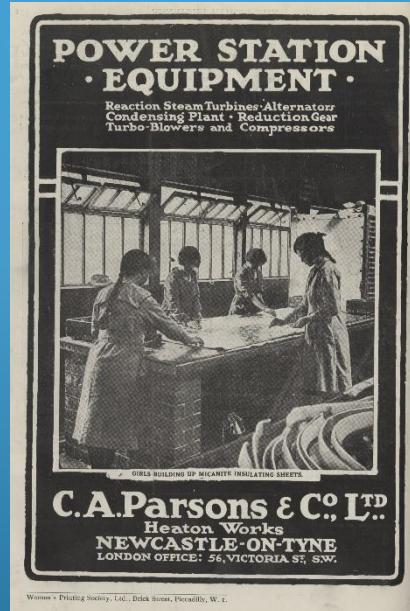


The Story of a Heritage Project to commemorate Sir Charles Algernon Parsons

Ruth
Baldasera



Sir Charles Algernon Parsons



Sir Charles as High Sheriff of
Northumberland in 1910

...the first Engineer to use a steam turbine to produce large amounts of power for electricity generation and driving ships.

Birr Castle



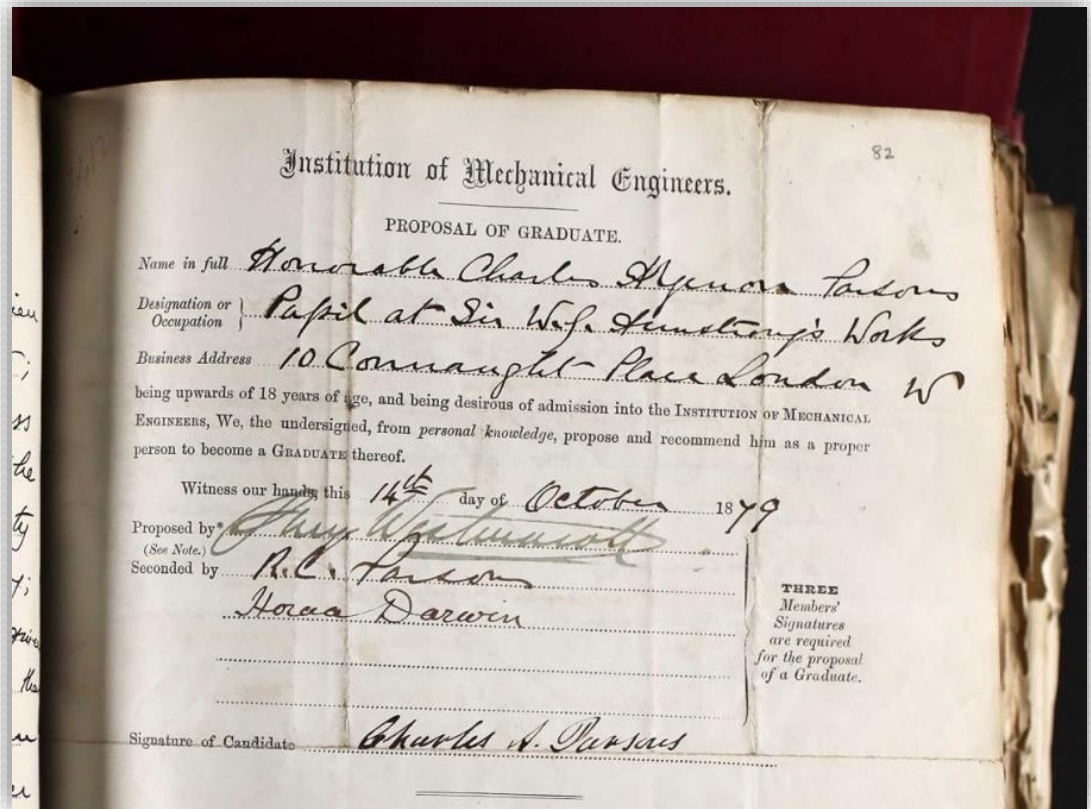
“The Award-Winning Gardens of Birr Castle Gardens and Science Centre in Ireland are both rich in amazing feats of science and engineering as well as rare trees and flowers, wonderful wildlife, and walks along peaceful rivers and the lake. The Parsons family invite you to explore one of the most extraordinary places in Ireland. Created over generations it is an environmental and scientific time capsule.”

<http://birrcastle.com/>

Apprenticeship

Charles Parsons then carried out his apprenticeship at Armstrong's Works in Elswick, Newcastle Upon Tyne.

Here is the document 'Proposal of Graduate' for the Institution of Mechanical Engineers in 1879.



Family life begins....1883

In 1883 Charles Parsons married Katharine Bethell, the daughter of William F. Bethell.

The Bethell family ancestral home was Rise Park (also known as Rise Hall), near Hull.

They had two children: Rachel Mary Parsons (b. 1885) and Algernon George Parsons (b. 1886).



The Family pictured at Elvaston Hall in Ryton



Note – Katharine was the youngest of the twelve children of William Froggatt Bethell and Maria Elizabeth (née Beckett).

Heaton Works founded 1889

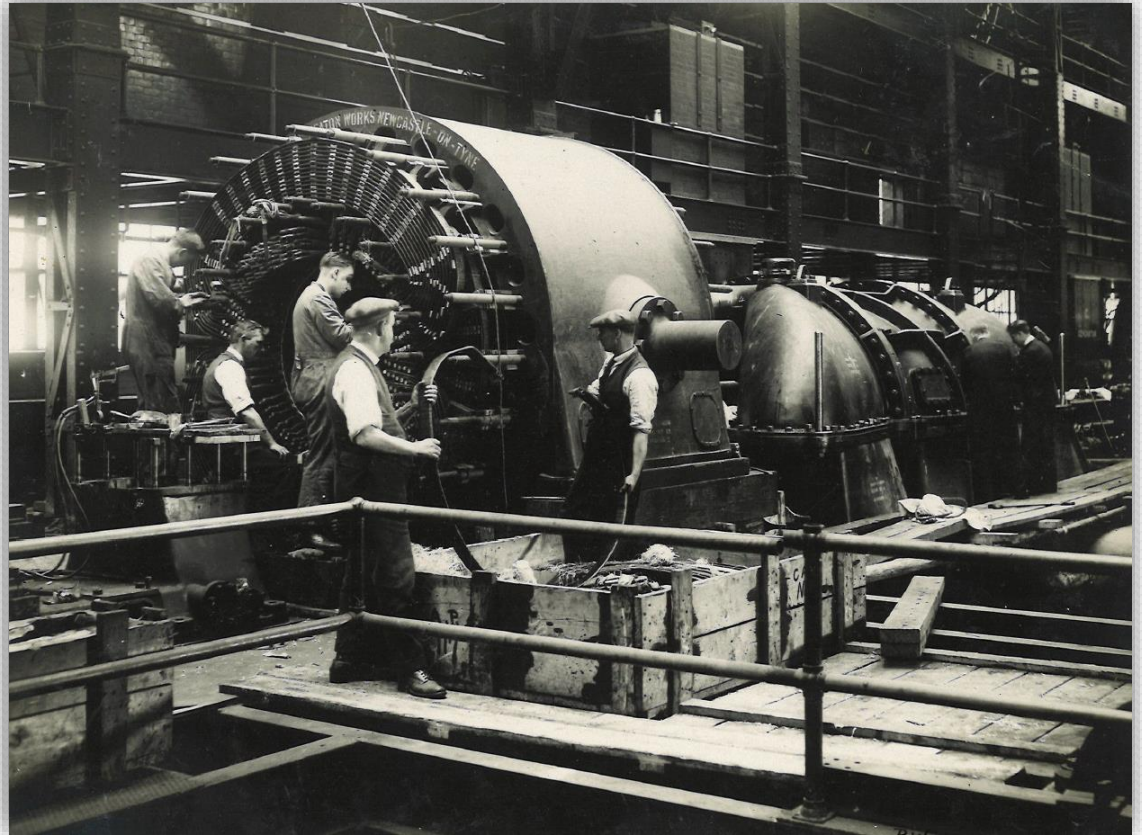


In 1889, Charles Parsons established C. A. Parsons & Company in Heaton, Newcastle, to produce turbo generators to his design.

In the same year he set up the Newcastle and District Electric Lighting Company (DisCo) and in 1890, DisCo opened Forth Banks Power Station, the first power station in the world to generate electricity using steam turbo generators.

What did Parsons achieve?

He designed the World's first truly powerful steam turbine. Previously, steam turbines had only been used to power small machines i.e. wood saws and cream separators. Parsons turbines would go on to power entire cities.



He developed the World's first steam turbine-generator. This was the first machine type which could produce electricity on very large scales sufficient to make it plentiful and affordable for everyone, not just the wealthy. (It was also the first reliable type of steam-powered machine which could do this without breaking down every few days.)

What did Parsons achieve?

He worked out how both turbines and generators could run safely at high speed (up to 20,000 revs/min not just a few hundred revs/min like reciprocating (piston) steam engines).

This was an essential step.

He marketed turbines successfully when they were an unheard-of technology in an era of untrustworthy inventions.

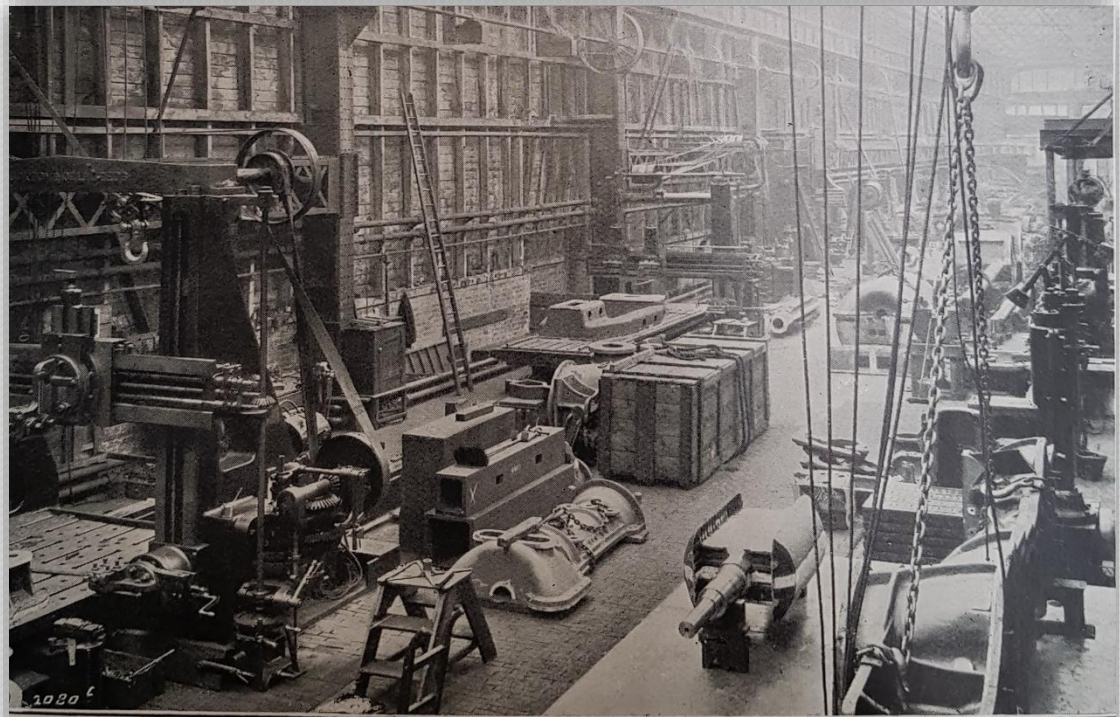


Fig. 392. One of the Machine Shops.

Heaton Works Factory circa 1910

Holeyn Hall in Wylam



Publication: Newcastle Journal

Publication date: Tuesday 12 October 1915

The Hon. Lady Parson's offer of Holeyn Hall, Wylam-on-Tyne, has been accepted by the War Office. The Wylam, Ovingham, and Heddon V.A.D. are going to work it.

In approximately 1894 the Parsons family moved from Ryton to Wylam.

In 1915 Holeyn Hall was offered as a convalescent home for WW1 soldiers.

The house is now two separate residences but retains many original features.

Ray Demense, Kirkwhelpington.

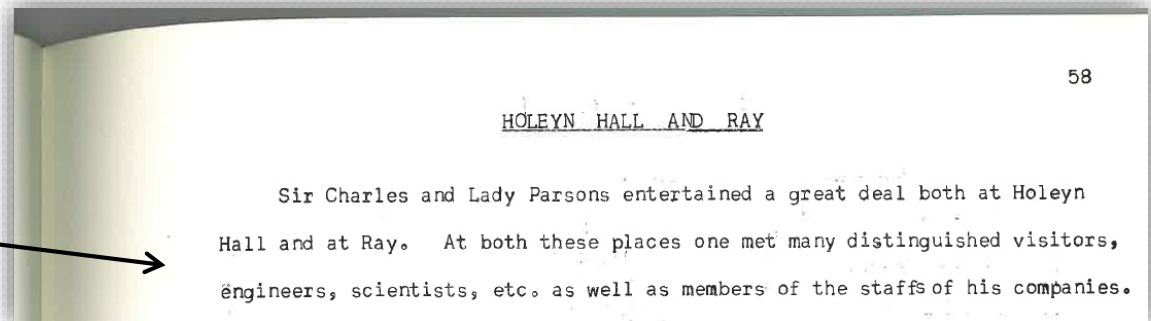


After WW1, Charles and Katharine moved up to the Ray Estate at Kirkwhelpington.

Today, Sweethope Lough, part of the Ray Estate, is described as follows – “Sweethope's two lakes, the Great Lough of 140 acres and Little Lough of 12 acres, are the headwater of the Wansbeck River which cuts its scenic way to the North Sea through some of Northumberland's prettiest scenery. Two well equipped holiday cottages are located on the southern bank of the Little Lough, and a five-pitch caravan site on its north bank.”

<http://www.sweethope.co.uk/>

Former MD of C A Parsons, Mr F G H Bedford, wrote about his visits to Holeyn Hall and Ray Demense in his memoirs which you can see in the archives at the Discovery Museum.



1931 – Sir Charles passed away

Sir Charles and Lady Katharine boarded the Duchess of Richmond, bound for Jamaica on 22nd January 1931. They were travelling 1st class and Sir Charles was listed on the passenger list as an Engineer. The inward bound passenger list shows Sir Charles as having passed away on board, listed under '*deaths on board*' and arriving back in the UK on 6th March. The cause of death was given as '*neuritis*'.



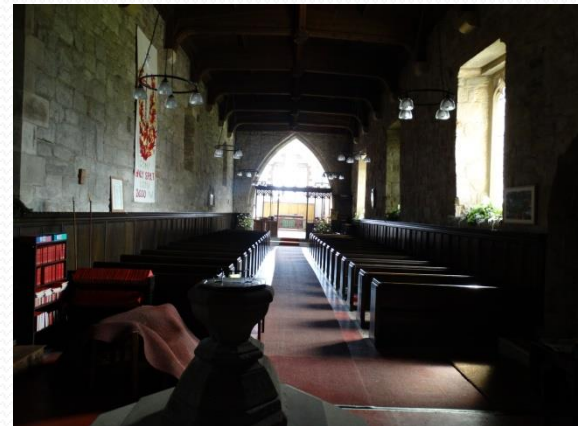
We know Sir Charles died in Jamaica on 11th February, so presumably his wife had to travel all the way back with his body, on her own.

Kirkwhelpington Church



Wall Plaque in memory of Sir Charles in St Bartholomew's Church, in Kirkwhelpington.

The plaque is mounted on the left hand side as you walk down the aisle.



Lady Katharine Parsons

Lady Parsons was a founding member of the Women's Engineering Society in 1919 (www.wes.org.uk).

She was an engineer of ability, and had the distinction of being an Honorary Fellow of the North East Coast Institution of Engineers and Shipbuilders.



Lady Katharine was a pioneer of the Girl Guides movement

Lady Katharine was prominent among the suffragettes of Northeast England and a pioneer of the Girl Guides movement, starting the Northumberland branch with suffragette Miss Nora Elizabeth Balls.

(Nora was a member of The Women's Social and Political Union (WSPU), which was the leading militant organisation campaigning for women's suffrage in the United Kingdom.)

Lady Katharine – a true lady right until the end

*Letter to Staff
August 1933*

Dear Friends,

I leave this letter to be opened after my death because none of us would like the strain of an individual 'Farewell'. I have valued your friendship and service very highly. No one could have had more willing service or ungrudging help than I, and I thank you all for contributing to make my life here so easy and happy, especially during the last two years.

Some of you may have thought that I leave everything here—my beautiful place and my many friends—with too light a heart, but I remembered that all these good things are lent us for the short time of our lives to make the best use of, and that we must be ready and willing to answer the call whenever it comes and start the last journey.

Faithfully yours

Katharine Parsons

Extract from the book
'Galaxies to Turbines'
(page 517)

Katharine's letter to her staff, read out to them by Canon R R Hedley, in Kirkwhelpington in 1933.

The War Years

1914 - She became a temporary director of C A Parsons.

(Extract from the actual Board Meeting Minutes at the Discovery Museum - 15th December 1915 - Resolved - "That Miss Rachel Parsons be appointed a director of the company ... in place of Capt A G Parsons".)

1914 - She became a leading member of the National Council of Women.

1915 - When a Ministry of Munitions was established under David Lloyd George, Rachel Parsons joined the training department, instructing thousands of women in the factories of Tyneside to perform a multitude of mechanical tasks from assembling aircraft to making telescopes, periscopes, searchlights and munitions.

1918 - Rachel became a member of The Royal Institution of Great Britain.

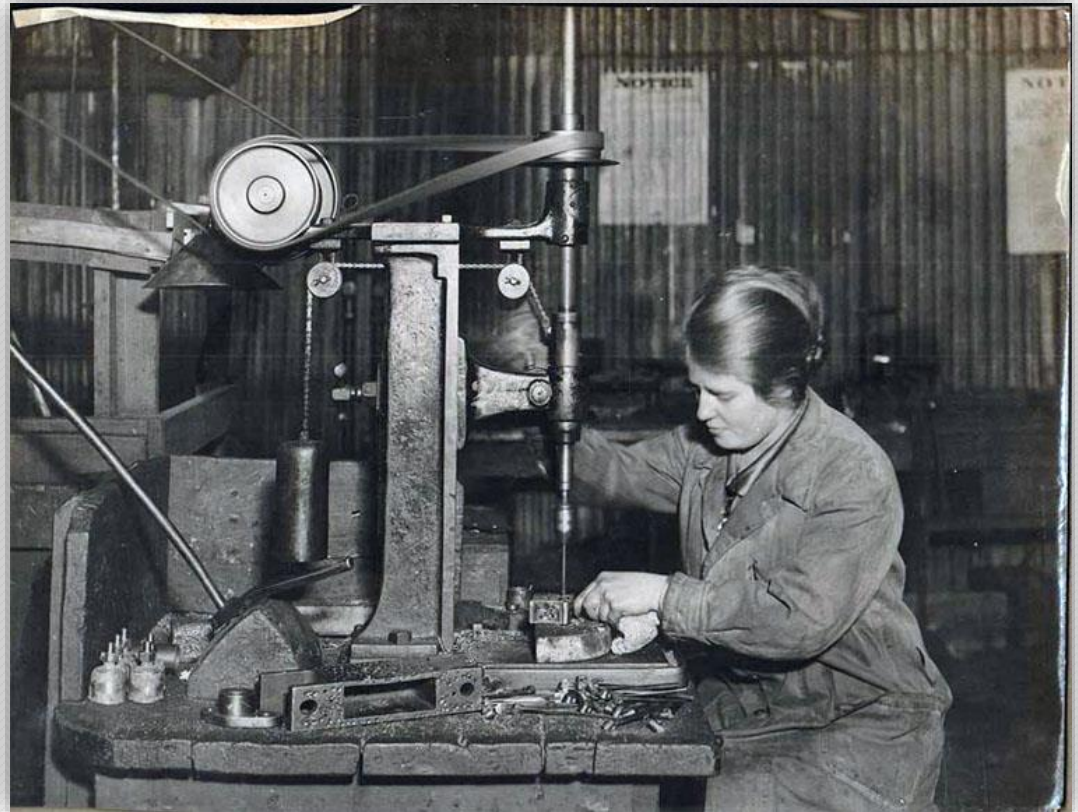


National Portrait Gallery

Women during WW1

When WW1 broke out, among other crucial jobs like making steam turbines for electricity generation and marine engines, the women at Heaton made the searchlight equipment to produce 'the beautiful beams of light travelling over the sky in the search for Zeppelin and aircraft'.

Rachel Parsons joined the training department of the Ministry of Munitions, instructing thousands of women in the factories of Tyneside to perform a multitude of mechanical tasks from making periscopes and view-finders, to assembling aircraft parts, and installing electrical wiring on battleships.



Women during WW1

While some excelled at intricate tasks requiring the highest degree of precision and accuracy, others were involved in physically demanding aspects of shell production, working hydraulic presses, guiding huge overhead cranes, lifting the molten ingots, fitting the tools in the machines, painting, inspecting and gauging the finished shell cases.



Some **800,000** women were recruited into Britain's engineering works during the war, reflecting a much larger increase of female employees than in any other trade or profession.

Rachel Parsons



In the spring of 1956, Rachel moved into a few rooms in Lansdowne House, because she became apprehensive of living alone at Branches Park. Ironically, this was to prove fatal.

She was found dead on 2 July 1956 and stableman Dennis James Pratt, a former employee, was convicted of her manslaughter on the grounds of provocation.



School and Work History

W.B. & L. (1898) - 14415-100-11-2
18954-100-3-4

JUNE-JULY, 1904.

FORM OF PARTICULARS.

N.B.—Candidates must fill up this form carefully and send it to the SECRETARY, CIVIL SERVICE COMMISSION, for transmission, in the case of successful Candidates, to the War Office.

Examination for Admission to the Royal Military Academy.

1. Name of Candidate in full *Algernon George Parsons*

2. Date and place of Birth *Sept 19 1886. Hampton Road, Brighton - or - Torquay*

(A Certificate of birth to be attached. If one has been previously forwarded, state on what occasion and where sent.)

3. Whether of pure European descent *Yes*

4. Permanent Address *Hampton Road, Brighton or Torquay*

5. Name in full and position in life of Father, and whether of English, Scotch, or Irish family *Charles Algernon Parsons, F.R.S. J.P. Northamptonshire*

6. If formerly in the Public Service, state how and when he quitted it, after how many years' service, and every particular as to his rank; if deceased, state whether Widow is in receipt of pension (this to be carefully answered) *He is surviving son of J. Williams, Esq. of Boston, Essex. Born 1840. Entered Army 1859. Served in India.*

7. Is the Candidate in the Militia? If so, state Regiment *No*

(Recommendation to be forwarded from the Officer Commanding the unit.)

8. Has the Candidate been in any other branch of the Public Service? *2nd Bn. Eton College RVC*

9. Name and address of the person in the United Kingdom responsible for the Candidate's contribution in the event of his being admitted to the Royal Military Academy *London C. & Parsons, Ltd., 25, Abchurch Lane, London E.C. 4*

School, College, or other place of education of Candidate.	The columns to be filled in for the four years preceding the date of applying for examination.	
	From	To
<i>Rocky Hill, Hants</i>	<i>Sept 1896</i>	<i>July 1899</i>
<i>Eton</i>	<i>Sept 1899</i>	<i>March 1904</i>
<i>Cedar Court, Newbury, Berks</i>	<i>Sept 1904</i>	<i>Present.</i>

10. *Signature of Candidate.* *A. G. Parsons*

Signature of Parent or Guardian. *Charles A. Parsons*

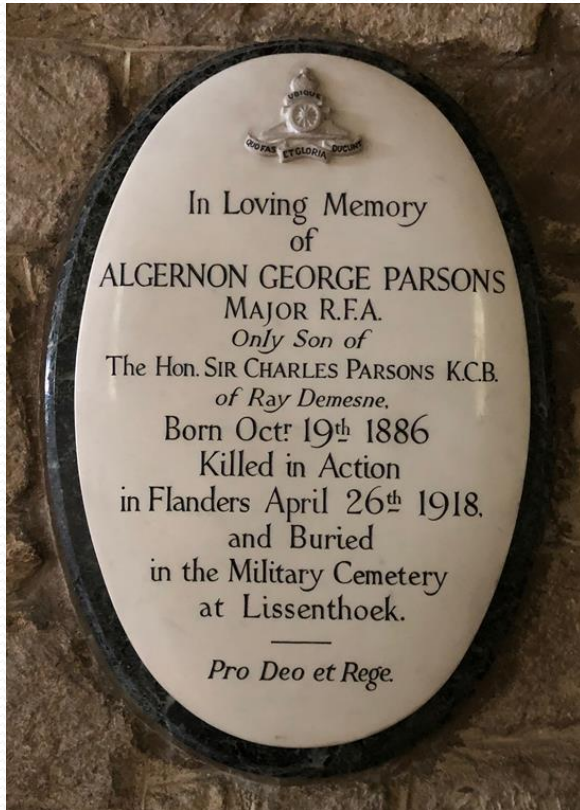
Date *Apr 27*

Every question must be answered in words, not by strokes, dots, or other marks.

Examination for Admission to the Royal Military Academy showing that Algernon had been to Eton College. The 1904 document had been signed by Algernon George and his father Charles Algernon Parsons on 27th April.

He resigned his commission in 1909.

Memorials and Algernon's Grave



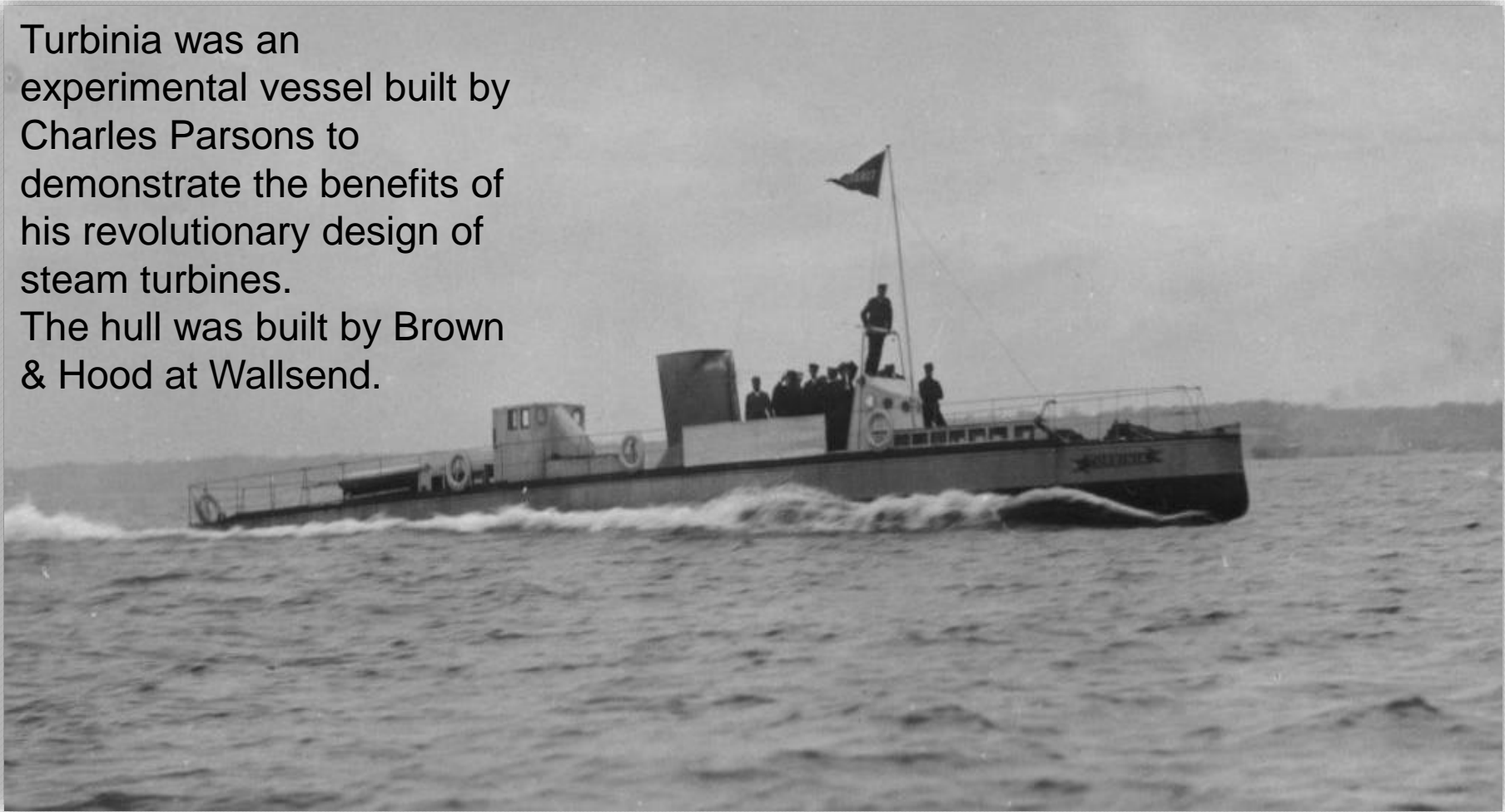
This plaque was put in Kirkwhelpington church by Sir Charles and Lady Parsons following the death of their son. Lady Parsons always sat beneath it for service.

Algernon is buried at Lijssenthoek Military Cemetery in Belgium

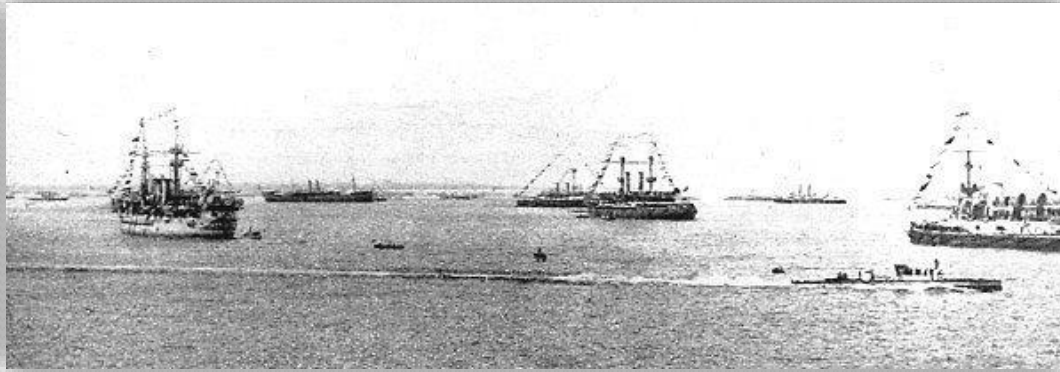


Turbinia

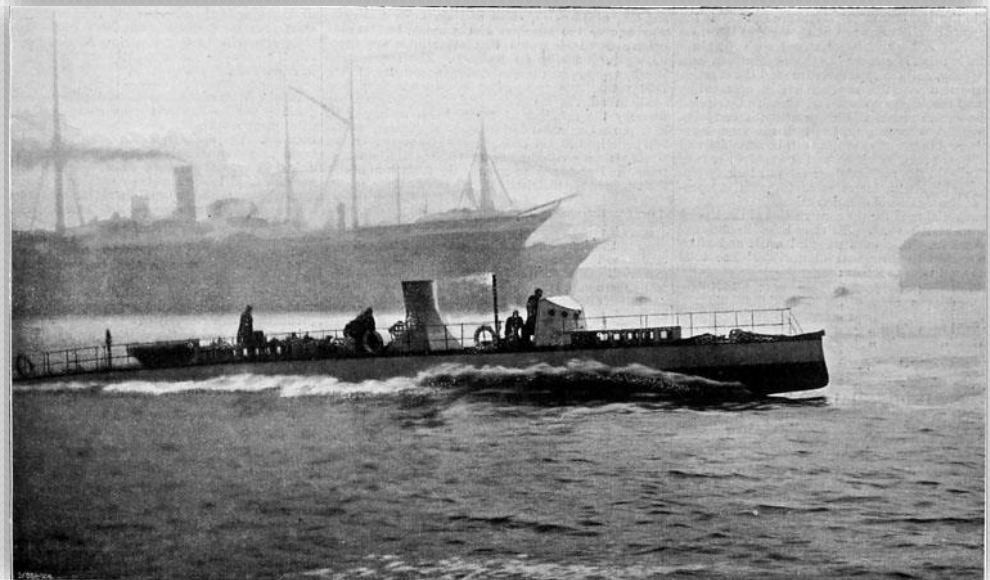
Turbinia was an experimental vessel built by Charles Parsons to demonstrate the benefits of his revolutionary design of steam turbines. The hull was built by Brown & Hood at Wallsend.



Turbinia at Spithead Review



Turbinia turned up unannounced at the Navy Review for Queen Victoria's Diamond Jubilee at Spithead, in the English Channel, on 26 June 1897, in front of the Prince of Wales, Lords of the Admiralty and foreign dignitaries.



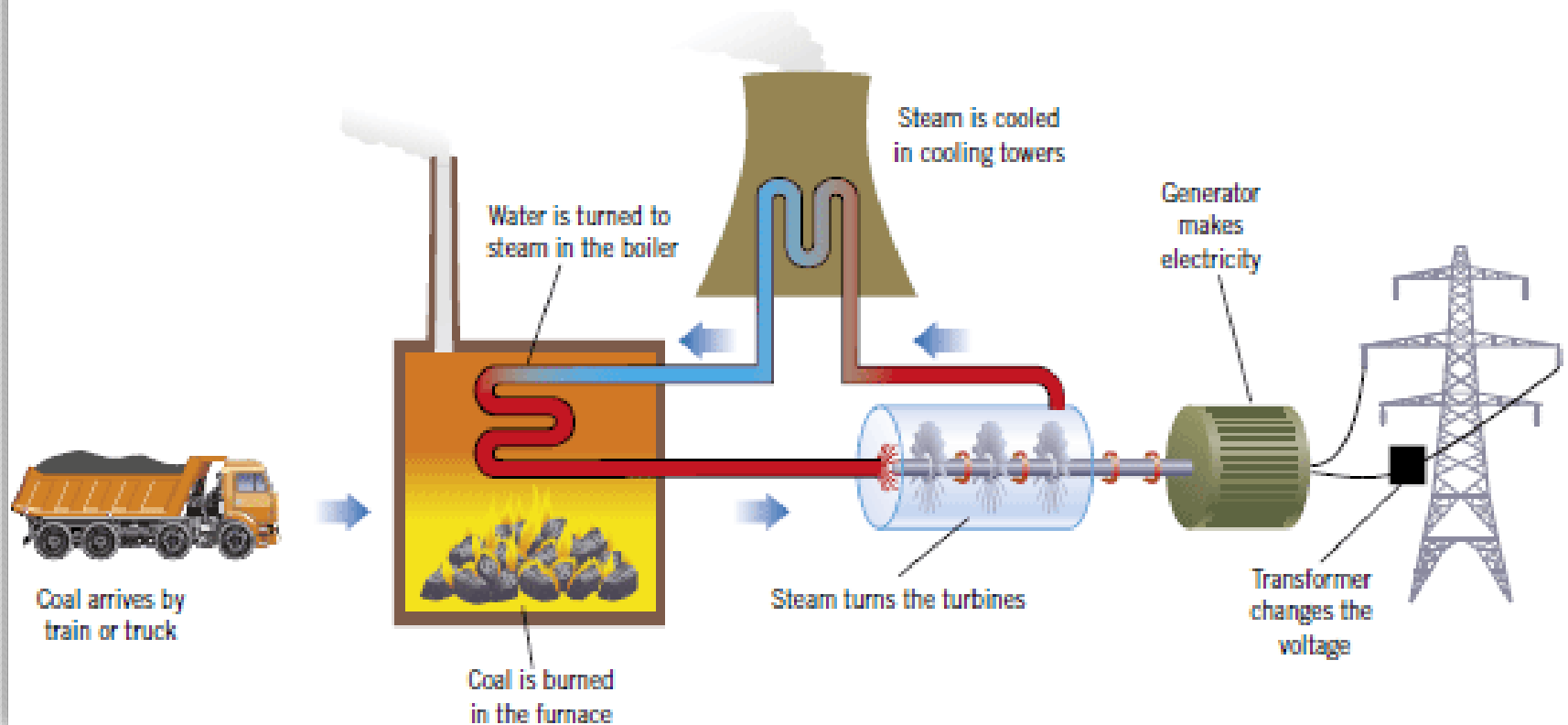
Turbinia now - 2018



Today....

“Parsons lives on, in power stations around the world.”

A coal-fired power station



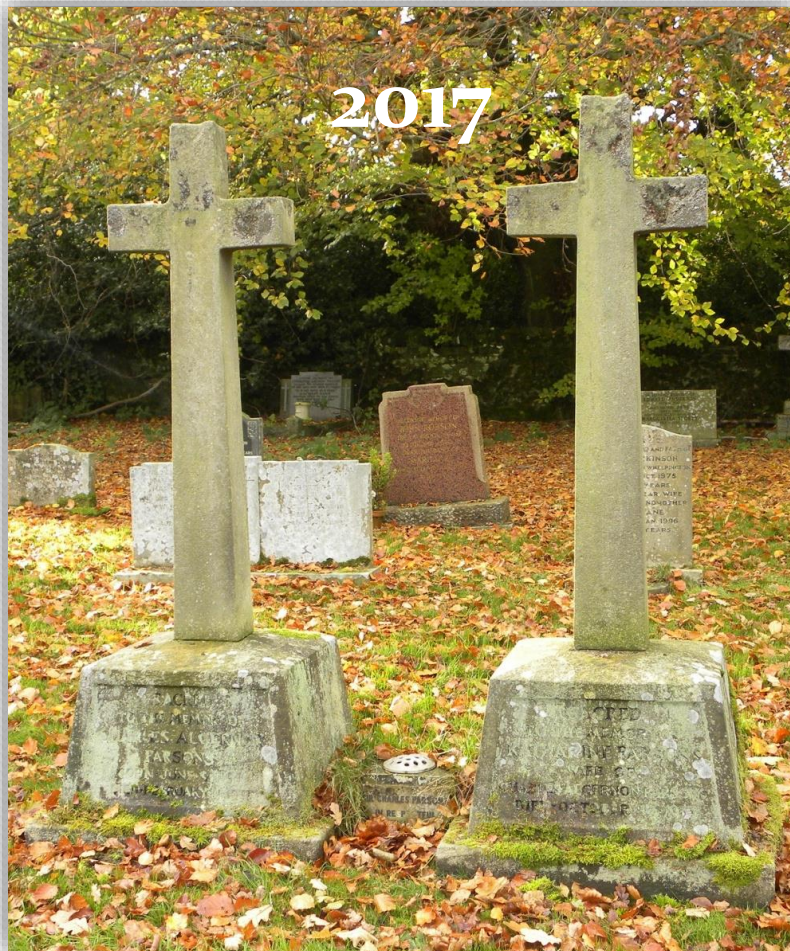
2018 Restoration Project

A project was undertaken during 2018 to do some restoration work to Parsons final resting place. It was felt necessary as the writing on the gravestones had faded, the rosebowl required repair and the stone needed a general clean.

A just giving website was set up to raise money for this project, as so many people wanted to contribute. It was astonishing to see just how many people donated, and who those people were.

Visit www.justgiving/ruthbaldasera to see all the comments.

Sir Charles and Lady Katharine Parsons Final Resting Place at St Bartholomew's in Kirkwhelpington.



Professor W G Scaife

Author 'From Galaxies to Turbines'



The Earl of Rosse, Birr Castle.

