

Haden family group c.1897 including William and Charles with their wives and children





Frank Ferris, Brian Roberts & Paul Yunnie



1942 Pamphlet with portrait of James Watt [Wiltshire Record Office 1325/220]



Matthew Boulton, James Watt and William Murdock (Father of Gas Lighting) Statue in Centenary Square, Birmingham

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, 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 1863, 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 and 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 George, James and John, 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. 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 1808, 1813, and 1818. The records show he put up heating apparatus for Josiah Wedgwood & Byerley in 1908. 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.



Memorial stained glass window Trowbridge Tabernacle Church [Photo Frank Ferris]

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



George Haden

George Haden was born at Handsworth, near Birmingham, on 23rd 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 at the age of 15 secured an 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, fifteen 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 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 employed his brother James at £2 per week and in 1816 he set up the firm of G & J Haden, in partnership with his brother James. The agency lasted for 34 years, during which time the Company erected a great number of steam engines for the clothmanufactories.

Also in 1816, he married Ann Nelson from Handsworth. In 1817 their eldest son George Nelson was born. Tragically, Ann died on 6th August 1819 aged 29 years and in the same year their second son Benjamin died in infancy. 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 20th July 1854 aged 70 years. When George Haden died on 29th 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."



Haden stove, date unknown Discovered being used as a post box Not far from Tyntesfield House, Wraxall, near Bristol [Photo Frank Ferris]



1826 G & J Haden stove No.94 installed at Erddig, near Wrexham House remodelled by Thomas Hopper



Dinton House (now Philipps House) Dinton Park, Wiltshire Architect Jeffry Wyatville



1830 G & J Haden installed heating stove and oven in Dinton House [Photos Frank Ferris]



1851 Tortworth Court, Gloucestershire Heating by G & J Haden. Architect S S Teulon



1858 British Museum Reading Room, London Hot water heating by G N Haden The architect was Sydney Smirke





COPY OF TESTIMONIALS

REFERRING PARTICULARLY TO THE

VENTILATION AND WARMING OF PRISONS.,

Extracts from 3rd and 4th Reports of the Inspectors of Prisons for the Home District, presented to Parliament in the years 1838, and 1839.

VENTILATION OF CELLS.

The objects to be attained under this head are,

1st. The supply of a sufficient quantity of fresh air and when necessary, of temperated air, into each cell without subjecting the occupier of it to any inconvenience from the draft.

2nd. The withdrawal of a like quantity of foul air.

3rd. That no additional facilities of communication between prisoners in adjoining Cells should be afforded by the means made use of.

In the consideration of the means by which these objects could be secured, we have had the advantage of the practical experience of those eminent Engineers, MESSRS. HADEN, of TROWBRIDGE, who on being placed in possession of our views and principles have devoted much time to the details of a system which has been adopted in order to secure the conditions proposed. Their Report on the subject is annexed in the Appendix of 3rd. Report, November, 1837.

(Signed)

WM. CRAWFORD WHITWORTH RUSSELL } Inspectors of Prisons. J. JEBB, Captain Royal Engineers.

Copy of a Letter from Major Jebb, Royal Engineers.

45, Parliament Street, 17th February, 1843.

MESSRS. G. AND J. HADEN,

Gentlemen,

I have now had sufficient experience

of the new hot water Apparatus you have designed and applied in warming three wings of Pentonville Prison, to be enabled to state to you that it fulfils all the conditions to which I directed your attention. An equable temperature of from 52° to 58° has been maintained in all the Cells under circumstances of great variation in external temperature. The consumption of fuel has not exceeded from 2 to $2\frac{1}{2}$ cwt of coal for sixty-six Cells, and the Ventilation or quantity of fresh air introduced into each Cell has been from 30 to 45 cubic feet per minute. The cost of maintaining this temperature and ventilation has been about $\frac{1}{2}d$. per cell for 24 hours.

You have now completed your contract with the Commissioners of Her Majesty's Woods and Forests, for works at Pentonville; and I only do you justice in stating that every thing you have undertaken has been executed in a manner which has proved your practical skill and ability and that all your engagements have been fulfilled with straight-forward integrity.

> I am, Gentlemen, Your Obedt. Servt. (Signed) J. JEBB.

1843 Pentonville Prison Reports and Letter [Wiltshire Record Office 1325/157]



1860 G N Haden stove, Size 2, Serial 1907 Holy Trinity Church, Ventnor, IoW Architect C E Giles of Taunton



George Haden family memorial Trowbridge Tabernacle Church



Memorial plaque on Trowbridge Bandstand [Photos Frank Ferris]



1865 Manchester Assize Courts Heating & ventilating with an early air washer system by G N Haden & Sons Architect Alfred Waterhouse [Wiltshire Record Office 1325/216]



1859 Wellington College, Sandhurst, by John Shaw



1865 Malvern Proprietory College by Charles F Hansom



1873 Shabden, near Reigate, by Edward M Barry



1869 Royal Academy, Burlington House, remodelled by Sydney Smirke



1872 Liverpool Seamen's Orphanage by Alfred Waterhouse



1879 Brompton Hospital for Consumption by Thomas Henry Wyatt



1874-82 The Law Courts (now the Royal Assize Courts) in the Strand G N Haden & Sons installed an air conditioning system with a chilled water air washer, steam-driven fans and a J & E Hall refrigerating machine with cooling a capacity of 2 tons of ice per hour. The architect was George Edmund Street [Wiltshire Record Office 1325/216]



Built 1866 Tyntesfield, Wraxall, near Bristol G N Haden & Sons installed a hot water heating system, probably in the 1880s Architect John Norton



1910 St Thomas' Church, Salisbury Specification of Engineers Work [Wiltshire Record Office]



William Nelson Haden

William Nelson Haden was born in Trowbridge in 1859, one of the three sons of George Nelson Haden, and was educated at Oakley House, Caversham. When George Nelson died in 1892 he left the Company to his sons. Of Joseph Poynton, the oldest, little is known and his younger brothers, William and Charles Ingham, managed the business. William was apprenticed to his father in 1875, became a Partner in 1892 and Chairman in 1919 serving until his retirement in 1933, a total of 58 years with the firm. He joined the Institution of Heating and Ventilating Engineers in 1902 and served as President in 1906 and 1907. He was Honorary Treasurer for 34 years from 1909 to 1943 and served on numerous committees. The William Nelson Haden Fund was instituted in 1943 to provide scholarships and assistance to students training in the industry. He was presented with the Gold Medal in 1945 in recognition of his valuable services rendered to the Institution. He served as President of the Association of Heating, Ventilating and Domestic Engineering Employers (now the HVCA) for 1919-20. He was also a Member of the Institution of Mechanical Engineers from 1904.

"Mr William" greatly enlarged the firm's activity in heating by air and by hot water circulation. He was an early advocate of centralised heating, hot water supplies and steam services, in very large and scattered institutions and one of the pioneers in the utilisation of exhaust steam from private generating plants in hospitals and asylums. Although the headquarters of the Company moved to London, he lived all his life in Wiltshire being appointed a Justice of the Peace for Wiltshire in 1897, then Chairman of the Trowbridge Bench from 1920 to 1936. From 1899 to 1908 he was a member of the Urban District Council and in 1928 was elected to the Wiltshire County Council.

An obituary by W W Nobbs (IHVE President in 1920) recalls the encouragement given to him by "Mr William" and commented, "I think a clue to his character, in spite of his commanding position in industry and civil affairs (was that) he was most approachable and always ready to give sound advice whenever, but not until, it was sought. However momentous or contentious the occasion I never heard him once raise him voice. On the contrary, the modest manner adopted in expressing his own opinion carried conviction, but behind that almost apologetic attitude was an inflexible will that would not be bent by extraneous considerations......He did not drink intoxicants himself, but as head of any table at which he was sitting he saw to it in his own unobtrusive way that whatever you fancied was on the table. One other clue to a character respected and admired by all who knew him, is that to the best of my knowledge, no one ever ventured to tell him a vulgar story." He died in London on 28 April 1946.



G N Haden & Sons' manhole cover, manufactured at the Trowbridge Foundry The Foundry was closed in 1910; Haden became a Limited Company in 1919 Discovered by John Barnes CIBSE Heritage Group, an ex-Haden employee [Photo Frank Ferris]



Charles Ingham Haden

C Ingham Haden was born in Trowbridge in 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.



Memorial tablet to Rosa Maria Ingham Haden d.1937 Trowbridge Tabernacle Cottages [Photo Frank Ferris]



1924 G N Haden & Sons Ltd Specification The Heating and Ventilation of Liverpool Cathedral Architect Sir Giles Gilbert Scott [Wiltshire Record Office 1325/171]



1912 Haden warm air stove, one of four, manufactured for St Paul's Cathedral [Wiltshire Record Office 1325/187]



1921 Drawing Of Haden Tubular Water Boiler [Wiltshire Record 1325/106]



Built 1903 Westminster Roman Catholic Cathedral Heating upgraded to oil firing by G N Haden & Sons Ltd in 1927 The campanile is 284 feet tall Architect John Francis Bentley



1916 Staff of G N Haden & Sons at Trowbridge [Wiltshire Record Office 1325/62]



1918 Haden Trowbridge factory workers engaged on munitions work William and Charles Haden are seated front row centre [Wiltshire Record Office 1325/135]



Built 1920 Repulse Bay Hotel, Hong Kong



1928 Peninsula Hotel, Hong Kong



1927 Manchester Ship Canal Company



1928 Haden oil-fired water tube boilers Bush House, Aldwych



1932 Shakespeare Memorial Theatre Stratford-on-Avon



1930 Gamages Oxford Street



1937 Queen's Hotel, Leeds



1939 Finsbury Health Centre



1927 Advertisement promoting oil firing Lists Haden branches including Brussels



George Nelson Haden OBE

Nelson Haden, the elder son of William Nelson Haden, was born in Trowbridge in 1900. He was educated at Mill Hill School and took his BSc at Manchester University. After experience in America with the American District Steam Company of Tonawanda, New York, and the Detroit Edison Steam Company on district heating systems, he joined G N Haden & Sons Ltd in 1923. He became a Director in 1924, Managing Director in 1935 and Chairman in 1938, a position he held until his retirement from the company in 1958.

He joined the Institution of Heating & Ventilating Engineers as an Associate Member in 1924, became a Member in 1925 and was elected to Council in 1932 and as President for 1938-39. He served on numerous committees and was considered one of the most outstanding members of the Institution, his services being recognised by the award of the Gold Medal in 1959. It was said that his contributions to Council discussions over a long period were particularly valuable for their wisdom and clarity of expression, serving as an inspiration to younger members. Nelson Haden was a member of the Council of the Association of Heating, Ventilating and Domestic Engineering Employers (now HVCA) from 1935, its President for 1941-42, and Chairman of the Labour and Negotiating Committee from its first meeting in 1939 with only short breaks until 1958. It was on this latter Committee that he made many outstanding contributions. He was also a Liveryman of the Worshipful Company of Plumbers. In 1948 he was awarded the OBE. He was a member of the Council of the Institution of Mechanical Engineers from 1947 to 1957 and served on a number of committees. Education, in the widest sense, was of particular interest to Nelson Haden and he was the IMechE nominee on the Board of Governors of the National College for Heating, Ventilating, Refrigeration and Fan Engineering at its inception. Later, the Nelson Haden Lecture Theatre at the National College was named in his memory. He was also very interested in research and was one of the early advocates and workers in the setting up of the Heating and Ventilating Research Association (now BSRIA).

He was a member of the commission appointed in 1947 by the Ministry of Fuel and Power to visit the USA to study district heating and a member of the Egerton Committee on the Heating and Ventilation of Dwellings. He was first a Governor and then Chairman of the Board of Bedales School and, for a time, he was a Governor of University College Hospital, until ill health forced him to resign. He was described as "A man of broad vision whose personal charm evoked the loyalty and love of those who served under him." It was said, "He built well on the foundations his predecessors had laid." When Nelson Haden died on 30 July 1960, at the age of 60 years, the last link to the family firm was severed.



1935 A cake for the inauguration The Hongkong & Shanghai Banking Corporation, New Head Office, Hong Kong

Air conditioned by G N Haden & Sons Ltd who provided ammonia refrigerating machines (410 hp) serving six air handling plants (229,000 cu.ft/min supply air), contract value being £75,000



1927 Haden Directors & Managers at Trowbridge [Wiltshire Record Office 1325/65]

Standing (l-r) A G Rebbeck C W Fletcher W T Clayton S S Jewsbury H Macdonald F H Wilson W Moffat M P Concannon J R Patterson C M Davis A G Bull Seated (l-r) D Glasgow G Nelson Haden F H Horton W Nelson Haden C Ingham Haden F Livesey Sat Down F Simpson L H Blanchard



1931 December 18th G N Haden & Sons Ltd Annual Staff Dinner at the Connaught Rooms, London W Nelson Haden in the Chair [Wiltshire Record Office 1325/67]



1937 Pier Approach Baths, Bournemouth G N Haden & Sons Ltd installed an off-peak electrical thermal storage system heating 40,000 gallons of water in four large insulated cylinders to 240 degF



1930 W Nelson Haden with Walter Yates



1932 Charles Ingham Haden with J W Cooling



1936 W Nelson Haden with R E Otter



1938 G Nelson Haden & Mrs Haden



1933 Three Past Presidents: Sam Naylor, E R Jones & W Nelson Haden



1936 W Nelson Haden (l), G Nelson & Mrs Haden (centre)



1938 W Nelson Haden, Mrs Roger Preston, Miss Buchanan, Mrs G Nelson Haden & Sam Fox





Leyland Motors Ltd, Ministry of Supply Factory, Lancashire Heating by HPHW working at 225 psig provided by four boilers with a total capacity of 184 million Btu/h and with waste heat reclaim from diesel generators and the rubbish incinerator [Architect Harry S Fairhurst & Sons]



1941 Queen Mary sees for herself the war effort at the Haden factory in Trowbridge, with G Nelson Haden (right) [Trowbridge Record Office 1325//141]



1941 G Nelson Haden with Queen Mary and Haden munitions workers at the Trowbridge factory [Trowbridge Record Office 1325/140]



1951 G N Haden & Sons Ltd, Directors & Managers Annual Conference The Burford Bridge Hotel, Oxon [Wiltshire Record Office 1325/69]

Back Row (l-r) R L Cox N Jackson M P Concannon E M K Mead M Franklin G Smith P Lane A Torrance G Allwood A Simms A C Beardow Seated E W Fox S S Jewsbury H Macdonald J R Patterson G Nelson Haden K A Collyer F A Pullinger W B R Cross H C Jamieson.



1960 Illuminated inscription recording the IHVE Gold Medals presented to Father and Son William Nelson Haden in 1945 and to George Nelson Haden in 1959 [Wiltshire Record Office 1325/210]



1962 Shell Centre, London. Then the largest air conditioned office block in Europe Chilled radiant panel ceilings (2700 TR refrigeration)



1962 E S & A Robinson, Bristol One of the first major UK office blocks to be air conditioned, 810-unit perimeter induction system (600 TR refrigeration)



1969 G N Haden & Sons Ltd merged with the old established electrical firm of Troughton & Young to become Haden Young



1970 Carrier Engineering Ltd, founded in London in 1921, known for its advanced air conditioning technology and its interests in paint finishing, acquired, leading to the formation of Haden Carrier



Hamish C Jamieson President IHVE 1959 Technical Director



W B R Cross President IHVE 1964 Director



Sir F Alan Pullinger OBE President IHVE 1972 Chairman



1979 Haden brochure Continuity Amid Change



Derek Gillingham President CIBSE 1990 Chief Executive Haden Building Services



1991 Haden 175 Years A Short History



1973 Sydney Opera House



1984 Lloyds of London



1997 Channel Tunnel Chiller Station, Folkestone



1998 British Library, Euston Road, London



Haden Young wins again

The Great Tradition Continues

On 23rd June 2003, at London's Grosvenor House, Haden Young won for an unprecedented third successive year the Major M & E Contractor of the Year Building Services Award. Paul Yunnie (pictured above left) makes the award, sponsored by Andrews Waterheaters, and congratulates David Beck, Managing Director of Haden Young on their success.

The Awards Judges were greatly impressed by Haden Young's strong financial performance and its analysis using KPIs (Key Performance Indicators) to examine the business and address weak spots. The company's achievement of ISO 14001 Certification and RoSPA Level 4 QSA grading in 2002, they said signified that Haden Young takes seriously its responsibilities for the welfare of the environment and their employees. In response David Beck said, "The huge effort put in by all to understand and meet our customers' needs has been rewarded ...and we'll continue to measure our performance and find ways to improve."

And that is just what Haden Young has been doing since George and James Haden started the company in Trowbridge in 1816.

