

Cardiff Castle.

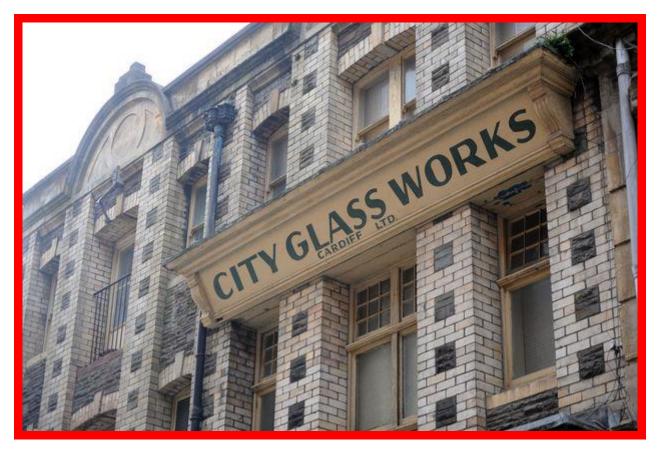
# HISTORIC ARCHITECTURE AND BUILDING SERVICES

# WALES

# FRANK FERRIS BRIAN ROBERTS



Cardiff Pier Head Building and Tower.



Cardiff Historic Glass Works.

# WALES

### **HERITAGE VISITS**

Cardiff Castle, Cardiff Town Hall, Tredegar House, Bethania Chapel Maesteg, Hen Dy Cwrdd Chapel Aberdare, Cardiff Old Library, Erddig House.

## WALES

In page order: Cardiff Castle, Cardiff Pier Head Building & Tower, Cardiff Glass Works.

CASTLES: Powis, Caernarfon, Aberystwyth, Conwy, Harlech, Llandudno, Swansea, Tenby, Castell Coch.

Pontcysyllte Aqueduct, Pontypool Colliery, Llandaff Cathedral.

CARDIFF in page order.

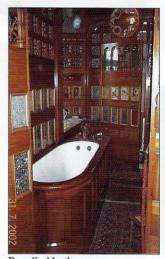
St. John's Church, Dumfries Place, Magnet House, Dumfries Drill Hall, St. Mary Street, High Street, Queen Street, Coronet Cinema, Whitchurch Road, Pumping Station, Tall Vale Railway Office, St. David's Hospital, Prison, Salvation Army Hostel, Cory Hall Station, Police Station, Bristol Hotel, Jamaica Street, Royal Hotel.

Little Moreton Hall.





Decorative wash hand basin



Panelled bathroom



Blue & white WC pan



Box radiator & cabinet

#### CARDIFF CASTLE





Heater enclosure

#### Cardiff Castle, Glamorganshire, restored 1866-86

The second Marquess of Bute, realising that the growing coal and iron industry of South Wales needed an outlet, undertook the financing of the construction of docks at Cardiff. After his death in 1848, the firm of marine engineers, Walker, Burges & Cooper took over the completion of the East Bute Docks. This brought the third Marquess into contact with William Burges, the architect son of Alfred Burges, the marine engineer. William Burges was interested in medieval design and Gothic architecture and Lord Bute was to become the principal support of Burges's practice. In 1865 Burges suggested to Lord Bute that he restore Cardiff Castle. Work started with the clock tower and continued with the main castle buildings and apartments, all lavishly decorated to Burges's incredible Gothic designs. A link between the Victorian engineer, Wilson Weatherley Phipson, and the heating installation has been established. The Castle still has a remarkable collection of decorated Victorian sanitary ware.

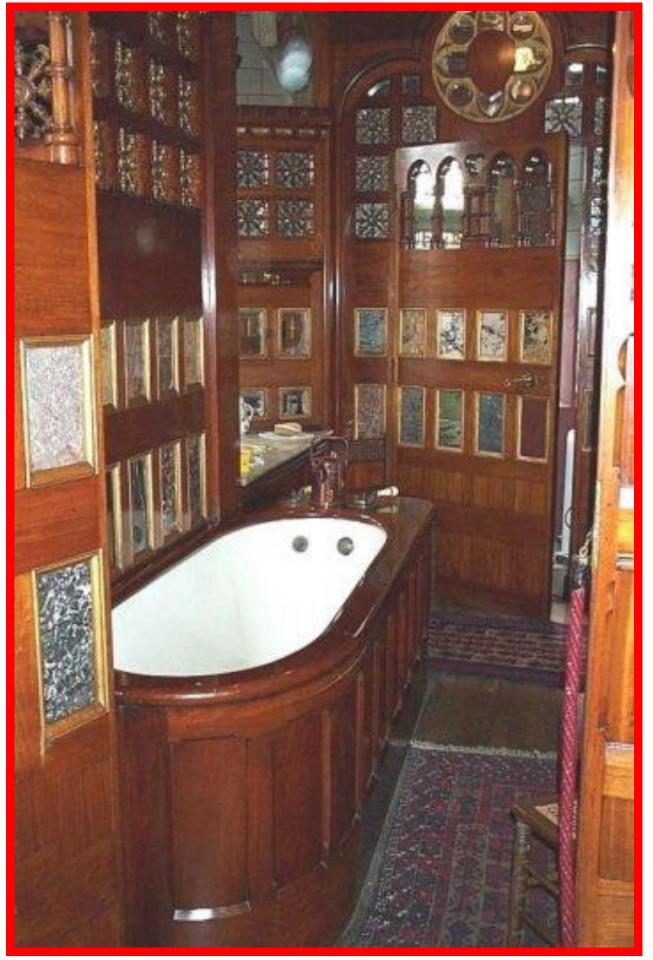
# **CARDIFF CASTLE**



## **GEORGE JENNINGS WATER CLOSET**



# **CARDIFF CASTLE PANELLED BATH**





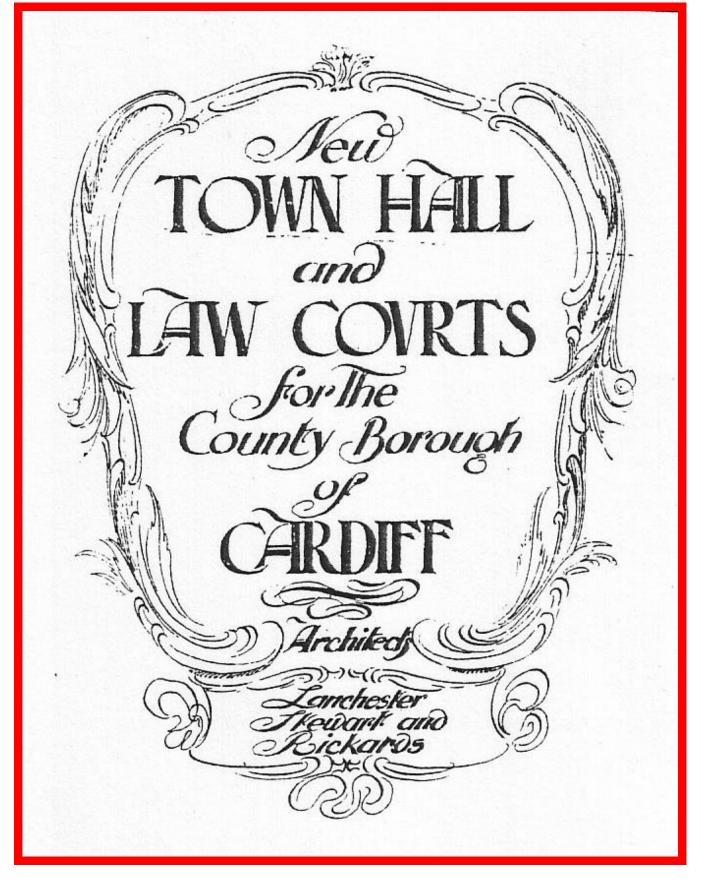


# **CARDIFF CASTLE WASH HAND BASIN**





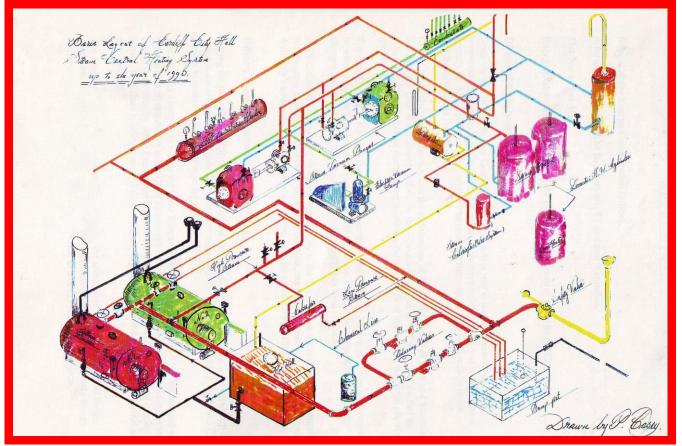
# **CARDIFF TOWN HALL**



# **CARDIFF TOWN HALL & LAW COURTS**



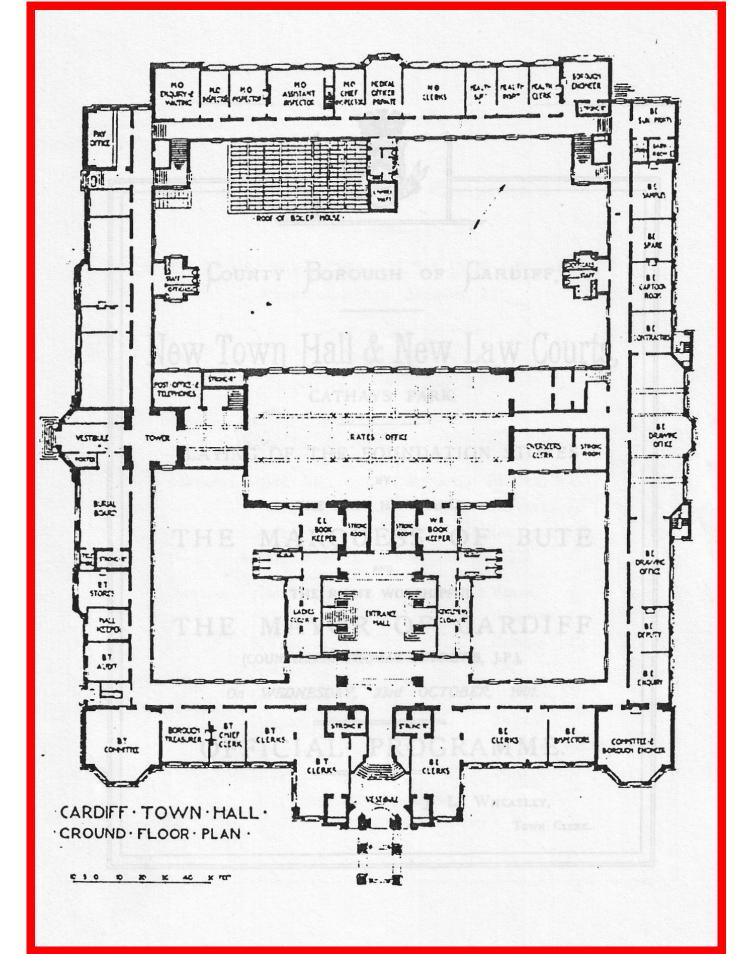
# **STEAM CENTRAL HEATING DIAGRAM**



# **TOWN HALL TOWER**



# **TOWN HALL GROUND FLOOR PLAN**



# **ASHWELL & NESBIT NAMEPLATES** 1904





# **STEAM VACUUM PUMP**



# **STEAM VACUUM PUMP**



# **ASHWELL & NESBIT INSTRUMENT BOARD**



## A Visit to Tredegar House in Newport, Wales



Tredegar House is considered one of the architectural wonders of Wales and one of the most significant late 17th-century houses in the British Isles. Situated within 90 acres of beautiful gardens and parkland this red brick house, now a National Trust property, was for more than 500 years the home to one of the greatest Welsh families, the Morgans, later the Lords Tredegar. The Heritage Group thanks Sam Johnson for organising the visit, Cardiff University for providing their minibus and driver, and Edith Blennerhassett and Arups Dublin for sponsoring lunch.



Taking the tour: Geoff Brundrett & Neil Sturrock (on the left)



Mike Barber (Hon. Secretary) & Frank Ferris (Webmaster)

# **Tredegar House**



The glittering Gilt Room



Outside and inside Tredegar House





Times Past: The days of domestic servants

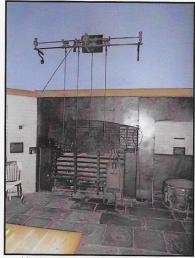
# Selection of the Building Engineering Services



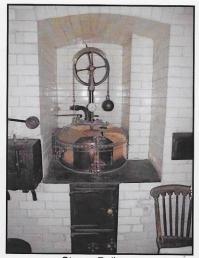
Bath and Drench Shower



One of several ornate fireplaces



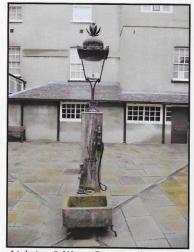
Kitchen and wall mounted spit



Steam Boiler



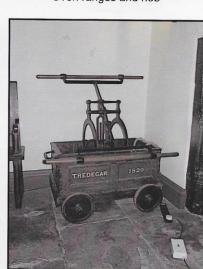
Oven ranges and hob



Lighting & Water Pump in Courtyard



Telephone Box for incoming calls



Original hand operated fire pump

This Newsletter is sponsored by



## TREDEGAR HOUSE FIRE FIGHTING HAND PUMP



### Bethania Chapel, Maesteg, South Wales

Early 19<sup>th</sup> century Wales saw a period of rapid industrialisation. As the valleys became peppered with iron works and then coal mines followed by progressive urbanisation the Baptist community began to build their chapels. The first Maesteg Bethania Chapel was built in 1832, enlarged in 1859, and rebuilt in 1898. The present chapel was constructed in 1908 to the designs of the architect Sir William Beddoe Rees and said to seat up to 1001 people. The heating system, which dates from this time, was a Perkins medium pressure hot water system with a 4-circuit layout, with the heating pipe coils sited under the seating, and was in use until recently. The Perkins iron furnace appears to have replaced the original. After its closure, the Chapel was acquired in 2006 by the Welsh Religious Buildings Trust.



The Chapel and Sunday School in 1904



The Design for the 1908 Maesteg Bethania Chapel



The Chapel as it is today



Spacious interior of the galleried Chapel



The low-level MPHW Perkins pipework heating coils



Perkins iron furnace

### Hen Dy Cwrdd Chapel, Trecynon, Aberdare, South Wales

The Chapel was acquired by Addoldai Cymru (the Welsh Religious Buildings Trust) in 2005, an organisation which conserves some of the best examples of early Chapels in Wales. This particular Chapel was rebuilt in 1862 to the design of local architect Evan Griffiths, being a medium sized example, seating a congregation of about 300. The plain building facade reflects simple and strong Unitarian beliefs.



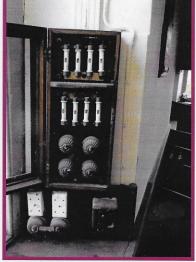
The Chapel today

The gallery and pews





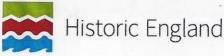
Examples of the flueless direct-fired gas radiators



DC electrical switchgear

The radiators which operated on town's gas from the local gas works, were manufactured by Fletcher Russell & Co Ltd of Warrington and probably date from the Edwardian period. In 1920, the gas lighting was replaced by a DC electrical system installed by J H Bosner of Aberdare. The original porcelain fuse carriers and jelly mould tumbler switches remain in their timber enclosure.

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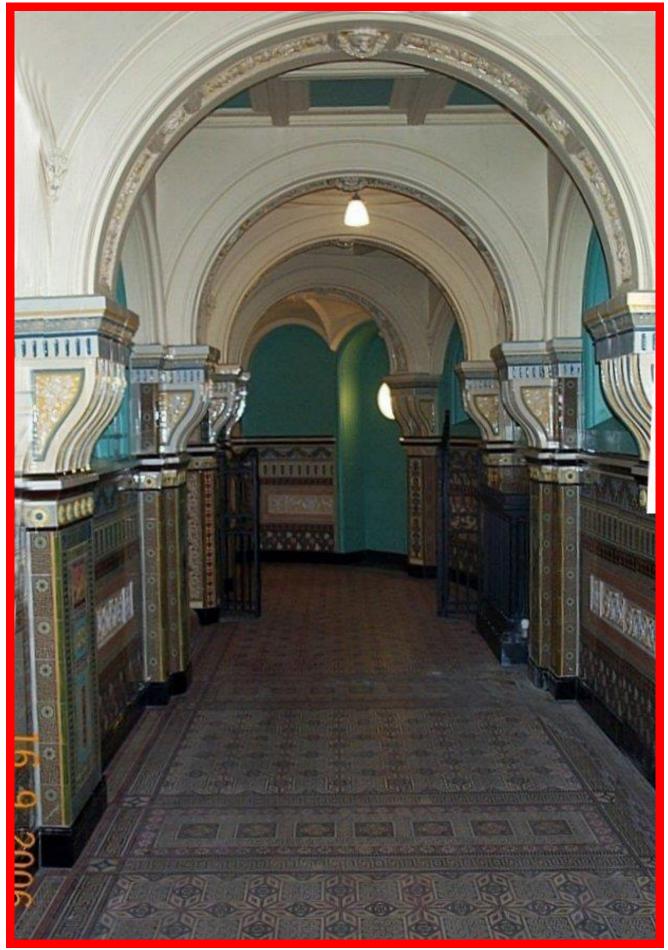


# **CARDIFF OLD LIBRARY**





# **CARDIFF OLD LIBRARY**



# **OLD LIBRARY DRINKING FOUNTAIN**



# **CARDIFF OLD LIBRARY CORNER RADIATOR**



# **CARDIFF OLD LIBRARY RADIATOR**



# **ERDDIG HOUSE**



# **POWIS CASTLE**



# **CAERNARFON CASTLE**



# **ABERYSTWYTH CASTLE**



# **CONWY CASTLE**



# HARLECH CASTLE



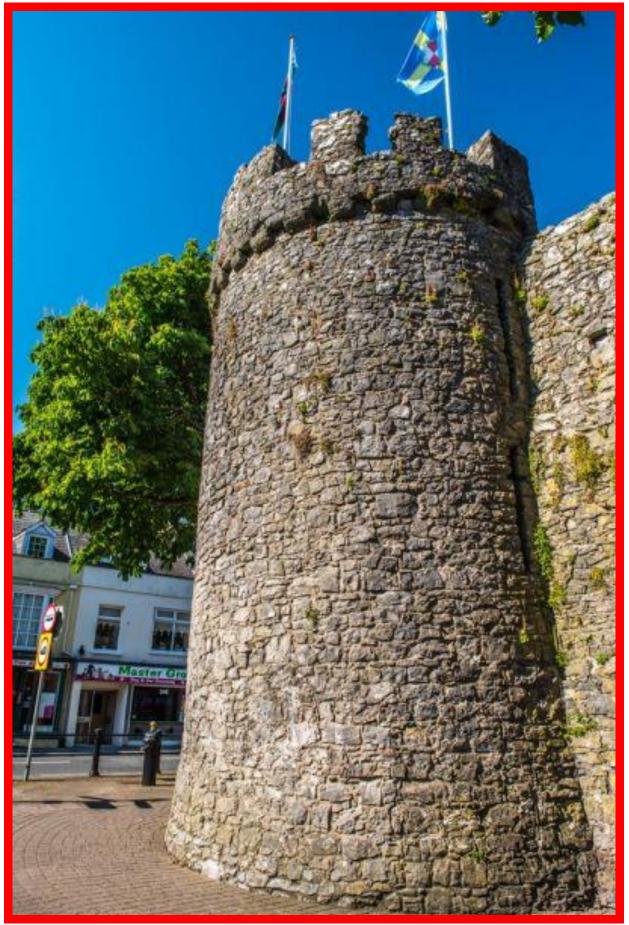
# **LLANDUDNO CASTLE**

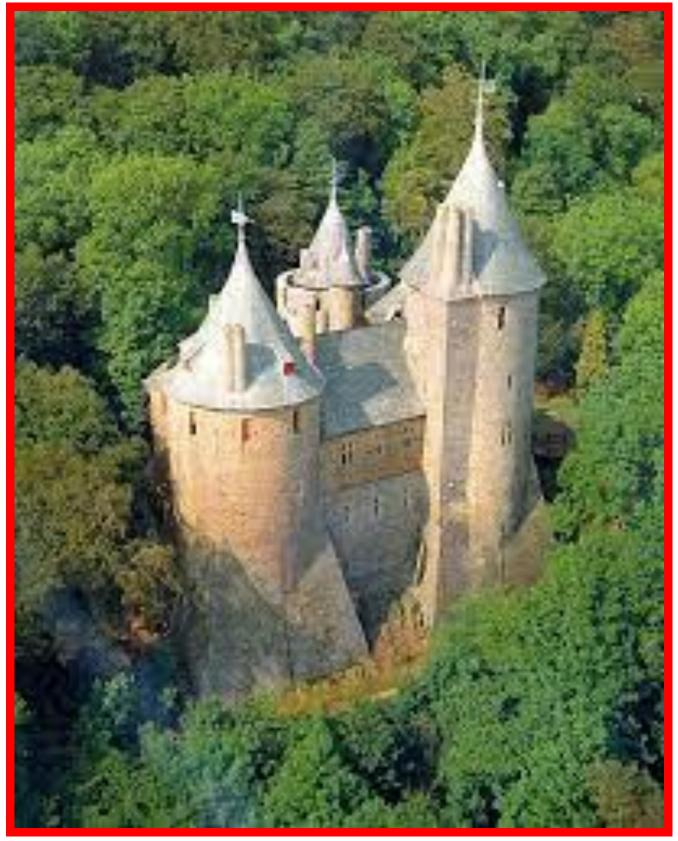


# **SWANSEA CASTLE**



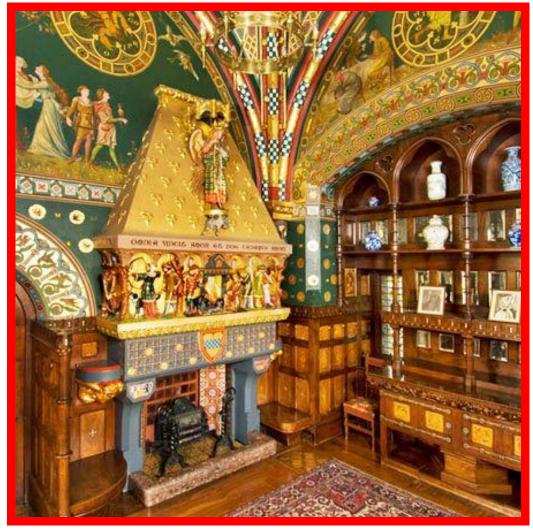
# **TENBY CASTLE**

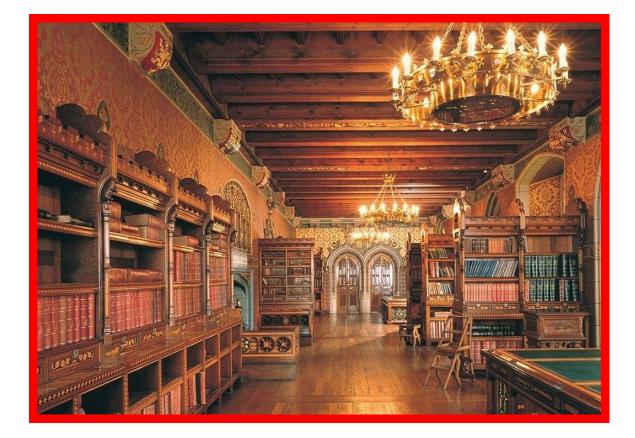




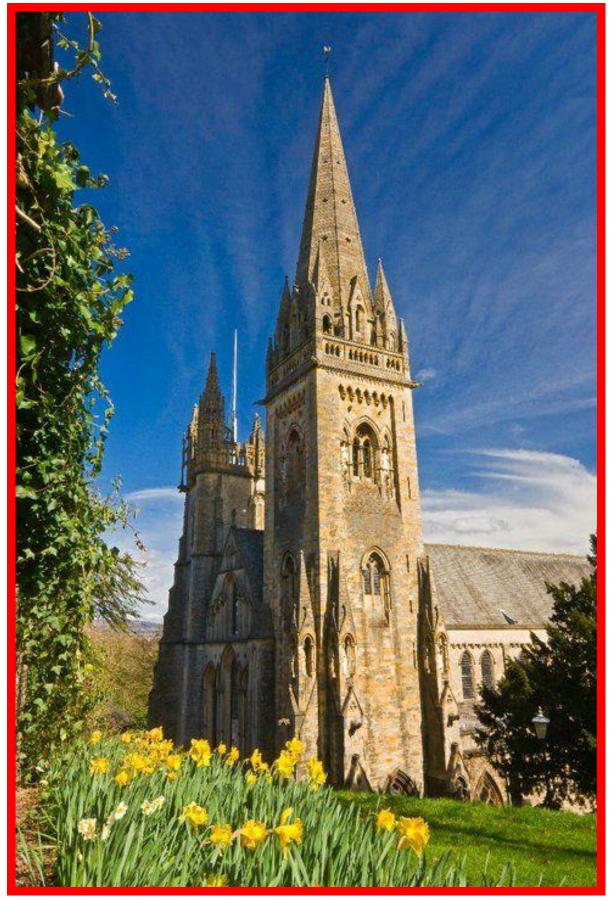








# LLANDAFF CATHEDRAL



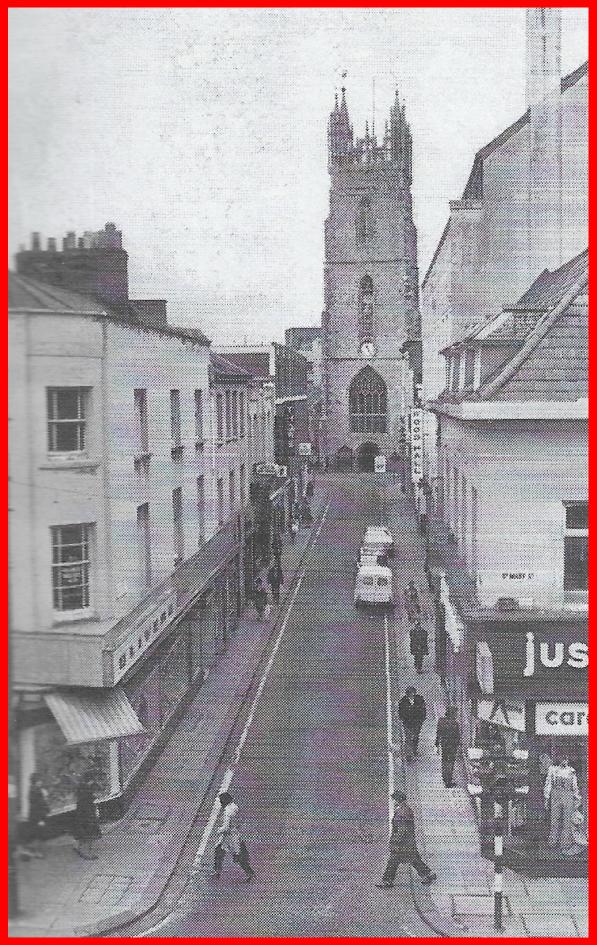
# **PONTCYSYLLTE AQUEDUCT**



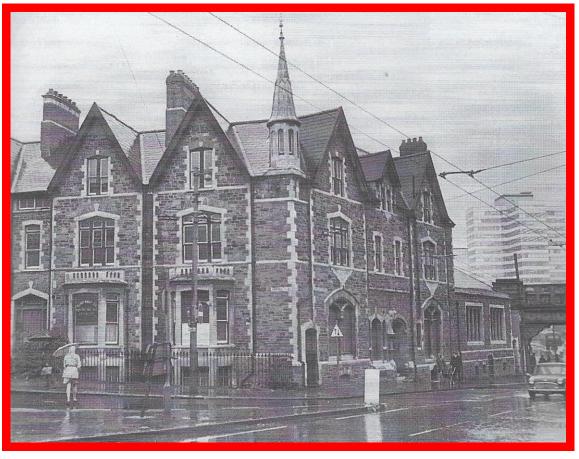
# PONTYPOOL COLLIERY closed



#### CARDIFF ST. JOHNS CHURCH 1980



#### CARDIFF DUMFRIES PLACE/QUEEN ST. 1969



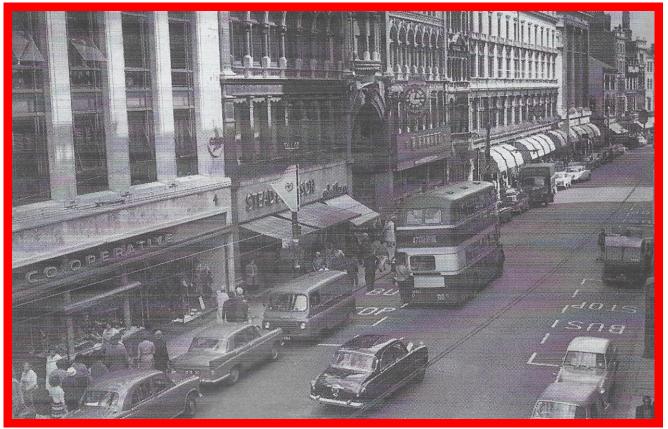
# MAGNET HOUSE 1963



#### CARDIFF DUMFRIES PLACE DRILL HALL



#### ST. MARY STREET 1960



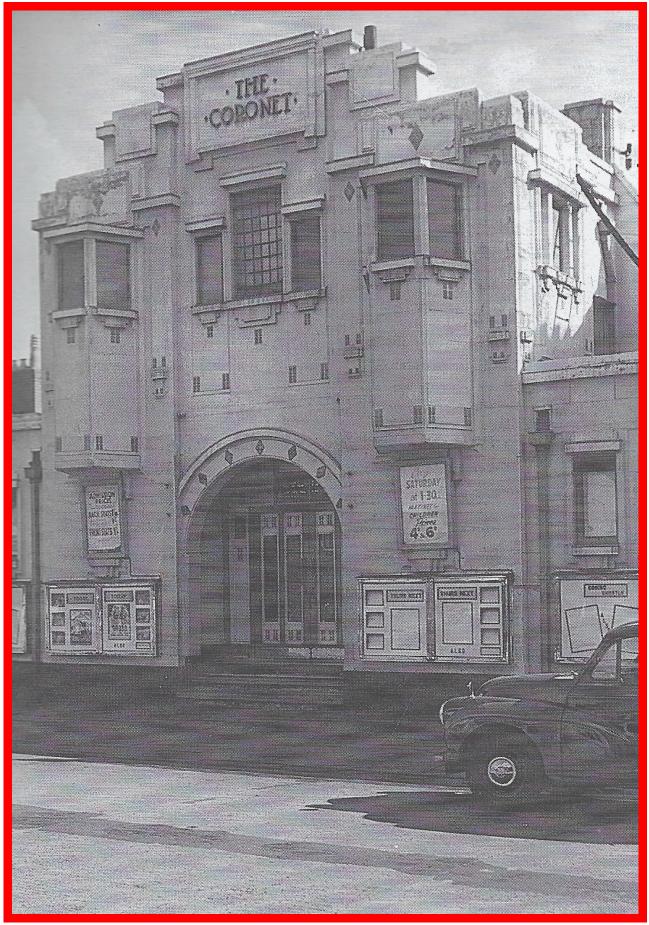
# CARDIFF HIGH STREET



# CAFE & HOTEL QUEEN ST. demolished c.1980



#### CARDIFF WOODVILLE RD CINEMA demolished 1973



#### CARDIFF LAST TRAM WHITCHURCH ROAD



#### WESTERN AREA PUMPING STATION 1970



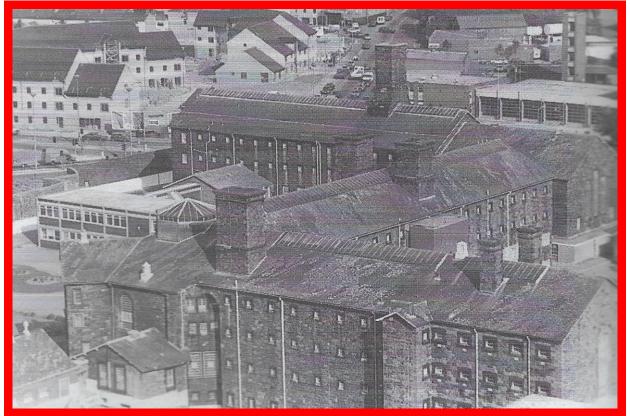
#### CARDIFF TAFF VALE RAILWAY OFFICE demolished



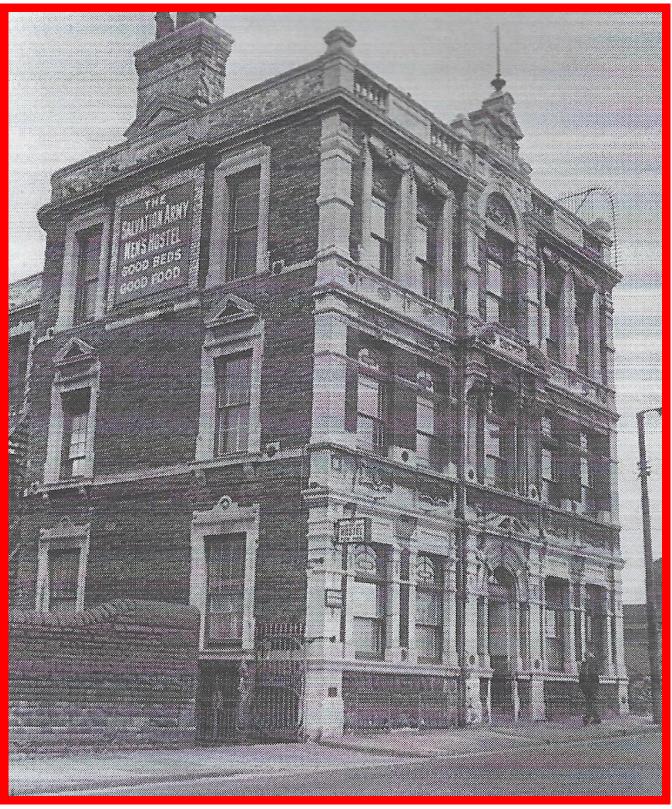
#### CARDIFF ST. DAVIDS HOSPITAL, CANTON



# **CARDIFF PRISON**



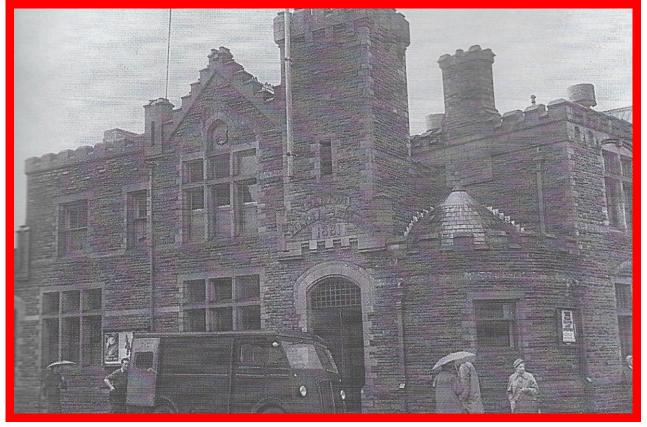
#### CARDIFF SALVATION ARMY MENS HOSTEL 1968



#### CARDIFF CORY HALL STATION TERRACE demolished



#### CARDIFF OLD CANTON POLICE STATION demolished



#### **BRISTOL HOTEL** 1968



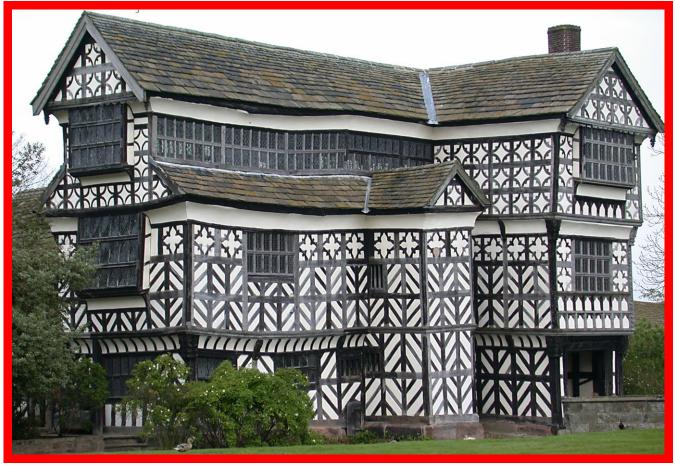
#### CARDIFF JAMAICA STREET c.1885



**ROYAL HOTEL ST. MARY STREET** 1965



# LITTLE MORETON HALL



# WALES

#### REFERENCES

2004 A Cardiff Century: A Capital City for Wales, Brian Lee, Breedon Books, Derby.

#### FURTHER READING

1994 The Builders Illustration Index 1843-1883, Richardson & Thorn, Builder Group with The Institute of Historical Research, University of London, Guildford.

Original hand-written and printed Heritage Documents and catalogues are held in the CIBSE Heritage Group Archive located in the Architecture Library, The Bute Building, Cardiff University.