

# WARWICKSHIRE Industrial Archaeology Society

# WIAS

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## FROM THE CHAIRMAN

### Looking forward

The June 2014 meeting marks the completion of twenty five years of existence for the Warwickshire Industrial Archaeology Society. This is a cause for celebration and reflection but also one where we need to consider the directions that the society needs to travel – in, dare I say it – the next twenty five years.

This will, of course, not just be an issue for WIAS but for the subject as a whole, and the availability of enthusiastic, committed people to carry on the work, and to take the subject and the society in new directions may become quite a challenge. What will be the focus of the post-steam train generation? Has most of the important work already been completed? Will more recent industrial change be part of the subject or will there be an accepted chronological period to which our studies should be applied?

For the immediate future there is much that the Society can do. As previously announced, from the summer, the WIAS database will be available online and we shall have a real focus of trying to ensure that the information on that database is as comprehensive, up-to-date and accurate as possible. The process has already thrown up some interesting questions surrounding the definition and classification of particular sites, a reflection in part of the difficulties of defining the limits of 'industrial' archaeology. We plan to involve members of the Society in this process and a list of sites for investigation and recording will be available at the June meeting. For my own part, I have found it fascinating to return to sites in various parts of Warwickshire to check details for the database, and to witness the changes that have taken place both to sites and the surrounding environment. It has

also taken me away from some of the responsibilities of being Chairman and given me the opportunity to return to what I like doing most of all. There is nothing better than a bit of exploring, opening a few doors, climbing over the odd fence, perhaps even an occasional trespass, with camera and notebook at the ready!

Increasing the material available on our website is a second, complementary goal to the development of the database. Peter Riley works extremely hard to keep material as up-to-date as possible and he is very willing to receive information, photographs and comments that he might be able to publish. The website may be the best destination for those unique photographs that remain stored in a drawer somewhere at home, or for that unpublished article that lies in everyone's head. Far better that these items are available for others to see, read and further explore than to risk losing them. This can also be achieved via publication in the Quarterly Newsletter, so ably edited by Mike Hurn.

We shall continue with our monthly meetings as the main thrust of the work of the Society, and we will seek to provide as varied a programme as possible to serve the diverse interests of our membership. Over the past 25 years we have provided approximately 250 meetings and the responsibility for arranging these meetings has been shared by our first Chairman Toby Cave and myself. Do I hear someone say that they would like to take on the role?

Indeed, the committee is very aware of the need to engage in some 'succession planning' and there may be younger members out there who would wish to gain a taste of the inner workings of WIAS via membership of the committee. Do not be shy in stepping forward.

These are important items for the future, but I hope we may be

permitted the chance to reflect on the achievements and enjoyment of twenty five years of WIAS and this will be the focus of the June meeting.

### IMPORTANT NOTICE: Change of venue and start time for June meeting

**The next meeting on 12th June 'Twenty five years of WIAS' will be held in the Bridge House Theatre, Warwick School, at 7.15pm. There is parking available near to the theatre at the Western end of the Warwick School site.**

As part of that evening we would like to offer the opportunity to members to recall an event, a particular site, a certain individual, a memorable meeting that epitomises WIAS for them. These need to be very short items so that several get the chance to speak, and I need to know in advance. Please contact me by e-mail on [wiaschairman@aol.com](mailto:wiaschairman@aol.com) or speak to me at the May meeting.

## PROGRAMME

### May 8 2014

Peter Perkins:

*The rise and fall of the Northamptonshire boot and shoe industry.*

### June 12 2014

Members' Evening:

*25 Years of WIAS. 1989 - 2014.*

### September 11 2014

*AGM, AIA Cheshire Conference Report and Members' Evening.*

### October 9 2014

Peter Grenfell:

*The Ford Foundry, Leamington Spa.*

### November 13 2014

Bob Booth (Chairman of the Bournville Society):

*'Cadburys and Bournville'.*

### December 11 2014

Martin Green (Chairman WIAS):  
*Chairman's Lecture.*

NEWSLETTER

## Meeting Reports

**January 2014: David Fry**

*Industrial Coventry in Old Postcards.*

A record attendance of 80, including 8 visitors, was treated to views of Coventry that were new to most. David Fry, a sociology and psychology teacher used the medium of old postcards to review the history of the city and to trace the demise of its craft industries. Indeed, there is really no medium that allows us better to explore the changes that occurred at the end of the 19<sup>th</sup> and especially at the beginning of the 20<sup>th</sup> centuries.

How did such a range and variety of subjects become preserved as postcards? It seems that the Victorian penchant for recording the family stimulated the evolution of the local photographer, usually with a studio for portraiture but then with a growing desire to explore and record the changing world beyond.

Whilst half-plate cameras were considerably bulkier and more unwieldy than today's equipment, they enabled contact prints to be made directly onto postcards for which there was a ready market. The local photographer thus needed to find ever more niche subjects in his neighbourhood. Happily for social historians and industrial archaeologists a hundred years later there resulted a treasure trove of visual material for exploration.

Every one of David's illustrations was worthy of close examination. An unexceptional view of a street with a few figures might confirm a run of artisan's houses with top-shops above, whilst the 'end of the working day' exodus from a factory showed where Lowry may have found his inspiration to record similar scenes.

Apart from recording the world outside, the early postcard was also used for advertising. For example, Geo. Herbert Holt was the only tobacco pipe manufacturer in Warwickshire with premises in Stoke, Coventry and a postcard records his waxed moustache and bowler hat for us.

Similarly, we have the record of the working model of a silk ribbon weaving loom made by one Harry Laxon of Coventry. This image has added importance since no illustrations of domestic weaving have yet been found and so details of the machinery used are otherwise unknown.

Moving to the recording of the Coventry cityscape, David traced the collapse of the silk weaving industry in the 1860s following the removal of tariffs by the Cobden Treaty which allowed in continental imports together with the activities of the Coventry Freeholders Land Society a few years earlier. These events spelled the end of the building of 'top shops' and also limited development in Coventry.

A fascinating set of postcards, mostly dated to the early years of the 20<sup>th</sup> century, showed both the scale of the photographic activity, it seemed that no street was unworthy of being recorded, and the fortuitous capture of so much visual information of use to us today.

Not only do we have details of streets and houses long lost but there are some isolated survivors that we can recognise. Especially, we have the corner shops and pubs often with a number of people bringing the scene to life.

Of particular note is the wide variety of houses present in any given street. Detached properties are rare but built side by side are two and three storied houses, some with obvious top shops, some substantial villas, some more lowly. References to the large scale contemporary maps confirmed the haphazard development of some Coventry streets.

Evidence of a ribbon weaving factory in Cromwell

Street, Earlsdon shows that more than watch making took place in that district. Also recorded are storm-damaged houses, highlighting the poor standards of building. A view of the Foleshill Road included a building with some fancy brickwork above the top shop windows giving extra height to the workspace, presumably for larger machinery.

Pictures of the larger scale activities of the philanthropic, non-conformists J & J Cash showed how investment and organisation could create employment opportunities out of specialisation.

However, as so often over the years, Coventry's fortunes shifted and watch making came to the rescue as artisan textiles waned. This new activity was centred on Spon End where suitable building land in the triangle bounded by the Old Birmingham Turnpike Road, Craven Street and Mount Street had been made available by an Act of Parliament in 1847.

Again, the postcard records of Allesley Old Road and Craven Street give a vivid picture of the area. There were pubs a plenty and social activities as exemplified by the Lord Street FC, winners of the MDT Cup in 1900, 1902, 1906 and 1907.

The postcards also record more personal and domestic scenes such as a family group in a garden or the substantial house built by a watch master in Moor Street.

As with the consolidation of ribbon weaving by Cash so Rotheram and others developed a watch industry. Illustrations of the factory were now possible and those of production lines (all female labour) at Williamsons, and an end of the shift exodus at Rotherams, were typical.

The pace of industrialisation quickened as Coventry caught up with the factory system and David's final examples showed the great increase in scale brought by the likes of Swift Cycle, Humber and Triumph Cycle. One picture of the new Rudge Whitworth factory showed an early steel framed building.

The Daimler works proved difficult to photograph but advertising pictures of a typical week's output of Daimler motor cars and assembly shops more than compensated.

The aftermath of a fire in 1906 at the Humber Motor Works contrasted neatly with the work's fire brigade. It seems that fire and Humber were no strangers.

One illustration of the pattern making department at Coventry Engineering and Pattern in Godiva Street harked back to earlier craft days, but a succession of pictures of the Courtauld operations showed where the City was heading. Not least with the tallest chimney in England (365 feet high).

No review of Coventry would be complete without a reference to Alfred Herbert, Wickman, Coventry Gauge & Tool and the other precision engineering companies on whom so much other industry depended.

Perhaps the most impressive of Coventry's lost industries was its short-lived heavy ordnance. 15" naval gun barrels straddling a level crossing stay in the memory.

Similarly memorable were the groups of trades unionists, whether posed or parading in support of their aims such as a 1914 Railway strike or the Stoke Heath Rent Strike.

It is, therefore, thanks to a relatively small group of photographers interested in their surroundings, the buildings, the industries and the people that worked in them we can get a greater understanding of Coventry and its inhabitants a 100 years ago.

**February 2014: John Brace**  
*The Channel Tunnel Fires.*

John Brace entertained another large audience with a wry but insightful review of operating procedures in the Channel Tunnel and examined the events surrounding the three major fires that have occurred in the tunnels since commercial services began in 1994.

Thankfully, there was no examination of the origins of the Anglo-French project with its huge cost overruns for construction and heroic over-estimates for traffic volumes that spelt commercial disaster for the initial investors. However, hubris can be seen in the subsequent events.

There are three parallel tunnels – two outer rail tunnels with a smaller service tunnel running between them. The service tunnel is pressurised to exclude smoke and is entered via air locks. It is narrow and has special double ended wire-guided vehicles. The service and running tunnels are connected by frequent cross passages sealed by heavy fire doors. The service tunnel is a safe haven in the event of a tunnel fire.

The freight shuttles differ from the car services in that the drivers do not remain with their vehicles but use a Club Car, usually placed immediately behind the loco. The original design for the freight wagons was enclosed, so as to contain any fire and had a self-extinguishing sump for liquids. Unfortunately, such wagons proved to be too heavy and the revised design was open-sided, un-roofed and without the sump.

Conventional rail signalling is not used in the tunnel. The driver has both a cab display and two radio links. This duplication can, and has, lead to conflicts. There are fire and smoke detectors throughout the tunnels and on board the locomotives and wagons.

There are permanently crewed and fully equipped first response teams on both sides of the channel. A pressurised fire main runs through the service tunnel to hydrants in the running tunnels. The primary role of the first response teams is to ensure a safe evacuation and appropriate first aid.

There would seem to be plentiful opportunities for Murphy's Law to apply – as the details of the three fires would show to be the case.

In the evening of 18 November 1996 a freight shuttle left France. All was normal save that both crossover doors had been left open – and they could not be closed without an engineer being in attendance. As the train moved off it was seen that one wagon was clearly on fire but the train was into the tunnel before an alarm reached the control room. However, no tunnel detectors were activated until the train was 2 Km into the tunnel followed by 3 further alarms over the next 3 minutes. It was not until 11 minutes after departure and 10 Km into the tunnel that the control centre got a full alarm.

Then followed a catalogue of failures: the rear loco power tripped, control circuits failed progressively, other services continued to run, smoke filled the tunnel preventing the driver from knowing his position to alert the control centre to open the appropriate cross passage door, the telephone circuits failed and the radio circuits deteriorated.

Fortunately, the French first response team found the right cross passage door by working backwards from in front of the stopped train and discovered that when the door was opened it produced a bubble of clear air which enabled the passengers and crew to escape into the service tunnel and to be evacuated. It was 1 ½ hours before fire fighting started

and it took a further 5 hours to extinguish the fire.

The second fire on 21 August 2006 was small and quickly dealt with but much had been learnt from the first event. Most significantly, the phenomenon of the bubble of clear air about an open cross passage door in an otherwise smoke-filled tunnel. This could be used to assist an evacuation provided that the driver could stop with the primary exit immediately opposite a cross passage door and appropriate marker boards were installed. But there are clear difficulties involved, precise positioning of the train, different configurations of locos and club cars and reading the marker in a smoke-filled tunnel to name but a few.

Other changes were made to improve the response to alarms. Notably, looking for signs of fire on departing services, loading restrictions to minimise fire risk adjacent to the club car and the provision of fire hoods for all passengers and crew.

The third fire on 11 September 2008 was potentially the nearest to a major disaster- and repeated all the previous errors. Blighted from the outset by an electrical fault on one of the vans being carried which the driver tried to rectify – he thought successfully - before having to board the club car whose primary emergency exit was 'locked'.

18 minutes into the journey simultaneous fire alarms from both train and tunnel detectors initiated a first response from the controller. On board, those in the club car could see the fire but the train did not stop, the driver's radio contact with the controller had failed. Eventually, the train manager convinced the driver to stop without the controller's permission.

Radio communication with the driver was re-established but smoke prevented him from identifying the number of the cross passage door where the train had stopped. But he could say that he was at PK49 thus allowing, after reference to track layout diagrams, the correct doors to be opened.

At the same time ventilation fans and fire pumps became unserviceable due to power failures and duplicates took hours to configure. The controller was overburdened but fortunately an off-duty controller was in the terminal and he played a vital role in managing the incident.

On board there was confusion in evacuating the club car due to the smoke and the locked door but eventually all passengers (some resourceful persons having broken a window to expedite their exit) and crew reach the safety of the service tunnel.

The power and water failures caused delays for the firefighters which were exacerbated by demarcation issues and it took 16 hours to bring the fire under control by which time all the wagons were burnt out and extensive damage had been caused. Over 700 fire and emergency personnel had been involved.

Subsequent to this near disaster a number of significant measures have been put in place to improve safety. Four 'safe stations', each 870m long and equipped with a sprinkler system, have been built under the channel where a train will stop and any fire can be extinguished. Firemen can now earth the catenary in the tunnel and they have equipment for setting up a fire curtain if necessary. Ventilation fans will be brought into use earlier and a permanent standby controller will always be on hand.

All in all, a sobering reminder that 'the best laid plans of mice and men...etc'.

### March 2014: John Frearson

*Jonathan Dumbleton Pinfold and the Brickmakers of Rugby.*

John Frearson is not an industrial archaeologist, or so he says, but he is a most diligent researcher and historian who brings a working lifetime in the concrete and cement industries to bear on his chosen subjects. These are many, and his examination of Jonathan Dumbleton Pinfold and the Brickmakers of Rugby demonstrated his methods to the full.

Detailed examinations of census data, OS maps of all vintages, trade directories, newspapers, County records, probates and wills and contemporary photographs were all used to show the development of Rugby's brick making activities during the late 18<sup>th</sup> and 19<sup>th</sup> centuries and the role played latterly by Pinfold.

The story stemmed from a photograph by E H Speight, a Rugby photographer, of a portable (wheeled) steam engine. Just decipherable cast into the wheel hubs was the legend 'J D Pinfold – Rugby'.

Investigations into that name revealed the extent of early brickmaking in Rugby. The earliest record is 1793 and linked to the building of the Union Canal. Brickmaking was a local on-site craft for the canal and many other building projects including industrial premises, churches and domestic housing as the town developed. The earliest local directory, Pigott's *Rugby Directory* of 1828, makes no mention of brick makers, although there were builders included who were later also listed as brick makers. The 1841 Census named 15 'brick makers'.

Plotting the early brick works on a modern map unsurprisingly showed them clustered near to the canal in the area of the Dunchurch, Barby and Hillmorton Roads. Convenient for incoming fuel and outgoing finished products. Reference to the large scale 1850 OS map reveals the details of many 'Brick Yards' and Brick Kilns'. The bricks were fired in clamps and some clays were self-fuelling by virtue of the inclusions of coal and other ignitable materials.

A common theme running through these early operations was the vertical integration of contractor, builder and brickmaker. It is probably no coincidence that the Rugby, St Cross Hospital was built next to the old Barby Road brick yards.

The individual brickmakers, as shown by the census returns, moved homes as the brick works moved to the new construction sites as the town expanded.

Along the Dunchurch Road were a number of such works and by 1851 a part at least was known as Haswell's Brickfield where one Francis Dring, who was at 'Parnell's Brickyard' in 1841 was now shown at Haswell's Brick Kiln Cottage, Dunchurch Road. When the 1887 OS map was published, the brickfields in Dunchurch Road were gone and the area had become allotments.

Looking at the Hillmorton area, the Satchell family was prominent. The earliest reference is the probate inventory of Henry Satchell, Innholder of Hillmorton for materials 'in the kiln'. A descendant, William Satchell was a brickmaker in Hillmorton 'for many years before 1864' and was well known for Hillmorton Red Bricks plus many other products.

By 1894 his son, John Satchell had retired and moved to 2 Bilton Road but still had the brickworks at Hillmorton 'in his own hands'. He had served on the Rugby Urban District Council and also as a County Councillor. Satchell built himself a handsome retirement home, Bayfield, in Clifton Road using what looks to have been Satchell's Red Bricks. An interesting record was recently unearthed during renovations at Bayfield, a plank of wood inscribed '...this house was built by Mr W G Satchell, for himself, on the occasion of his retiring from business. The following is a list of the names of the men employed on the job from the

start...'. Today, the Hillmorton brick works site is an Aldi supermarket.

Similar histories can be traced for other families including Rathbone, Lucas and Banks. The last having a colourful career. A Cheshire journalist who married a Hillmorton woman possessing some family land where '...there was clay and sand beneath...'. However, poor management and an expensive lifestyle resulted in bankruptcy. In the Bilton area, the Wakefield family followed the same pattern of success and failure.

Technical developments also occurred, notably through the efforts of J Heritage on the Lawford Road with a patented process for perforated bricks that were lighter, stronger and cheaper. Mechanisation was coming into play. This led to an expansion of the trade and a confusing pattern of conveyancing of land and works for bricks and lime.

One Henry Haddon, seems to have sold up a large Lawford Road works to satisfy creditors and relocated to Malvern to prosper as an architect. His son was a successful engineer in the Indian Civil Service whose wife had a purported affair with Albert, Duke of Clarence, eldest son of the future Edward VII. After Albert's death Mrs Haddon, now divorced, claimed him as the father of her son, Clarence. The claim was dismissed but in the 1920s Clarence published a book *'My Uncle George V'* and was charged with demanding money and extortion after writing to the King. At his trial it was proved that he had been born two years before his mother's affair. Bound over for three years he breached his conditions and was jailed for a year.

Another Bilton dynasty, John Parnell & Sons, provides the link to Jonathan Dumbleton Pinfold, engineer, by selling him a parcel of land near to the Rugby and Leamington Railway, '...part whereof was lately used as a brickyard...'.

Pinfold was born in 1825 in Middleton Cheney, Oxfordshire, the son of a travelling journeyman miller. After his apprenticeship he went to London to gain experience, married and returned to Rugby as a '...Millwright and Engineer Master employing 1 man and 1 boy...'. Sadly, no photograph or portrait of Pinfold has yet been found.

However, there is no shortage of material recording his commercial success since he used agricultural shows and trade exhibitions extensively to promote his products, principally machinery. We find him first in 1862 at the Warwickshire Agricultural Show: '...Mr J D Pinfold, Rugby, exhibited Wright's patent Brick and Pipe making machine, worked by steam power. ...'. Then follows a succession of handbills, patent applications for brickmaking machinery and grist mills, company and exhibition catalogues and even a writ for patent infringement.

With much of the equipment needing independent power, self-contained steam engines were an important part of Pinfold's product range and an illustration from 1876 shows a portable steam engine identical to that used to introduce the talk.

Which brought us nearly full circle. In 1880 Pinfold floated his business as The Rugby Brick and Tile Manufacturing Company Ltd. Sadly, in 1888 a bankruptcy notice was served on him by a brickmaker in Kilburn. The creditors were paid off in full. Pinfold remarried after his first wife's death, his second wife being a daughter of the millwright to whom he had been apprenticed in Oxfordshire. He died in 1910.

Finally, a review of the development by Bromwich, Foster and Dicksee of the businesses that became The Rugby Brick Company showed the usefulness of the wealth of detail contained in the old Aerofilms Collection to examine industrial sites from earlier years.