a private tutor for them. He was a scientist, Sir Robert Ball, who in return was allowed to use the Birr telescope and who later became Astronomer



**Charles Algernon Parsons.  
Inventor of the modern steam turbine.**



**Broom Hill where Charles and Richard Parsons were  
living at the time of the 1881 census. Photograph taken  
with the kind permission of Father Stephen Webb.**

Royal for Ireland. Both brothers served apprenticeships and studied at Trinity College Dublin, where Richard graduated from the Engineering School. Charles went on to Cambridge and gained a first in mathematics.

Richard Clere Parsons was at Kitsons from 1880 to 1887 and his special interest was in steam trams. In 1881, Charles joined him, bringing with him a special kind of engine of his own design, and forty of them were made in the Kitson works.

Charles was also working on the design of military torpedoes and James Kitson signed an agreement allowing Charles to continue this work, sharing equally with him the costs and any profits that might be forthcoming. A workshop at the Airedale works was made available to Charles and the services of a mechanic, a clerk and a driver.

Parsons' torpedo was about 6 foot in length. It had a range of 200 to 300 yards, reaching speeds approaching 20 knots. Amazingly it was propelled by 2.5 lb charges of gunpowder of which up to three of these would be used in one torpedo run. These tests were carried out on the Waterloo Lake at Roundhay Park.

The 1881 census shows the two Parsons' brothers living in Leeds with RC Parsons' wife and baby daughter, his niece and several servants at Broom Hill in Moor Allerton. Broom Hill still exists. It is currently the priest's home on the site of the Immaculate Heart of Mary Catholic Church on Harrogate Road near the Stainburn parade of shops.

In January 1883 Charles Parsons married Katharine Bethell at All Saints Church in Bramham and soon his new bride was accompanying him to Roundhay Park testing torpedoes. In her later life she recalled how she was left standing on the bank of the lake in the freezing cold at seven o'clock in the morning while her husband and his mechanic pressed on for hours with their experiments. She caught rheumatic fever not long afterwards. Charles promptly suspended his tests and they went off to America for a while to aid her to recover.

On returning to England, Charles Parsons took some serious decisions. He ended his work on torpedoes, left Kitsons and Leeds, and joined Clarke Chapmans in Gateshead as chief electrical engineer and junior partner. In 1884, he filed his first patents on steam turbines. In his student years, his brother Richard had distinguished himself in the design of screw propellers and Charles set about

matching high speed screw propeller performance with the output from steam turbines exhausting to a vacuum.

Charles became a major industrialist in the Newcastle area, quickly forming CA Parsons and Co., to promote his turbine interests. The firm still exists in the Siemens Parsons group of companies.

The dramatic manner in which Charles Parsons demonstrated the effectiveness of the steam turbine in marine technology is legendary. He designed and fitted the first boat to be powered by a steam turbine. He called it, the *Turbinia*. It outran all opposition in a record speed of nearly 33 knots at Queen Victoria's Diamond Jubilee Review in 1897 and by 1904 the Admiralty decided to fit steam turbines to all its warships.

Charles Parsons was knighted in 1911 and received the Order of Merit in 1927.



**CA Parsons' Turbinia, the first boat to be powered by a steam turbine.**

Richard Clere Parsons' career was less spectacular than his younger brother's but nevertheless continued at a high profile level.

During his time in Leeds it seems he was involved in the development of the Yorkshire College, which of course became Leeds University.

Richard's father-in-law, John Frederick La Trobe Bateman, was a distinguished civil engineer, a fellow and a former president of the Royal Society. He was in the business of constructing reservoirs and waterworks and in 1887 Richard left Kitsons and joined him as a partner for a couple of years. He seems to have continued in this line of business and he worked in several countries including England, Ireland and South America.

His final years, however, were quite a contrast to this. Presumably his experience and connections were valuable. He became Treasurer and then Deputy Chairman of the Delegacy of King's College in London, and lastly, Governor of Imperial College before he died in 1923.

### **Acknowledgements**

Charles Parsons' life and achievements is well-documented on the Internet and there are a few references too to Richard Clere Parsons from which I have been able to draw some information.

Outstanding among these were some articles by Professor Garrett Scaife who wrote a 600 page extremely comprehensive account of the lives of the Parsons family entitled "From Galaxies to Turbines" (ISBN 0 7503 0582 7) which was published by the Institute of Physics in 2000.