

# WARWICKSHIRE

## Industrial Archaeology Society

NUMBER 22 March 2006

PUBLISHED QUARTERLY

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This edition of the Newsletter sees the start of a new regular feature: *From the Chairman*. Written by Martin Green, I anticipate a series of observations and personal thoughts on the direction of the Society and industrial archaeology generally. Comments are of course welcome!

Mark W. Abbott.

### FROM THE CHAIRMAN

Ever since its inception in 1989, the Society has sought to fulfil its primary function of promoting the study and recording of the remains of our industrial past, with particular reference to the local area of Coventry and Warwickshire. The principal vehicle employed in this respect has been the regular monthly meeting which seeks to provide speakers on a range of issues (both local and beyond), and to offer a forum for discussion and the opportunity for contact between members. Attendances at these meetings now regularly exceed 50, and this is a very gratifying response by the membership to the programme laid on by the Committee. Long

may it continue!

Less fully embraced has been the more challenging task of seeking to record all the industrial sites in our area and to present these in some form of gazetteer. This has taxed the minds of the Committee for a long time, and no obvious solution offers itself which cannot avoid a considerable amount of labour from individuals in the Society.

There have, of course, been some excellent examples of individual study and recording by members which have added to our knowledge and understanding of the area's industrial past. For example, under Roger Cragg's leadership, the civil engineering heritage has been well covered – including the creation of the Warwickshire Bridges Database, whilst Arthur Astrop's research into the machine-tool industry of Coventry has improved our knowledge as well as identifying the (few) remaining sites of that once highly significant industry.

In fact, civil engineering, transport (especially canal and rail) and wind and water power have attracted considerable attention from other groups, and it is no surprise that these industries are well-documented. Part of the reason for this is, of course, that many continue to carry out their original, highly specific function (e.g. canal aqueduct; restored watermill) but this is not the case for many other sites. Many structures – though still standing – may have little link with their original function, being

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### SOCIETY NEWS

#### Programme.

The programme through to July 2006, is as follows:

#### March 9th

Mr. Jeromy Hassell: *White and Poppe*

#### April 13th

Mr. George Demidowicz: *The Soho Foundry*.

#### May 11th

Mr. Martin Green: *Aspects of the Industrial Archaeology of New Zealand*.

#### June 8th

Mr. Mel Thompson: *Woven in Kidderminster*.

#### July 13th

AGM and Members' Evening to include: *Aspects of the Industrial Archaeology of North Warwickshire*

#### Subscriptions

Members are reminded that subscriptions for the 2005/2006 season are due. The amount payable remains as for the last season: £10.00 per person or couple with an additional meeting payment of £1.00 per person to help cover refreshment expenses. Payment should preferably be made at a meeting, but payments by post are acceptable. Please note that receipts for postal payments will not be sent out, but instead will be available for collection at a subsequent meeting. Cheques should be made payable to Warwickshire Industrial Archaeology Society please. If you are unsure of your subscription status for this season please ask the Treasurer. Reminders for outstanding payments will be sent with the current Newsletter mailing.

# NEWSLETTER

# Meeting Reports *by Arthur Astrop*

December 2005 Prof. Marilyn Palmer

## *Technology in the English Country House and Estate*

Largely through the efforts of the National Trust and English Heritage, the architecture, furnishings, paintings and grounds of very many of Britain's country houses and estates have been preserved and made accessible to visitors. This is sterling work, but until relatively recently it has been concerned principally with conserving what may be termed the 'upstairs' of such national treasures. But what of life 'downstairs'?

For on the other side of the 'green baize door', as it were, are to be found many hitherto neglected jewels of the industrial archaeology of our great houses. It is through the persuasion of Professor Palmer, and others, that efforts to preserve and make these treasures equally accessible to the public are increasingly bearing fruit, and it was on this aspect of IA that she addressed our December meeting

When the wealthy of the late 18th and 19th centuries, including the new industrialists, built their grand houses many chose sites deliberately distant from the 'madding crowd'. And if the site also happened to be on elevated ground, how was water to be supplied to the kitchens and bedrooms? Hence the eventual installation of different types of powered pumps and hydraulic rams to lift water from lower levels. What if, when the inconvenience of oil lamps became too irksome, the great house was remote from supplies of gas and, later on, the advent of electricity? Then, dedicated gas-producing or battery-charging facilities were needed. And when central heating became *de rigueur* then that also had to be installed.

Such equipment, visually so different from the other splendours of the great houses, was initially considered unfit to be on show to the residents, and especially to visitors. As a result, it was always installed either well 'below stairs' or in its own buildings out of sight in the grounds. Even hot water radiators were thought best concealed behind special casings in reception rooms in case they offended the eye. Much of what was once thought of as 'ironmongery' in our great houses and estates still exists and, in the nick of time, is being recorded, rescued, conserved, and in some instances even brought back to working order for brief demonstration purposes.

The installation of various types of technology in our great houses, Professor Palmer pointed out, was driven by two important societal 'forces'. The first was largely hedonistic, namely to provide greater comfort and convenience for the residents, together

with a desire to impress their visitors. By the end of the 19th C, domestic staff was already becoming more difficult to obtain, and the second driving force came immediately after the Great War of 1914-1918. Owners of the great houses then found there was no longer an apparently inexhaustible supply of manual labour, especially young maids- and men-servants. In short, they needed to use a steadily diminishing workforce much more efficiently, and turned to technology to fill the gap.

Professor Palmer's view of the industrial archaeology to be found in many of our country houses was illustrated by some splendid slides of what lies on the other side of the 'green baize door'.

### **From the Chairman *continued*:**

occupied with activities unrelated to the past. Indeed, the nature of the structures may place limitations on their adaptability to modern industrial or commercial usage. The task of the industrial archaeologist is to make sure that what remains is recorded, and, if circumstances demand it, to try to press for conversion rather than demolition.

This is not such a simple task as it sounds. The phrase 'if circumstances demand it' begs many questions. What criteria might we use to judge whether an industrial building merits inclusion in our gazetteer and deserves- if possible - to be preserved? Here are some ideas which may deserve attention:

- Date of construction
- Significant technology and/or processes remain intact
- Important building in the history of the industry in the UK
- Only example/one of few remaining in Warwickshire
- Crucial building in an local/industrial/urban landscape
- Particular features of construction
- Architectural merit

Readers of this newsletter may feel there are other criteria to consider. Feel free to make your views known!

The great danger for the future is that an 'industrial heritage walk' through an area will simply be a stroll through housing estates with the guide only able to refer to the buildings and industries that used to be there. Careful retention and sensitive conversion of industrial buildings must have a role to play in future landscapes.

**Martin Green**

# The Foremost 19th Century Railway Builder

January 2006 Mr. Roger Cragg

*Thomas Brassey*

A commemorative plaque to Thomas Brassey, the bicentenary of whose birth occurred in 2005, carries the words 'The world's foremost builder of railways in the 19th century'. This statement is undoubtedly true but it scarcely does justice to the energy, range of projects, skill and sheer genius of a man who by the time he died in his 65th year had masterminded railways (and many other related projects) in Britain and in no fewer than 14 other countries. A 36-in diameter silver gilt shield exhibited at the Great Exhibition of 1851 carried portraits of 12 of the eminent engineers with whom Brassey worked, 12 views of some of his greatest projects, and the names of 36 of his worldwide network of agents.

The son of a yeoman farmer, and born into a fairly wealthy Cheshire family, Thomas Brassey was 16 when he was apprenticed to Mr Lawton, a local land agent. He soon found himself on survey work for Telford's improvements to the Holyhead Rd in Cheshire, and by the age of 21 he was made a partner in Lawton's firm. He was sent to Birkenhead to run Lawton's business there and seeing the potential of the area as a future port he borrowed money from his father to found a brickworks to provide building materials. At that time, George Stephenson was building the Liverpool and Manchester railway and he asked Brassey to quote for supplying stone for a viaduct. That quotation was not accepted, but it led to another for the Penkrige viaduct, in which he was successful. He was also awarded a contract for a further 10 miles of railway. Brassey was 'on his way'.

From this point, Roger Cragg unfolded Brassey's astonishing career, originally in Britain but soon extending across the Channel into France. There, the 82-mile Paris to Rouen railway was one of his first overseas projects and at the same time Brassey switched from financing projects himself to working with partners. First there was William Mackenzie and later he also joined forces with Samuel Morton Peto and Edward Ladd Betts, a triumvirate which prospered for 18 years. By 1834 Brassey had 13 major contracts in England, Scotland, Wales and France and soon he was working in Norway as well. In 1852, Brassey, Peto and Betts undertook a survey of Canada, which led to the building of the Grand Trunk Route railway. And in 1855 he masterminded the construction of a 29-mile long railway in the Crimea to facilitate transport for Britain's war there. More than 20 ships ferried the materials from the UK, and in the first 10 days a huddled camp was built

and 5 miles of track was laid.

But not everything he touched was successful. He had several financial crises, losing substantial sums of money, and in 1846 the base of one of the piers on the Chappel viaduct shattered and consequently the remainder of the structure collapsed. The viaduct had to be completely rebuilt at Brassey and Mackenzie's expense. The sheer magnitude of his projects which, in addition to the 6,583 miles of railway track, included docks, bridges, waterworks, part of London's sewer system, involving work in countries from Russia to Australia and from India to South America, prompted Roger to wonder why Brassey is not as well known in the UK as another engineer whose name also starts with a B!

## Harbury Windmill

Harbury windmill is of the tower type mill; it is situated in the village and is visible from many positions.

It was erected in the first decade of the 19th century and the tower is constructed of brick and stone. Chesterton Manor house was demolished in 1802 and it is thought that the stone used, originated from there.

The walls of the two lower floors are of stone (probably limestone) and the upper four floors are of dark red brick giving a total of six floors. There is a considerable batter on the walls. The height of the tower is sixty feet and the cap is another ten feet making it the tallest in Warwickshire. It formerly had a cap in the shape of an up turned boat; this has been altered in recent years to a pitched roof type.

It was originally fitted with four common sails of about thirty feet in length; these were reached from a furling gallery, which encircled the tower. The sails ceased operating the mill before the First World War and were removed in the early 20s, but the stocks were not removed until 1934.

From 1912 different forms of engines powered the mill, the first one being a steam engine, followed by an oil engine and from the early 30s by electricity.

At different periods the mill housed two and sometimes three pairs of stones these being of millstone grit or the French burrs. These stones were on the fourth floor.

There have been about eight different millers over a period of one hundred and fifty years. Over these years two were accidentally killed, George

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# A Vanished Landmark

February 2006 Mr. Tim Booth

## *Emscote Mill*

In the Emscote Road, Warwick, there is a modern residential development called Fleur-de-Lys Court, where a 20th century pie factory once stood. But the pie factory was in fact housed in the buildings of a 19th century flour mill. And the only trace of *that* enterprise today is one small archway or culvert in the bank of the nearby Warwick & Napton canal through which excess water was taken, for a nominal payment of £30/year *in perpetuity*, to drive the mill's water wheel. It was with that shrewd annual contract, entered into in 1803 by Charles Handley and John Tomes, that Tim Booth started his story of a milling business which flourished for over 150 years and once provided the people of Warwick and Leamington with plenty of work.

The mill (initially known as Navigation Mill) was formally opened in late 1805 with power to drive five sets of stones and with a capacity for producing 500 sacks of flour per week. The water wheel was 24 ft in diameter by 7 ft wide and was in cast iron, that material having advanced to the point where the overall weight of such a wheel was no greater than one made from wood. With the new mill placed almost precisely midway between Warwick and Leamington, and with the impending prodigious increase in population of the latter town, its future success as a supplier of high-quality flour was hardly in doubt.

By 1830, millers Kench and Cattell were operating the business, probably as lessees to Handley and Tomes, and in 1841 Cattell seems to have withdrawn and the firm traded as P. Kench & Son. Tim Booth's immaculate research then led us through the successive generations of Kench's who ran the mill, extending and updating it. In the late 1860s, for example, a steam-driven mill was added to the water mill when the latter reached its maximum output. Towards the end of the 19th century, Sheldon Kench, grandson of the founder was facing up to changing technology with the introduction of

roller milling in place of mill stones. This process produced high-quality fine flour by gradual-reduction milling through diagonally arranged chilled-iron rolls.

In 1904, Sheldon Kench employed Briddon & Fowler to remodel the Emscote Mill and a large block of additional buildings appeared on the site. In 1908, Leonard Sheldon Kench joined his father in the business, having served his apprenticeship at the Albion Flour Mills, Worcester, but Leonard fell in WW1, and his father died in 1926. The mill continued working until 1961, when in due course most of its buildings were converted for the manufacture of Fleur-de-Lys pies.

A highly detailed, illustrated history of the Emscote Mill, written by Tim Booth, appeared in Issue 22 of *Wind and Water Mills*, 2003, published by The Midlands Wind and Water Mills Group, and is still in print. Copies were on sale, price £3.00, at the February meeting and are also available from Mr A. Bonson, 14 Falmouth Rd, Congleton, Cheshire, CW12 3BH.

### **Harbury Windmill continued:**

Verney in 1890 by being caught up in the internal machinery, and another miller when out on the furling gallery being struck by a sail.

Milling ceased in 1952 and after some years it was used as an engineering workshop. In 1982 a rather larger looking pitched roof type replaced the boat shaped cap. In 1988 the lower floors became part of a home.

### REFERENCES

1. The Warwickshire Museum Publication, *Windmills in Warwickshire* by W. A. Seaby and A. C. Smith.
2. *Wind and Water Mills*, Number 10, Midland Wind and Water Mills Group.

**Peter Chater**

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### Credits

#### **Design and editing:**

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#### **Printing:**

Southam Office

Supplies