A VERY ODD WALL
from Peter Trout

Figure 1 One of the buttresses outside the wall, side outlet two thirds of the way down, hard against the wall. The lower courses are not keyed into the wall.

Figure 2 The top of a pipe, rim broken, showing its ‘flowerpot’ shape and its junction with the glazed down pipe.

A kitchen garden wall in a Thames-side garden in Reading had a 150ft peach house on its inner side and has 22 equally-spaced buttresses outside, continuing the 220ft length of the wall. Brickwork is nineteenth-century, bricks machine-made, buttresses may have been additions or have been altered. The lower parts are mortared, but not keyed in to the wall (Figure 1). Through each buttress, offset to the left, runs a vertical pipe of glazed earthenware, topped by a circular terracotta ‘chimney pot’ that widens at its rim (Figure 2, broken pot viewed from above) and tucks under the wall coping (Figure 3)
Two-thirds down the left side of each buttress is an inlet/outlet tube that feeds into the pipe (Figures 1 & 4). Accumulated soil was removed from the pipe to the level of the side arm and the residue washed out from the top via the side outlet. The way further down is blocked by brick rubble or this may be the bottom of the pipe. No evidence of linkage between the buttresses. No evidence on the wall of fire as heat source. No visible pipe work or fixtures on the outside or the inside of the wall.

What was this system for and how did it work over the entire length of the wall? All suggestions welcome!

Susan Campbell, the expert on kitchen garden walls, said that is is the oddest wall she has ever seen. http://home.fccg.org.uklhistory

---

**IMPERIAL AIRWAYS**

**John King**

**Editor’s Note:** John King’s talk on Imperial Airways was given at the BIAG meeting on Monday 18 May. He kindly gave us a copy of his notes for the talk and an edited version of these follows.

The first flight by the Wright Brothers took place in North Carolina in 1903 and in 1909, Bleriot flew the Channel. The 1914-18 War accelerated development of aviation, although the UK was slow to embrace it. Aeroplanes of course require aerodromes and it was the urgent need for a better defence of London (which was being threatened with Zeppelin and aeroplane raids) that led to a plan for a ring of aerodromes around the capital. Thus in December 1915 the land that was ultimately to become Croydon Airport, was earmarked as a military aerodrome. The land was farmland in the Urban District of Beddington & Wellington. It would be known as Beddington and it was probably in 1916 that the first aeroplane, a BE2c of a training squadron of the Royal Flying Corps, landed there. Other aeroplanes at Beddington that were to play a part in the defence of the capital were Sopwith Camels, Avro 504s and Bristol Fighters.

There was also the National Aircraft Factory at Croydon and, in particular, what followed in its buildings after the war - the Aircraft Disposal Company. The factory was on land to the east of the RFC aerodrome. Cubitts began to build National Aircraft Factory No.1 in September 1917 and it was completed in early 1918, the first aeroplanes being completed in March. These were test flown not on what had become RAF Beddington but on a separate but adjoining landing ground! So why the factory? In 1917 it was decided that production of aeroplanes had to be greatly increased to meet the demands of a war that showed no sign of ending. Mass production of aeroplanes on a scale never attempted in Britain was needed.

A railway siding to bring in building materials was built and this was used later to bring in materials for the aeroplanes. Cubitts were also to run the factory which may not have been a wise decision as they had had no manufacturing experience and knew nothing of aeronautics. The first complete aeroplane, a DH9 -a two seat day bomber, was handed over to the DG of Aircraft Production on 14 March 1918. Over 2,000 men and women were employed at the factory. The target was 200 DH9 aeroplanes a month but that was never achieved.
The war came to an end in November 1918 but it was only an Armistice and there was also the problem of terminating the various contracts. Nevertheless, 1,500 employees at the factory were dismissed in January 1919 while the remaining 600 had their wages reduced. The Factory now became National Aircraft (Salvage) Depot No. 3. The task of disposing of the aeroplanes was huge. Some which were not suitable for re-use were broken up and burnt. Other aeroplanes which had just been assembled and paid for, were wheeled out and burnt in sight of the people who had made them. Questions were asked in Parliament!

1919 is an important date as it was the year when international scheduled airline services began. The first regular services began in August 1919 between London and Paris; other destinations followed. However, the services were not from Croydon but from Hounslow Heath. There were British airlines, namely Aircraft Transport & Travel and Handley Page Transport from Cricklewood; and there were also French airlines. The first services used converted war-time machines and were not very attractive; they were expensive and not very comfortable. Also, Hounslow was not very suitable so Croydon's RAF buildings became London's Airport on 29 March 1920. Croydon was not that attractive and there were the activities of the surplus aircraft on the adjoining land. However, the factory's landing ground (Waddon) became the landing ground for the airport. It was not ideal as an aircraft needing to get from the landing ground to the hangars had to crossing a road (Plough Lane) and movements were controlled at a level crossing.

Perhaps I should something about the predecessor airlines to Imperial Airways first? The original airline that started it all from Hounslow Heath to Paris on 25 August 1919 was Air Transport & Travel which transferred to Croydon in 1920 when it became London's airport. However, that airline closed down at the end of the year! It should be noted that, that from the beginning, air transport has had a high rate of failure (especially domestic airlines in the 1930s). There was also Instone which did survive while at Cricklewood and Handley Page Air Transport - but they were all losing money and in February 1921 all the British airlines closed down, although the heavily subsidised French and Dutch airlines flew on. Britain hastily introduced subsidies and services were resumed. In 1922 another airline (Daimler) began at Croydon. So the government was subsidising competing airlines and the Hambling Committee was set up which recommended larger and long-term subsidies to just one airline. As a result, Instone, Handley Page and Daimler were merged in 1924 into one state-sponsored airline, Imperial Airways. There was also the British Marine Air Navigation Company which was operating a not very efficient service between Southampton and Guernsey, although it wanted to go through to France but the French...

Imperial Airways was guaranteed an annual subsidy of £137,000 for four years after which it was to be progressively reduced - but it never was and grew progressively. The airline did not get off to a very good start - no services were operated for over a month. The reason was not a strike but the pilots of the predecessor airlines would not accept the pay and terms offered by the new management which was headed by Sir Eric Geddes as chairman (before the war he had been Deputy General Manager of the North Eastern Railway at York and during the war had sorted out the munitions problem for the government; he was also chairman of Dunlop). The Managing Director was Frank Searle (who had been with two of the predecessor airlines) and the General Manager was Woods Humphery. The pilot dispute was quite nasty and Woods Humphery was accused of putting profit before safety. When the Air Ministry wanted to know why services had not been started, the airline tried to make out that the delay was due to getting certification of the aircraft.

The new airline started with a motley collection of 18 aircraft of 7 different types and a staff of 260. The initial routes were to Paris, Brussels and Cologne, Basle and Zurich plus the Southampton/Guernsey service. This network of 670 miles was not very imperial. In spite of this beginning, Imperial Airways was to become one of the great airlines of the world with a reputation for comfort and safety. From 1926 its services gradually spread over the globe. In 1929 India was reached, although international politics (Italy!) required the passengers to fly to Paris, then by train from Paris to Italy where they transferred to the airline's Calcutta flying boat for the water crossing to Alexandria. In 1932 Cape Town was reached.

Imperial Airways was based at Croydon but the airport was far from ideal in that it was really two adjoining operations which were still separated by Plough Lane. It was not until 1928 that the two were pulled together and a modern terminal built. But even then it was not ideal because it was not flat and there was a dip at one end of the airport.

The railways in the 1930s had their own airline, Railway Air Services and had got the authority of Parliament for this in 1929. However, no sooner had they got it than they started buying their way into Imperial with the objective of gaining control of the airline by a 51% share holding. Why? The Southern Railway had in the 1920s lost much of its first class traffic between London and Paris to the airlines. The railway was terrified of losing more traffic to newer and cheaper airlines and, by controlling Imperial, it would gain a tool to fight them. In the event, the railway stopped buying shares when Imperial discovered what was happening. After this, half-hearted co-operation was agreed between the two. However, the railway had secured about a fifth of the Imperial shares which they gradually disposed of - at a profit!
The railways together formed their own airline in 1934 jointly with Imperial Airways who secured the aircraft, provided the pilots, the engineering services and much else -. The railway airline operated a number of services including Isle of Wight, Birmingham to Plymouth and Croydon to Belfast and Glasgow. In 1935 there were discussions on the Southern Railway becoming involved in the IAL Paris service but it never happened.

Imperial Airways was in effect a monopoly in that it was the chosen instrument of the government which meant that no other airlines could get subsidies. However, there was nothing to stop another airline competing with Imperial and in 1933 Hillman's Airways which had not long started domestic services, opened a service from Romford to Paris at prices lower than Imperial's. Hillman, a former bus operator, cut corners, overloading his aircraft, In 1935 Hillman merged with others to form British Airways Ltd at Heston, moving in 1936 to the re-built Gatwick. Apart from the French, Imperial now had serious competition from another British airline on the Paris route. Eventually the government persuaded Imperial to withdraw from Northern Europe in favour of BA.

In 1934 Imperial Airways proposed that all letters to the empire should go by air and this was accepted by the government. The focal point for the service would be Southampton, a new fleet of flying boats were ordered and the Empire Air Mail scheme began in 1937. Southampton was not ideal and there was a proposal to use Langstone Harbour which did not happen. There was another proposal to move the landplane services from Croydon to an airport to be built at Lullingstone which also never took place...

There was another pilot problem in the mid-1930s which led to the formation of the pilot's union (BALPA), an enquiry into civil aviation, the departure of Woods Humphery and the merger of IAL and BA into BOAC. In 1939 Imperial Airways moved into a new head office at Victoria which included a terminal linked to a railway platform for special trains to Southampton Docks.

No Imperial Airways aircraft have survived but the memory of the airline is kept alive by the Croydon Airport Society and a number of BA volunteers who maintain its archive at Heathrow. There are also records relating to the airline in the National Archives at Kew; and there have been a number of books about the airline. The 1928 Terminal Building and the adjoining hotel still stand at Croydon while the listed 1938 terminal at Victoria is today the offices of the National Audit Office. Finally there is a sort of Imperial Airways museum in Wiltshire which opened last year but which I have yet to visit.

---

**BIAG VISIT TO FOREST OF DEAN (8 August 2015)**

John Coulson

---

On Saturday 8 August about twelve BIAG members (plus friends etc) drove off down the M4 in a number of shared cars to get to the Dean Forest Railway in Lydney for 1000. We met up there as planned and, after buying our Day Rover tickets, we were given an introductory talk by their General Manager followed by a tour of their workshops to view their rolling stock and the restoration/maintenance work currently in progress. After a hurried visit to the signal box at Norchard Station we boarded the 1140 train which took us down to Lydney Junction and, after a 15 minute stop there to turn the engine round, the train left at 1205 to head up to the other
end of the line at Parkend for 1235. There was a 20 minute stopover there for the engine to be turned round and watered, the train then headed back to Norchard.

By that time, it was past 1300 and lunch beckoned so some members headed for the café on the station. After lunch, the party split up and some decided to go back to Lydney Junction and take the walk to the harbour while others explored locally (see a subsequent article from Brian Boulter). Our group met at 1400 after having a look around the museum at the Station and went on to the Dean Heritage Centre at Soudley.

The Heritage Centre is based in an old mill building complete with a restored waterwheel that generates electricity for the site. Generally the Centre was described as being “family friendly” and there are numerous exhibits about life and work in the area together with outlying buildings such as a Forester’s Cottage, Machinery Sheds, a Cider Mill & Press and a replica free mine. There is the usual café and we ended up having an afternoon cup of tea there before we left.

We returned via Gloucester and most of the group reconvened for an evening meal at the Royal George Hotel in Birdlip. Overall a very enjoyable day out and I was left with the feeling that I must revisit that area soon and take more time to look around – I had not previously been there.

Many thanks are due to Bob Haskins for arranging the trip so efficiently (and ensuring that we had such good weather!)

---

**KEEPING CLEAN**

Brian Boulter

Late 19th century Maidenhead was a prosperous middle class commuter town. One consequence of this was the emergence of the laundry industry. Prominent in it was the Rogers family, and Melvyn Rogers has produced a book “Suds in the Blood” giving details of his and other families associated with the firm. It was started by Edwin Rogers who had been a partner in the Maidenhead Ironworks and it was whilst researching this that I met the author. As well as family trees and biographies, the book gives details of the laundry technology. A plan of their original 1885 laundry at Furze Platt shows three rotary washing machines, a hydroextractor, and equipment labelled “blue, rinse and scald”.

A Cornish boiler, installed by the Reading Ironworks, heated the wash water and provided steam for a 8 hp Clayton & Shuttleworth engine which drove the machinery. Immediately over the boiler was the drying room used in wet weather, and with typical Victorian ingenuity there were gratings in the ceiling to let the heat from the boiler help to dry the clothes. Incoming laundry was checked for laundry number, sorted into type of fabric/garment, and then sorted again into “Saints” needing one wash and “Sinners” which might need two. They used a mixture of tallow soap and soda ash which had to be boiled in a bucket before adding to the washing machine. Soft water was obtained by collecting the rain water from the roof, supplemented by their own deep bore well. At the back was the drying ground which also served as a soakaway for the dirty wash water. Delivery was by horse and cart so there was a chaff-cutter in the stables.

The book relates a succession of developments in laundry equipment and processing, its expansion and takeovers of other firms, then changes in demand with the advent first of launderettes, then cheap home washing machines. The firm, now CLEAN Laundry, still operates but it now concentrates on the Hospitality Industry – hotels and restaurants.

Coincidentally I have been recording and researching an industrial building ahead of demolition for housing. It had a single story brick office block fronting a simple building with a north-light roof. It could have housed any business and was latterly a marble workshop. I discovered that it had been built in the 1920's as Portlock Hand Laundry. I feel that whilst industrial archaeologists tend to concentrate on “iconic” buildings, they sometimes forget that within them, the equipment and processes were constantly evolving to produce a better cheaper product.
I will bring the book to the next members’ evening, it will then be placed in the Maidenhead Heritage Library.

---

**VISIT TO FOREST OF DEAN**

Brian Boulter

After the visit to the FoD Railway, my son and I decided to try the GWR Museum at Coleford. Somehow surviving in a retail park is a GWR goods station of 1883, looking very much like the one formerly in Maidenhead. It was saved by Mike Rees who then transferred his own collection of railwayana to it. There is a
Peckett tank loco of 1936 which spent its life at various power stations. It is only steamed once a year for the town festival, and only has a few yards of track to run on. There is a guards van, box car and observation car. Running round the site is a track for 7.5 inch models. In the goods building is a very wide range of material and models. It was interesting to see the furniture and documents used at stations and offices. Also on the site is the signal box from Cogload Junction, Somerset with a lever frame from somewhere else! There were once two railways with their own stations in Coleford, a reminder of the complex development of the area. The museum is only open on some Fridays and Saturdays, and we were glad to have seen it.

FORTHCOMING 2015 MEETINGS PROGRAMME

19/10/15 AGM & MEMBERS’ EVENING
16/11/15 BUCKLER CARS Member of Buckler Society
21/12/15 FILM EVENING & SOCIAL

All meetings are held on Monday evenings at Watlington House and will start at 7.30pm.

Travel Guidance: By bus, the westbound Route 17 bus services stop at the end of St John’s Hill. The nearest eastbound stop for Route 17 is outside the Prudential offices to the north east of the Watlington St bridge over the Kennet. Both stops are about 5 minutes’ walk away.

By car, it is easiest to approach by travelling westward along London Road from Cemetery Junction and then turning right into Watlington Street just before the petrol station. Please use the car parking facilities at the front of the site.

Watlington House has a web site with a map: www.watlingtonhouse.org.uk

EDITOR’S NOTE:

As you all know I’m always looking for additional content and new fresh ideas for the newsletter and will of course welcome any feedback. So please keep these articles and comments coming in so that we can enjoy a Winter 2015 issue. Note our closing date for input to it is 15th November 2015.

Finally, thanks to Brian Boulter for his articles on the Maidenhead Laundry, SWWRIAC and his trip to the Forest of Dean – it was good to find out about another IA site of interest in the area.

John Coulson (jcoulson@theiet.org)

IA CONFERENCES

SWWRIAC 2015 – (Brian Boulter)

This year the conference was in Tiverton. It was hosted by the Devonshire Association, founded 1862, and organised by their more recent Industrial Archaeology section. There were reviews of the relationship between Welsh steel and iron ore from the south west, the history of mineral exploitation on Dartmoor, and the local gunpowder industry – an important part of mining and quarrying. Contributors gave updates on the Stover Canal and Haytor Tramway, and on “Brunel's Other Bridge” - a swivel bridge at Bristol docks. The consultant for the latter is Geoff Wallis, formerly of Dorothea Restorations. Bridges and other large industrial structures need to be inspected, and the Technical Director of a Tiverton-based company gave a fascinating talk on how they reach the underside of bridges and other inaccessible places using ropes and rigging. Next year’s conference will be at Dursley, Gloucestershire on 16 April 2016.

I stayed at an inn which backed onto the Grand Western Canal. This was conceived in 1814 as a link between the south and north coasts, but in the event only an 11 mile stretch was built north of Tiverton to carry lime. It is now a County Council country park with facilities for boating. Quite a discovery for me.
DATES FOR YOUR DIARY

Devizes Industrial Archaeology Symposium (Saturday, 31 October 2015)

PROGRAMME FOR THE DAY (www.wiltshiremuseum.org.uk/events)

0930 - Registration
1000 - Chairman's Introduction – Mike Stone
1005 - Farm wagons – with particular reference to the Society's collection - David Viner
1050 - Coffee
1110 - Yate Colliery - David Hardwick
1200 - Agriculture in Wiltshire in WW1 - Ivor Slocombe
1250 - Lunch (not provided – see below)
1415 - Supplying water for the Wilts and Berks Canal and water supply in and around Chippenham - Mike Stone and Jan Flanagan
1500 - Tea
1525 - Chippenham Grist Mill 1086-1957 - Dr Kay S. Taylor
1630 - Symposium closes

The ticket price includes morning coffee and afternoon tea. There are many cafes, pubs, restaurants and sandwich bars in the town where lunch may be taken. For those bringing their own lunch Hillworth Park is 400 yards away up Long Street.

The Symposium will be held at Devizes Town Hall (not the Wharf Theatre as in previous years).

Tickets £14 (£12 WANHS members). Booking is essential and four options are available:

Book online using Paypal
Telephone – 01380 727369
Email – hello@wiltshiremuseum.org.uk
Visit – Wiltshire Museum, 41 Long Street, Devizes

SERIAC 2016 (23 April 2016)
To be hosted by Surrey Industrial History Group at Holy Cross Preparatory School, George Rd, Kingston upon Thames, KT2 7NU.

SWWRIAC 2016 (16 April 2016)
To be held at Dursley (Glos).

AIA CONFERENCE – (9-14 Sept 2016)
To be held in Telford

For general BIAG business, please contact the Secretary: PETER TROUT (Tel: 01491 682002)
7 WEST CHILTERN, WOODCOTE, READING, RG8 0SG

Submissions to BIAG News are welcome in any format. Please send your contributions with an IA theme such as articles, letters, pictures, jokes, cartoons, cuttings from journals etc. to:

JOHN COULSON (Tel: 0118 9402526)
3 THE CRESCENT, CRAZIES HILL, READING, RG10 8LW
or e-mail jcoulson@theiet.org

September 2015

Printing and distribution: Bob Haskins and Bent Weber