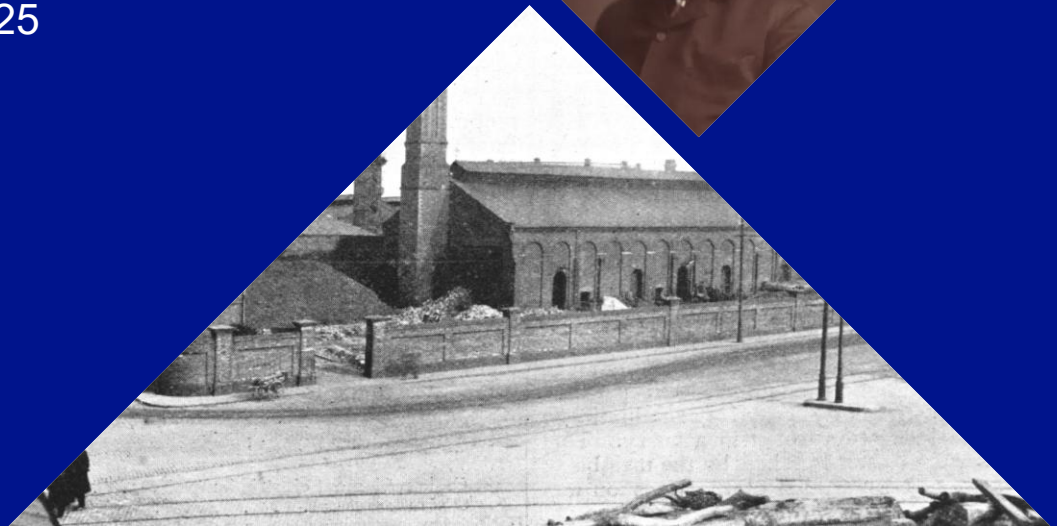
A history of the gas industry in Great Yarmouth

Tuesday 15th July 2025



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Introduction

As a fashionable tourist resort Great Yarmouth was an early adopter of gas lighting in 1824, with tourists expecting the same amenities as the cities.

This talk aims to bring to life the operation and some of the important personalities and events which helped shape the gas industry in Great Yarmouth over the past two centuries.

The gasholder on the landscape with the Ferris wheel and Scroby Sands Wind Farm behind. Source: Geoffrey Frost.

The Early History

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Early lighting prior to gas

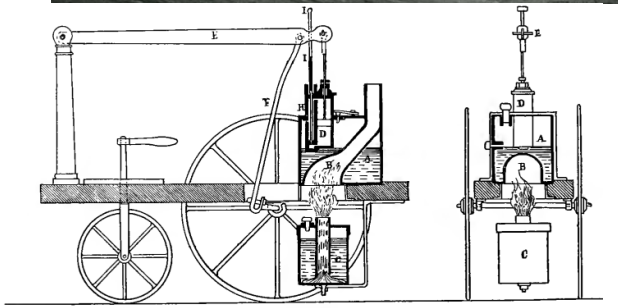
- Lighting today is taken for granted.
- However, up until the start of the 19th century, the choices for lighting were limited.
- The best options available were candles and oil lamps but many could only afford rushlights.
- Candles and oil lamps burnt with a smoky flame and only gave off a dim light.
- These were the same options for street lighting and did little to make the streets safer at night.
- It was the same in the new factories of the industrial revolution as it was in the home.
- Candles and oil lamps when knocked over caused numerous fires with many fatalities.

Image of early lighting

Early history

- William Murdoch was a Scottish engineer who joined Boulton and Watt (B&W) in 1777.
- Given the important task of installing steam engines in the Cornish tin mines.
- Lit his house and office in Redruth in 1792 with coal gas.
- Constructed the first small gasworks at the Soho works of B&W.
- B&W had a limited interest in gas lighting, persuading Murdoch not to Patent - Viewed as a distraction from steam engines.
- Murdoch worked with a team of B&W engineers, - John Southern, the Creighton Brothers and Samuel Clegg.
- Undertook a considerable amount of research into gas manufacture, using different retorts and coals.

A diorama of William Murdoch demonstrating gas lighting at his home in Redruth, Cornwall.



A drawing of William Murdoch working steam carriage.

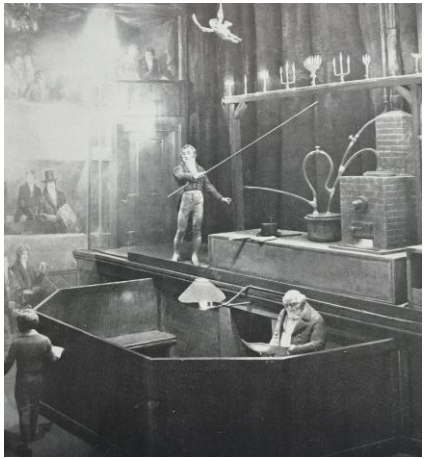
Rivalry in Gas Lighting

- B&W's existing customers had great interest, but it took efforts from George Augustus Lee (Salford) to get a commercial plant constructed.
- Samuel Clegg was frustrated at the slow progress at B&W so set up as a rival gas engineer.
- B&W installed gas at the mill of Phillips and Lee (Salford) after lighting George Lee's house.
- Clegg was installing a gas plant at the Mill of Henry Lodge at Sowerby Bridge in Yorkshire.
- Both mills were lit by gas in 1805 but Clegg is believed to have beaten Murdoch by two weeks.
- Other gas engineers (e.g. Josiah Pemberton) emerged and hundreds of other mills and factories across Britain were then lit by gas.

Samuel Clegg - Apprentice to Murdoch at B&W and lit the first factory by gas.

From Factory to Centralised Gas Plants

- Friedrich Albrecht Winzer (German) had witnessed Lebon's Thermolamp in Paris and assisted him on some experiments.
- Initially tried and failed to persuade the Duke of Brunswick to establish gas lighting in Brunswick.
- Moved to Britain in 1803 and anglicised his name to Frederick Winsor.
- Lectured at the Lyceum Theatre with demonstrations using gas.
- He demonstrated gas lighting on the wall behind Carlton House and Pall Mall in 1807.
- Winzer developed the concept of centralised gasworks providing gas to multiple customers through gas mains under the streets.
- Proponent of the Gas Light & Coke Company (GL&C Co), lighting the Cities of London and Westminster and the borough of Southwark from 1813.



A portrait of Friedrich Winzer (top) and a diorama of him lecturing at the Lyceum theatre

The Rapid Growth of Gas

- The GL&C Co had many early troubles and eventually achieved some stability in 1817.
- Many early technical issues were solved by the engineers of the GL&C Co, including the design of governors, meters and purifiers.
- It was replicated many times.
- The first provincial gas companies were established in Preston and Liverpool.
- Gas became popular because it was:
  - cheaper (75% less expensive than oil lamps or candles);
  - brighter than oil lamps or candles; and
  - safer, cleaner and easier to operate.
- By 1820 the 15 principal English and Scottish towns and cities were lit by gas.
- By 1830 over 200 British towns and cities were lit by gas.

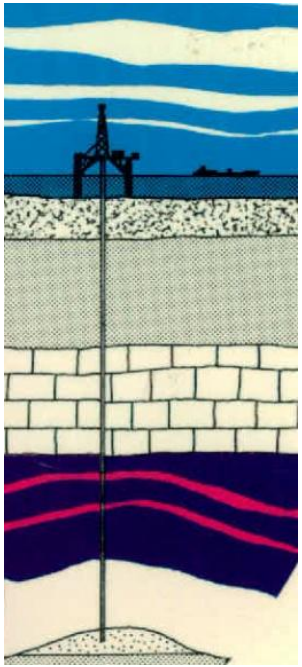
The gas plant built by Samuel Clegg for Rudolph Ackermann

What is Manufactured Gas?

Gas was manufactured by heating coal in a sealed oven (called a retort). Without oxygen present the coal did not burn but broke down into smaller molecules. It's composition was approximately:

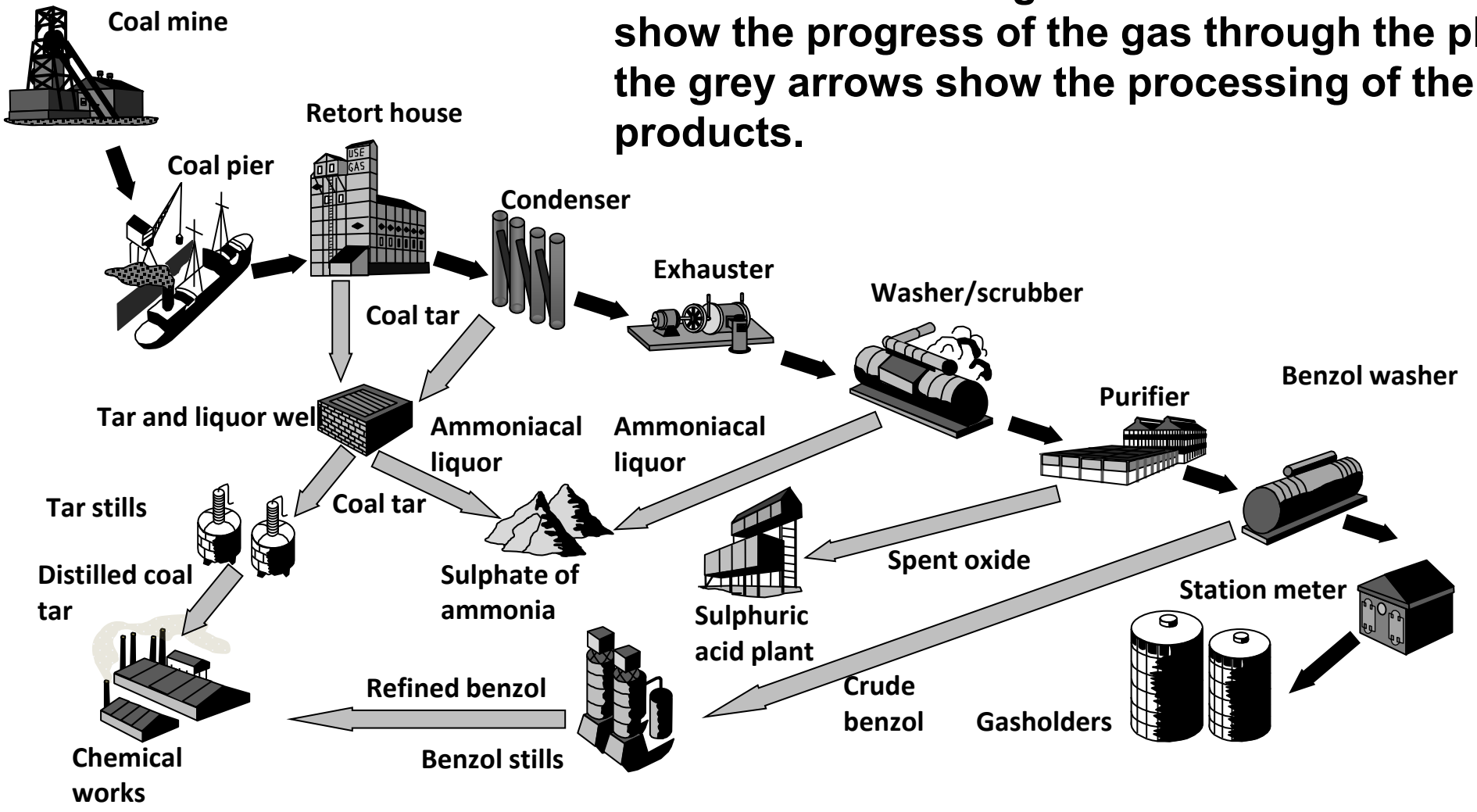
Non combustible components	Coal gas	Natural gas
Carbon dioxide	2.0%	0.6%
Oxygen	0.5%	---
Nitrogen	5.5%	2.7%
Combustible components		
Carbon Monoxide **Toxic**	7.5%	---
Hydrogen	51.8%	---
Methane	27.0%	90%
Other Hydrocarbons (Ethane, Propane, Butane, Benzene and others).	4.7%	6.7%

Natural Gas is primarily composed of methane.

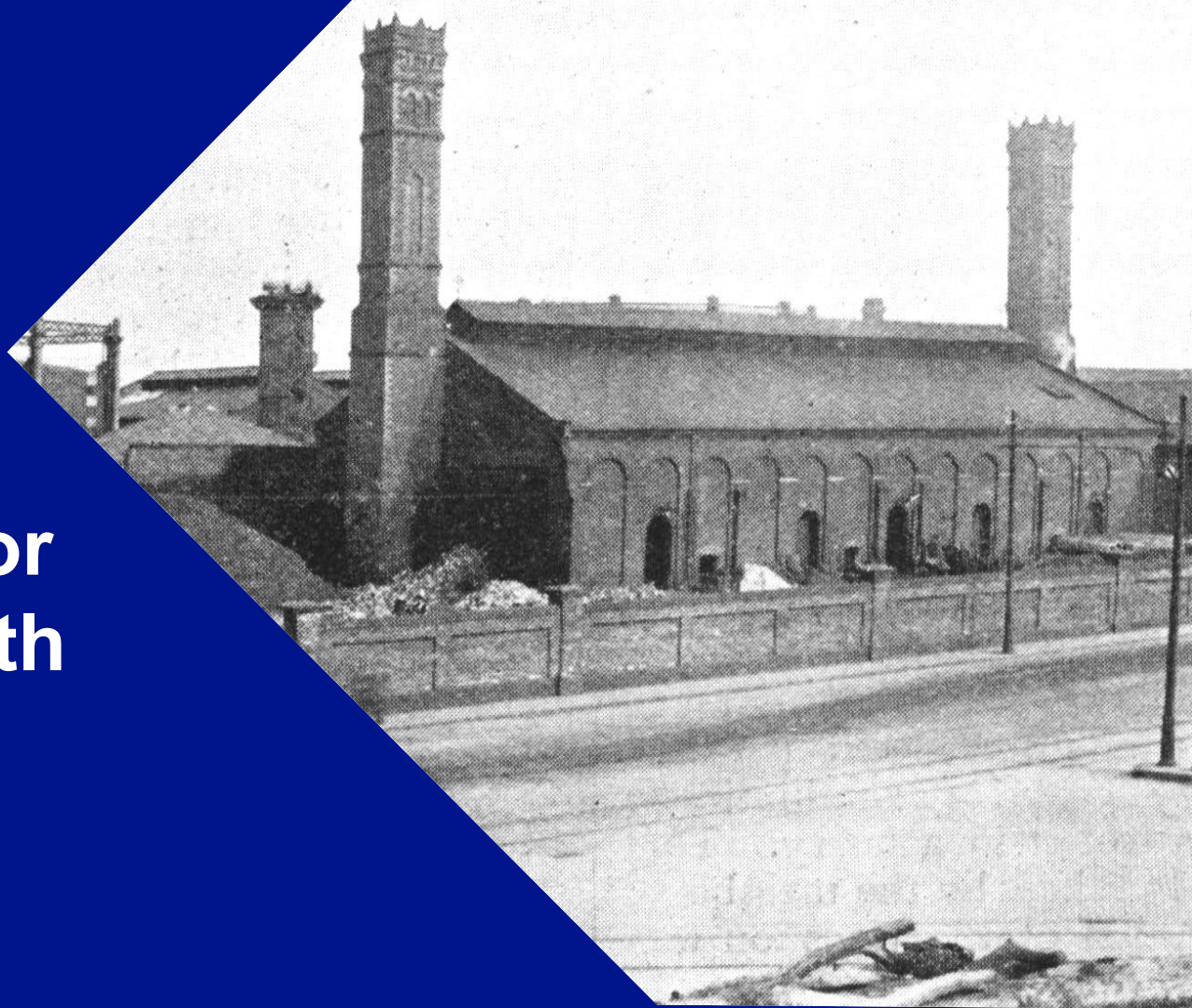


Gasworks Process Flow Schematic

The manufacture of gas from coal. The black arrows show the progress of the gas through the plant and the grey arrows show the processing of the by-products.



A Gasworks for Great Yarmouth



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The First Great Yarmouth Gasworks

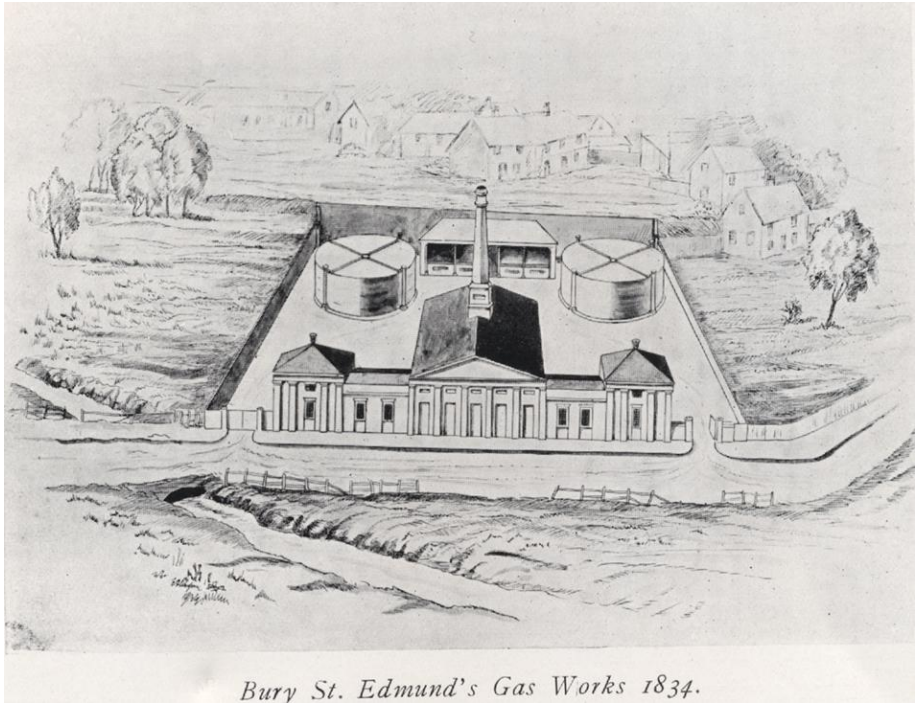
The gasworks were erected by Mr George Holworthy Palmer of London.

They were located by the River Yare on a square piece of ground.

The gasworks were surrounded by a brick wall with two handsome lodges built either side of the front entrance.

In the centre of the yard, was a building which contained the retort house, the condenser house, purifying house, lime shed, the tar receiver and storehouse for coals.

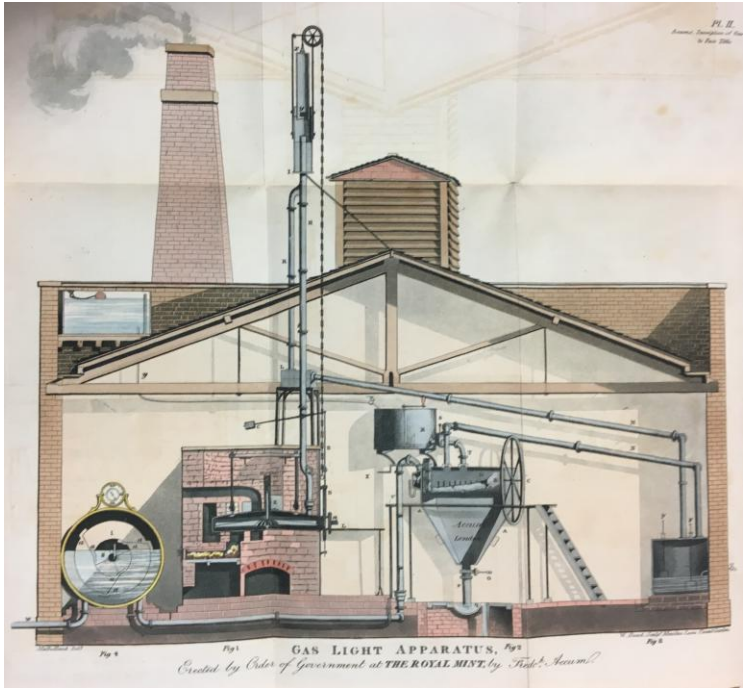
There were two circular gasometers, each of 10,000ft^3 (283m^3) capacity.



Bury St. Edmund's Gas Works 1834.

Mr George Holsworthy Palmer

- George Holsworthy Palmer, a colourful and innovative character.
- He started as an apprentice shipwright but found his way into a role as a storekeeper with the Gas Light & Coke Co (GL&C Co) in London.
- He later worked with Samuel Clegg at the GL&C Co and assisted him with the Royal Mint Gas Works.
- He later worked for the Imperial Gas Light and Coke Company but was dismissed.
- He had designed many early gasworks, with varying degrees of success.
- Great Yarmouth was one of his better attempts and involved associates from the Royal Mint.



The gasworks built at the Royal Mint by Samuel Clegg.

Gas Light comes to Great Yarmouth

“The town is very brilliantly lighted with coal gas, for which the spacious and level streets, at all times clean and dry, are well adapted.

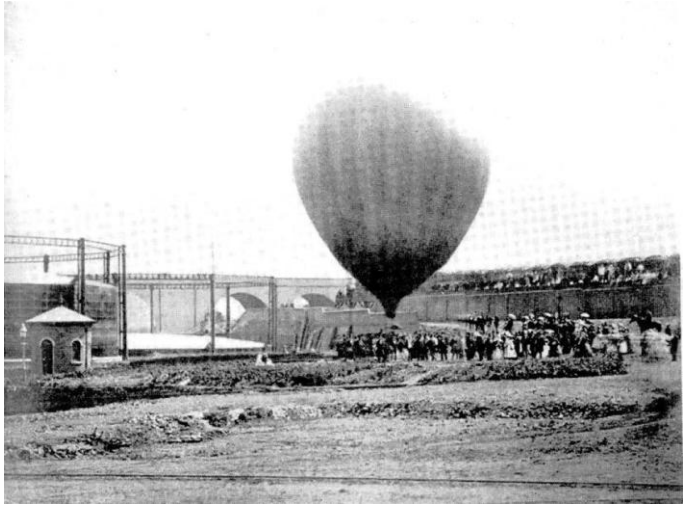
Perhaps there is scarcely a town in England that appears to greater advantage with these lights: the quays, when illuminated, are particularly splendid and it is very general in the shops.’

Great improvements were made in lighting the town in 1840, new gas plant constructed and new gas mains installed.

The gas lit promenade in Margate as an example.

Great Yarmouth Gas and Coke Company

- The gasworks remained under the control of the directors until 1845, when the Great Yarmouth Gas and Coke Company was formed.
- In 1849, St. Peter's Church was lit with gas for the first time and 1858 St. Georges Chapel was also lit by gas.
- In November 1847 a new gasholder was constructed it held 47,000ft^3 and was named after Queen Victoria.
- Balloon flights were linked to gasworks. On the 25th September 1852, such a balloon known as the "Prince of Wales", filled with town gas took off from Vauxhall Gardens.
- Piloted by a Lieutenant Chambers, it's short journey ended up with him descending on a nearby marsh.
- 10 years later James Glaisher and Henry Coxwell's famous balloon flight from Wolverhampton Gasworks, reached a record altitude of six miles, which almost cost them their lives.



Coxwell and Glaisher's balloon flight from Wolverhampton Gasworks. Source: National Gas Archive.

Great Yarmouth Gas and Coke Company

- Mr William Henry Willis, the company's secretary, was in office from 1849 till 1889, some of their most difficult years.
- The gas lighting was extended in 1855 to the workhouse and Wellington Pier.
- In 1863 the Yarmouth Gas Bill went through parliament to incorporate the company and give further powers for lighting to town and neighbouring areas.
- The town council had considered opposing the Bill, but it would have cost £800.
- The local Board of Health had contacted the British Gas Light Company asking if they would build a gasworks in the town, which they refused.
- Despite tensions the gasworks was extended in 1862 and 1864.
- The gasworks was built on three sites leased from the Corporation, which the gas company wanted.
- The Corporation ended up in arbitration with the Gas Company over the valuation of the land and this is when we first hear the name Robert Paulson Spice, who we return to later.

A Gasworks Across the Yare

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A Gasworks Across the Yare

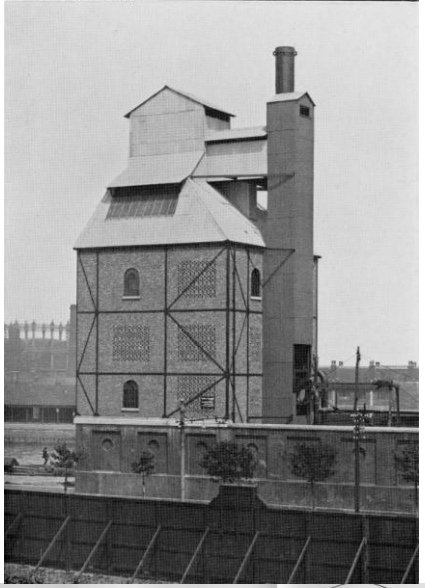
- Gorleston remained without gas until the 1850's.
- The Gorleston and Southtown Gas Company, was formed on 30th July 1852, with a capital of £3,500.
- The new gasworks cost £2,800 and the first gas lamps were lit on the 6th September 1854.
- The gasworks were enlarged again in 1859 and 1871 to meet continually growing demand.
- Henry Weller and Frederick Weller were managers.
- The gasworks were small but well appointed and typical of a small-town gasworks producing 14million ft^3 of gas in 1890.
- The Eastern Counties Gas Association visited twice, a photograph of the meeting is shown.

The Gorleston Gasworks from the road in 1924. Source: IGEM History Panel Archive.

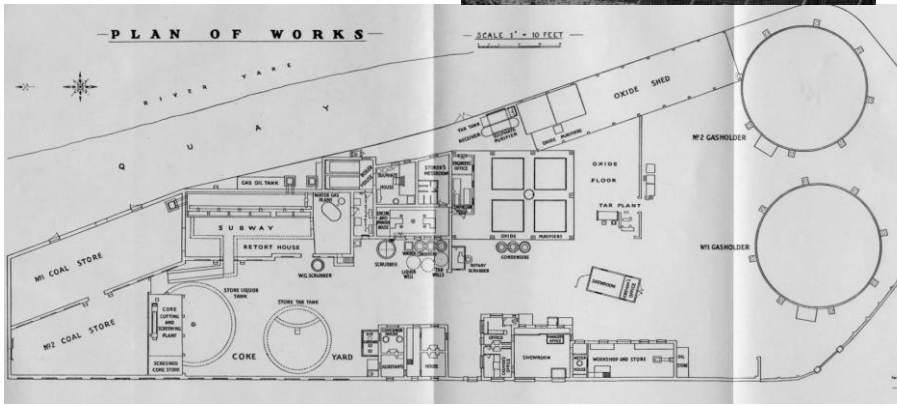
Eastern Counties Gas Association Meeting at Gorleston 1924. Source: National Gas Archive.

A Gasworks Across the Yare

- The gasworks were situated on the west bank of the River Yare and received coal by sea.
- In 1924 the retort house had six beds of six horizontal retorts, loaded with a manual charging machine.
- It also had a small chemical works for tar and sulphate.
- In 1929 the gasworks were rebuilt and a new modern vertical retort plant built.
- In 1935, control was acquired by British Gas Light Co., who operated other gas undertakings in the region such as Norwich and Fakenham.



The vertical retort house installed at the Gorleston Gasworks in 1929 by Woodall-Duckham (right). Plan of the Gorleston gasworks in 1929 (below). Source: IGEM History Panel Archive



R.P.Spice and Great Yarmouth

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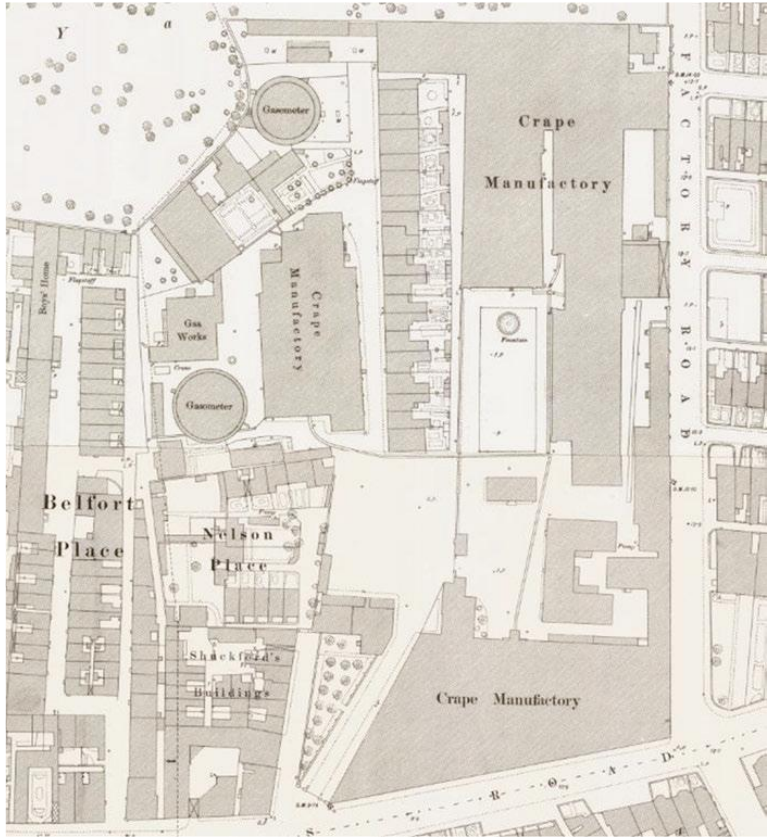
The Gasworks at Grout's Silk Mill

- There was a private gasworks in the north of Great Yarmouth at Grout's Silk Mill.
- Grout and Co. were silk and crepe manufacturers and had factories in Great Yarmouth, Norwich, Bocking Churchstreet and Ditchingham.
- Each mill had its own private gasworks, despite Norwich and Great Yarmouth having existing public gas supplies.
- Gas had multiple uses in a silk mill, the main one being lighting.
- By 1909, the gasworks was disused and a gas supply would have been taken from the main gasworks.

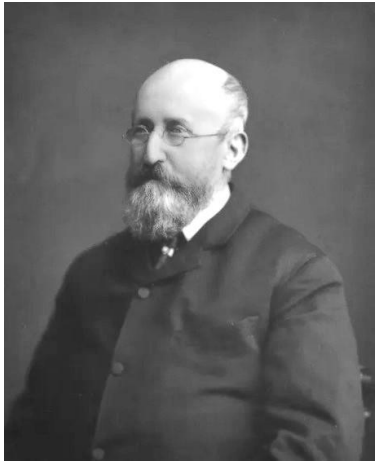


OS Town Map showing the private gasworks at Grouts Silk Mill. Source: Reproduced with the permission of the National Library of Scotland.

Robert Paulson Spice and Fakenham

- He was born on 1 January 1814, a day after the Gas Light and Coke Company lit the first public gas lamps in the world on Westminster Bridge.
- He was the son of Norwich grain merchant, Thomas Spice. However, being one of many children, his parents could not afford the engineering education he wanted.
- Instead, he was apprenticed to William Warren, an iron founder and ironmonger, based in Fakenham. He took over Warren's business in 1840.
- He married Elizabeth Thompson in 1837 and they had two children, Anna and Robert.
- He learned the skills of a gas engineer and built the gasworks in Fakenham in 1846, which survives today as a museum.
- By 1848 he had sold up and moved to Richmond, Surrey to work as a gas engineer.

Fakenham gasworks retort house (top) and R. P. Spice (below).



Robert Paulson Spice in Richmond

- Spice was also engineer to gasworks built in Odiham, Boston, Tattershall and Coningsby, Swanage and Abingdon.
- Spice was very closely linked with the Hoddesdon Gas Company, from its foundation in 1847 to his death in 1889.
- It was at Hoddesdon that he forged his links with Samuel Cutler and Sons, who provide the plant, and he worked with them thereafter.
- He operated the West Surrey Chemical Works in Egham, Surrey, which made inks from coal tar.
- He became the lessee of the gas undertaking in Wandsworth, Hampton Court and Richmond.
- He was well loved by his workers and on his birthday in 1859, a deputation of his workers surprised him with a written testimonial and bought him a gift.

COUNTY CHAMBERS,
CORNHILL, LONDON, E.C.

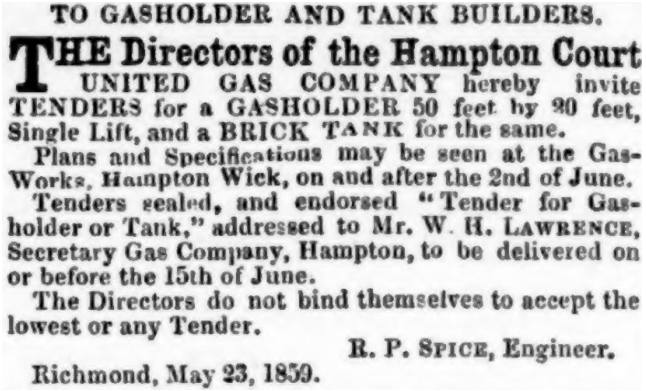
MR. R. P. SPICE, of Richmond, respectfully announces that, for greater convenience, he has removed the business of his Office to the above address.

Plans, Specifications, and Estimates, prepared for the Erection or Improvement of Gas-Works.

Agent for the Purchase, Sale, or Leasing of Provincial Gas-Works.

The Green, Richmond, S.W., Jan. 2, 1860.

Adverts placed by R. P. Spice in the gas journal during his time in Richmond



TO GASHOLDER AND TANK BUILDERS.

THE Directors of the Hampton Court UNITED GAS COMPANY hereby invite TENDERS for a GASHOLDER 50 feet by 20 feet, Single Lift, and a BRICK TANK for the same.

Plans and Specifications may be seen at the Gas-Works, Hampton Wick, on and after the 2nd of June.

Tenders sealed, and endorsed "Tender for Gasholder or Tank," addressed to Mr. W. H. LAWRENCE, Secretary Gas Company, Hampton, to be delivered on or before the 15th of June.

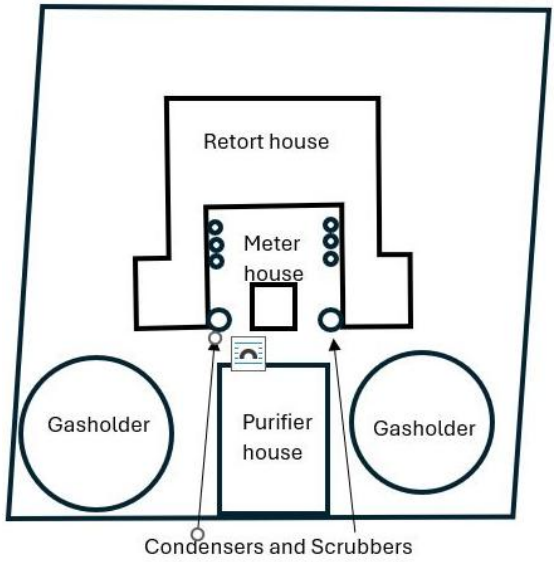
The Directors do not bind themselves to accept the lowest or any Tender.

R. P. SPICE, Engineer.

Richmond, May 23, 1859.

Robert Paulson Spice in London

- Spice moved to an office in Lombard Street in London in 1860.
- He described himself as a contractor for gasworks, designing and enlarging them.
- He was heavily involved in parliamentary work, supporting or opposing bills and acting as a witness in cases.
- It was as a witness we first encountered his name associated with the Great Yarmouth Gas Company.
- This became a good relationship and when the company needed a new gasworks - Spice designed it.
- A plan of the original gasworks does not survive, but from its description it was built in duplicate.
- Some of the original building survived till later on, if modified, such as the scrubbers and meter house.



R. P. Spice's assumed design for the new gasworks at Great Yarmouth (top), the meter house and scrubbers (bottom)

The Surviving Gasholder

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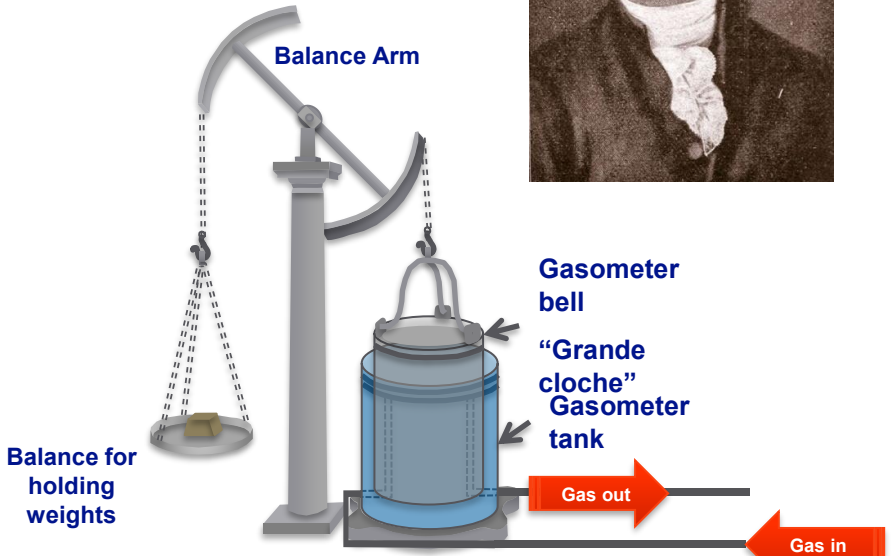
Lavoisier's Gazomètre

Lavoisier devised the gazomètre for experiments in pneumatic chemistry.

"It would be difficult to dispense with the gazomètre since nothing that ingenuity could devise could replace this important device" **quote in Kings Treatise accredited to Lavoisier.**

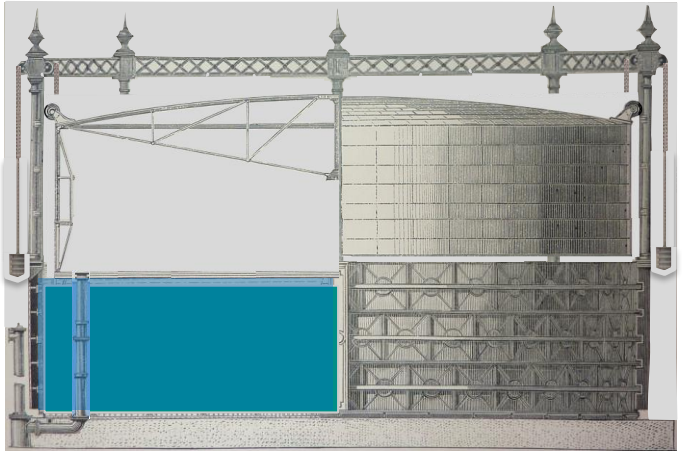
Drawing of Antoine-Laurent Lavoisier. Source: Wikimédia Commons



Source: Author

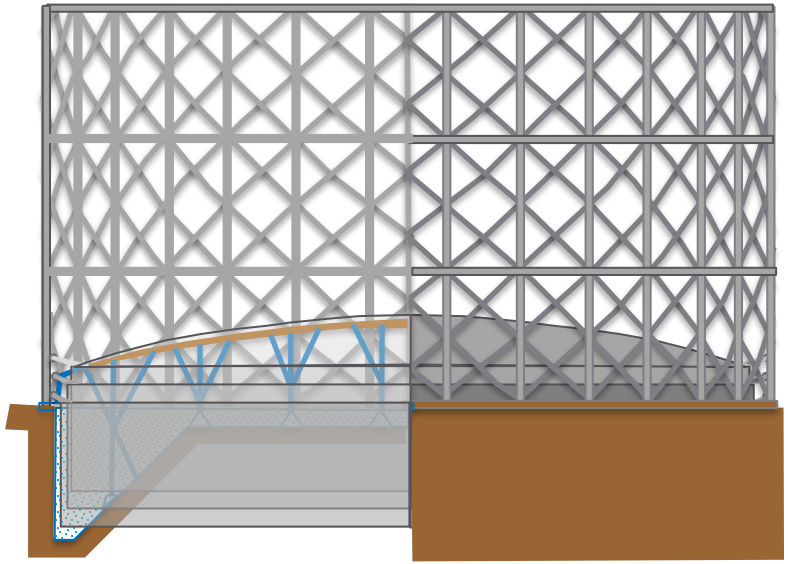
Column Guided Gasholders

- Gasholders removed the need for continuous gas production, providing storage acting as a buffer.
- Early guided gasholders used vertical iron rods attached to the inner sides of a tripod.
- The tripods were replaced by columns which were connected to ensure rigidity.
- On the inside of these columns, guide rails were attached to ensure the rigid guiding of the lifts.
- Guide wheels were attached to arms extending from the rim of the top of the gasholder lifts.
- The weight of the gasholder vessel determined:
  - the pressure to the gas in the mains; and
  - the back pressure on the gas making plant (if no exhauster was used).



Source: Author

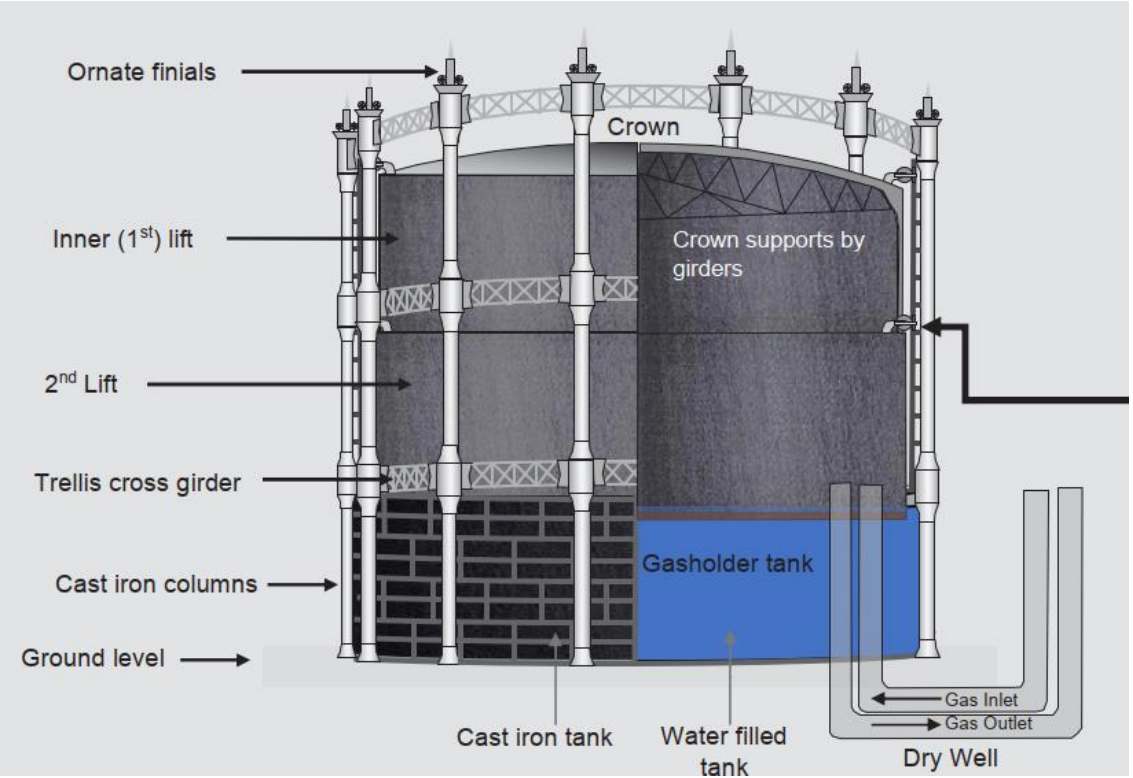
The Telescopic Gasholder



Source: Author

- As the demand for gas storage increased, limited new land was available.
- Telescopic gasholders could store a greater volume of gas within the same footprint.
- The first example is attributed to Tait and was built in Leeds.
- The lifts were connected by interlocking cups and dips.
- As the inner lift rose to its maximum, the cups and dips interlocked, forming a gas tight seal and pulling up the next lift.
- They became common with many gasholders retrofitted to multiple-lift holders.

The Surviving Gasholder



The key statistics for the gasholder are as follows:

Nominal capacity	400,000ft³ or 11,326m³
Height	26.8m excluding finial, 29.0m including finial
No. of lifts	2
Tank diameter	29.8m
First lift diameter	29.0m
Second lift diameter	28.2m
Depth of tank & lifts	8.54m tank & lifts
Crown rise	1.68m
No. of columns	14
Columns diameter	0.99m
No. of lattice beams	42 (14 on each of the 3 tiers)

The Gasholder Tank

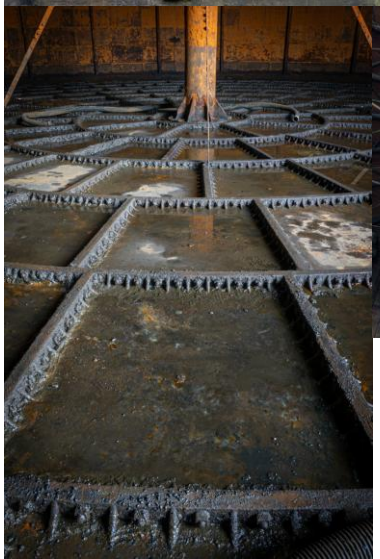
The Gasholder bore the name of the engineer (R.P.Spice) and contractor (Samuel Cutler and Sons).

The tank was formed from cast iron plates bolted together and caulked. Iron straps were placed around the tank to provide extra support.

Samuel Cutler was a renowned gas engineering contractor based in Millwall, London.

Cutler and Spice had a long-standing working relationship.

The surviving gasholders at Kings Cross were built by Samuel Cutler.



Views of the gasholder tank. Source: Mike Glyde.

The Gasholder

- By 1884, building a cast-iron tank was rare due to the great cost but was required at Great Yarmouth.
- When the gasholder was first constructed, it was closer to the River Yare and founded on wooden planks.
- When filled with water it started to subside, it had to be taken apart and moved to a new site in 1885.
- When decommissioned, the tank was found to be constructed several metres below ground, for added stability.
- The gasholder frame combines a mixture of ornate features with its Gothic design but used novel curved girders and tangential rollers to keep the lifts stable.

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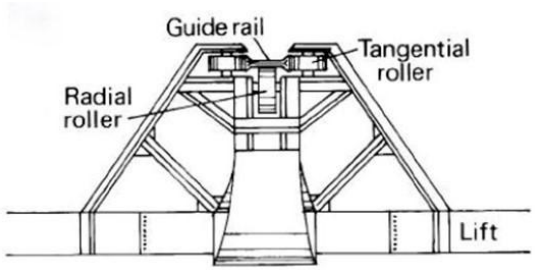
A recent view of the surviving gasholder tank (top), a drawing of a tangential holder carriage (bottom)



Tunbridge Wells Gasworks

- In the 1870s Robert Paulson Spice was employed as the consulting engineer to Tunbridge Wells Gas Company.
- The company had nearly outgrown its original gasworks and needed a new gasworks on a new site.
- Spice was employed to design the new Tunbridge Wells gasworks.
- Spice followed a similar philosophy and like the surviving gasholder at Great Yarmouth it expressed his interest in art, culture and engineering and it had similar artistic merits.
- The buildings were embellished with locally produced clay tiles.

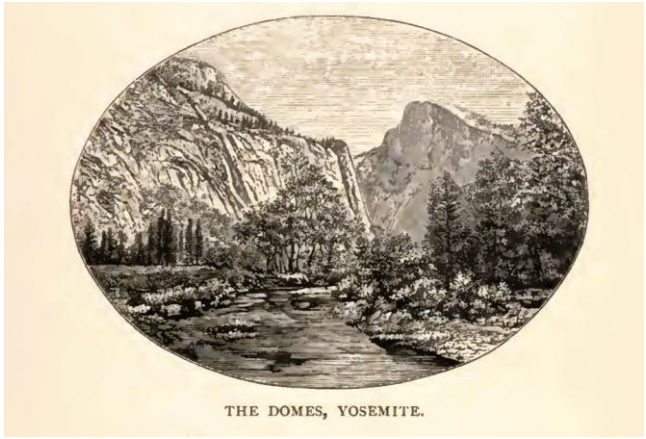
R. P. Spice's Tunbridge Wells Gasworks

The Hermit of Westminster

- Spice had a second life as a travel writer.
- He would right under the name of “Hermit of Westminster”.
- His publications were his own private musings but gained a popular following.
- He travelled across Europe and often to North America.
- His writing included nature, society and even politics.
- He mentioned his stays at the Royal Hotel in Great Yarmouth.
- He was a fan of Gothic architecture and liked the town hall in Brussels, which he felt the Town Hall in Great Yarmouth represented.

R. P. Spice’s sketch of himself (right)

A sketch of Yosemite Valley, USA (below)



The Loss of a Unique Individual

- Robert Paulson Spice died aged 75, in 1889.
- He had been fully engaged in his work up to within a short time before his death.
- The Gas Journal reported:
  - “The profession of gas engineering has lost one of its veterans. Robert Paulson Spice – hero of many a hard parliamentary fight, champion of many a desperate cause, and warm-hearted friend of two generations of young gas managers. His was a unique place in the ranks of professional men, which can never be filled by another. He belonged to an order of gas engineers who have almost died out.”
- He possessed the gifts necessary for an expert – ready wit, keen appreciation of the situation and the ability to express himself.
- Benevolent to a fault, many went to him in distress and received relief. He was only too open with his hand and too ready with his support for all who appealed to him for help.
- His funeral was attended by a large number of his private and professional friends including those companies who he had represented.

The Gasworks Extensions and Remodelling

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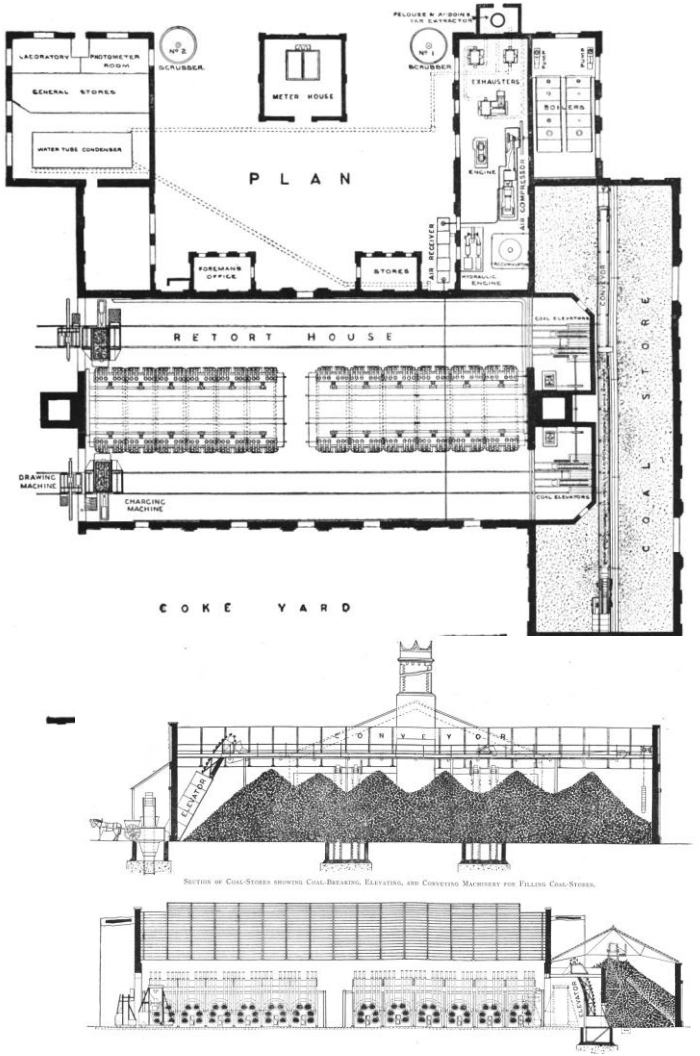
The Hydraulic Cranes

- By 1901 the engineer W.J. Carpenter had made improvements to the gasworks.
- He improved the handling of coal at the site.
- With no river frontage, his proposal included running two hydraulic cranes on the council owned quayside.
- The council prioritised access to the herring fleet, so access had to be temporary.
- Power came from a hydraulic accumulator in the gasworks and transmitted by hydraulic power pipes to hydrant on the quay side.

The Gasworks Extensions

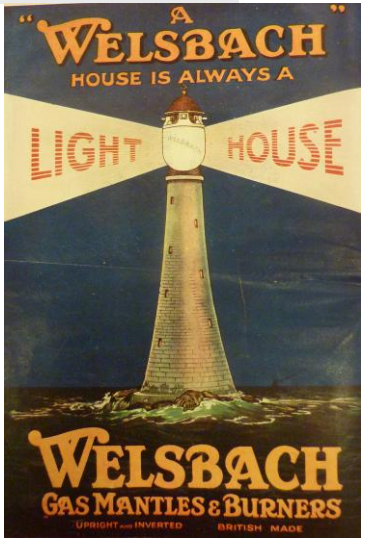
- An automatic charging and discharging machine designed by West's Gas Improvement Company.
- The charging (loading) and discharging (unloading) machines were pneumatically powered from a compressor and air receiver.
- The machine provided a perfect layer of coal in the retorts, which had been constructed by the works staff.
- Finding staff had been a challenge and the machines made the gas making process less laborious.



The Challenge of Electricity

- As with gas, Great Yarmouth was an early adopter of electricity.
- The Great Yarmouth Corporation obtained a parliamentary order to provide electric lighting in 1890.
- The first electricity generating station was built on Swanstons Road and operated by the corporation.
- It used both gas and steam engines to drive generators.
- Electric light soon displaced gas for street lighting.
- The gas company provided brighter incandescent gas lighting to counter electricity and moved into the cooking and heating markets.

By 1898, electric lighting had grown significantly and there were 6,600 electric lights across the town.



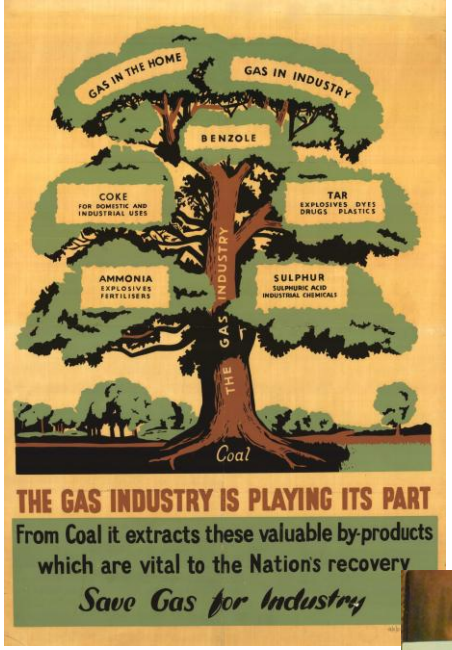
Gasworks During the First World War

- The First World War had significant impacts on the gas industry.
- Many skilled labourers were lost to the war effort, never to return, which led to the closure of some small gasworks.
- Women were drafted to work in the gas industry to undertake roles from meter reading to stoking retorts, and shovelling coke (right).
- Great Yarmouth was attacked twice, once on the 19th January and then again on the 25th April 1916.
- Whilst Great Yarmouth gasworks escaped, Gorleston gasworks was attacked and damaged, suffering considerable damage from 14 bombs.
- Mr William Poll, the Assistant Works Manager, received the British Empire Medal for putting out two fires burning on the gasholders.

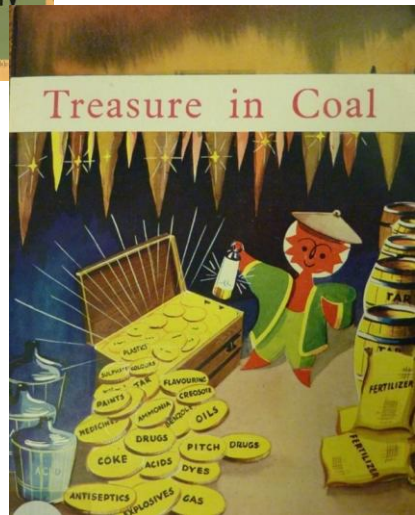
A Woman Helping Bag Coke at Cambridge Gasworks.

The By-Products

- The gas industry produced many important by-products.
- Coke was the residue left in the retorts after gas manufacture, it was used as a smokeless fuel in the home and in industry.
- Coal tar was used as a feedstock in the chemical industry (medicines, dyes and plastics), for creosote and pitch for roads.
- Spent oxide was used to make sulphuric acid.
- Ammonia was used as a fertiliser.
- Benzol was used as a motor fuel.
- During both World Wars the by-products played an important part in the war effort.



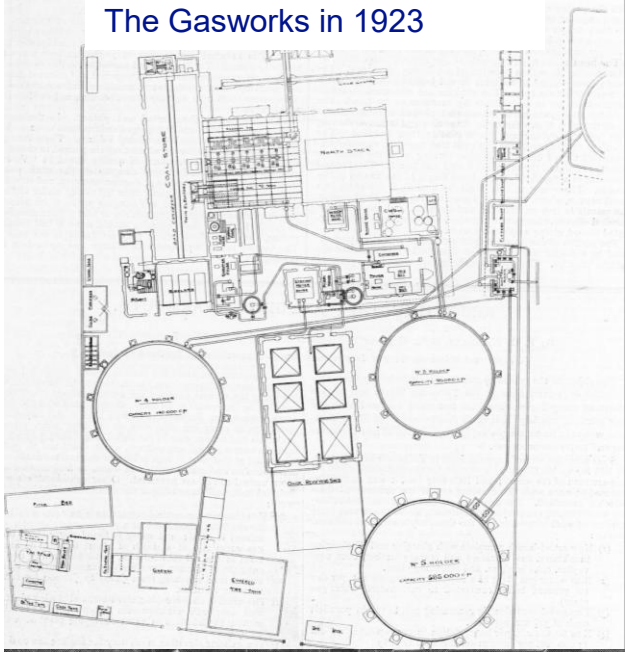
Posters showing the various uses of gasworks by-products.

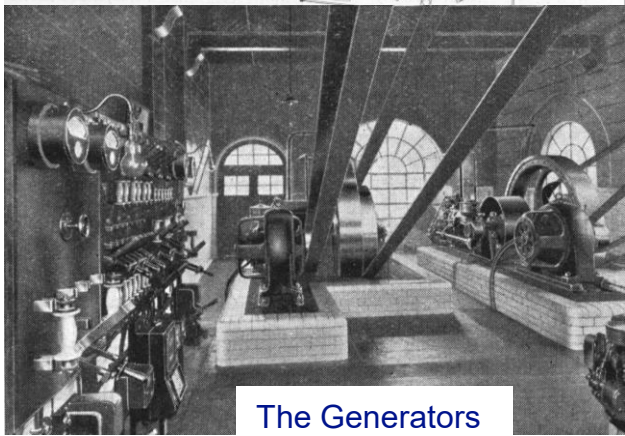


Mr Walmsley Arrives

- In 1919, a new engineer and manager took over, Mr P.D. Walmsley.
- By 1921, he had remodelled the Gasworks and made significant improvements.
- A new retort-bench, built by Guest-Gibbons with a loading and unloading machine.
- A new coal and coke plant.
- A new Water Gas Plant – a plant which made gas quickly from injecting steam into red hot coke.
- He installed two electricity generating sets to power the gasworks motor driven plant.
- All were completed without stopping gas production.

The Gasworks in 1923

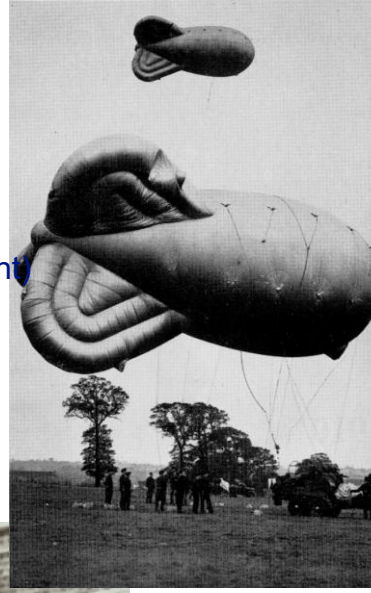




The Generators

The Second World War

- In World War Two the situation was worse. The gas industry suffered direct attack, loss of staff to the war effort and under-investment.
- Women were drafted to work on gasworks again and played a key role keeping the industry functioning.
- The gas industry played a vital role in inflating barrage balloons with hydrogen.
- During World War Two, Great Yarmouth was attacked several times, with the Gorleston Gasworks severely damaged and unable to make gas.
- Gas was supplied from the Great Yarmouth Gasworks via a temporary gas main built under the River Yare.



Hydrogen filled barrage balloons (right)

Mrs Mantelow shovelling coke at Beckton Gasworks. (below)

Nationalisation

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Nationalisation

- Post World War Two the Heyworth review of the gas industry (1944-45) concluded changes were required to the gas industry.
- This included major improvement of the gas networks and amalgamation to form larger gas undertakings.
- Incoming Labour Government decided upon Nationalisation as had happened for electricity and coal.
- The Gas Act of 1948 vested 1,064 local gas undertakings (both private and publicly owned) into twelve Area Gas Boards.
- The Gas Industry was Nationalised on 1st May 1949.

The division into regional boards following nationalisation

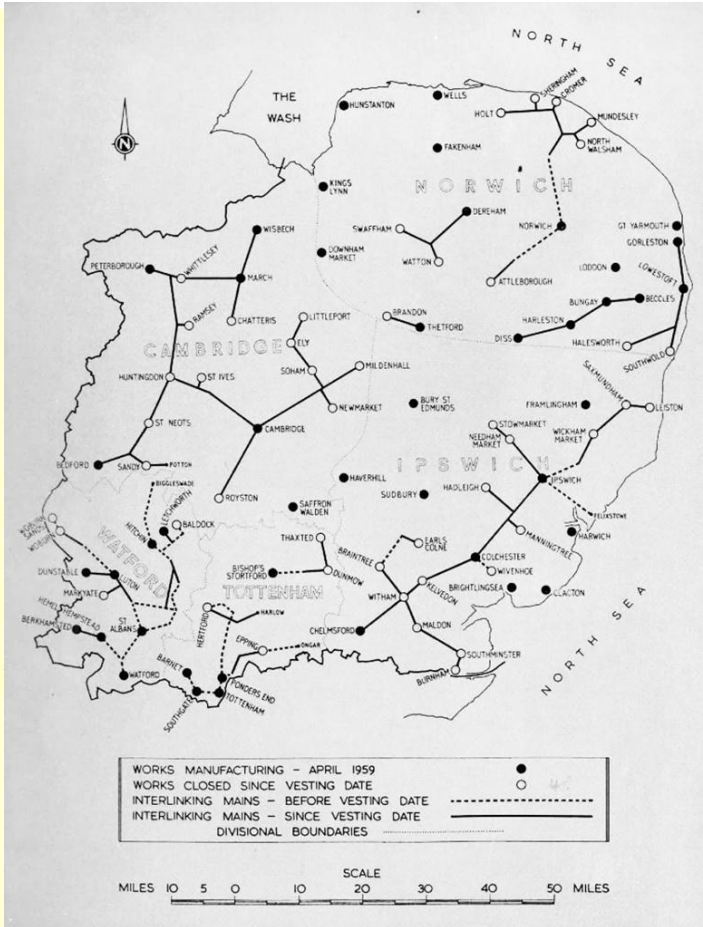
Nationalisation and the Eastern Gas Board

On 1st May 1949 the Great Yarmouth and Gorleston Gasworks became part of the Eastern Gas Board.

The Great Yarmouth and the Gorleston Gasworks were amalgamated into the Norwich Division of the Eastern Gas Board.

The Eastern Gas Board had to gradually connect adjacent rural towns via new pipelines to the larger and more cost-effective gasworks.

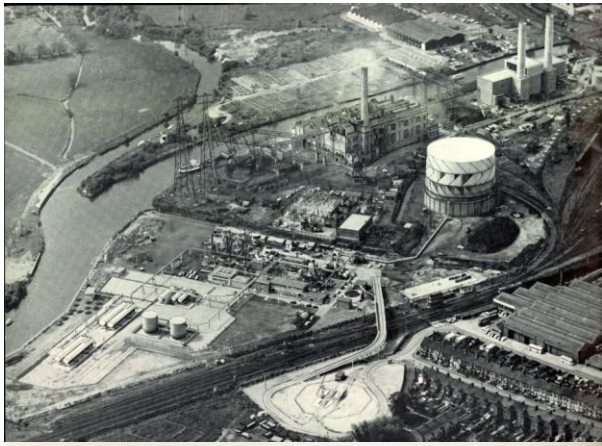
By 1965 Great Yarmouth had been connected to the Norwich gas network and the gasworks were then closed.



The End of Coal Gas

- In the 1950's the UK was struggling to find sufficient quality gas coals, and alternatives were sought.
- At Coleshill (Warwickshire) a Lurgi coal gasification plant and an oil reforming plant were built on the same site.
- Both were successful, but the oil reforming plant was more economical.
- A reforming plant was built at a new site in Norwich.
- It made gas from LPG and Naphtha.
- Initially supplied by train, an LPG import facility at Felixstowe and a pipeline to Norwich were built to supply the new works.

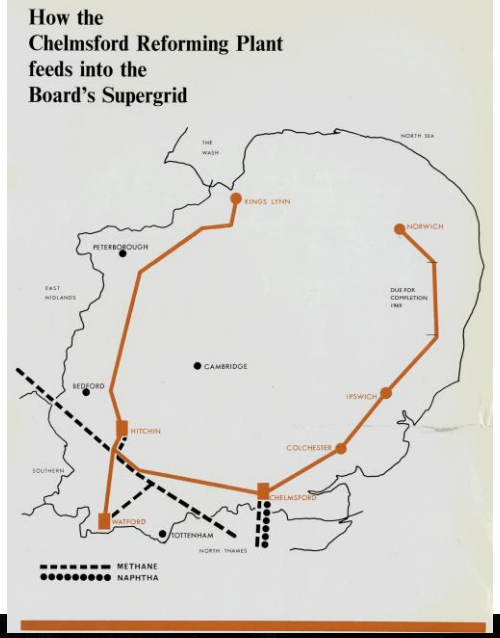
Cremorne Lane Gasworks, Norwich

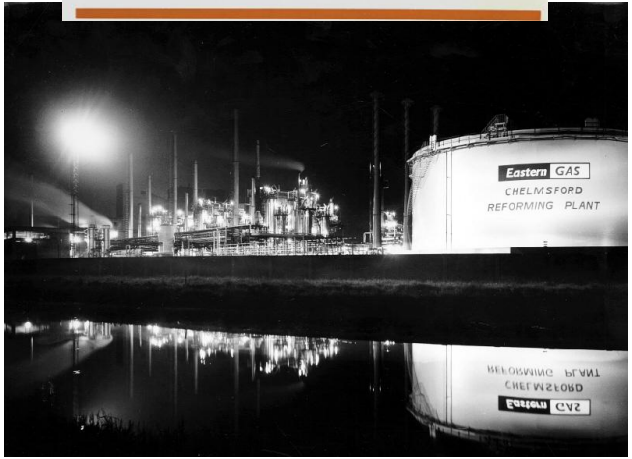


LPG tank at Felixstowe

The Supergrid

- Reforming plants were built across the Eastern Region, which included Chelmsford, Colchester, Thetford and Norwich.
- A high pressure supergrid was built linking the main population centres in the region with the reforming plants.
- In 1964, an LPG/air plant was installed at Great Yarmouth. This small plant could help make a gas compatible with town gas to meet times of peak demand.
- A high-pressure gasholder was built in the north of the town to supply the rural gas network north of Great Yarmouth.





The Coming of Natural Gas

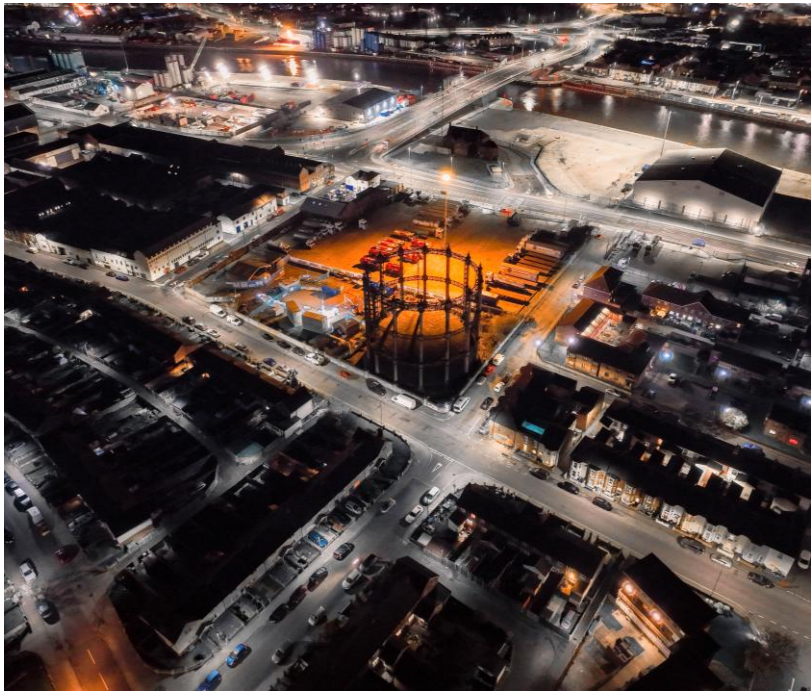
- In the 1950's, gas fields were discovered in France (Lacq 1951) and the Netherlands (Schlocteren 1959).
- With no native gas, Britain trialled the importation of Liquified Natural Gas (LNG) from the USA first and then Algeria, using new LNG tanker technology.
- This brought natural gas ashore at Canvey Island, from here gas was shipped via the National Methane Pipeline. It supplied Eastern Gas at Hitchin.
- North Sea gas was being brought ashore at the Easington terminal by March 1967 and at the Bacton terminal by July 1968.
- The gas network in Great Britain was converted from Town Gas to Natural Gas between 1967-1976.

The Gas Industry Today

- Gas is supplied to Great Yarmouth by Cadent Gas.
- Gasholders ceased being used for gas storage on the gas network in 2012.
- Gas is now stored in several alternative ways:
  - in transmission and distribution pipelines (linepack);
  - in below-ground storage facilities; and
  - in liquified natural gas (LNG) import terminals.
- Gas is still imported from the North Sea and can be imported/exported as LNG or through interconnector pipelines to the continent.
- Gas provides a vital role today powering electricity generation when renewables are not available.

Thanks

- **Many thanks to the following for their support in preparing this presentation**
- National Gas Archive,
- Institution of Gas Engineers & Managers Archive; and
- The Fakenham Museum of Gas and Local History.
- **If you enjoyed this presentation why not visit the:**
- The Fakenham Gasworks Museum - http://fakenhamgasmuseum.com/
- National Gas Museum Leicester - http://www.nationalgasmuseum.org.uk/
- The Preserved gasholder at Lavenham.
- Historic England Website on the Manufactured Gas Industry: https://historicengland.org.uk/research/current/discover-and-understand/industry-and-infrastructure/manufactured-gas-industry/



The gasholder on the landscape at night . Source: Geoffrey Frost.

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