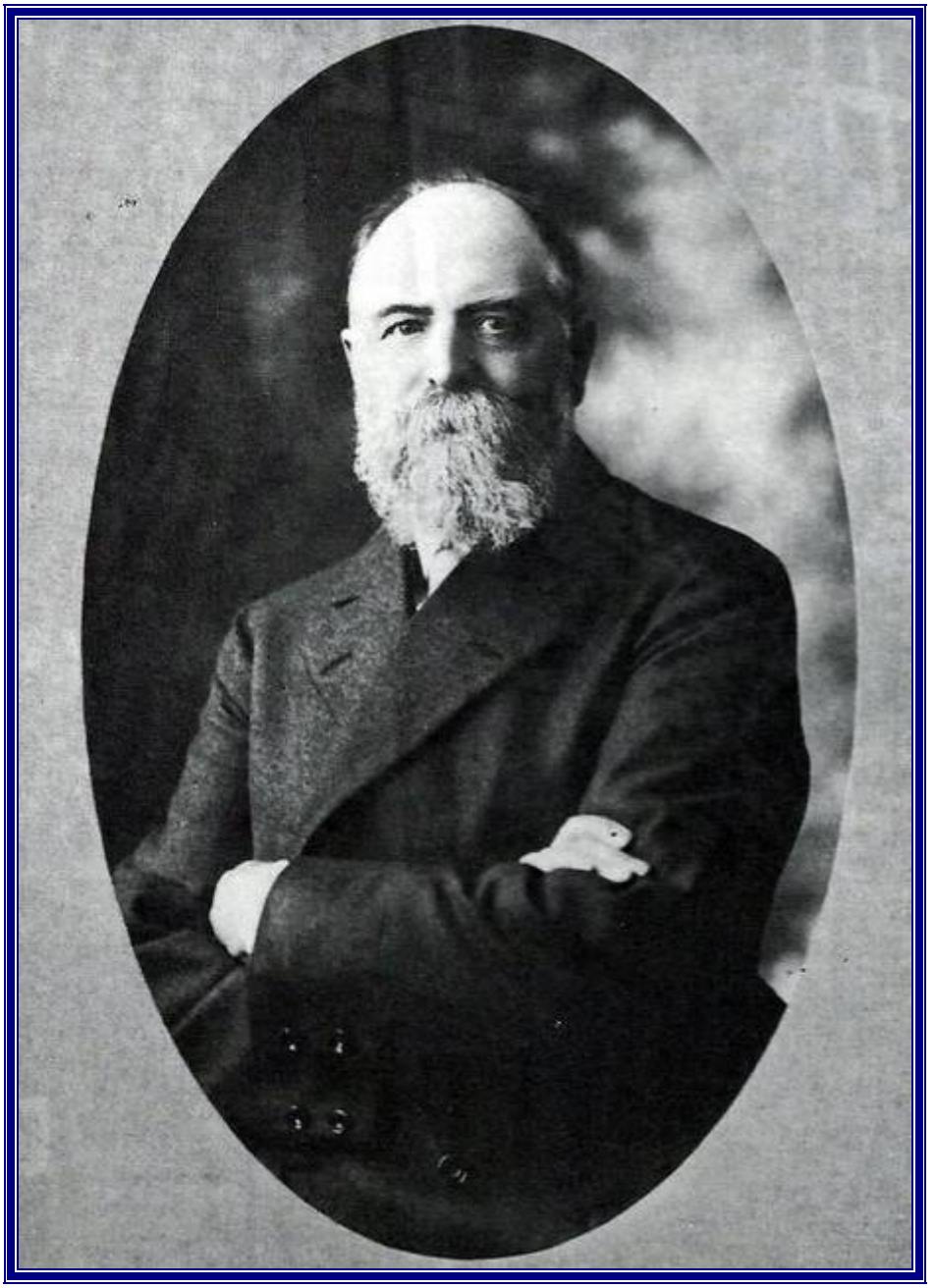
THOMAS POTTERTON

By EurIng Brian Roberts, CIBSE Heritage Group



Thomas Potterton 1847-1926

Thomas Potterton was born in Balham in South London in 1847. His father, Thomas Potterton Senior, died in 1870, leaving him a building business "which he was to transform by sheer ability, personality and good sense into a boiler company with a world wide reputation."

One of Potterton's objectives was to achieve better utilisation of the fuel (coal) then in general use, by improving the efficiency of boilers and kitchen ranges. His changes worked and the company expanded.

He then turned to the development of the gas-fired boiler believing that in time air pollution would be a problem. It is said Potterton risked his business by spending so much time and money on research, but in 1902 he was able to introduce what was claimed as the world's first gas boiler for central heating, using town's gas. This boiler was the forerunner of the Victor range. More inventions followed: the first safety cut-out valve system and an ether capsule thermostat. In 1905, Potterton patented his "zig-zag" boiler concept. The company's building activities largely ceased and Potterton concentrated on the development of heating equipment and its installation.

Mr & Mrs Thomas Potterton in 1880

N° 5182 A.D. 1894

Date of Application, 13th Mar., 1894—Accepted, 30th June, 1894

COMPLETE SPECIFICATION.

An Improvement in Boilers for Heating Greenhouses and other Structures.

I, THOMAS POTTERTON, of "Norman Hurst," 122 Cavendish Road, Balham in the County of Surrey, Hot Water Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

Usually the flue from an independent hot water boiler passes away at the top, there being a clear way to same directly over the fire, by which much of the heat is conducted away and wasted. My invention relates to a boiler by which I avoid this waste of heat, as I shall describe in accompanying drawings.

Fig. 1 is a vertical section, and Fig. 2 is a sectional plan of a boiler according to my invention.

I make the boiler in two sections, right and left hand, which are bolted together K K, each part having zig-zag projections A. B. C. over fire. The top part of each section is made parallel to the part over the fire, thus forming a zig-zag flue D. E. F.

A feed hole H, and clinker door J are provided in front. A flow pipe G from top of each section, and return pipe R from side of each section, provide for water circulation. These two parts are made so that these pipes may have the same or independent circulation.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is :—

A boiler having zig-zag projections over fire, and constructed to a form a zig-zag flue, to act substantially and for the purpose set forth.

Dated this 13th day of March 1894.

THOMAS POTTERTON.

London : Printed for Her Majesty's Stationery Office, by Darling & Son, Ltd.—1894

Thomas Potterton's British Patent No. 5182 of 1894 for Boiler Improvements

In 1898, Potterton had been a founding member of the IHVE. He became a well-known figure in the industry at exhibitions and conferences and for his pioneering promotional and advertising activities.

A.D. 1894. MARCH 13. Nº. 5182.

POTTERTON'S COMPLETE SPECIFICATION. (1 SHEET)

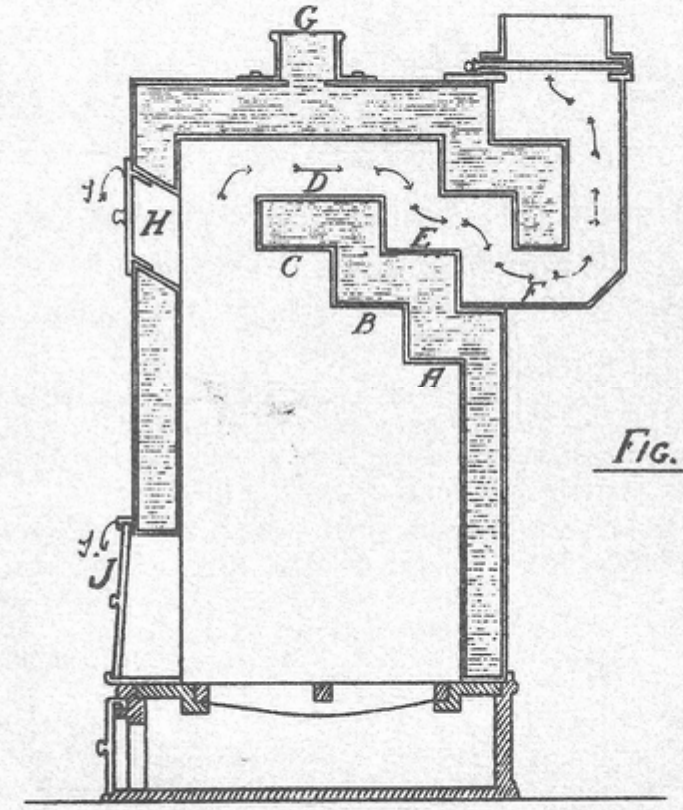


FIG. 1.

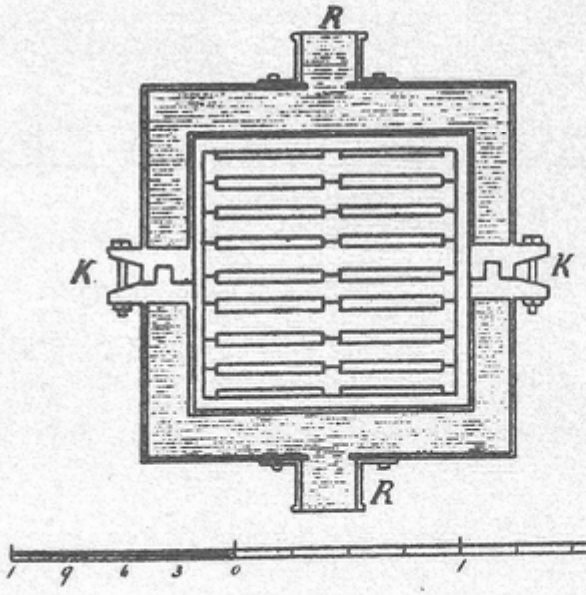


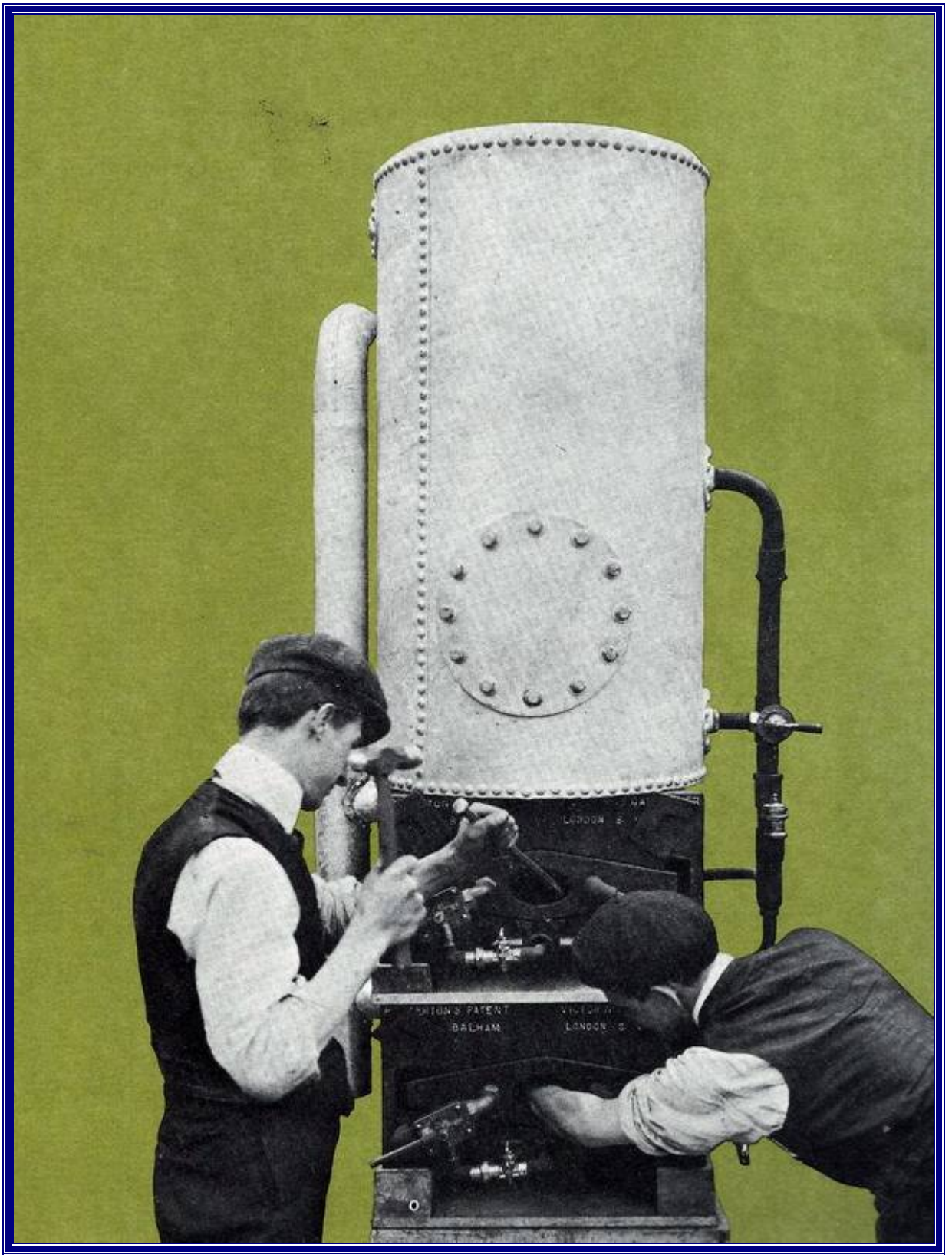
FIG. 2.

[This Drawing is a reproduction of the Original on a reduced scale.]

LONDON. Printed by DARLING and SON Ld.
for Her Majesty's Stationery Office. 1894.

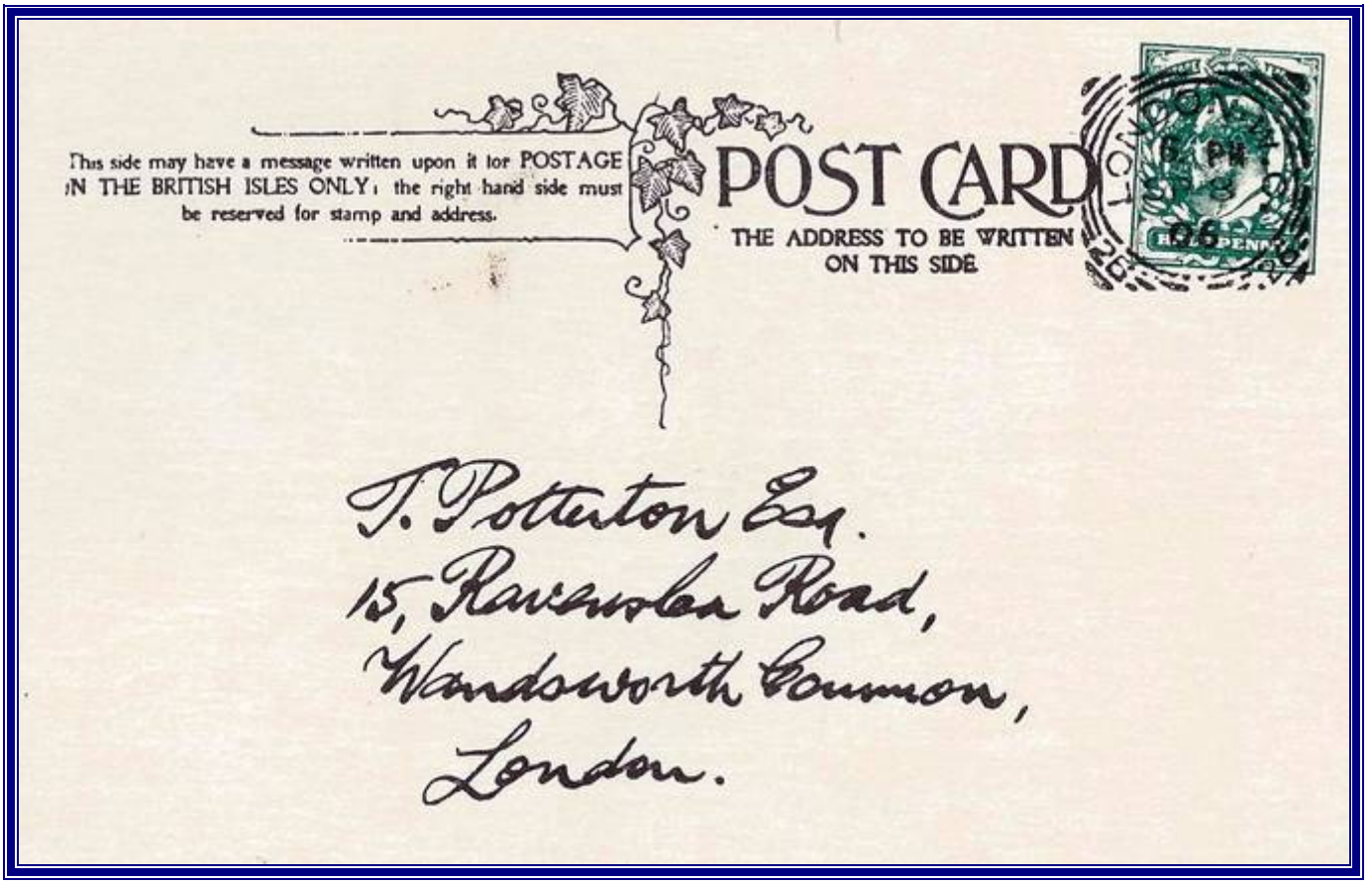
Malby & Sons, Photo-Litho.

Diagram of Potterton's Patent drawing showing his internal zig-zag boiler arrangement



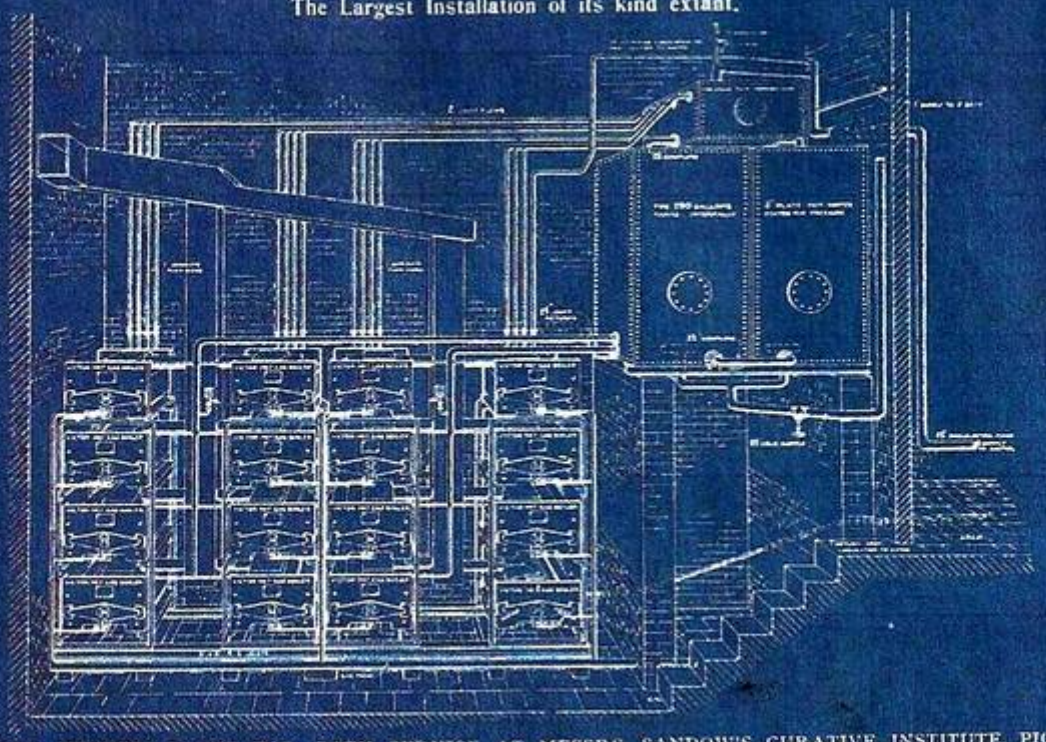
Servicing a Potterton boiler, 1905

Delivering Potterton boilers in 1906



GAS HEATED HOT WATER SUPPLY

The Largest Installation of its kind extant.



WATER HEATING PLANT FOR BATH SERVICE AT MESSRS. SANDOW'S CURATIVE INSTITUTE, PICCADILLY, LONDON. ERECTED MAY, 1909. Another plant consisting of 8 Boilers, with 300galls. storage, has been working since 1907—TOTAL CAPACITY, 700 Baths Daily. When building their new premises in St. James's Street, Messrs. Sandow decided upon our Gas Heated System in preference to the use of Coke Boilers, having both at work in their old premises. The hard pressure put upon these boilers daily testifies to their durability. Head of water, 80 feet. Arrangements can be made to inspect this installation and many others by appointment. We shall be pleased to hear in this connection from gas companies' officials.

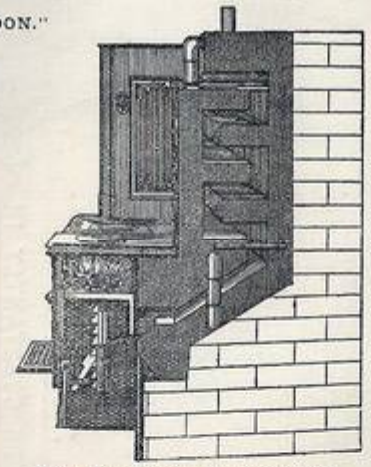
Diagram of Potterton's 1907 installation of 8 gas-fired boilers providing domestic hot water at Sandow's Curative Institute, St James's Street, Piccadilly, London

T. POTTERTON, Hot-Water Engineer,

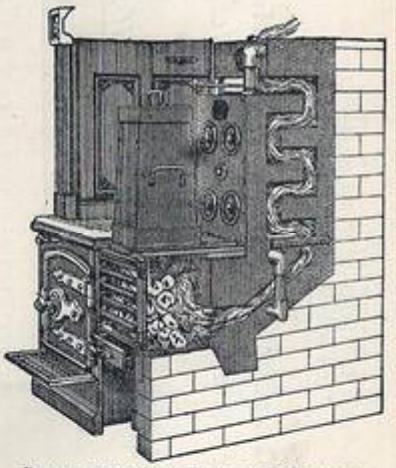
CAVENDISH WORKS, BALHAM.

Telegraphic Address: "POTTERTON, LONDON."

No. 3 Boiler fitted to Range.



No. 1 Boiler and Rising Bottom fitted to Range.



Range with Top Feeder in Position for Night use.

POTTERTON'S PATENT ZIG-ZAG BOILERS are the most powerful Range Boilers ever invented. They are suitable for supplying very large quantities of Hot Water or Warming Houses in connection with domestic supply. Write for Catalogue.

T. Potterton's Treatise, "A Practical Guide to Warming Houses from Kitchen Fire by Low-pressure Hot Water, on the One Pipe System, in conjunction with Domestic Supply." 49 Illustrations of Plans, Apparatuses, &c. Price 1s. 6d.; post-free 1s. 9d.

Potterton boiler advertisement from 1897

HOT WATER SUPPLY.

Complete Equipment for the Smallest Flat or the Largest Residence.

POTTERTON'S
"VICTOR" GAS BOILERS

AND

COMPLETE
AUTOMATIC APPARATUS

Nos. 12, 14, and 16 Class "D."

A NEW SERIES TO OCCUPY NARROW SPACES

In the design of efficient but simple water heaters, the properties of horizontal waterways as important considerations, but in most the requirements of our customers of less importance is [illegible]

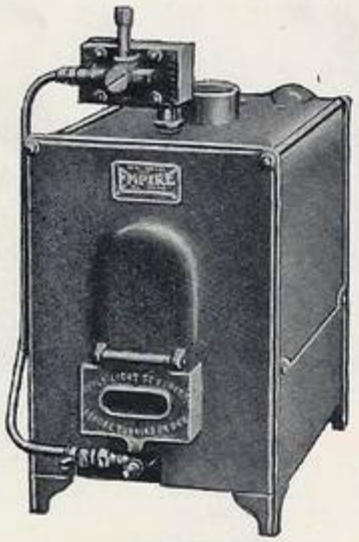
No. 4 APPARATUS.

EXAMPLE OF "VICTOR" COMPLETE HOT WATER SUPPLY APPARATUS FOR RESIDENCE WORK OR TRADE PURPOSES.

The new regulations [illegible]

Potterton Victor Gas Boiler advertisement, probably early 1900's

Gas Heated Hot Water Supply



"EMPIRE"
Gas Water Heater

"EMPIRE" "EMPEROR," & "REX" Automatic Gas Water Heaters can be seen in operation at the IDEAL HOME EXHIBITION, Olympia, Stand No. 106, Grand Hall Floor.

They afford access to flues and waterways "in situ" and produce high-temperature water quickly, by maintaining the maximum stratification without heating bulk.

FULLY AUTOMATIC — INCLUDING CUT-OFFS

THOMAS POTTERTON (HEATING ENGINEERS) LTD.
Cavendish Works, Ravenswood Road, Balham, London, S.W.12
Telephone: Balham 1244-5-6 Telegrams: Potterton, Toot, London

IHVE Journal, 1938

The Potterton home at 15 Ravenslea Road, Wandsworth Common, London

It is recorded that at the age of 76, Potterton still regularly walked down to his works in Balham and that he was "still ordering suits with a pocket specially made to carry his slide rule."

Thomas Potterton died on 26 January 1926. His funeral service took place at St Mary's Church in Balham (where the CIBSE Headquarters building is now next door). His internment was at Wandsworth Cemetery.

Mr & Mrs Thomas Potterton

A modern tribute to Thomas Potterton by the company he founded reads:

A Man dominated by a zest for life and a passion for invention.
A first class engineer. A rip-roaring entrepreneur.
A sensitive man. A genial friend. An unrepentant publicist.
A family man. A great Victorian.

St Mary's Church, High Road, Balham

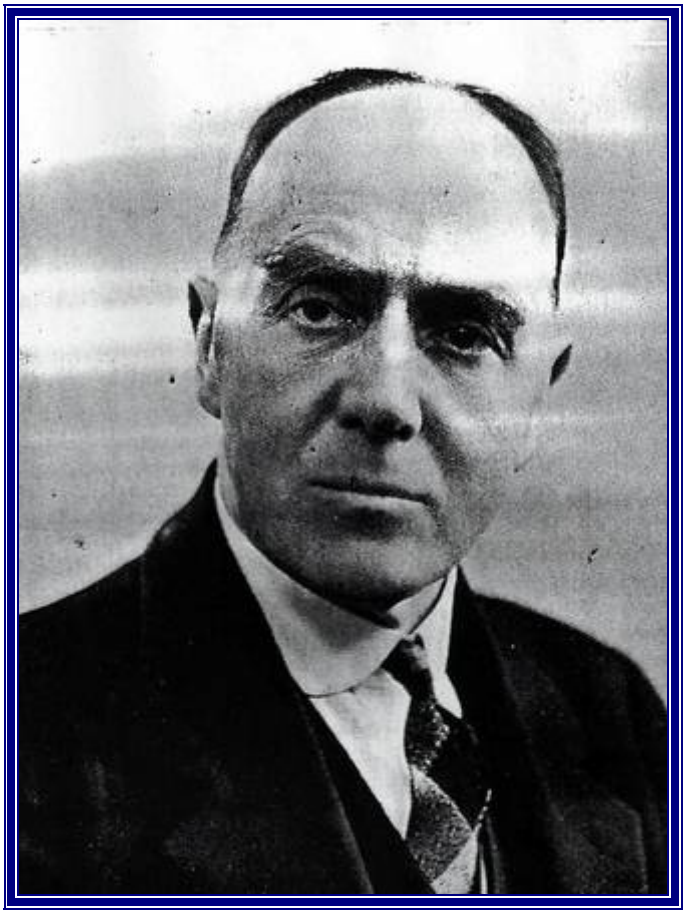
References

Obituary: Thomas Potterton, Gas Journal, 3 February 1926

A B Potterton, President 1936-37, JIHVE, Vol. 4, No. 37, March 1936

Thomas Potterton: The Heatmakers No. 4, Thomas Potterton Ltd, about 1990

Appendix



A B Potterton, President IHVE 1936-37

A B Potterton was born 30 June 1873 in Balham and educated at a private school before joining the Potterton family firm which had been founded by his grandfather in 1850. Upon the death of his father, Thomas Potterton, he became joint Managing Director with his brother, T F C Potterton. He joined the IHVE as an Associate Member in 1898, becoming a Member in 1908 and sitting on the Council for many years. He served as both Junior and Senior Vice-President before his election to IHVE President for 1936-37.

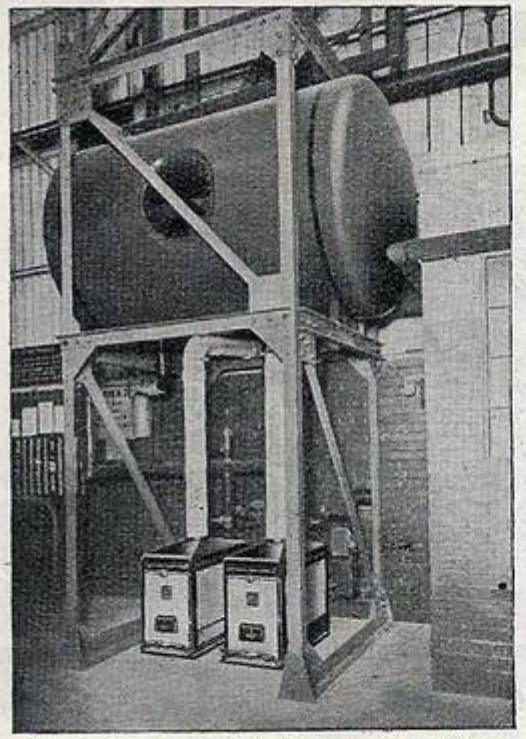


Photo by Courtesy of the Installing Engineers, Messrs. Heat and Air Systems Ltd., Westminster, S.W.1

GAS IN INDUSTRY

An example of Modern Practice in supplying large scale Hot Water Services through the medium of "Rex" STORAGE APPARATUS for Factory uses yielding in this case 330 gallons of hot water raised 100° F. hourly.

Direct Heating **Perfect Control**

Maximum Stratification

Full and continuous discharge at taps

Greatest flexibility of output

THOMAS POTTERTON

(Heating Engineers) LTD.,

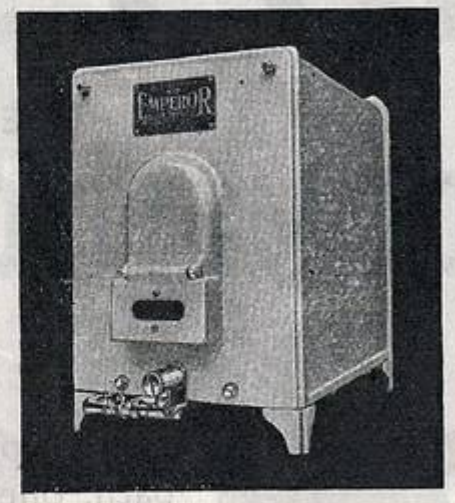
Cavendish Works, 20/30 Buckhold Road,

WANDSWORTH, S.W.18

IHVE Journal, 1944

Gas Water Heating Specialists . . .

We shall be happy to advise Engineers of the POTTERTON models once more becoming available for the saving of labour and space, as well as the abatement of smoke, in Britain's future buildings



THOMAS **POTTERTON** (HEATING ENGINEERS) LTD.

CAVENDISH WORKS, BUCKHOLD ROAD, LONDON, S.W.18

Telephone : PUTney 2263 (5 lines)
Telegrams : Potterton, Put. London

IHVE Journal, 1946