



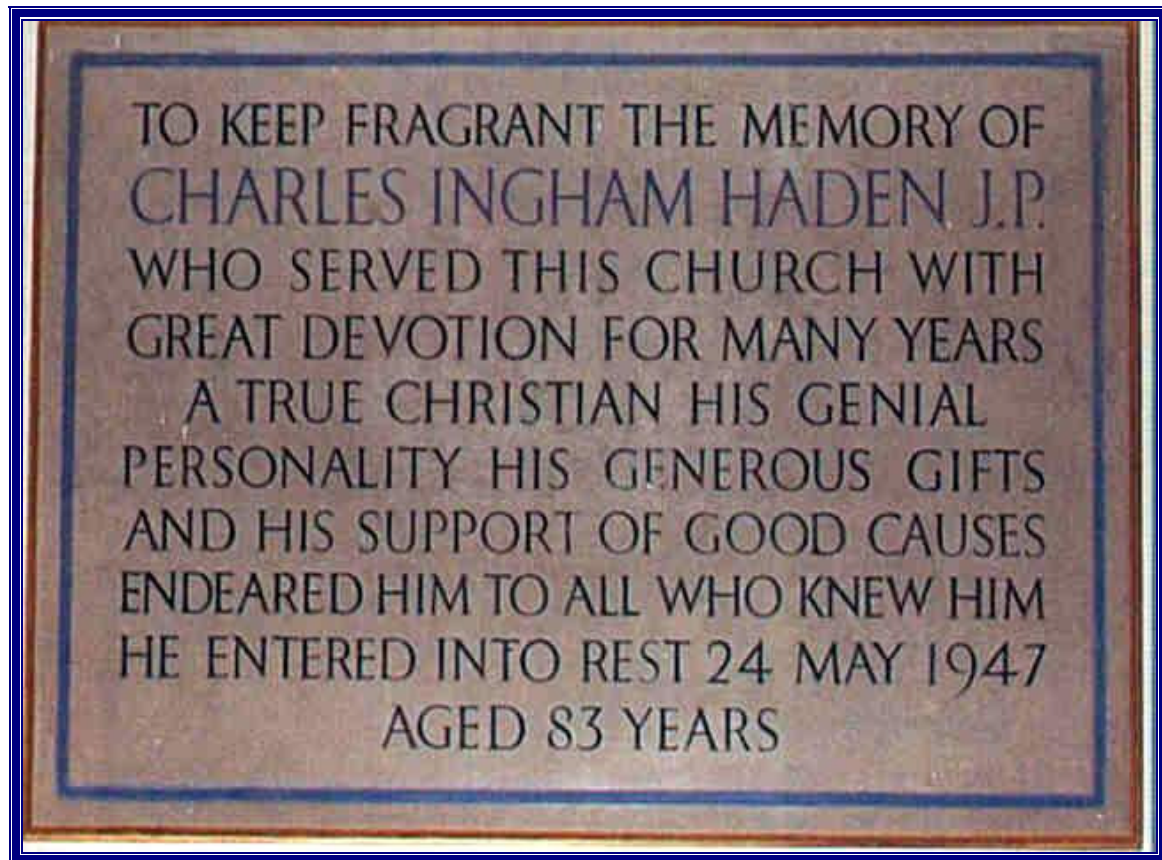
**CHARLES INGHAM HADEN**  
**1863-1947**



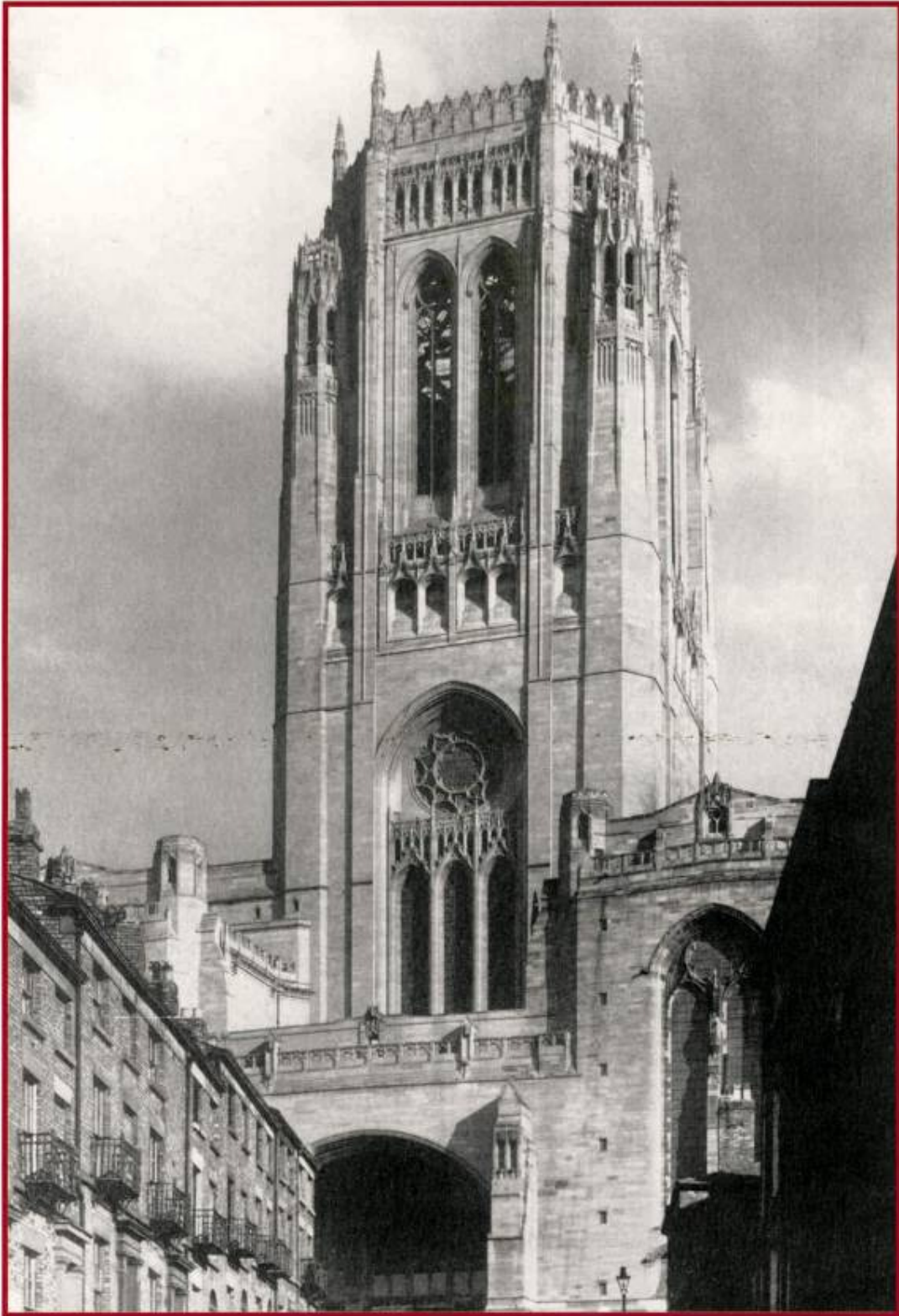
*President IHVE 1910*

Charles Ingham Haden was born in Trowbridge on 2<sup>nd</sup> May 1863 and he worked for the family firm for the whole of his professional career, as an apprentice from 1880-84, then as a draughtsman until he was admitted to partnership in 1892 and placed in charge of contracts. He became Joint Managing Director when the Company was incorporated in 1919 and was appointed Chairman in 1933, a position he held until his retirement in 1938, after 58 years service. His capacity for design greatly enlarged the scope of the business, many important institutions being equipped under his direction, including the new buildings at Leeds University, St Bartholomew's Hospital, St Paul's Cathedral and the new Cheltenham Town Hall. C Ingham Haden was a Member of the Institution of Heating and Ventilating from 1902, being elected President for 1910. He was elected an Associate Member of the Institution of Mechanical Engineers in 1904, transferring to Member in 1910. He held the position of President of the Association of Heating, Ventilating and Domestic Engineering Employers (now HVCA) in 1911-12. He was a Justice of the Peace for Wiltshire from 1916 and served as Chairman of the Trowbridge Bench for many years, a position he held at his death. He was also a member of the County Education Committee and Chairman of the Managers of the Local Council Schools. He devoted much of his time to maintaining charitable, religious and social institutions. A cause near to his heart was the Trowbridge and District Hospital of which he was President. He died at Red Gables, Trowbridge, on 24 May 1947, at the age of 83 years.

*(Text & pictures from "Hadens of Trowbridge," Frank Ferris, Brian Roberts & Paul Yunnie, Haden Young, 2004)*



*Memorial tablet in Tabernacle Church, Trowbridge*



*Liverpool Cathedral, the largest in Great Britain. Architect Sir Giles Gilbert Scott  
The foundation stone was laid in 1904 but the building was not completed until 1978  
G N Haden & Sons Ltd first prepared the Specification for Heating and Ventilation in 1924  
This was an underfloor warm air system supplemented by radiators*

ST. THOMAS' CHURCH

SALISBURY

Specification  
of Engineers Work.

G. N. Gladen  
and Son,

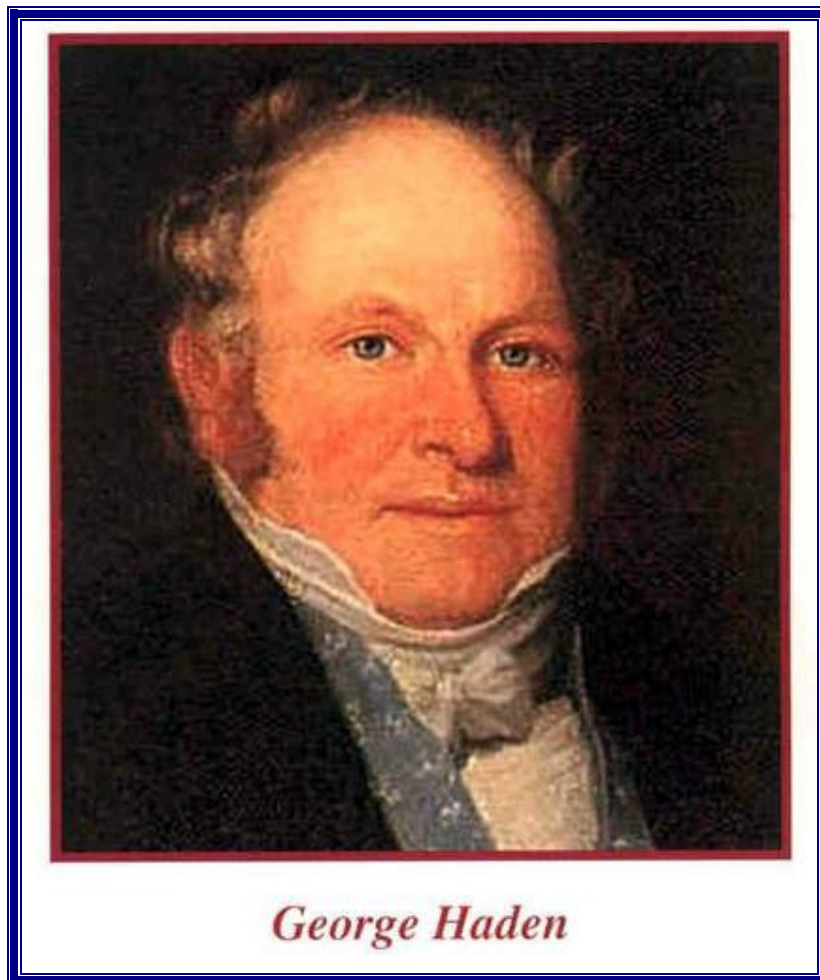
TROWBRIDGE

LONDON, MANCHESTER  
AND  
BIRMINGHAM.



# GEORGE HADEN

1788-1856



*A detailed biography is available under **Victorian Heating Engineers** elsewhere on this web site*

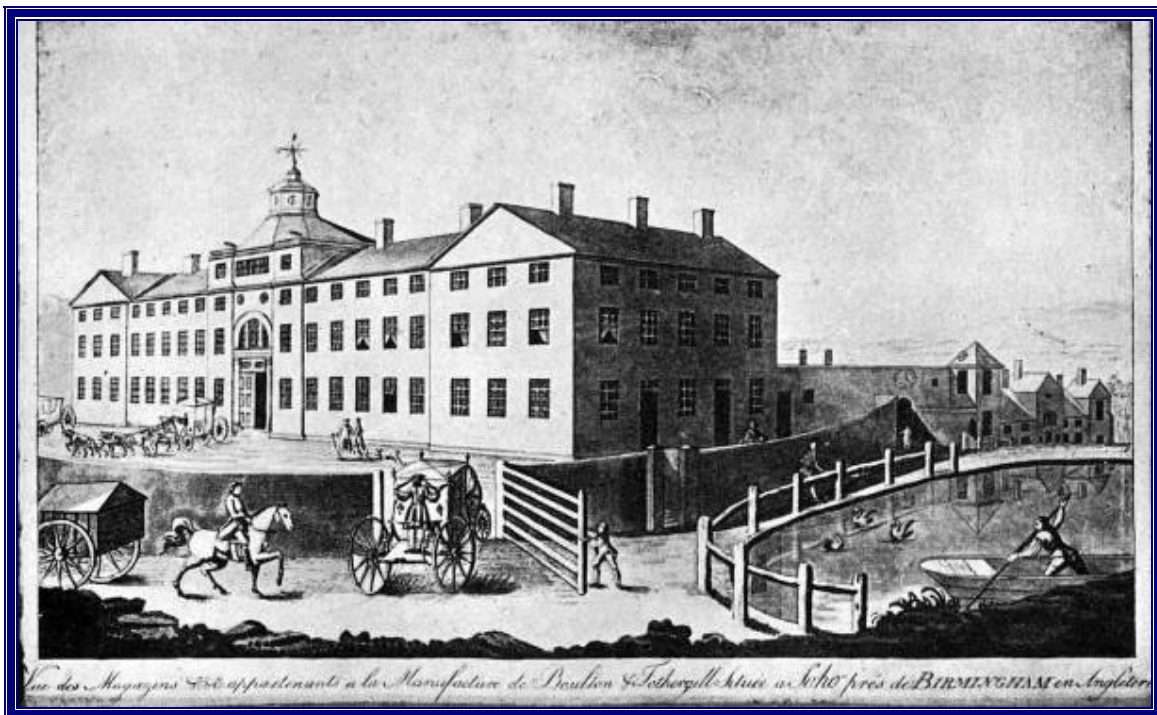


[223] George HADEN

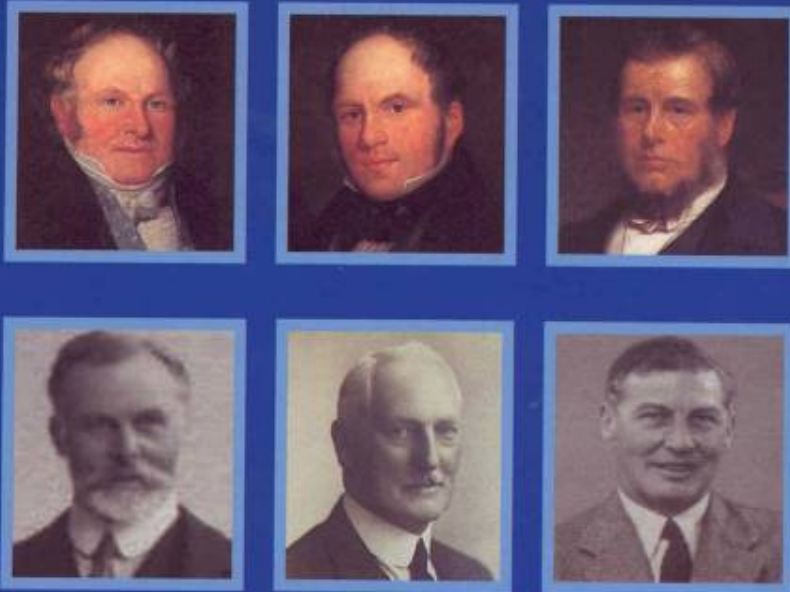
1788-1856

Son of George Haden, Sr., who worked for, and was held in high regard by, James Watt [13]. Apprenticed to the firm of Boulton & Watt. Trained on the steam engine side of the business. With his brother James [228], established G. & J. Haden in Trowbridge (1816) as an agent of Boulton & Watt to erect steam engines for West Country cloth mills. George was regarded as somewhat pious but the more dynamic of the two brothers and probably the better business manager. A natural extension of their work was the installation of the associated steam piping systems and this may have awakened the brothers' interest in heating. The real impetus came from the warm air ventilating stove, which was developed and patented by George (BP 9259: 1842). He also became involved in providing boiler plant and heating for the huge growth in institutional buildings, particularly lunatic asylums and prisons. Haden worked with Jebb [204] on the heating and ventilating of Pentonville Prison. The success of the firm was also due to the installation of their patent stove in many hundreds of churches built in the mid-19th century. James Haden retired in 1855, the company becoming G.N. Haden & Son and continuing under the direction of George's son, George Nelson Haden (died 1892).

*(Mini-biography from "The Comfort Makers," Brian Roberts, ASHRAE, 2000)*



*Boulton & Watt's Soho Manufactory c.1781, Matthew Boulton, H W Dickinson, 1937  
(CIBSE Heritage Group Collection)*



*Hadens*  
*of*  
*Trowbridge*

*The family and the firm 1816-2004*

*"Hadens of Trowbridge," Frank Ferris, Brian Roberts & Paul Yunnie, Haden Young, 2004  
(CIBSE Heritage Group Collection)*

## *The Boulton & Watt connection*

Matthew Boulton was born in Birmingham in 1728. James Watt was born at Greenock on the Clyde in 1736. Boulton entered his father's flourishing business and took it over after his father's death in 1759. Two years later he found new premises at Soho, Birmingham, eventually rebuilding the original mill entirely so that by 1765 it had become the Soho Manufactory employing some one thousand people in what was then the most famous factory in the world. About this time, in 1763, Watt was asked to repair a Newcomen steam engine and recognised that its efficiency could be greatly improved. He obtained financial backing from Dr Roebuck, a friend of Boulton, obtaining a patent in 1768, the same year as he first met Boulton who recognised the potential of Watt's improved steam engine. But Roebuck held a two-thirds share of the patent and Boulton was unable to agree the terms of a licence to manufacture with him. However, when Roebuck became bankrupt, Boulton was able to secure the patent and get it extended to the end of the century. Boulton & Watt went into partnership in 1774. The rest is legend. Boulton died in 1809, Watt in 1819. Their sons, Matthew Robinson Boulton and James Watt Jr, carried on the business. The manufactory was closed on the latter's death in 1848, the steam engine business continuing until 1896. Soho House survives as a museum, which is open to the public. The Soho Foundry was bought by the scale-makers W & T Avery.

George Haden Senior was born in Birmingham in 1756. He was known to be working for Boulton & Watt in 1781 and records show he was employed in the copying-press workshops in 1792 and was still there in 1795. He was the father of John, George and James, all of whom worked for the Engine Company. On 26 February 1810 he was paid six guineas as a present and a further half guinea was given as a present to his son James. On 14 August 1822 M R Boulton wrote to Watt Jr, "Poor old George Haden was interred yesterday. His dissolution was rapid." His son, George Haden, worked as an engine erector from 1809; James Haden was described as an engine erector/engineer. George went to Trowbridge for the firm in 1814 and so liked it there he stayed. He and James started their own business of G & J Haden in Trowbridge in 1816. John Haden was first an engine erector and later Superintendent of the Soho engine yard, signing 5-year agreements in 1797, 1803, 1808, 1813, and 1818. The records show he put up heating apparatus for Josiah Wedgwood & Byerley in 1808. But by 1823, M R Boulton was becoming increasingly dissatisfied with John's performance and it was discovered he was both ill and seriously in debt. His brothers George and James came to Soho in 1824 and arranged a settlement of John's affairs and took him into their business at Trowbridge. The firm of G & J Haden continued their association with Boulton & Watt until 1850.

*(Text from "Hadens of Trowbridge")*



**George HADEN Jr.** Boulton Watt & Co. engine erector. Son of George Haden Sr. George made a 5 year agreement on 16 Aug. 1809. [B&W, Memoranda of Agreements etc.]

'Mr. Pearson has taken a house in Caroline Street, Birmingham, and Mr. George Haden will remove forthwith, pro tem., to House late Busch.' [MBP W. Cheshire to M. R. Boulton, 29 June 1809.] (Or perhaps this refers to George Haden Sr.)

George's first job according to the list of engine erectors beginning in Jan. 1808 was circa Dec. 1809, for Birley & Hornby in Manchester. [B&W Box 48/1] He appeared on the lists for Jan. 1811, Jan. 1814 which gave his wages as "30/- 40/- per week" and Jan.

1816, which gave the same sum. [B&W Box 48/1] The "Statement of Mens Wages Under Agreement 1814—1822" [B&W Box 48/1] gave his wages as 30/- from 1814 to 1818 and 40/- when out.

He and his brothers left Boulton Watt & Co. and went into business together in Trowbridge in Wiltshire, with a particular interest in heating apparatus. George and James left first, and were followed by John in 1825. They appear to have acted for Boulton Watt & Co. as agents or subcontractors, for example see James Watt Jr. to Boulton Watt & Co., 28 May 1826 [B&W Box 33/26], re. George and James' losses in connection with work for Neale's. Also on 7 Mar. 1827 – "George Haden has called here to ask if he might be allowed to put up an engine purchased by Heathcote & Co. from Mr. Horton [?] of Stourbridge, which I have declined agreeing to." [B&W Box 33/27]

On 10 Feb. 1830 Creighton wrote to Brown "Mr. Hardwick should by all means apply to G. & J. Haden Trowbridge, who have done much in heating about London, and with great satisfaction. BW&Co. have several years ago ceased to prepare stoves, and in their favour." [B&W Box 54/64] For an advertisement and testimonials for the Haden's heating apparatus, see B&W, Portfolio 5/1334z.

*(Notes from References to George Haden in the Boulton & Watt Archive, Birmingham)*

George Haden was born at Handsworth, near Birmingham, on 23<sup>rd</sup> July 1788. He received his education locally and at an early age worked in several of the manufactories in that neighbourhood. He developed an interest in engineering and in 1804, on his 16<sup>th</sup> birthday, secured a 5-year apprenticeship with Boulton & Watt at their Soho Works. Mr Brunton, the Manager of the engine-works, recalled that if he wanted any little matter schemed and fitted up, young Haden was generally employed upon it, for he never hesitated to work all night, and would not leave until it was completed, frequently working during three nights in a week. On completion of his apprenticeship he was employed by the firm, first at Manchester, because he was "the young man that was never tired" and then at Leeds where he erected the first gas-works to be established there. Next, he went to Glasgow for five years, where he erected steam engines for the Cranston Hill Waterworks, and installed the first pair of engines, that worked together at right angles, on board the River Clyde steamboat "Princess Charlotte." He erected many engines in Glasgow, Edinburgh and elsewhere in Scotland. It was said that he was so indefatigable and industrious that James Watt at one time doubted whether he could have been occupied so many hours as were stated. However, after examining the books, and seeing what was done each day and night, Mr Watt returned the books, paid the overtime and gave George a present to show his appreciation. One incident serves to show the active and persevering character of the man. On being sent to repair an engine, 15 miles from Glasgow, he rode over on horseback in a storm of sleet and snow. Upon removing the piston he found a leak in the bottom of the giant cylinder. As the cylinder was still too hot to stand in, he was suspended head downwards for twenty minutes, repaired the leak, started the engine, and rode back immediately to Glasgow. Returning from Scotland in 1814, he settled in Trowbridge, having been appointed by Boulton & Watt as their agent in the West of England, including the counties of Gloucestershire, Wiltshire and Somersetshire. He was so taken with the town that he stayed, and in 1816 set up the firm of G & J Haden, in partnership with his brother James who was paid £2 per week. The agency lasted for 34 years, during which time the Company erected a great number of steam engines for the cloth-manufactories. Also in 1816, he married Ann Nelson from Handsworth. In 1817 their eldest son George Nelson was born. Tragically, Ann died on 6<sup>th</sup> August 1819, shortly after the birth of their second son, Benjamin. She was only 29 years old. Benjamin died several days later.

A natural development of the engine work was the installation of steam systems, both for process work and heating in the mills. The heating stove stove business seems to have been initiated by James and thereafter taken up enthusiastically by both brothers. George became a member of the Institution of Civil Engineers in 1834. In 1844, he married Christianna Hicks. Letters written by him reveal a somewhat pious nature, but he was unquestionably the more dynamic of the two brothers and seemingly by far the better business manager. Christianna died 20<sup>th</sup> July 1854 aged 70 years. When George Haden died on 29<sup>th</sup> October 1856, the firm was predominantly engaged in heating work. His obituary read, "In the decease of Mr Haden, science has lost an able engineer, society a useful member, and the poor a generous and sympathising friend."

*(Text from "Hadens of Trowbridge")*

Three extracts from a letter from George Haden to his father, written from Glasgow; he reports that his clients 'scruple to pay the freight' on the boilers

Honoured Father

Andersons<sup>rs</sup> Glasgow April 12<sup>th</sup> 1824

In the enjoyment of perfect Health I now embrace the opportunity of writing a few lines to you I hope that with the Blessing of God we will find you and My Sister and Brother the happy partakers of the same Blessing Oh may we constantly thank our God for the Blessing He is so constantly bestowing upon

But the Boilers are not come from Liverpool yet for they scruple to pay the freight and the agent won't send them Mr Nutton has been very kind to Me in this business But I should have been better without him for My Spirits have never failed yet though I have been much troubled in mind and have been obliged to speak before a many Gentlemen ~ ~ ~

For I can well believe there is not much comfort abroad for I think the World is turning upside down, Give My respects to My shop mates and to all Friends who should make any Enquiry after Me

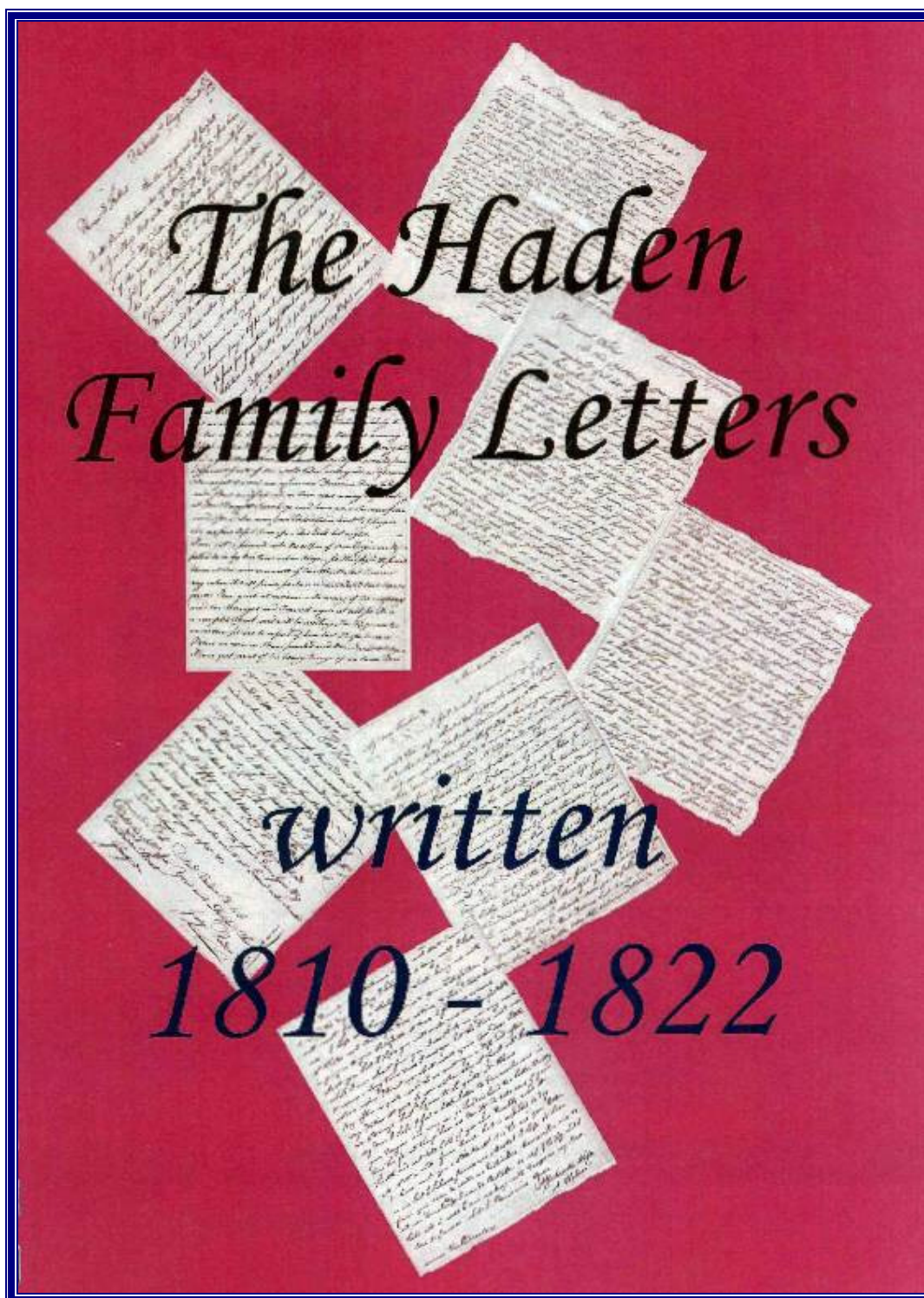
Direct to

Cruston Mill And Behove Me to be  
Water Comp<sup>rs</sup> office Yours ever Dutifull Son  
Ruthevan Street  
Glasgow

George Haden

Please write soon

(From "Haden 150 Years," 1966: CIBSE Heritage Group Collection)



*This booklet of letters transcribed, compiled and edited by Frank J Ferris,  
as a private record for Haden family descendants, 2006  
(CIBSE Heritage Group Collection)*

From the Rev. GEORGE MONILAWS, Manse of Peebles.

Peebles Manse, 9th Nov. 1853.

Dear Sir,—I have great pleasure in stating that the Stove which was erected by you in the Parsh Church of Peebles, about six years ago, has given the most entire satisfaction.—I remain, dear Sir, yours truly,

GEORGE H. MONILAWS.

To George Haden, Esq.

XLV.

From J. C. COLQUHOUN, M.P., Killermont.

Chartwell, 14th Nov. 1853.

Mr Haden put up his Apparatus, many years ago, to warm my house in Scotland,—which was large, and the passages long.—I found it perfectly effectual to produce and keep up a steady moderate heat. It has been of the greatest use in drying the house, and regulating its temperature.

J. COLQUHOUN.

( *Written on the Envelope.* )

P.S.—I have much pleasure in writing this Testimonial.

XLVI.

From the Rev. JOHN SMITH, Aberlady.

Aberlady Manse, 15th Nov. 1853.

I hereby certify that Mr George Haden, Engineer, erected his Heating Apparatus in the Parish Church here, a few years ago, and that the result has been most satisfactory.

JOHN SMITH, *Minister.*

FROM ALEX. M'GREGOR, Esq., Architect.

Edinburgh, 15th Nov. 1853.

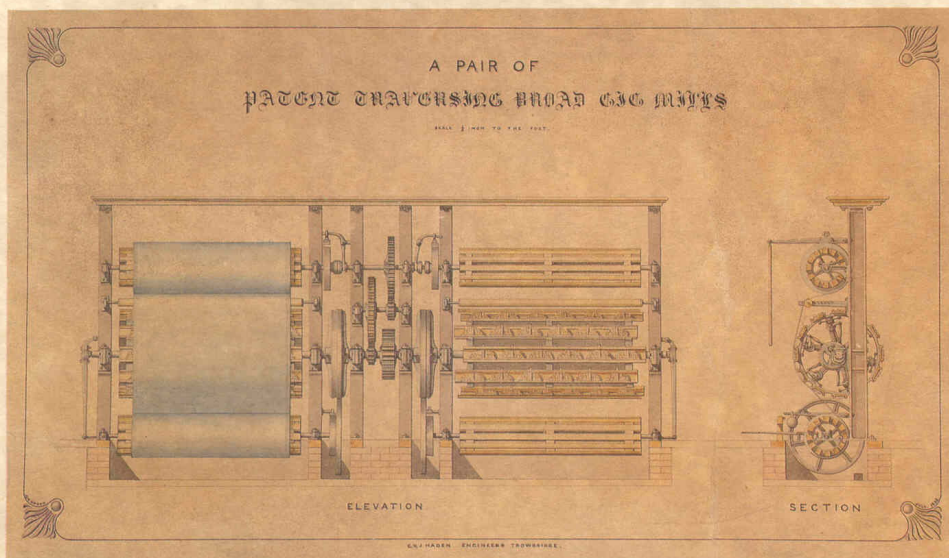
Dear Sir,—It is with much pleasure that I comply with your request to contribute my humble testimony to your abilities as an Engineer, especially in that department which embraces the warming and ventilating of buildings; and which the increasing requirements of the age, and the investigations of scientific men, have now elevated to the rank of almost a distinct science. The great attention which you have more immediately devoted to this branch of your art, combined with the peculiar advantages you had enjoyed in England, under the training of your uncles, the worthy pupils of Watt and Bolton, has been crowned with complete success; the best proof of which, are the numerous buildings, both public and private, that have been warmed and ventilated under your personal direction or superintendence.

In saying thus much, I have only given expression to the hackneyed common-places of Testimonials; but it is more creditable to you, and should weigh more with those who may read this, when I state that I have known you intimately for upwards of twenty years, and that, although in the course of my own profession as an Architect I have had few occasions of availing myself of your skill and experience, I have had, during a long term of service in the capacity of one of the principal assistants in the office of Messrs Burns and Bryce, the most favourable opportunities of seeing your talents and capabilities called into requisition, with success, under every variety of circumstances.—I am, dear Sir, yours faithfully;

ALEX. M'GREGOR, *Architect.*

# Haden

## A SHORT HISTORY OF THE COMPANY 1816-1991



*Haden booklet celebrating 175 Years (CIBSE Heritage Group Collection)*

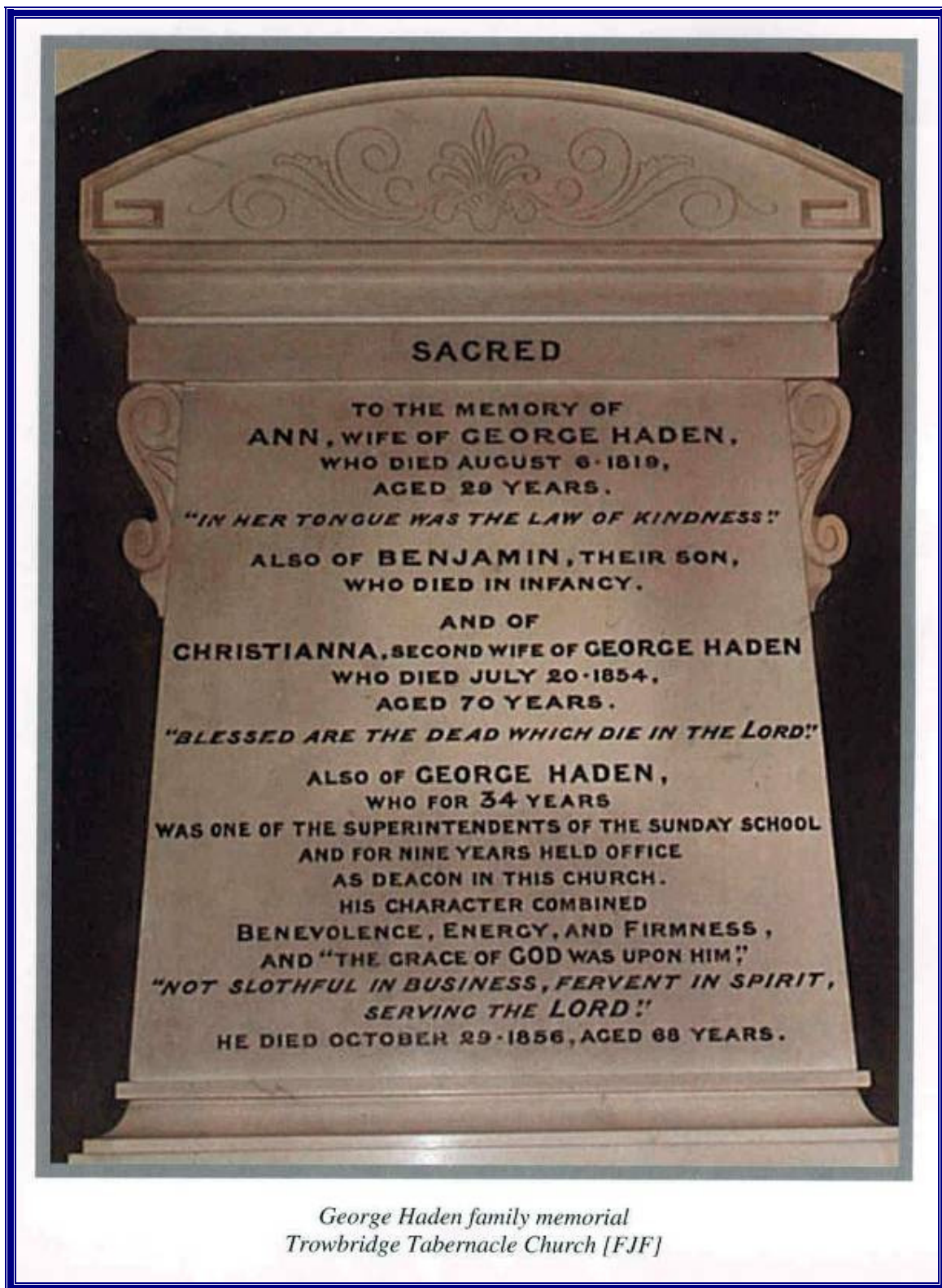


*Memorial stained glass window Trowbridge Tabernacle Church [FJF]*

TO GEORGE HADEN-DIED OCT 29 1856  
BY HIS SON-GEORGE NELSON HADEN

*(From "Hadens of Trowbridge")*





*(From "Hadens of Trowbridge")*

# FOOTNOTE

## HADEN

**George Nelson Haden & Son**, # Trowbridge. Founded 1816 as G & J Haden. One of the employees of the famous engineering firm of Boulton & Watt was George Haden Senior. His two sons, George and James, served apprenticeships with the firm, George on the steam engineer side, while James appears to have had a more general training. George set up in business in Trowbridge as an agent for the supply and erection of Boulton & Watt steam engines in the West of England. He was joined by James, who was later taken into partnership. Being involved with steam engines, water wheels and power transmission systems for the cloth making industry, it was a natural extension of their business to become involved with process steam installations. Later, following discussions between Matthew Boulton Jr and James Haden, the brothers became involved in the manufacture and installation of heating stoves. James travelled the country and built up an impressive list of titled customers. By 1825, he was doing work for schools, churches, reading rooms, museums and various institutions. In 1826, a warm air stove installation was carried out for His Majesty's apartments at Windsor Castle. To customers whose work was delayed, James' letter of apology always included the explanation "But I have been much occupied fixing stoves for His Majesty at Windsor." During the 1830s & 40s "there was hardly a lunatic asylum or prison without a Haden installation." The best known of these is the Haden warming and ventilation system for Major Jebb in 1844 at Pentonville Prison {BSER,205}. George

*(Entry from CIBSE Heritage Group Records:  
Items marked TB indicate references from "The Builder,"  
giving year and page numbers over the period 1843-1883)*

Nelson Haden (son of George) came into the business and for prisons he devised a water pumping system for the boilers (to be operated by the prisoners), a hard-labour crank and a treadmill. Early Haden projects include the Middlesex House of Detention, Islington [TB,1846/282-3]; Tortworth Court, Gloucestershire [TB,1853/66-7]; Wellington College, Sandhurst [TB,1856/86-7]; Grammar School of St Olave's & St John's, Southwark [TB,1856/118-9]; St Peter's Parish Church Schools, Leeds [TB,1856/662-3]; Bristol General Hospital [TB,1858/262-3] and the Leeds & Yorkshire Assurance Co, Leeds [TB,1858/467]. By now, the firm was growing rapidly. Work during the 1860s includes: Central Hall (Sessions Court), Clerkenwell Green, Middlesex [TB,1860/313]; the Herbert Memorial Church, Bemberton, Wilts [TB,1861/266]; the Church of St James's the Less, Westminster [TB,1862/187]; the National Provincial Bank of England in Bristol [TB,1864/583]; the New Westminster Chapel [TB,1864/722-3]; Malvern Proprietary College [TB,1865/47]; Manchester Assize Courts [TB,1865/136-7]; St John's Church, Middlesbrough [TB,1865/873-3]; St David's Church, Neath [TB,1868/430-1]; various New Congregational Churches [TB,1869/46]; the Royal Academy, Burlington House in Piccadilly [TB,1869/106]; the Guthrie Memorial Chapel, Clifton [TB,1869/161,166-7]; a New Bank, Silver St, Bury [TB,1869/447]; Birmingham Town & District Bank [TB<1869/547], and Claremont (Country House) near Denbigh [TB,1869/807]. Surprisingly, the biggest competitor of Haden from this period onwards appears to have been **Hipson**, who took over the National Provincial Bank work and beat Haden in competition for prestigious projects like the Natural History Museum [DVH]. But Haden's progress continued unabated in the 1870s and early 80s: New Hall of the Inner Temple, London [TB,1870/28-9]; New Assize Courts, Durham [TB,1870/28-9]; Berkshire, Reading & Newbury Lunatic Asylum [TB,1870/267]; Bristol offices of the Liverpool & London Assurance Co [TB,1870/447]; Bayham Abbey, Sussex [TB,1871/986-7]; Congregational Church & Schools, Thame [TB,1872/286]; Liverpool Seaman's Orphan Institution [TB,1872/406-7]; Town Hall, Bradford [TB,1872/904-7]; Manchester New City Police Courts [TB,1872/1026-7]; Bolton Town Hall [TB,1873/426]; Shabden (Country House) near Reigate [TB,1873/626-7]; Burlington House, again [TB,1873/987]; Southsea Congregational Church [TB,1874/929]; St Mary's, Newington (Southwark) [TB,1875/325]; New Board Schools, Walsall [TB,1875/1150]; Derby School of Art [TB,1877/585-7]; St Aloysius Church, Oxford [TB,1877/1175]; the New Municipal Buildings, Cardiff [TB,1878/727-9]; Hospital for Consumption, Brompton [TB,1879/1290,1294-5]; St Mark's Church, Milverton [TB,1880ii/526-8]; Bank Buildings at Leek [TB,1882ii/464-5]; Tabernacle Church, Hanley [TB,1883ii/12-13], and Sanatorium at Reedham, Norfolk [TB,1883ii/48]. At this time, Haden was particularly active in Bristol, Manchester and London, as well as operating out of Trowbridge. Generally described as Messrs Haden, or Haden & Son, on certain projects (such as Burlington House in 1873 and some churches) the attribution is "Mr Haden." This, coupled with references to other heating engineers on a number of projects, suggests that Haden may have also operated as a consultant, or as a supplier of equipment only. Other early important contracts included the British Museum (1857) and the St Pancras Station & Hotel (1876). By the mid-1920s Haden claimed to have heated "1100 churches and 20 cathedrals, 400 government and municipal buildings, 300 offices and banks, 200 hotels (etc), 200 theatres and museums, 200 stores, 300 hospitals, and nearly 1000 residences for the gentry." Acquisitions included **Troughton & Young** in 1969 and Carrier Engineering in 1970. In 1986, Haden became part of BICC. Founder member HVCA 1904. *Nelson Haden, 9th President IHVE 1906/7: W Nelson Haden, 8th President HVCA, 1919/20: C Ingham Haden, 12th President IHVE, 1910 & 3rd President HVCA, 1911/12: Henry H Bruce, 43rd President IHVE 1949: Hamish C Jamieson, 53rd President IHVE, 1959: W B R Cross, 58th President IHVE 1964: F A Pullinger, 65th President IHVE, 1972: G Nelson Haden,*

*19th President HVCA, 1941/42: Sir Alan Pullinger, 45th President HVCA, 1967/68: Derek Hyam, 54th President HVCA, 1976/77.*