# WARWICKSHIRE Industrial Archaeology Society

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NEWSLETTER


### THIS ISSUE



## EDITORIAL

I write this editorial after a somewhat disorienting week, the middle of which saw a 3.00am start for a visit to the depths of Lincolnshire! The reason for this was the rare spectacle of a genuine wartime Avro Lancaster bomber, performing some tail-up runs on a wartime Bomber Command airfield for the benefit of a BBC film crew.

There is a link to local IA in this event, since the aircraft concerned was built by Austin Motors at their Longbridge plant, a further example of the diverse industrial past of Warwickshire.

This diversity is reflected in the interests of our membership, who again ably saved the day at the February meeting when the speaker was forced to withdraw at very short notice (a full report is on page 4). This diversity of interests is also something that, as a Society, we perhaps do not recognise sufficiently.

Other recent meetings have shown there is a considerable industrial knowledge base amongst the membership, on both a professional and amateur level, and yet relatively few members contribute to the meetings. If you have something to say, we would love to hear from you. Even if you do not wish to talk yourself, you may know of someone in your field of interest whom the Society could approach to speak. Toby Cave is in the process of drawing up the 2002 programme (and beyond) and urgently needs leads to potential speakers to maintain the high standard of meetings that he invariably arranges.

Please pass the details of any likely contacts to a member of the committee.

**Mark W. Abbott**

## SOCIETY NEWS

**Programme**

The vacant May meeting has been filled, as hoped for, by Ian Frimston. His subject will be: *Three Local Aerodromes: Wellesbourne, Gaydon and Shenington.* This is the speaker and subject originally scheduled for January 2001 and unfortunately cancelled because of the fuel crisis.

**Lives and Times**

The Society has again been invited to exhibit within the *Lives and Times* event at the annual Coventry Godiva Festival. This year's dates, subject to confirmation, are the ninth and tenth of June.

**Drakelow Factory**

This site and the book detailing its history (reviewed elsewhere in this newsletter), were mentioned at the February meeting. Following an excellent response to the suggestion of tour of the site, an enquiry has been made to see if the Society can make a block booking for a Sunday tour.

## CROSSNESS CORRECTION

The recently featured Crossness article in Retort Issue 10, contained a slight error in the omission of a single word, *rotative*.

Whilst not wishing to diminish in any way the greatness of the engines at Crossness, they are not, in the generally accepted sense, 'The largest beam engines in the world'. That accolade, in conventional beam engine terms based on cylinder dimensions, beam size and weight and pumping duty, expressed in millions of gallons per day (sorry no SI units here), must be reserved for the Kew Bridge 100 inch engine built by Harvey and Co., Hayle, Cornwall, in 1869.[1] Together with the equally fine and adjacent 90 inch engine, constructed by the Copperhouse Foundry, Hayle, the Kew engines represent the largest beam engines in preservation anywhere in the world.[2] The Crossness engines may well be the largest *rotative* beam engines in existence.

However, in absolute terms, the unique multi-beam, annular compound engine preserved at Cruquius in Holland is, definitively, the largest steam engine ever constructed; again Harvey and Co. being largely responsible for the work.[3]

REFERENCES:


1. Watkins G. *The Stationary Steam Engine.* David & Charles. 1968
2. Barton D. B. *The Cornish Beam Engine.* Barton, Cornwall. 1969
3. Willock J. F. *The Largest Steam Engine in the World.* Model Engineer, No. 3795. 1987


**John Willock**

# Meeting Reports *by Arthur Astrop*

## December 2000
## Keith Draper: *Aspects of Coventry's Industry*

Being Coventry-born, having served an apprenticeship with the Standard Motor Co, and now a well-known Features writer for *The Coventry Evening Telegraph*, meant that Keith Draper was trebly qualified to speak knowledgeably on the industrial history of his native City. He brought all his accumulated experience to bear on that subject at the Society's December meeting when he took members on a 'saunter' through the years when Coventry had almost more factories than it had shops, when it was the unchallenged centre of motor car manufacture in Britain, and when the City echoed to the sound of scores of factory hooters. Not to mention the ringing of bicycle bells as literally tens of thousands of craftsmen and women pedalled daily to and from their work at benches or on machines!

Using what must surely be an unrivalled collection of slides, with some subjects dating from the 19th century, Keith's talk was a roll call of famous names covering individuals, companies, factories, and streets, few of which are still with us. Understandably, because of his early background, the vehicle makers of Coventry featured most prominently in Keith's talk, with Daimler, Maudsley, Standard, Morris, Triumph, Humber, Alvis *et al* and their various factories being lovingly described. Slides showing both the exteriors and the interiors of their plants, many from their early days, recalled the conditions under which the car makers of the 1920s and 30s worked. These factories, crowded with machines and workers, all labouring under a forest of overhead shafting and flapping leather belts, and with the absolute minimum of artificial lighting, would today be considered nothing short of a Factory Inspector's worst nightmare. Yet somehow, the pride which those men and women felt both for their work and for the Companies they served, came over.

Then there were the names of some of the men who led them. For example, Sir John Black of Standard who, immediately after the Second World War, sent his designer Walter Belgrove to make a pencil sketch of a US-built Plymouth car which Sir John knew was regularly parked outside the American Embassy in London. That day trip, with notebook and pencil, eventually became the inspiration for the famous Standard Vanguard saloon car. Keith also ranged over many other products which once made Coventry famous, including aircraft (Whitley bombers, Mosquitoes), aero engines, sidecars (with one particularly elegant wickerwork and leather upholstered model made by Montgomery), power transmission chain (Renold), high-accuracy speedometers and petrol taps (Rotherhams), gas meters (Wilson) and, of course, the naval guns, almost unbelievably large by today's standards, which were once made in Coventry's huge Ordnance Factory in Foleshill. Keith had high quality slides to show for almost every topic he covered.

He also had slides of daily life in the City itself, from the early years of the 20th century through to its battered condition immediately after the Second World War when, as a small child, he knew its streets and buildings intimately. There were those in his audience who also knew those subjects intimately and who were able to identify for Keith some landmarks of which even he was unsure.

Indeed, the evening was so successful not just because of its subject, and Keith's skill as a speaker, but because it was also a lively 'interactive event', with members contributing their own knowledge and experiences as well.

## Book Review: Drakelow Unearthed

***Drakelow Unearthed*, Paul Stokes, £5.50**

One of the country's largest wartime Shadow Factories, built 150ft underground for Rover, is described in considerable detail by Paul Stokes in his book *Drakelow Unearthed*. It was not until 1993, when the entire complex was sold into private hands, that the official mantle of secrecy covering this massive underground 'town' just a few miles north of Kidderminster was lifted. Stokes was then given free rein to explore its maze of tunnels in their entirety, describe their uses and illustrate his work with a large number of excellent photographs and plans.

In its time, besides being used by Rover for war work, Drakelow also served as a secret Regional Government HQ in case of a nuclear attack and Stokes records in considerable detail its changes in fortune over the years. An astonishing number of the original facilities remain, albeit in a somewhat dilapidated state, and bear poignant witness to their various uses. In that respect, Drakelow is a 'time capsule' of a piece of 20th century industrial archaeology. The book is obtainable from Paul Stokes at 'Fairfield', The Compa, Kinver, West Midlands DY7 6HT, and it is understood that party tours of the complex can be made by special appointment.

# Metalworking and Leamington's Railway

**January 2001**

**Maureen Bourne: *Francis Skidmore of Coventry - Famous 19th Century Metalworker***

The metalwork of Francis Skidmore was once described as 'The jeweller's art writ large' and indeed much of his output, from his early crafting of chalices to the major pieces of architectural metalwork for which he ultimately became most famous, was clearly influenced by skills he learnt while apprenticed to his jeweller father.

Maureen Bourne, who is Slide Librarian to the Department of History of Art at the University of Warwick, presented a profile of Skidmore, much of whose work stands to this day in churches, cathedrals and public buildings throughout the UK. It is wide-ranging, and covers a spectrum from small pieces of silverware to the decorative features of the Albert Memorial, and from gas lighting standards to the roof of the Oxford University Museum.

Skidmore earned the respect of, and co-operated with, many eminent Victorians. In particular he worked for Sir George Gilbert Scott, supplying almost all the decorative ironwork for the latter's buildings. Skidmore's willingness to tackle projects for which his background and training did not always fit him proved at times to be both a strength and a weakness. His genius for designing and producing elaborate decorative metalwork of the highest quality and artistry is beyond question. However, his venture into using the same materials (notably wrought iron) for load-bearing architectural structures proved to be far less successful. For example, his design for an elegant glazed roof to cover the quadrangle of the Oxford University Museum, using wrought iron for major structural members, collapsed during construction and a redesign using cast iron was needed.

Skidmore was born in Birmingham in 1818, but in 1822 his father moved the family to Coventry where he set up in business as a jeweller. In his apprenticeship, Francis learned the full range of jeweller's skills, a training which might appear inappropriate for the type of work which was later to make his name. In fact its influence can be seen even in his largest projects, which are renowned for their delicate and complex metal tracery.

Skidmore eventually had a series of workshops in Coventry, the sites of which Maureen Bourne showed on early maps of the City. Although this man of relatively humble origins was an associate of many famous Victorians, and although his work remains a permanent memorial to his genius, he died in poverty, for like many another outstanding artist he was sadly in fact not at all a successful business man.

## Leamington's Railway Bridge and Station.

The January meeting concluded with a short presentation by Peter Chater of various stages in the history of Leamington's railway station and its associated bridge over the High St/Clemens St junction. Peter traced the history of the station from the original fully covered design through the subsequent re-developments which led ultimately to the 1930s design we know today. He then turned to the associated rail bridge and covered the various versions which have been used over the years, none of which it must be admitted has ever done much to add to the elegance of the town. Peter's intimate knowledge of railway history and practice, and a splendid selection of slides, ensured that his talk was as rich in detail as it was comprehensive in presentation.

## A Second Look - Update

**The High Street Railway Bridge.**

The following notes on the reconstruction of this notable Leamington landmark were provided by Peter Chater.

The original bridge of 1852 that spanned High Street was constructed with plated girders of wrought iron, supported at either end on brick and stone piers and 10 supporting cast iron columns throughout its length. It originally carried a double track of mixed gauge. This bridge remained *in situ* until replaced in 1906.

The present bridge is built with arched truss girders (five in number) supported at each end on brick and stone piers, one central column and one blue brick pier at one side. The removal of the columns of the old bridge facilitated the movement of road traffic beneath.

The two sides of the new bridge were constructed separately so that rail traffic would not be disrupted. The upside was completed first with all rail traffic passing over the downside of the bridge, tracks being interlaced (this avoids any moving points). When finished, tracks were diverted to the upside so that the downside could be built.

This information was obtained from the Great Western Magazine of 1906. To quote: The manufacture of the steelwork, 330 tons in weight, was undertaken by Messrs. Eastwood and Swingler of Derby. The erection was supervised by Divisional Engineer L. R. Wood, Wolverhampton.

# City Planning, Bricks and Vintage Aircraft

### February 2001
### Members to the Rescue

Only three hours before this meeting was due to open, news was received that the scheduled speaker was unfortunately indisposed and therefore unable to attend. Nevertheless, by 7.30pm enough of our members had been mustered to fill the evening with contributions of their own, and to present a variety of topics and slides of impressive quality and interest.

Martin Green took us on a splendid pictorial tour of Birmingham City Centre, concentrating on some of the difficult choices faced by planners in its redevelopment, and especially where the 'old' must soon perforce give way to the 'new'. The Rotunda, one of the buildings to be retained, served as vantage point from which he took a series of panoramic 'aerial' views to illustrate both the beginnings of the redevelopment and some of the cherished landmarks which may soon disappear. Interspersed were external and internal shots of such historic areas as the Jewellery Quarter, the Law Courts, the Midland Art School, Moor St station, and the Birmingham Gun Barrel Proof House. Other subjects covered by Martin included canal-side buildings, and the Typhoo Tips Tea and Bird's Custard factories. The fact that Martin was on the 'home ground' of his childhood meant he could bring some of his personal memories to bear with great effect.

Roger Cragg was the next speaker with slides he had taken on tours of industrial sites within and without Warwickshire. When the roof of the Retort House for the original gas works in Gas St, Birmingham, was being restored Roger was in fact consulted by the contractors, and he had a fascinating tale to tell of the unique cast-iron trusses which had to be preserved. These trusses needed to be assessed for strength in relation to the new covering they were destined to support, and this work was carried out by a colleague of Roger's from Coventry University. Other topics covered by Roger included Wigan Pier, the Adam Bridge on the Liverpool & Bury Railway (for which early pre-stressed concrete beams were used); the Albert Dock in Liverpool; and finally some aspects of bridges, aqueducts and inclined planes on canals in the West Country.

Since the scheduled speaker was to have given a talk on brickmaking it was fortuitous that both Peter Chater and Richard Storey were able, at such short notice, to make contributions on that very same subject. Peter had had the foresight to photograph the Cherry Orchard Brickworks, Kenilworth, at a time when it had already stopped production but before it was razed to the ground. His slides showed both general views of the site and internal views of the buildings where some of the original brickmaking machinery was still installed, albeit long since abandoned.

Richard Storey spoke next on the patented Caleb Hitch Brick, an interlocking design which had some success in the years *circa* 1820-1840 but which ultimately lost favour, possibly because of its complexity, the need for so many variations on the basic design to accommodate corners and ends, and consequently the difficulty and relatively high cost of production compared with a standard brick.

Mark Abbott rounded-off the meeting with a brief profile of the Shuttleworth Collection and showed slides of vintage triplanes, biplanes and monoplanes, many of them airborne, and a roll call of historic names that included Bleriot, Sopwith, Blackburn, Bristol, Avro, Supermarine and Hawker.

The meeting was a splendid example of the knowledge which resides within members of the Society itself, and it is hoped should encourage others to come forward from time to time with short contributions.

Any member wishing to make a contribution to a meeting (short or otherwise!), should contact a member of the committee.


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