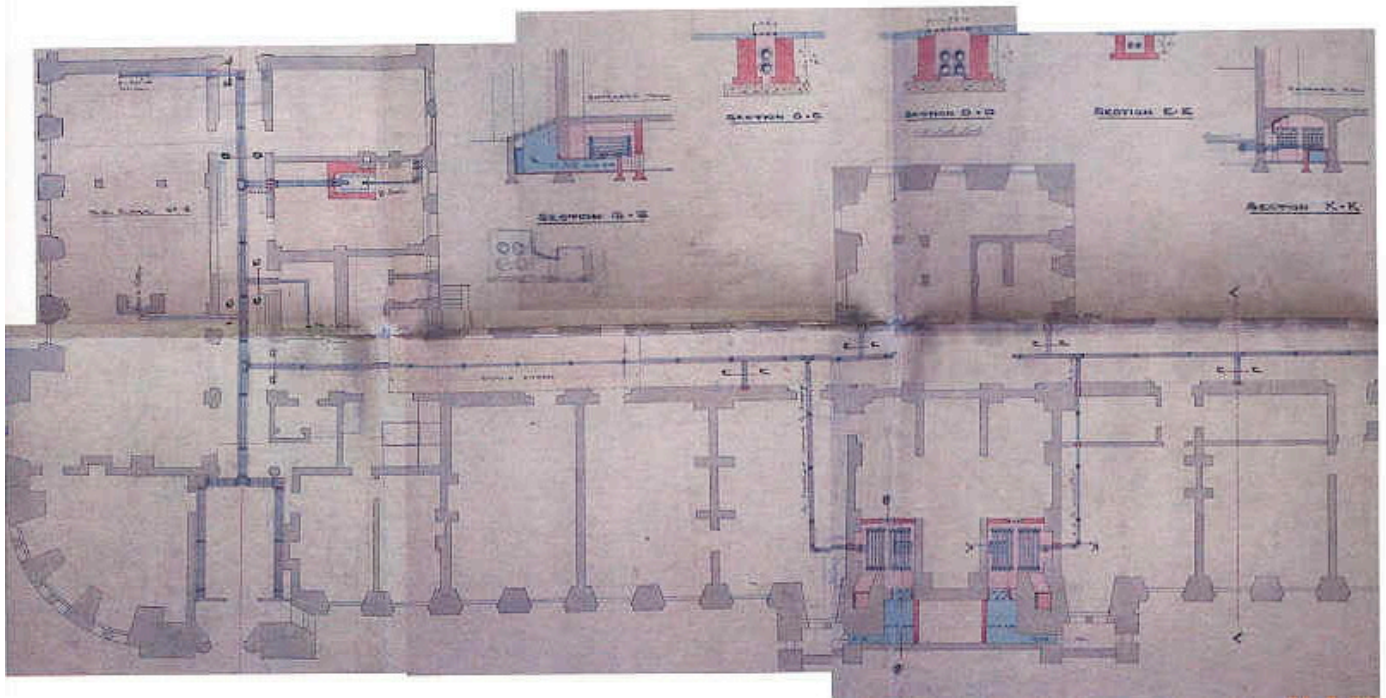
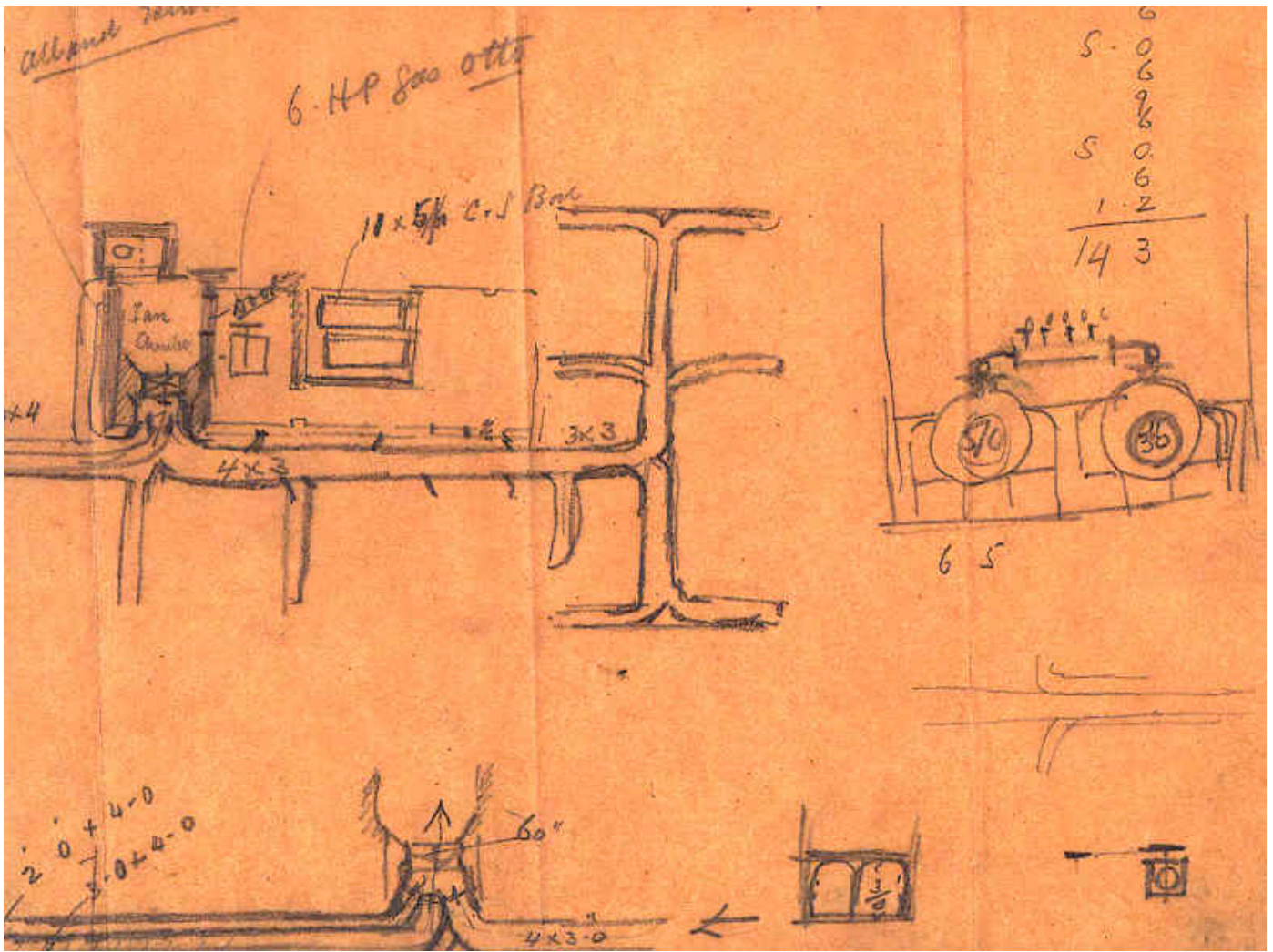


# HISTORIC BUILDING ENGINEERING SYSTEMS & EQUIPMENT

## Records and Documentation

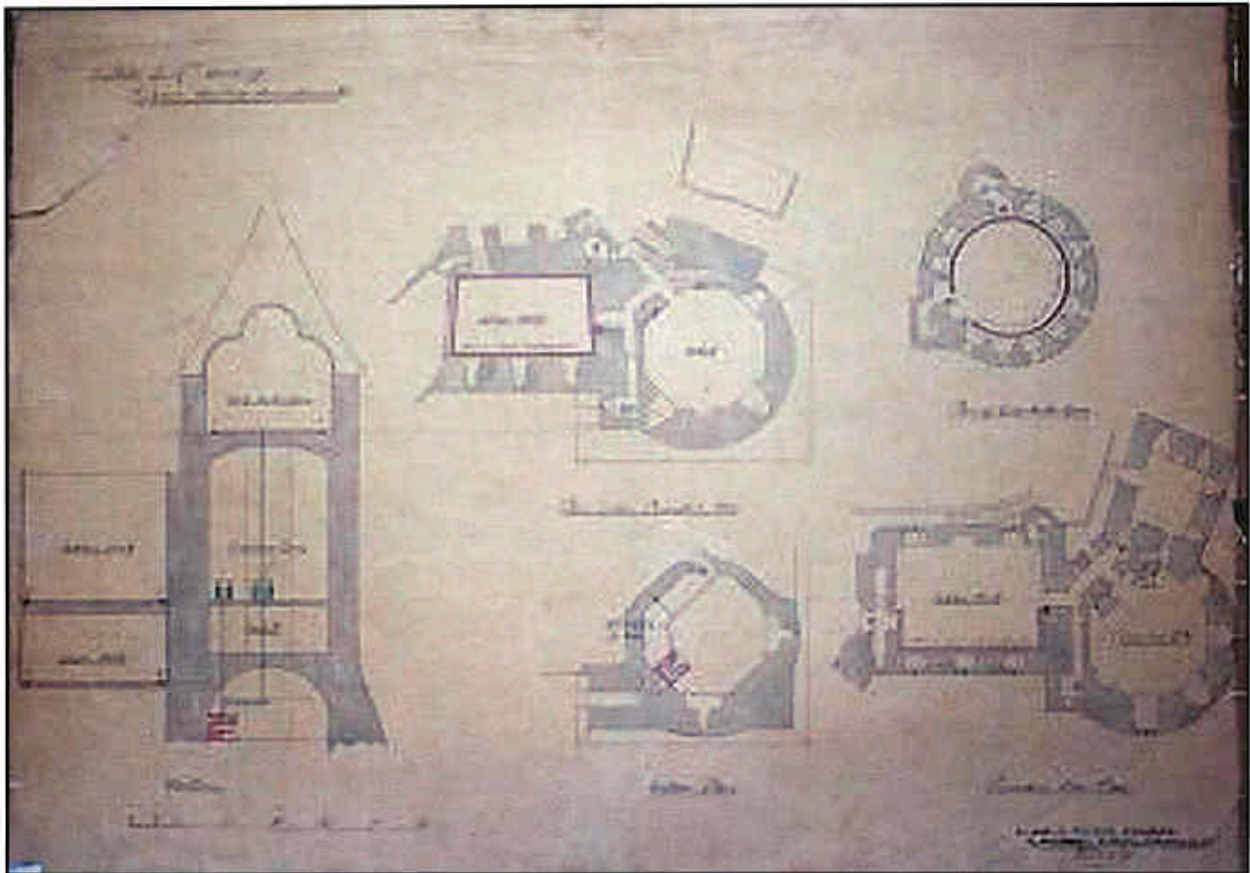




Sketch by W W Phipson for service dusts at Halifax Baths 1891

# HISTORIC BUILDING ENGINEERING SYSTEMS & EQUIPMENT

## Records and Documentation



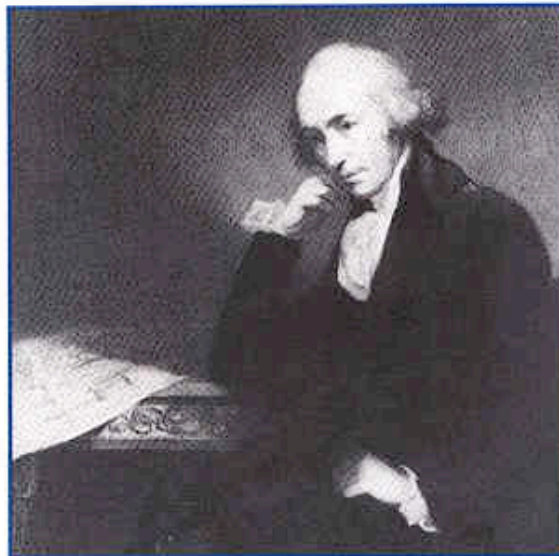
*Scheme drawing by W W Phipson for the heating at Castell Coch, near Cardiff, c.1880*

HISTORIC BUILDING ENGINEERING SYSTEMS & EQUIPMENT

## Records and Documentation

**Brian Roberts**

Chairman, CIBSE Heritage Group



ST. THOMAS' CHURCH  
SALISBURY

Specification  
of Engineers Work.

G. N. Haden  
and Son,

TROWBRIDGE

LONDON, MANCHESTER  
AND  
BIRMINGHAM.

*Specification of 1910 by G N Haden & Sons for the heating of St Thomas' Church, Salisbury [Wiltshire RO]*

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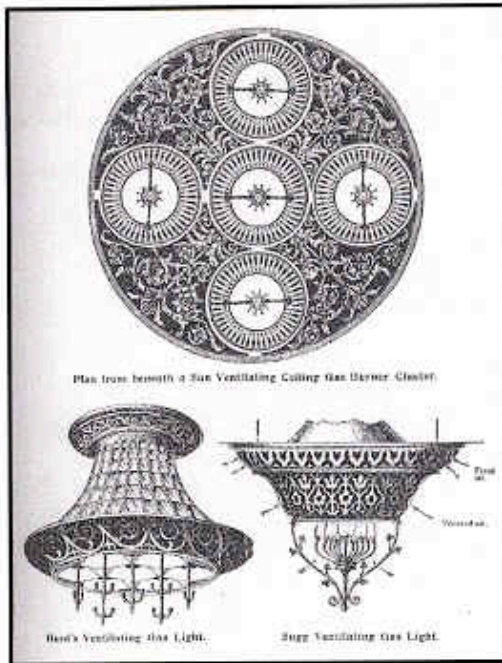
## Introduction

Building engineering services fall into two categories. Environmental services contribute directly to the comfort of the occupied space and are heating, ventilation, air conditioning (which includes refrigeration) and lighting. Utility services contribute to human well-being, health and safety, and an easier way of life. They include plumbing (domestic hot & cold water services, and drainage), electricity generation and distribution, sanitation, fire detection and fire fighting, controls, communications, lifts, escalators and moving platforms. In heritage terms there are further subdivisions. For example, lighting may cover illumination by oil, gas, acetylene and electricity. Specialist areas include street lighting, lighthouses, floodlighting and theatre lighting.

The investigation of historical building engineering services generally starts on site when the building itself is being demolished, altered or restored. A major problem is often identifying the importance, in heritage terms, of the sometimes incomplete services systems and equipment. One aim of this book is to raise awareness of the importance of historic services, understand what survives, assess its significance, and make informed decisions about what to do next. Options range from re-use, retention in-situ, to removal to a safer site or, regrettably in some circumstances, to thoroughly record and destroy.

The investigators may include the property owner or occupier, architect, builder, services consultant and contractor, local government officers (especially conservation officers), and English Heritage inspectors. None of these may have the necessary expertise to evaluate a particular building engineering services item. One solution is to seek advice from someone knowledgeable in this field, where such a person can be found. The other approach, often overlooked due to commercial and time constraints, is to search for all related records and documentation. Information may be available locally, regionally or at national level –in libraries, record offices or specialist collections.

This book gives examples of the type of records and documentation which may be available, the information it may contain and how it may assist in identifying the age, type, manufacturer and importance of building engineering service equipment and components.



*Ventilating Gas Lights, c.1880 [Lighting by Gas, Chandler, 1936, p.146]*

Records may span the complete life of a particular building, but those relating to its construction generally produce the most detailed information. Documentation on the building itself and the architect is more commonly found than papers relating to the services and the engineer. But research on the former often leads to details on the latter.

From the engineering services viewpoint, records and documentation may span from inception to handover, operation and maintenance. There are numerous steps in between –some commercial, some technical. The examples on the following pages cover securing the order, design and drawings, sending out enquiries, obtaining estimates, preparing specifications, calculating costs, going to tender, reporting to the client, through to commissioning & testing, and operation & maintenance.

Many of the documents shown in this book are taken from the Archives of the CIBSE Heritage Group and, in particular from the Phipson Collection.

Wilson Weatherley Phipson, MICE (1838-91) was a Victorian civil engineer who specialised in heating and ventilating. Born near Birmingham he spent his later childhood in Brussels and then became a pupil of Dr Van Hecke, a heating and ventilating engineer. Returning to London, Phipson established his own business in about 1862. He acted as a building services consultant (rare in those times), installer and entrepreneur. Some fifty of his works have been identified, including such notable buildings as the Royal Albert Hall, Natural History Museum, Glasgow University, the second Alexandra Palace and the Prudential Assurance offices in High Holborn. One of his major competitors was the firm of Haden (established in Trowbridge in 1816) and a comprehensive archive on their activities is held at the Wiltshire Record Office. These are just examples of what may be discovered by diligent research.



*Twyford Catalogue of Sanitary Specialities, 1889*