British Heating Stoves-2



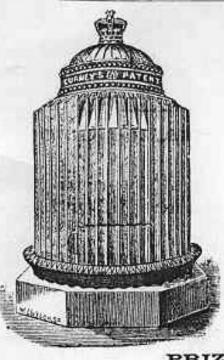
Gurney Stove

Just a few examples from CIBSE HERITAGE GROUP ARCHIVES

The London Warming & Ventilating Co.

32, HENRIETTA STREET, COVENT GARDEN, W.C.

(Removed from 23, Abingdon Street, Westminster, S.W.)



GURNEY STOVES.

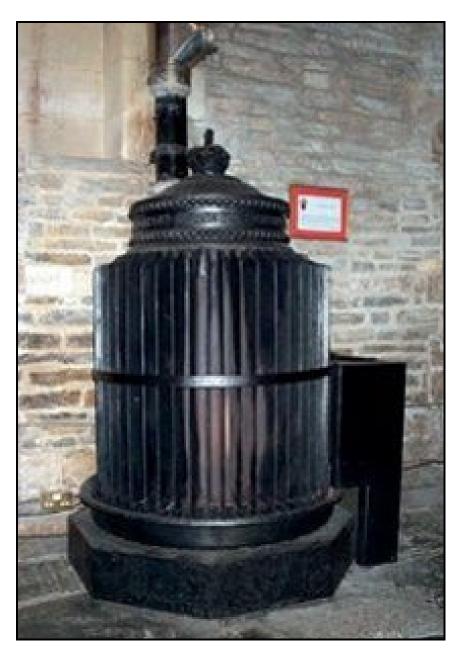
These Stoves are used in the Offices of the DEPARTMENT of SCIENCE and ART, in ST. PAUL'S, YORK MINSTER, LLANDAFF CATHEDRAL, ST. GEORGE'S CHAPEL, WINDSOR, and twenty other CATHEDRALS; besides more than FIVE THOUSAND CHURCHES, GOVERNMENT and other PUBLIC and PRIVATE BUILDINGS in England alone.

SPECIAL STOVES FOR SCHOOLROOMS, HALLS, &c.

Particulars and Estimates Free.

PRIZE MEDALS AWARDED:

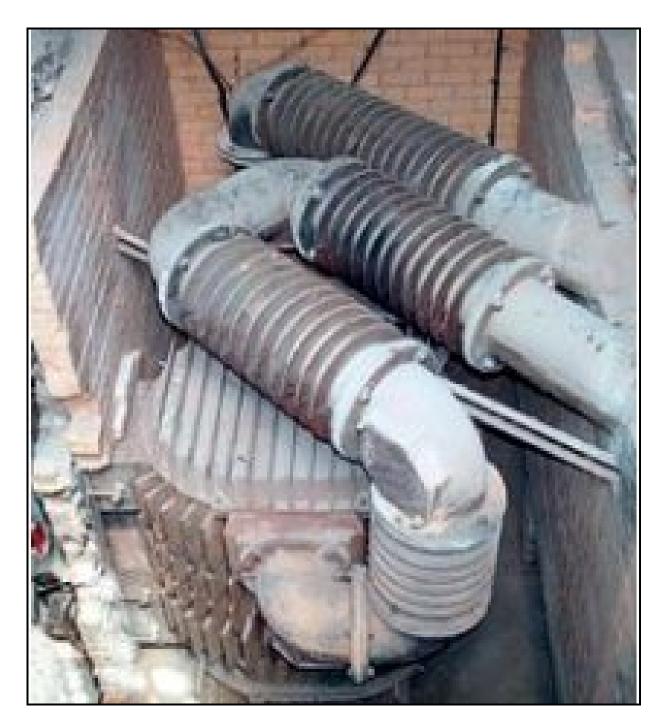
LONDON, 1862; PARIS, 1867; DUBLIN, 1859; BEAUVAIS, 1869.



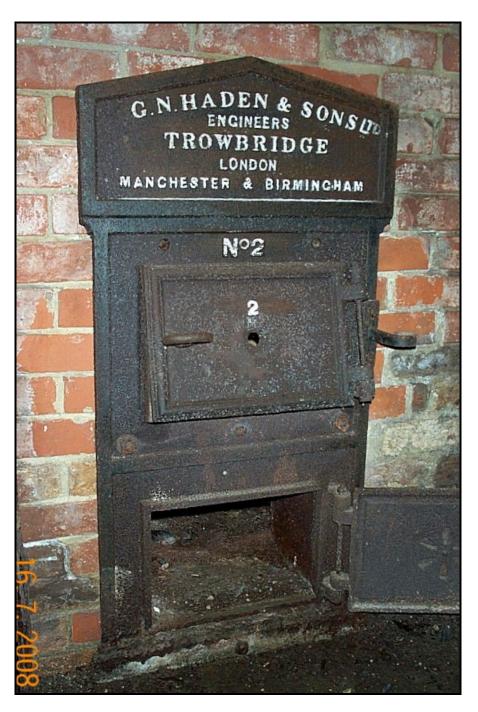
Gurney Stove in Tewkesbury Abbey



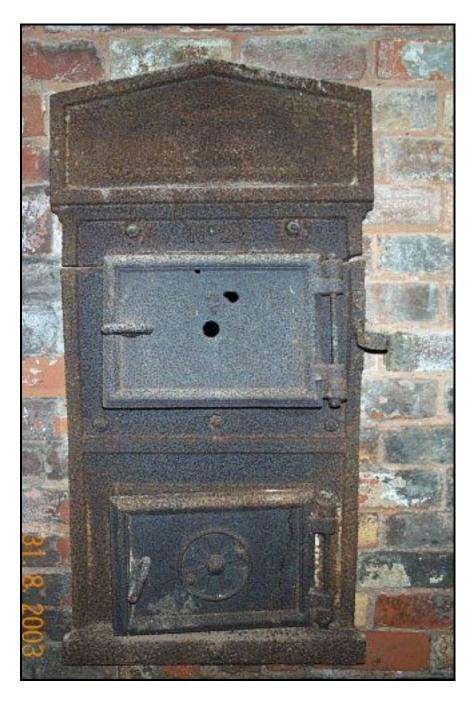
Gurney stove, St Mary the Virgin, Yazod, Herefordshire



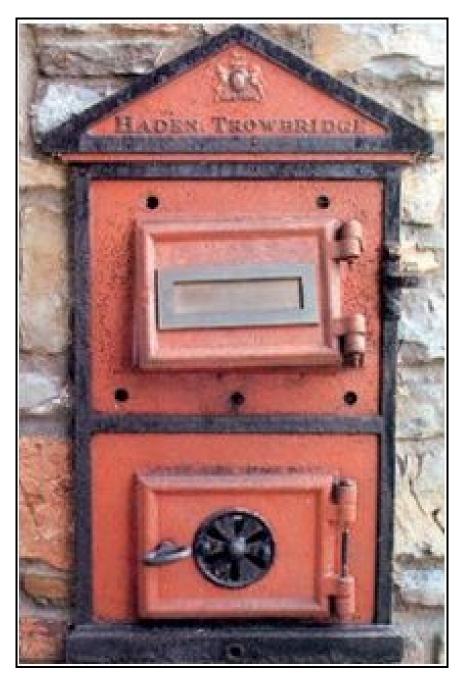
Grundy stove in St Paul's Deptford



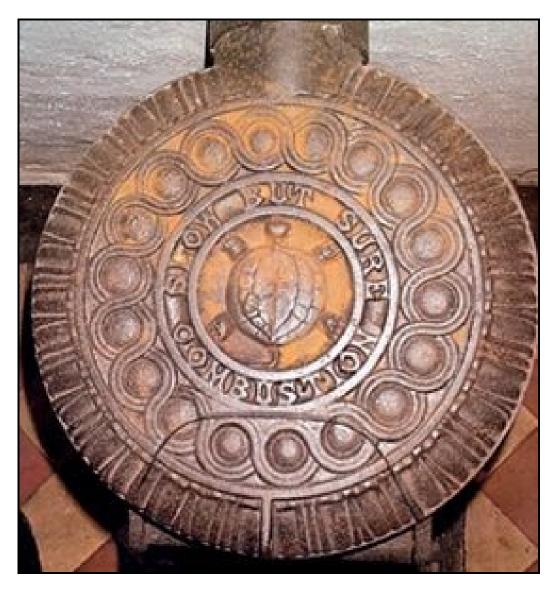
Haden stove in St Peter & St Paul, Mapperton, Somerset



Haden stove at St Mary the Virgin, Hanbury, Worcestershire



Haden stove front near Bristol serving as a letter box



Tortoise stove "Slow but Sure Combustion," St Leonard, Rodney Stoke, Somerset



Grundy stove before removal at St Barnabas in Epsom

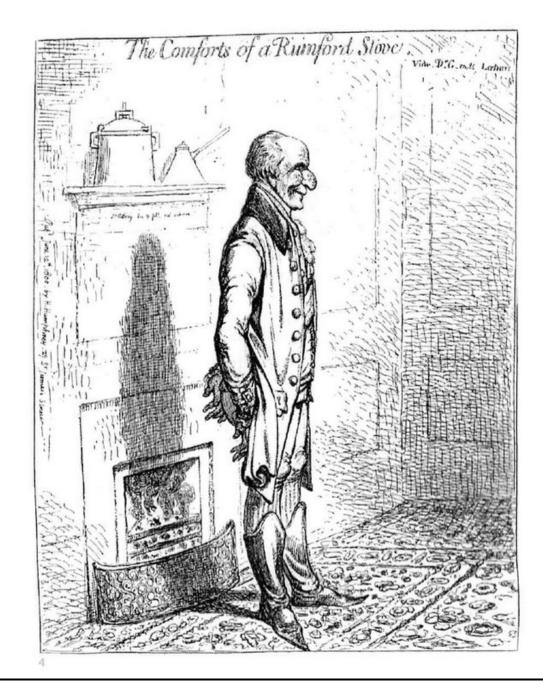


Tangye stove, St Mary's, Whitby, Yorkshire



Extracts from joint publication ENGLISH HERITAGE & CIBSE HERITAGE GROUP Brian Roberts, 2009

4 The Comforts of a Rumford Stove, 1800



Heating Stoves

asonry stoves of brick, earthenware and porcelain have been used for over 1,000 years in northern Europe, particularly in Scandinavia, Russia and Switzerland. Closed metal stoves were devised in Germany in the 15th century and improved over the next 200 years, spreading across continental Europe. But Britain preferred its open fires.

In England, around 1609, the first metal stoves were imported from Holland to heat the orange houses of the nobility. (It is said that the word 'stove' is of Dutch origin and the first English heated greenhouses were in fact called stoves.)

In the I790s, Count Rumford devised a metal stove, while William Strutt with Charles Sylvester installed his Cockle (or Belper) stove at Derby Infirmary. This Cockle stove consisted of a circular iron pot with a rounded dome. Fuel was consumed on a grate at the bottom of the furnace, coal or coke being added through a charging door at the side. Air for combustion was supplied through a duct to a chamber below the grate.

A forced warm-air furnace was patented by Benford Deacon in 1812, using a fan powered by a descending weight, and used at the Old Bailey. In the latter part of the 19th century, ventilating and other improved grates (the distinction between grates and stoves is not always clear) were due to Sir Douglas Galton, George Jennings (London grate), T Elsey (Lloyd's patent ventilating grate), D O Boyd (Hygiastic grate) and the firm of Shorland (Manchester grate).

In 1818, the Marquis de Chabannes introduced his *Calorifere* stove (air warming furnace) from France. Just before this, in 1816, the firm of G & J Haden set up in business in Trowbridge to erect the steam engines of Boulton & Watt in the West Country. Within a few years Haden was manufacturing heating stoves for churches and the country houses of the gentry. Between 1824 and 1914 they manufactured and installed nearly 7,000 stoves. Atkins & Marriot introduced their *Thermo-regulated* stove in 1825, followed by the *Thermometer* stove of Dr Neil Arnott (Physician Extraordinary to Queen Victoria) in 1834. The 1830s also saw the development of the famous *Tortoise* stove by Charles Portway who went on to manufacture some 17,000.



- 5 Buzaglo stove, Knole Orangery, Kent, 1774
- 6 Stove at Edmondthorpe Church, Leicestershire
- 7 Tortoise slow burning stove designed by Charles Portway, the first being hand-built by him in 1830 to heat his ironmongery store in Halstead, Essex. Over 17,000 stoves were sold, many for use in churches, by 1880. He used a tortoise as his emblem with the motto 'Slow but Sure.'

Use of the warm air stove grew considerably from the middle of the 19th century with the tremendous wave of Victorian church building and the construction of many and varied institutions - prisons, hospitals, schools, workhouses and asylums. Around this time Dr Goldsworthy Gurney brought out the large stove which bears his name. It was later sold by the London Warming and Ventilating Co who in 1897 claimed it had been used to warm 22 cathedrals and over 10,000 churches. schools and other buildings. They were also agents for the Choubersky, Salamandre and similar continuous burning stoves, which only needed refuelling once a day. Other stoves of the later Victorian period included Saxon Snell's Thermhydric, Mr George's Calorigen, Dr Bond's Euthermic, the Manchester stove of Shorland and the Convoluted stove of Joseph Constantine. Another notable heating apparatus manufacturer was John Grundy of London and Tydesley Ironworks, Manchester (the first president of the Institution of Heating & Ventilating Engineers in 1898) whose products included the Helios and Sirius smoke-consuming grates and the Hestia warming and ventilating stove. But the increasing use of hot water heating systems and the introduction of the radiator soon caused a marked decline in the use of warm air stoves.

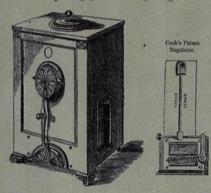




COMYN CHING & CO., CASTLE STREET, LONDON, W.C.

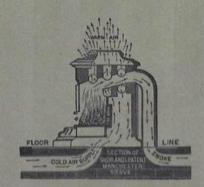
DR. ARNOTT'S ORIGINAL SLOW COMBUSTION FUEL STOVES

Cook's Patent Begulator or Compound Bars.

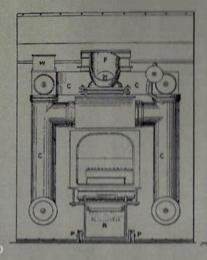


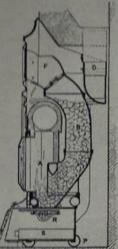
Many years since, this principle was perfected at our Works finder the direct superintendence of Dr. Asnorr, and though many new plans for economically and effectually heating apartments, churches, fic., have since been introduced, the continued and sheady sale of these, prove, that they still compete successfully, with the many newer methods. With these Stoves you reduce the supply of air to the smallest that can be, to support combustion; thus reducing to the minimum the amount of heat lost to use by comping through the floc.

By Cook's Patent Compound Bar, you actually make your fin regulate itself, for as it begins to burn too fercely, the Compound Bar becoming heated curves gradually and thus shuts off the supply of air.









The LONDON WARMING CO. LTD.

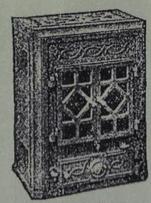
2 PERCY ST., RATHBONE PLACE, LONDON, W.1



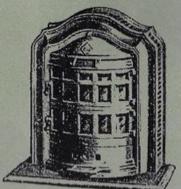
The KOOKSJOIE RANGE 11 sizes. Prices from £10 10 0



GURNEY STOVES 6 sizes. Prices from £6 10 0



OSOBRITE STOVE Open fire or closed stove at will, Prices from £5 11 0



DON ANTHRACITE STOVE Heating capacity, 5,500 cu. ft. Prices from £8 7 6

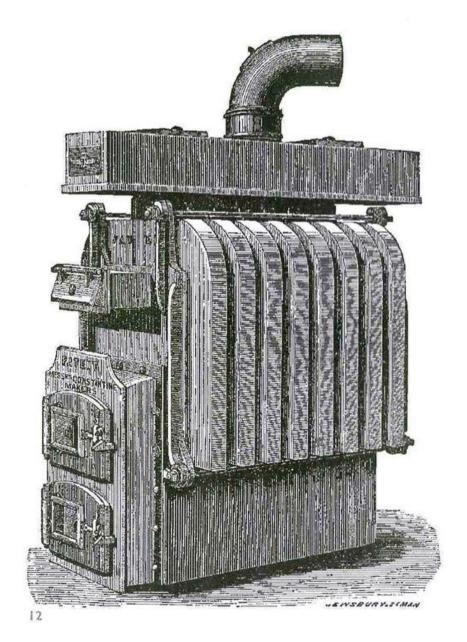
For full list of Appliances, including Authracite Stoves, ranging in price from £2 10 0, send for our 40-page list.

Please mention Laxton's

- Dr Neil Arnott's Slow Combustion Fuel Stove marketed by Comyn Ching, London, probably c1880
- Shorland Manchester stove, 1907
- 10 Helios amoke-consuming grate, really a portable stove on wheels, designed by a Mr Heim and sold by John Grundy of Islington, cl890
- I Victorian stoves, including the Gurney stove (top right) invented by Sir Goldsworthy Gurney and installed in many churches and cathedrals

12 The first Convoluted stove made by Joseph Constantine, Manchester, 1881.

The stove illustrated has eight convolutes (sections). These stoves were made in sizes with 5 to 12 convolutes each. There were sizes of convolute weighing from 0.5 to 3.5 cwt each (about 19.7 cwt = 1 tonne).



EXAMPLES OF INFORMATION ON CIBSE HERITAGE GROUP WEBSITE www.hevac-heritage.org

Buildings with Historical Equipment/Heating/ (dates are when visited) Churches & Chapels

2001 St Helens, Abingdon, {Grundy Stove}

2002 St Leonards, Rodney Stoke, {Musgrave and Tortoise Stoves}

2003 All Saints, Woodford {Falkirk Iron Stove}

2003 St Mary the Virgin, Hanbury, {Haden Stove}

2005 St Faith, Overbury, {Haden Stove}

2007 St Andrews, Corton Denham, {Petter Stove}

2010 St Pauls, Spalding, {Haden Stove}

2012 Hereford Cathedral, Chester Cathedral & Tewkesbury Abbey, {Gurney Stoves}

2013 St Mary the Virgin, Yazor, {Gurney Stove}

National Trust Properties

2002 Dinton House, Wiltshire, {Haden Stove}

2002 Erdigg, near Wrexham, {Haden Stove}

2007 Castle Abbey, Derbyshire, Cast Iron Stove}

2014 Wightwick Manor, Wolverhampton, {Constantine Stove}

Other Properties

2016 Brownlow House, Lurgan, NI, {Haden Stoves}

EXAMPLES OF INFORMATION ON CIBSE HERITAGE GROUP WEBSITE

Historical Equipment Numerous examples of Built-in Pattern & Free-Standing Heating Stoves

The Heritage Group has an ongoing quest seeking out Churches and other historical buildings where there could be the possibility of finding unused and abandoned warm air stoves from the Victorian and Edwardian eras. Many warm air stove discoveries by different known and unknown makers have been made. The stoves shown below illustrate the variety of shapes, styles and sizes that were made during the V & E eras. The warm air stoves separate into two types, 1) the pattern built into brickwork or an enclosure and, 2) the free-standing pattern. The search for further makers and types continues.

2) Free-Standing pattern
Manufacturer
John Grundy
Robert Howden
Charles Portway
Musgrave & Co
London Warming & Heating Co (Gurney stove)
McClary
Wicolary
London Pipeless Heating Ltd
Speirs & Co

EXAMPLES OF INFORMATION IN CIBSE HERITAGE GROUP NEWSLETTERS

- 2001 Haden warm air stove, Church IoW, No.5, December
- 2002 More Discoveries on Church Heating, {Howden & Portway Tortoise Stoves}, No. 6, June
- 2002 More Discoveries on Church Heating {Musgrave & Haden Stoves}, No.7, December
- 2003 Erdigg Hall, Wrexham, {Haden Stove}, No.8, June
- 2003 St Paul's Church, Deptford, {Grundy Stove}; Osborne House, IoW, {Haden Stove}, No.9, December
- 2008 Croscombe, Devon, {Gurney Stove}, No.19, December
- 2009 Liverpool Town Hall, {Ornamental heating stoves thought to be French}, No.21, December
- 2010 Wilton's Music Hall, Tower Hamlets, {Grundy Warm Air Furnace}, No.22, June
- 2010 Ornamental Musgrave Stove manufactured in Mannheim, Germany, No.23, December
- 2011 Westminster RC Cathedral, {Haden Furnace}: Osborne House, IoW {Sylvester Stove}, No.25, December
- 2012 Rodney Stoke, {Tortoise Stove}: St Andrew's Church, Ombersley {Howden Gothic Stove}, No.26, December
- 2012 St Andrew's Church, Epworth {Warm Air Stove}, No. 27, December
- 2016 Haden@200 Special Edition {Examples of Haden Stoves}, No. 34, April