

INDUSTRIAL ARCHAEOLOGY NEWS

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THE BULLETIN OF THE ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

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Psychoindustrialarchaeology • Ironbridge Weekend



INDUSTRIAL ARCHAEOLOGY NEWS 162 Autumn 2012

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Portland Works, Sheffield and the Centenary of Stainless Steel

Stainless steel is one of the key new materials of the twentieth century. It is a range of alloys of steel and chromium; many include other metals, particularly nickel. The first one was invented – or perhaps ‘discovered’ is a better word – by Harry Brearley (1871-1948) in Sheffield in 1913. He told the story in his very readable autobiography ‘Knotted String’.

Derek Bayliss

Harry Brearley's father was a steel melter, his family large and poor, and his formal education limited and uncongenial. At 12 he began work as a cellar lad in Firth's steel works. He found his way to the laboratory, washing bottles. Thanks to his hard work and a far-sighted mentor he became a metallurgist, and in 1908 took charge of a new research laboratory built jointly by Browns and Firths. In 1912-13 he was doing research into corrosion in gun barrels, and decided to look at steel-chromium alloys with more chromium than usual. Unexpectedly, samples that were left outside did not rust. They were the first stainless steel.

The centenary next year will be marked by a programme of events and a new book. The research laboratory still stands, in Princess Street, Attercliffe, and carries a plaque to Brearley. It is listed grade 2, but a slightly later block behind it was demolished not long ago. Until recently it was the Princess Works of the English Pewter Company, but the site has been sold at auction and we await news of its future.

The first commercial use of the new alloy was for cutlery. However, this was not an easy step. Cutlery firms found it very difficult to forge and

grind, and there were doubts – there still are – whether it could give as sharp a cutting edge as carbon steel. But one cutlery firm, Robert F Mosley, persisted, and in 1914 produced the first commercial range of stainless steel knives under the trade name Rusnorstain. The alloy was first called Rustless, but Ernest Stuart, Mosleys' manager, coined the name Stainless Steel.

The rest, as they say, is history, and we turn to Mosleys' works, which are still in use. Called Portland Works they are in Randall Street, south of the city centre near the Sheffield United ground at Bramall Lane. They were built in 1877-9 for the firm who there until the 1950s. The two storey front is on a curve and has some architectural touches, including a handsome central gateway. Inside there are workshops, largely of three storeys, around a number of small courtyards and alleys and along the back of the site. It used to be steam powered, and there is an engine house and a round chimney, which was reduced to half its height during World War 2 lest it become a landmark for enemy aircraft. Line shafting is still in place in some of the workshops. Listed Grade 2*, they are in a conservation area designated for light industry.

Mosleys shared the works with a number of 'little mesters' in traditional Sheffield trades. Some did subcontracted work for them, some for other customers. Today it still houses twenty businesses, and some 35 people work there. They include Stuart Mitchell, who has been here since 1980 and makes high quality knives for collectors. These use exotic materials such as mammoth ivory, and sell for £200-400 each. Andy Cole has worked here for 34 years making hand tools. Others in the metal trades include silver platers and a die maker and engraver. Mark Jackson makes school equipment, including coat-pegs to his own ingenious patented design. Besides these there are woodworking firms, artists' studios, and musicians' rehearsal rooms; Def Leppard started there. It is increasingly hard to find similar work spaces elsewhere in the city.



Portland Works, Randall Street, Sheffield

Photo: Portland Works Committee

COVER PICTURE

Newcomen Engine, about 1760, said to be the oldest surviving steam engine in the world – Ford Museum, Dearborn. Originally for mine pumping at Rowley Regis. Moved to US in 1930. Seen on the AIA tour in May. Full report in the next edition

The owner applied for consent to convert the buildings to 66 small bedsit flats, but after a vigorous campaign this was rejected in April 2011, because the change of use was not acceptable and because the character and appearance of the works would be affected. The campaign brought together the tenants and other people who wanted it to continue to provide spaces for a range of small businesses. They asked the owner about buying the building to secure its future, and after discussions they were told that he would accept £400,000 and would allow a limited period to raise this.

The campaigners went to work quickly and effectively. A fully costed business plan was prepared, covering not only the purchase but the repair and renovation that would be needed. Open days were held to attract support. There was widespread publicity, including a TV appearance in *Britain's Heritage Heroes* with John Craven and Jules Hudson. An MA History student on a placement is collecting and presenting the Works' history including the many living memories.

The plans include the provision of apprenticeships and advanced training in manufacturing skills. There is potential for other educational uses and cultural events. While the project is not intended primarily as a visitor attraction, it is hoped to develop opportunities for visits.

The vehicle for the purchase, and then for managing the Works, is the PWLS (Portland Works Little Sheffield) Industrial and Provident Society, with charitable aims and on co-operative principles. This route is often used by, for example, village groups buying and running their local shop or pub. Shares have been issued for sums from £100 to £20,000. They are not transferable but can be sold back to the Society. No dividends will be paid, but there will be interest payments which will approach the rate of inflation

Donations are also welcome, and businesses that donate at least £1,000 become Patrons. One of the first was the construction firm Henry Boot. The Architectural Heritage Fund and others have offered substantial loans, but the campaign group is cautious about taking on too much loan funding.

Enough has now been raised to purchase the building, and this is going ahead. Then the first priorities are to make the building weatherproof and renew the power supplies.

Psychoindustrial-archaeology?

Archaeologists are beginning to use the term psychoarchaeology. Industrial archaeology is now generally considered to be part of archaeology, so presumably there is such a thing as psycho-industrial archaeology.

Robert Carr

In a beautifully worded abstract prepared for the 33rd Theoretical Archaeology Group Annual Conference, held at the University of Birmingham

in December 2011, Kenny Brophy and Vicki Cummings define psychoarchaeology as follows:

Psychoarchaeology is the study of the specific effects of archaeological sites on the emotions and behavior of individuals and communities, and offers a means to reflect on the way that traces of the past are mediated to us through the present landscape. Psychoarchaeology is concerned with the intersection / collision between the past and the present in the form of ruins, earthworks, buildings, cropmarks, lithic scatters and sub-surface traces. These are the fusion points between past and present. As such, archaeological traces / sites could be regarded as temporal unconformities. They often occur in juxtaposition, or are surreal, inappropriate, emotional, sources of tension or misunderstood within the modern world. Our archaeological engagements are entirely mediated through encounters at these fusion points. As such, we could regard such 'sites' as wormholes, tears in time, leading back to the past. Psychoarchaeology underlies virtually everything we do, because we have an emotional response to the material we are working with and the environment that the material is in (whether it be the landscape, in a trench, a museum or in the lab).

This statement is admirably clear and to the point, and the evocation of wormholes in space-time is a splendid metaphor borrowed from science fiction if not mainstream physics.

When lecturing on industrial archaeology and describing his visits to former factories, Kenneth Hudson used to mention the ghosts of departed workers. He was not using 'ghost' in a supernatural sense but as a word to describe the feelings such environments evoked in himself – a turn of phrase. Sir Neil Cossons was fond of mentioning the sensation of place associated with old industrial remains, which he said could be overwhelming.

Used in the context of prehistory psychoarchaeology can have really significant relevance. For the last 300 years for which we have so much more evidence in the form of records and artefacts, a psychoarchaeological approach has perhaps a diminished usefulness. In IA News 120 I raised the question of how we define Industrial Archaeology. Is it what mainstream archaeologists sometimes call 'real industrial archaeology' dealing with the whole period of human existence or is it a 'period study' covering just the recent past?

The concept of psychoarchaeology stretches back at least eighty years. Sigmund Freud wrote about it around 1930 and while he may have gone in and out of fashion over the years and his work dismissed as pseudoscience, he may be back in fashion now.

Psychogeography can be defined as the study of the specific effects of the geographical environment, consciously organised or not, on the emotions and behaviour of individuals. This definition was written in the 1950s and the notion of psychogeography has become extended and ramified over the past 60 years, being applied to increasingly more varied situations to the

extent that what now passes for the subject is getting increasingly difficult to recognise, and we expect a similar process to occur with psychoarchaeology. What Freud was writing about eighty years ago is somewhat different from the outline definition of Brophy and Cummings above. Just because their definition is beautiful it is not necessarily true or useful, and does their statement really amount to much that is actually new? Is psychoarchaeology describing anything we do not know already, or just attitudes and activities we are all too familiar with? This elegant prose may be essentially stating the obvious.

But looking at the papers presented in Birmingham in December, psychoarchaeology is relevant to industrial archaeology, even if it is just a word covering activities we ourselves have been engaged in and even though there is a hint of the 'Emperor's New Clothes' in some of this. Psychoarchaeology is a word which has its uses, even in run-of-the-mill industrial archaeology. Kenneth Hudson insisted that a historian must have an historical imagination.

The Ironbridge Weekend 2012

After two years' absence the AIA's Ironbridge Weekend has been reinstated. The theme was Industrial Heritage at Risk (IHAR) which was launched in October 2011. Over 40 people attended the weekend, generally agreed to be a great success.

Amber Patrick

On the Saturday morning there were five sessions, starting with a talk by Shane Gould from English Heritage. He took delegates through the very extensive website on Industrial Heritage at Risk. Even for those of us who had used the site and were reasonably familiar with it, it was a useful exercise and showed all too clearly the amount of work which had gone into this project. The web site for starting one's investigation is: www.english-heritage.org.uk/caring/heritage-at-risk/industrial-heritage-at-risk/

Next were three short presentations on the Industrial Heritage Support Officer's role. The position will be based at Ironbridge. David de Haan from the Ironbridge Gorge Museum talked on the museum but without illustrations! Tegwen Roberts talked on the East Peak Innovation Partnership and Lucie Thacker spoke on the Architectural Heritage Fund.

The final talk was by John Yates from English Heritage on Ditherington Flax Mill: past, present and future. The talk was in preparation for the afternoon's visit and included some excellent animated graphics on the construction of the iron framed building. Designed by Charles Bage, it is well known as the first iron framed building in the world and listed Grade 1. Plans for its reuse were approved in October 2010.



Ditherington Mill

Photo: Amber Patrick



Ditherington Mill

Photo: Amber Patrick

The last session started with the Association's annual awards for publications: Newsletters and Journals. The final and very important activity before lunch was the launch by Keith Falconer (of English Heritage) of the CBA/AIA *Industrial Archaeology Handbook* by Marilyn Palmer, Mike Nevell and Mark Sissons.

After lunch John Yates led us on a visit to Ditherington – the highlight of the day for most of us. First we toured the outside and then, inside, we were able to visit the Main Mill, the Cross Mill, the Warehouse and the Dye House. Much work is needed and many parts are not yet accessible. There is a Friends of the Flaxmill and Maltings who organise events and open days. Their website is: www.flaxmill-maltings.co.uk

Following Ditherington we went on to the Mill Meece Pumping Station in Staffordshire. It dates from 1914 and has two horizontal tandem steam engines. Volunteers from the Mill Meece Preservation Trust who maintain the site for visits kindly opened it for us. The journey back to Ironbridge was spectacularly wet!

In the evening there was an excellent (and this time fully illustrated) talk by David de Haan on the 1851 Exhibition.

On the Sunday morning there was a short visit to Carpenters Row just across the road from the Ironbridge Institute. Unfortunately we could only view the workers' cottages from the outside because the roofs were being replaced. Then it was off to Blists Hill for a tour round including a

trip to the clay mine.

It was a wet week-end but fortunately we were not too inconvenienced and importantly we learnt how vulnerable industrial heritage is but also how it can be protected, whether by a small preservation trust as at Mill Meece, or by major projects in need of lottery funding as at Ditherington.

Post Script: Ditherington has been awarded the first stage of a £12m grant from the Heritage Lottery Fund.

Keith Falconer retires from English Heritage

Keith Falconer retired in May from his post as Head of Industrial Archaeology with English Heritage. He has served industrial archaeology with distinction over a working career of forty-one years, beginning in 1971 when he was recruited as Industrial Survey Officer to the Council of British Archaeology.

Angus Buchanan

He came from graduation at Edinburgh University and a period as a research student (on disused canals) at the University of Hull. He and his wife Eileen made their home in Frome, Somerset, convenient for Bath, Salisbury, and Swindon, which became the main bases of his work, and here they raised their family and made many friends.

There were three phases in Keith's career. In the first, as an officer of the CBA – although financed by the Ministry of Works and based for several years with myself and George Watkins at the University of Bath – he was responsible for promoting the national survey of British industrial monuments which had been started by Rex



Mill Meece Pumping Station

Photo: Bruce Hedge

Wailles. This involved extensive travelling to prepare the detailed reports which he submitted to the CBA Industrial Panel for making appropriate recommendations to the Ministry for scheduling and listing. The work gave Keith a wide knowledge of the field evidence of industrial archaeology which provided the basis for his Batsford Book – one of the national series that he edited – *Guide to England's Industrial Heritage* (Batsford, 1980).

The second phase began with Keith's transfer to the Royal Commission on the Historical Monuments of England, in which he continued his advisory role to Government on industrial monuments, and also took an important part in the expanding activities of the Royal Commission in relation to the industrial heritage, involving him in work on Liverpool Docks, Yorkshire and Lancashire Textiles, Staffordshire Potteries, Waltham Abbey Gunpowder, and many other important industries. Keith became Head of the Salisbury Office for the RCHME, and when the Commission was pressed to move its Headquarters out of London he was quick to identify the derelict Brunel railway buildings at Swindon as an excellent opportunity to re-use an important industrial structure in an appropriate manner. This idea was promptly accepted and the Commission moved to Swindon where Keith undertook, with John Cattell, the scholarly study of *Swindon: the legacy of a Railway Town* (RCHME & HMSO, 1995).

The merging of the RCHME with English Heritage in 1999 brought a third phase to Keith's career, when he became Head of Industrial Archaeology in the organisation, responsible for co-ordinating the initiatives taken by EH in the protection of industrial monuments. There is a seamless progression in which he moved through these phases, and throughout he was engaged in advancing other ventures aimed at the enhancement of the industrial heritage. He was a

founder of the AIA in 1973, and also of FICCIM (which became TICCIH) in the same year, supporting the rapidly expanding international interest in the subject. Industrial archaeologists have good cause to be grateful to Keith, and to wish him and Eileen a long and happy retirement.

Wellington Wheel Pit

Over one hundred and fifty people attended the opening by Mark Sissons, AIA Chairman, of the excavated Wellington wheelpit at Mellor Mill, Stockport on Saturday 10 March 2012. The wheel pit was excavated by Mellor Archaeological Trust with funding assistance from an AIA Restoration Award and is the first stage of what is planned to be a much larger excavation of the mill site over several years.

Peter Bone

Mellor Mill was built by Samuel Oldknow in 1790 – 1792 and worked for 100 years until it burnt out in 1892. It was impressive water driven three storey cotton spinning mill with three staircase towers. The Wellington Wheel was enclosed in the centre of the building and was a high breast shot wheel 22ft in diameter and 17ft in width capable of producing 120hp. The rural site is next to the river Goyt and has not been overbuilt; there are extensive below ground remains of the mill, a 1860s engine house, workshops and stables and Mellor Lodge, Oldknow's home. The lodge was built directly overlooking the mill and connected from the cellar to the mill site by a tunnel. The house has been demolished but specimen trees and shrubs he planted are now growing wild in the woodland. There is a second large wheel pit which housed the Waterloo Wheel and a complex series of water tunnels and leats. After the mill



*Mark Sissons cutting the tape and declaring the wheel pit open
Photo: Peter Bone*

burned the mill ponds were renamed "Roman Lakes" and used as a pleasure park with boating, fishing and a dance hall. Recreational use continues today.

The mill was very large for its day and is one of those that marked the transition from the proto-factory to a true industrial enterprise employing 550 people. Oldknow was a friend of Robert Owen and the Arkwrights; he tried to create a workers community with housing, farming, mining and forestry.

In his address Mark Sissons commended the work done by Mellor Archaeological Trust, the Manchester Regional Industrial Archaeology Society and many others in the recording, excavation and interpretation of this fascinating site. He said the site records the presence of this huge mill which was one of the very first to move Arkwright's spinning technology onto a much larger scale than had been seen in earlier textile mills.

Hoylandswaine Nail Forge

In 2009 the AIA awarded a grant of £5,000 to the South Yorkshire Trades Historical Trust, which manages the South Yorkshire Industrial History Society's four historic industrial properties, to help repair the roof of one of them, a nail forge at Hoylandswaine near Penistone, in Barnsley MB. The project has taken longer than expected, but has now been successfully completed.

Derek Bayliss

Hoylandswaine Nail Forge is a small stone building with a stone slate roof. It is listed Grade 2. The previous owner, Hilary Smith, gave it to the Society in 1998 to preserve for the future. Its date



Professor Angus Buchanan, Keith Falconer and Sir Neil Cossons on the occasion of Keith Falconer's retirement



Hoylandswaine Nail Forge

Photo: Ted Young

is uncertain but it was there by 1850. It consists of three forges where nails were made by hand. Each had a hearth, bellows and chimney, and a stiddy (a small anvil) for each worker. In one forge the hearth, bellows and chimney have survived. We do not know of any other domestic nail forges in Britain, still on their original sites, where that is the case.

Some initial conservation work was done in 2004. Since then the Trust has opened it to the public on one day a year, during Heritage Open Days. We knew that the roof needed to be taken down and rebuilt, replacing defective slates, and the grant application was to meet much of the cost of that. We applied for further funding to the East Peak Innovation Partnership (EPIP), based in Penistone, for a grant from the LEADER programme, which is jointly funded by DEFRA and the European Union through the Rural Development Programme for England.

After we passed stage 1 of EPIP's application process, we were advised by English Heritage that we should employ a conservation architect. We appointed Andrew Shepherd of Eldon Minns Ltd., Sheffield. Since his report was needed before EPIP could consider our application, his fees had first call on our AIA grant, and we could hardly have gone forward at that stage without it. EPIP agreed to our second stage application, including funding for interpretation as well as building work, and we could go ahead in December 2011.

The roof repairs were done, under Andrew's supervision, by Parker Maythorn Ltd. of Holmfirth, and we are pleased with the result. They found that 70% of the stone slates needed to be replaced, rather than 30% as estimated before the work. They discovered that the chimney was partly supported by the roof, and had to prop it while the repairs were done, and rebuild the top section. The farmer of the adjoining field turned out to know the contractor, and asked for the north east gable to be extra secured as his cows like to scratch themselves against it.

The interpretation materials were done by Wessex Archaeology and include display panels, leaflets, and an attractive (free) small guidebook. If you would like a copy, please send me an A5 stamped addressed envelope marked 'Nail Forge'. My address is 30 Muskoka Avenue, Sheffield S11 7RL.

There is still more work to be done. In particular, the electricity supply, which we hoped to repair ourselves, now needs complete replacement. We also need to develop awareness and support in the village and area, and find out more about the history of the domestic nail trade. The Nail Forge is already featuring in one local school project, and we hope for more.

We shall open during Heritage Open Days, on Friday 7 Sept from 16.00 to 19.30 and Sunday 9 Sept from 11.00 to 16.00. Visits by small parties can be arranged at other times; please note that it only takes 20-30 minutes at most to see the building. It is a short distance up from the Lord

Nelson pub, in the village street just off the A628. Please contact me (tel. 0114 230 7693; email v.bayliss@btinternet.com) if you need further information.

Chaldron Waggon

Following the restoration grant which the AIA provided to Beamish, The Living Museum of the North, to partially fund the rebuilding of some of their collection of Chaldron waggons, several people have asked me 'what exactly is a chaldron waggon?'

Mark Sissons with thanks to Paul Jarman and Beamish, the Living Museum of the North.

The chaldron waggon (in this context, waggon is traditionally spelt thus) was a type of timber framed and timber bodied bottom discharge hopper railway waggon used on most of the early colliery tramroads and railways that led down from the pits in North Eastern England to shipment points on the rivers Wear and Tyne.

So what is a chaldron? The word chaldron is derived from the Scots 'chalder'. The chaldron was a dry measure of volume whose use can be traced back to at least the thirteenth century. It was mainly used for measuring volumes of coal and other bulky relatively low value goods. In the seventeenth and eighteenth centuries volumetric measure was much easier to perform than weight based measure. One of the major problems with the volumetric chaldron was that its weight varied depending on the lump size of the coal and its water content, a factor that was sometimes exploited by less than scrupulous merchants. The value of the chaldron also varied by region and changed over time. The principle North Eastern English chaldron was the Newcastle Chaldron measure which was standardised with a value of 53 cwt (2,692 kg) in 1694. A London Chaldron, on the other hand, defined as 36 heaped bushels, approximated to a weight in coal of around 28 cwt, (1,422 kg).



Frame of Chaldron Waggon

Photo: Beamish Museum

From January 1836 it became illegal to sell coal by volume and from that date on it was only to be sold by weight.

The chaldron waggon, also known in some areas as a 'black waggon', became the standard conveyance for coal from colliery to port of shipment in the North East. The traditional chaldron waggon was built with a timber frame, dumb (unsprung) buffers and timber body. It was braced and reinforced with wrought iron strapping and carried on unsprung wrought iron axles and wheels. There was significant variation in the overall design depending on which railway they ran on and, particularly for the axles and wheels, which local foundry produced the components. It was an amazingly resilient type lasting from the early eighteenth century through to the 1960s. The earliest chaldron waggons ran on wooden wheels on wooden railways but iron and then steel became the normal medium for both rails and waggon wheels. The impact of the chaldron waggon on modern rolling stock is very tangible. The modern bottom discharge hopper wagons and today's high capacity 'merry go round' wagons are the direct lineal descendants of the chaldron. The bottom discharge waggon was ideal for the unloading method used at the shipping staithes in the North East. It was perpetuated by the North Eastern Railway who, unlike most other British railways, carried most of their coal traffic in high capacity bottom discharge hopper wagons. High level coal drops were provided at all but their very smallest stations. The export of coal to London and Germany also led to the export of wagon design and this influence can be seen in European rolling stock to this day.

The waggons at Beamish are mainly from the Londonderry Railway which connected some of the pits in the area with the principle sea bound loading outlet of the railway. The railway and port was developed by the Third Marquis of Londonderry as an outlet for his collieries. Seaham Harbour was the last location where a significant number of chaldron waggons remained in use. Beamish originally acquired 34 of these waggons from the Seaham Harbour Company in 1970. Several of these were subsequently judged to be in a condition that was beyond reasonable repair and these were dismantled with all of the iron components being stored. The longevity of the Londonderry chaldron is testament to the soundness of their design which had fully evolved by 1870. They were cheap to build and easy to maintain. Many of the waggons have been rebuilt several times in their life. When a waggon became too dilapidated, it was common practice to burn it and recover all the iron components for re use in a 'new' vehicle. This practice has been followed with some of the rebuilt Beamish examples.

Three of the original waggons in the Beamish collection have been conserved in unrestored condition and are kept in environmentally sound conditions in the museum store.

Tallyllyn Weighbridge Restored

On Saturday 19th May, the Tallyllyn Railway's wagon weighbridge, first installed in 1865, was officially unveiled in its new position at Tywyn Wharf Station, after a four-year restoration. The Association contributed £2000 towards this work.

Don Newing

When the Tallyllyn was built in 1865, a weighbridge was installed at the Tywyn Wharf terminus (then known as King's), immediately alongside the original office, with the weighing mechanism inside the building. At that time, the terminus was used for freight only; passenger services terminated at Pendre station at the other end of the town.

The weighbridge was supplied by Henry Pooley and Son of Liverpool, who also supplied

weighbridges for Bryneglwyns Quarry at the inland terminus of the line. Pooley's supplied many weighbridges for rail and road use around the world. The company moved to Birmingham in around 1890, and were taken over by W & T Avery in 1931. Avery continues to provide rail vehicle weighing systems today as Avery Weigh-Tronix.

In 1951, following the death of the railway's owner Henry Haydn Jones, the railway was taken over by the Tallyllyn Railway Preservation Society, as described in Tom Rolt's famous book "Railway Adventure". The railway ceased to haul freight traffic, and the weighbridge fell into disuse. In 1964 the weighbridge was removed from its site outside the office to make way for a new station platform. The parts were placed in store with future re-assembly in mind. Few imagined that it would be almost 60 years before this happened!

Following the completion of the new Wharf station in 2004, space became available in the south-east corner of the station site, and it was decided to house the weighing machine in a new slate building, to match the former gunpowder



Tallyllyn Railway Weighbridge removal 1964

Photo: Tallyllyn Railway Trust



Tallyllyn Railway Weighbridge volunteers weighed after restoration 2012

Photo: Tallyllyn Railway Trust

store building next door. Work on the building, and the construction of a pit to house the weighbridge, started in 2008, using staff and volunteer labour from the Talylyn Railway. The weighbridge mechanism was restored by a member at his engineering business in Yorkshire. Final assembly on its new site took place in August 2011, and since that time the finishing touches have been completed. As work continues on the south side of the Wharf Station site, it is planned to connect the newly built weighbridge track to the tracks in the station yard.

In addition to the grant from the AIA support was received from the Narrow Gauge Railway Museum Trust, the PRISM Fund for the Preservation of Industrial and Scientific Material, I D Howitt Limited, Wakefield, and the staff and volunteers of the Talylyn Railway.

London Bridge Station Redevelopment

This sounds like a horror story from the 1960s. A major London railway terminus somewhat bigger than King's Cross, listed and with a large arched roof predating St Pancras, shortly to be demolished and apparently no John Betjeman to campaign for its retention

Robert Carr

London Bridge railway station is one of the oldest in the world, the first part opening in 1836. Following numerous stages of rebuilding the station now occupies a large area on two levels immediately south-east of London Bridge. At least the fourth-busiest rail terminal in London, it is to be completely rebuilt as part of a masterplan. Currently the planned rebuilding will involve the demolition of the large LBSCR (London Brighton and South Coast Railway) trainshed covering platforms 9 - 16 to the southeast of the site. Built during 1864 - 67, the engineer for this Brighton terminus was F D Banister (1823-1897) with C H Driver (1832-1900) as architect. Although listed grade II, English Heritage and the Victorian Society have decided not to oppose demolition.

It is intended to integrate London Bridge as a whole so that at long last it will serve as a single station rather than being two awkward parts as now. As well as the LBSCR terminus there are the former South Eastern Railway through platforms for services from Charing Cross, Waterloo East, Blackfriars and Cannon Street to south east England. These three island platforms are to the north of the trainshed at a higher level and very intensely used. The through platforms have just simple canopies of recent date to keep the rain off. The spacious and quieter Brighton terminus with an overall roof is to the south. As at St Pancras the trainshed, and the rest of the station, is elevated well above the original ground level on brick vaults. It is said that the 1860s roof of the LBSCR terminus must go as the new tracks to be laid through it have to run at a different angle –

not along the old alignment. At Victoria station for example, the old South Eastern Railway train shed did not impede the present day operation of the station and there it has been possible to retain it.

Over the years a considerable amount of repair and renewal has taken place at London Bridge as would be expected for a railway station of this age. At one time the Brighton station had

10-11 platforms; there now are eight. Part of the LBSCR trainshed roof to the east was rebuilt following World War 2 bomb damage. The 1860s part of this roof which is listed grade II is essentially at the west end. This is considered to be structurally weak as there are insufficient wrought-iron tie rods and the roof presently functions as an arch rather than a truss. The least altered part of the original roof is at the widest



London and Brighton and South Coast Railway trainshed interior

Photo: R Carr



London Bridge Station 1864-66 roof

Photo: R Carr

part of the station where as part of the planned redevelopment it is essential to insert escalators.

Banister's design for the London Bridge LBSCR trainshed roof was based on a 'nave and aisles' plan, with a large barrelled roof running longitudinally and two aisles, originally flat roofed, flanking this central structure. The nave was based on a 'crescent roof' design and is the last of its kind in London. There were once similar roofs at Cannon Street, Blackfriars, Charing Cross, Birmingham New Street and Liverpool Lime Street. The roof in Liverpool is the only other example to survive. The train shed at London Bridge Station is of national importance.

However since there is no officially recognised opposition or even coordinated protest the removal of this great Victorian train shed now seems inevitable and the question arises as to whether it might be relocated. Railworld at Peterborough have put in an offer but could railway enthusiasts raise the huge sum of money that would be needed? It is unlikely. In any case could they maintain it subsequently, and isn't a train shed at least eight platforms wide too big for Peterborough anyway? A more sensible suggestion is that it might be re-erected as a grand market hall, perhaps as part of some big urban development. Following closure of the 1850s Les Halles market in central Paris about forty years ago, some of the massive iron and glass building by Victor Baltard was moved to Nogent-sur-Marne. Have any readers visited Nogent recently and is the Pavillon Baltard there a success?

There is also the issue of the South Eastern Railway offices. Formerly in competition, the South Eastern Railway (SER) and the London Chatham and Dover Railway (LC&DR) came to a mutual agreement at the end of the nineteenth century and formed a Joint Management Committee in January 1899. To avoid the financial cost and risks of a formal merger the two companies remained officially separate until the Grouping in 1923, with the receipts split 59% to SER and 41% to LC&DR.

Joint offices were built at 64 – 84 Tooley Street close to London Bridge station to the northeast. The building work occupied 1897–1900 and the architect is believed to have been Charles Barry junior (1823-1900). If so, this is his only surviving commercial building, a distinctive polychrome edifice, listed locally, still in use and in good condition. The exterior has recently been refurbished. These offices are likely to be demolished as part of the London Bridge redevelopment and this IS a matter of contention.

One reason for the demolition is that a brick building close to the road is seen as a potential danger should a terrorist bomb be detonated in a road vehicle parked at the kerbside. It is recommended that for small cars there should be a clear distance of 30 metres from the kerb to the nearest building.

A number of documents articulate the importance of security in design, including the RIBA Guidance on Designing for Counterterrorism (2010) and the Centre for the Protection of National Infrastructure's, Integrated Security, A

Public Realm Design Guide for Hostile Vehicle Mitigation (2010). An outcome is the following statement:-

'The identification and mitigation of terrorist threats is not an exact science but one which requires all those involved in the planning process to make reasonable efforts to manage risk. We believe the reduction in blast stand-off which would necessarily result from the retention of 64-84 Tooley Street would result in a materially different environment, such that the public benefit of a secure station would not be delivered to a similar extent through an alternative design proposal.'

Dr Ian Dungavell, Director of the Victorian Society, said that 'to knock this attractive historic building down to create a wider pavement is unnecessary and wasteful.'

It was reported in February that the Mayor of London Mr Boris Johnson told local activists he would like to prevent the demolition of the South Eastern Railway office building in Tooley Street. We await developments.

Crofton

Buying an engine house complete with two workable beam engines for £75 might seem a bargain. That is just what the Kennett & Avon Canal Trust did in 1968. A bargain, that is, if there is a competent and willing volunteer force to carry a restoration project forward.

Bruce Hedge

The pumping station is located at Crofton close to the market town of Marlborough, Wiltshire. The summit level of the canal is 450 feet above sea level and 40 feet higher than any local water sources. Crofton's engines lift the water from that local supply into a feeder that takes it a mile westwards to the summit level.

I accepted an invitation on behalf of the Association from the Trust to a steaming and

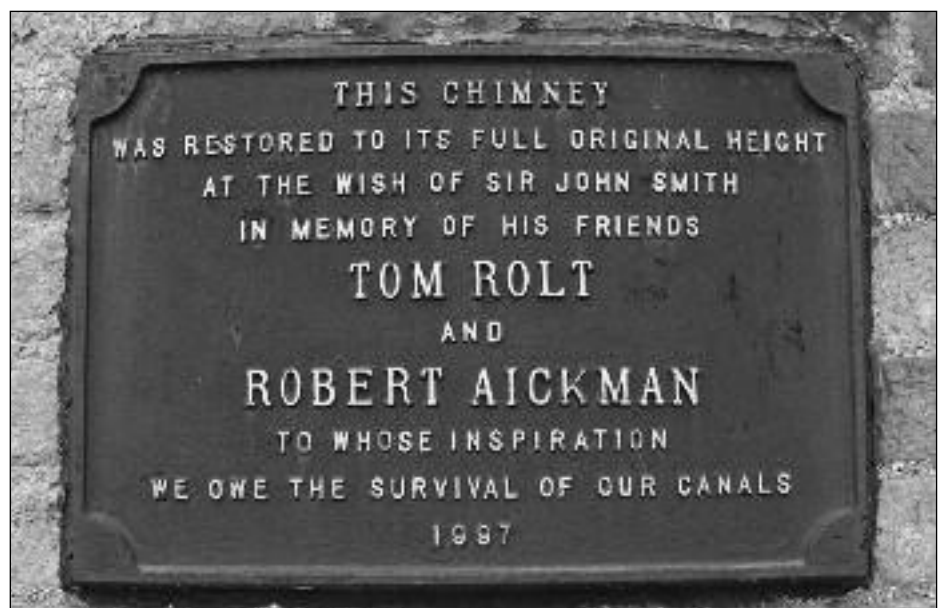
reception to celebrate 200 years of the oldest beam engine in the world still performing the job it was built for. The engine is a 42-inch diameter, 8ft stroke engine working a 30-inch lift pump, ordered from Boulton and Watt in 1810 and working two years later.

The celebrations were over two days in June, the Saturday event being attended by H.R.H. the Duke of Gloucester. I was in slightly less exalted company on the Sunday. Mike Rodd, Chairman of the Trust and Jon Willis, Chairman of Crofton Beam Engines, welcomed us. Between them they outlined the history of the Trust itself and of the engine. What I had not realised before was that the engine we were celebrating was not the first at Crofton. That honour went to a wooden beamed, second-hand, but unused, B&W engine of 36 inch diameter purchased in 1807 from the West India Dock Company. Three waggon boilers supplied steam to both those original B&W engines. These were later replaced by Cornish boilers and subsequently by a Lancashire boiler.

The 1807 engine was retired in 1843 being replaced by a Sims Patent Combined Cylinders engine supplied by Harveys of Hayle. At the same time the 1812 engine was converted to the Cornish cycle. The Sims engine was converted in 1905 to a conventional Cornish engine with a new 42 inch cylinder manufactured at Swindon by the GWR.

The Boulton & Watt engine remained in steam until 1959 when both engines were officially retired. British Waterways, the owners of the canal, continued the task of raising the water with, initially, diesel driven pumps and later with two electric pumps. Normally, retired engines were allowed to deteriorate and be scrapped. However the efforts of Mr F Wilmot, the former resident engineer, ensured the engines were preserved in good condition.

After the purchase in 1968 work began to restore the buildings, engines and boilers. Work that was made possible by a team of volunteers, including several engineering experts, and with



Commemorative Plaque at Crofton

Photo: Bruce Hedge



Crofton Pumping Station

Photo: Bruce Hedge

the financial backing of English Heritage, grants from central and local government as well as the proceeds of national appeals. Steam was raised on the 1812 engine on April 4 1970 and the engine moved again for the first time in eleven years.

Now, 42 years later, the need has arisen for further work to be undertaken on the buildings, boiler house and the header pond at Crofton. The intention is to apply for a Restoration Grant from the Association towards the relining etc. of the pond. The B&W engine may be two hundred years

old, but it and the Harvey engine were recently called into service again when the British Waterways electric pumps both failed, the two engines worked for one week performing their original role.

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Treasurer's Report for 2011

In this report last year I forecast a deficit for the year 2011 and indeed the unadjusted position shows just that, a Gross Operating Deficit of £2,813. However, that is the unadjusted number. Taking just the income we receive that can be applied to running the Association and the costs of doing so, then I'm pleased to be able to report that there was a tiny surplus of £612, effectively we broke even. All other income, comprising donations, conference income and that from English Heritage is applied to making of Restoration Grants, running the conference and running the National Capacity Building Programme for English Heritage.

It has been four years since we last raised our subscriptions and I did warn the AGM last year that we would have to do so for 2013. Accordingly, Council have decided that all classes of membership will have to pay an additional £3 per annum. Since 2008 our running costs have hardly increased; what has declined sharply is the income to pay those running costs. And that decline can be attributed almost entirely to falling interest rates over the period. Interest received in 2011 was lower by £6,500 than that received in 2008, despite higher average cash balances on deposit. Membership numbers have also declined, and hence subscription income, but that shortfall was significantly made up for in 2011 by increased income from other sales. But the continuation of that level of sales cannot be guaranteed.

This is the last report I shall be doing as Treasurer, my replacement is, assuming members elect him at the AGM, John Jones, a Chartered Accountant of broad experience, and I'm sure that the finances of the Association will be in good hands.

It only remains for me to thank Council for their unequivocal support over the last seven years.

*Bruce Hedge
Hon. Treasurer.*

AIA Publication Awards

At the Ironbridge weekend in April Marilyn Palmer was able to present AIA awards to winners who were unable to be at the conference in Cork last year.

Two Peter Neaverson Awards were made for 2011, to Celina Fox for her book *The Arts of Industry in the Age of Enlightenment*, New Haven, Yale University Press, and to J R Hamilton and M H Jones for their book *Neither Here Nor There? The mining and transport of iron ore from the Brendon Hills to South Wales*, Exmoor National Park Authority 2010. Celina Fox received the Peter Neaverson award at the Ironbridge Weekend. Sadly, John Hamilton had passed away since the Brendon Hills book was written and Mike Jones was unable to come at the last moment, and so his award was sent to him.

Ron Martin of Sussex Industrial Archaeological Society received the award for their journal, *Sussex Industrial History* No 41,

2011, and Angela Smith of the Hampshire Industrial Archaeological Society the Newsletter award for their *Focus on Industrial Archaeology*.

The Affiliated Societies Officer

I have been asked by the AIA to be the Affiliated Societies Officer and as such I thought it might be wise to give you a little bit about my background and my industrial archaeology credentials!

I have a degree in archaeology from Southampton University. The course covered prehistory to the industrial period and my dissertation topic was 'The Isle of Wight Brick Industry'. My MA is in Conservation, Vernacular and Historical Studies – dissertation topic 'Workers' Housing at Whitfield Glossop Derbyshire 1820-1920'.

I worked for English Heritage on List Reviews in the early 90s and British Waterways on their Architectural Heritage Survey, covering the Manchester and Ashton Canal, Erewash, Caldon and the Macclesfield Canal – all very different in character.

Freelance work for various archaeological units included work on 'Newark's Industrial Archaeological Resource', a publication c 1992 by the Trent and Peak Archaeological Unit in association with RCHME, and sites such as the Grotton Brickworks. This combined fieldwork and documentary sources to give a history of the development of the site. The brick kilns were then preserved among the new housing development!

From 1998 to 2011 I was Historic Buildings Officer to the Council for British Archaeology (CBA) dealing with about 3800 listed buildings cases a year and focusing on vernacular and industrial buildings such as the former flax mill at Ditherington and Stanley Mills, Gloucestershire, promoting the idea that buildings are archaeology and that an understanding of the significance of a site was vital to inform proposals for it. I also gave evidence at the Public Inquiry at Nelson Lancashire opposing the Compulsory Purchase Orders and the proposed demolition of hundreds of Victorian terraced houses, believing that

refurbishment rather than total loss was the way forward – a belief shared by the Secretary of State.

I have been a member of the AIA since my undergraduate days and so the AIA/CBA Handbook for Industrial Archaeology, launched at the Ironbridge Weekend, is of particular interest to me and engenders a certain amount of pride. It is the culmination of a three year programme of training days, funded by English Heritage but organised by the AIA and the CBA for its Historic Building Volunteers.

I look forward to meeting my AIA colleagues and representatives from the Affiliated Societies. I can be contacted at lynnewalker5@gmail.com.

Lynne Walker

Allihies Wins Award

After the 2011 Cork Conference it was decided that the Allihies Copper Mine (illustrated on the cover of the last edition of IA News) was worthy of both the President's Award and the AIA Initiative Award. Our chairman, Mark Sissons, was able to present these while on holiday with his wife, Hilda, in June. Over 100 people from the village, which has a population of 650, attended the ceremony. The *Southern Star* reported the event quoting Mark: 'Everyone agreed that the Allihies Copper Mine Museum won hands down! The museum's interpretation of the working of the copper miners is what we really liked. We think it is a remarkable facility to have in a place as remote as Allihies.' The copper mine museum does have much to recommend it but its curator, Theo Dahlke, is proud of the fact that it is 'the most inaccessible museum in Ireland.'

The chairman of the parish council, Charles Tyrell, said the development of the museum – which cost €500,000 to build but is now breaking even and helping to stimulate the local economy with two full-time and six part-time jobs – is just phase one.

The Museum Trust has exciting plans for phase two but, for now, Charles said: "awards, such the one presented by the UK Association for Industrial Archaeology, confirm that we are on



Celina Fox with Marilyn Palmer at Ironbridge April 2012

the right track. It is a huge honour for us to receive this award and we will display it with pride at the entrance to the museum, café and art gallery."

Canal & River Trust

A meeting was held on 16 May 2012 – the New Vision for Waterways Museums – at The National Waterways Museum, Ellesmere Port. David de Haan represented AIA. The new Canal & River Trust (CRT) took over from British Waterways Board in June. It will own the waterways and river network, buildings and the three museums of the Waterways Trust (Ellesmere Port, Gloucester and Stoke Bruerne). After the Churches and the National Trust, the CRT will be the largest owner of heritage in the UK. The meeting discussed issues centred on sustainability, volunteers and partnership development. There were 84 delegates representing CRT board and committees, managers of canal and river museums and of industrial museums with boat collections. It was chaired by Simon Thurley, with a keynote address by Neil Cossons. It was agreed the group should meet once a year as a forum to discuss common issues.

Skills for the Future

Representatives met on 20 March at the Museum of Science & Industry, Manchester. David de Haan represented AIA. The Heritage Lottery Fund is considering a second round of 'Skills for the Future' grants and are now looking at whether there are any particular skills in which there is a need for training – traditional heritage skills such as boat building, boiler maintenance, lime mortaring, etc or other skills needed to ensure that museums and sites are sustainable, such as marketing, audience development, volunteer management, etc. Also there may be newer skills needs such as using digital technology in interpretation.

A Book Bargain!

Industrial Archaeology: A Handbook, CBA Practical Handbook 21, by , Michael Nevell and Mark Sissons, can be ordered for £20 from the Council for British Archaeology's website: <http://www.britarch.ac.uk/books/palmer2012>

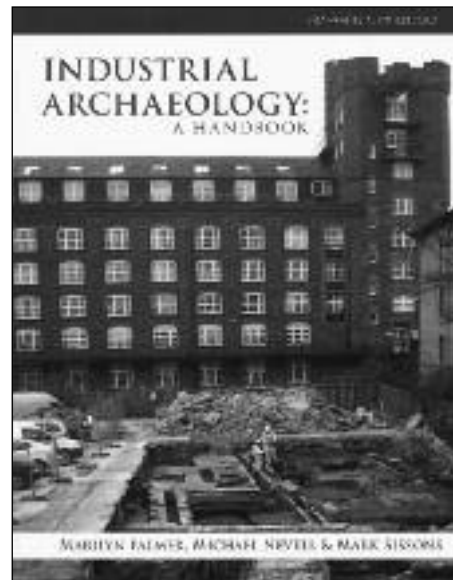
The authors would like to thank all those members of AIA who made this book possible by organising or contributing to the day schools on the recognition of industrial buildings and structures which were run between 2008 and 2011, as well as those who subsequently provided information. We did our best to include everyone in the acknowledgments but apologise to anyone we have inadvertently omitted, such as Henry Gunston who provided material on land drainage. We will correct these omissions in any reprint. The day schools themselves were only made possible with the cooperation of the CBA, particularly Lynne Walker (now the AIA's Affiliated Societies Officer), who took part in every day school, and Brian Grimsditch at the

Centre for Applied Archaeology in the University of Salford (Director Mike Nevell) who provided administrative support, both of them also attending every day school.

The book was published by the CBA with grant aid from English Heritage, to whom we are very grateful, as well as to Tony Crosby and Bruce Hedge who bore the brunt of financial negotiations over the subsidy. It is 326 pages long with more than 120 illustrations, mainly in full colour. We are proud of the fact that it is the first of the CBA's Practical Handbooks to be treated in this way and we are very grateful to their hard-working Publications Manager, Catrina Appleby, who took a great interest in the book, speeded up the publication process, and herself suggested the full colour: it certainly makes the book very attractive in appearance.

We hope that the book demonstrates how the discipline of industrial archaeology has matured in recent decades, recognising the increased participation of professional contract and curatorial archaeologists while acknowledging the huge role still played by volunteers in conserving and interpreting industrial structures. The book also provides a comprehensive guide to further reading not just in standard texts but also in journal articles and grey literature, now often available, like *Industrial Archaeology Review*, in digital format. Lists of key sites are included for each industry but we have not been able to include everything, of course!

The initial reviews are very promising: one in *Salon*, the on-line newsletter of the Society of Antiquaries of London, points out that despite the comprehensive coverage of industries in the book, 'you don't feel that the subject has been skimmed: rather you feel grateful for such a succinct summary and for a handbook that serves as a guide to vast amounts of additional data that you can follow up once you have mastered the



basics'. The reviewer also felt that the book was also 'a tribute to the achievements of industrial archaeology pioneers, because page after page provides examples of structures that have been conserved and preserved, either as working museums, or as buildings and landscapes sensitively adapted to new uses'.

We could not have written this book without the help of so many members of AIA and thank them for their help, and particularly Keith Falconer who read and commented on initial drafts. Keith has now retired from English Heritage and the launch of the book at the Ironbridge Weekend on 21st April was one of his final appearances as Head of Industrial Archaeology English Heritage. There is a tribute to him elsewhere in this issue.

Marilyn Palmer, Michael Nevell
and Mark Sissons



Launch of *Industrial Archaeology: A Handbook* – Mike Nevell, Mark Sissons, Catrina Appleby, Keith Falconer, Marilyn Palmer

South West and Wales Regional IA Conference 2012

Hosted by the Somerset IA Society and held in Cheddar on 21 April, the conference heard six speakers before enjoying guided visits to local sites of IA interest.

John Willows recounted the extraordinary story of how the chimney of the Great Eastern came to be displayed in the Great Britain Museum in Bristol. At a time when the Weymouth Water Company was expanding its facilities, the Great Eastern suffered an explosion in the English Channel. The ship was repaired at Portland and a damaged funnel replaced. Part of the funnel was adapted as a water filter at Sutton Poyntz waterworks and was used there for 140 years. In 2003 the old funnel, still in good condition, was removed and is now displayed alongside Brunel's first iron ship. John also recounted the Great Eastern's history as a cable laying ship.

Ian Standing gave a moving insight into the life of Robert Mushet. Robert spent his formative years studying metallurgy and took over the management of his father's foundry at Darkhill in the Forest of Dean in 1845. Robert discovered that a small amount of manganese added to the steel rendered it more workable and this greatly improved the durability and malleability of steel made by the Bessemer process. However, Robert failed to capitalise on his discovery and by 1866 was destitute and in ill health. His 16 year old daughter travelled to London alone, to confront Bessemer, arguing that his success was based on her father's work. Bessemer, whose own process for producing steel was not viable without Mushet's discovery, henceforth paid him an annual pension.

Iain Miles outlined the legacy of engineer Louis Kelting, a pioneer of steam engine preservation on the Somerset Levels. In 1938, at 28 he was appointed Chief Engineer to the Somerset Rivers Catchment Board. During the Second World War he designed major works for

both the Brue Valley and Sedgemoor, based on his knowledge of nineteenth century proposals, originally too expensive, but now necessary to produce large amounts of water for the ordnance factory at Puriton. After the war Kelting undertook new river works, but he also oversaw the loss of steam pumping engines, which made him determined to save the rest. In addition to five steam pumping engines, he was responsible for saving several other steam engines in the County, and the Bridgwater Docks steam dredger.

Mike Messenger described the impact of Cornwall's first steam railway. The Bodmin & Wadebridge Railway opened in 1834. It was built to carry sea sand from the Camel estuary to inland farms for use as fertiliser, and for many years was isolated from other railway systems. However, Mike focussed his talk on the impact of its opening on local communities, and the china clay works, granite quarries, and small mines in the area. For example De Lank Quarry sent granite by train to Wadebridge to be shipped to London and Durfold Clayworks was one of the first to lay a pipeline to a railway, in this case to Tresarrett. The huge rail-served dries at Wenfordbridge ensured the line's survival until 1983.

In setting the scene for his talk on 'A Century of Cleansing Winchester', Martin Gregory described the awful conditions in mid-C19 Winchester, with endemic disease and no mains drainage. A political group called "muckabites" were opposed to a solution on grounds of cost, but Martin paid tribute to Thomas Garnier, Dean of Winchester, who fought for better drainage. The Sanitary Act of 1866 required the Council to provide drainage and a water supply, but the Sir James Lemon's fine sewage pumping station which still stands on Garnier Road, was not built until 1878. Extended in 1905 for a second steam engine, oil engines were added in 1930. In 1959 the beam engines of 1878 were scrapped. Martin described the pioneering experiments to use household waste as a fuel for the engines. This

early example of recycling and waste-to-energy proved successful and, with continual improvements in efficiency, lasted until local government reorganisation in 1974.

The last talk of the conference was by Mick Atkinson on 'The Extractive Industries of Dartmoor' and the impact on the landscape. Initially tin was found by open cast working in the moorland valleys. Much of it was used to make pewter, and output reached a zenith in 1524. Although the resulting waste heaps may seem haphazard, aerial photographs show that there was a systematic technique. Mick described mining for the rare iron oxide mineral, micaceous haematite for use as an anti-rust paint. Other products were peat, china clay and granite, all resulting in tramway networks crossing remote moorland. Mick ended by noting the re-opening of the tungsten mine at Hemerdon, which is reported to contain one-quarter of the world's known reserves of the metal.

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IMPORTANT – APPEAL FOR HELP

At the AIA Council meeting in June it was strongly felt that the Association badly needed someone to take charge of Public Relations. Individual members and the Association as a whole do a great deal to advance the interests of industrial archaeology in many different ways but this does not get all the recognition it deserves. The IA News endeavours to keep our own members informed and the AIA website has all the main information about the Association while Roy Murphy, our Publicity Officer keeps a presence at events such as regional conferences. However, with the proliferation of social media, Facebook particularly, it was felt that we need to be more proactive and make contact outside our known territory. Waiting for people to ask what we do and what we have done is not sufficient. We must take the initiative. None of the council members present felt they had the right skills for this work.

Would any member who feels they could help please step forward

Not only would you be furthering our cause but more publicity would encourage more people to join and this in turn would allow us to do more. Suggestions as to how to achieve more recognition would also be welcome. Please get in touch with the secretary, David de Haan or any member of the council if you would like to discuss this issue.

Ditherington Bus Garage

The former Midland Red bus garage at Ditherington, Shrewsbury, which is expected to be demolished would make an excellent road transport museum. There are large numbers of preserved road vehicles around in the West Midlands and these are of great popular interest. Few Midland Red bus garages survive and this one is in a surprisingly complete condition. The former Eastern National bus garage on Canvey Island is now a transport museum.

As the intention is to be to make the vicinity of the Ditherington flax mill a tourist attraction with marketing and restaurants etc, something like a road transport museum there could really bring in the crowds, probably in droves that would vie with the numbers visiting the flax mill itself. A different type of audience perhaps, but you would broaden the interest, getting economies of scale and really put Ditherington on the local attractions map. With Sentinel and Rolls Royce having had factories in Shrewsbury, a local road transport museum would be appropriate.

There is a canal for canal enthusiasts and probably a steam railway is needed. Perhaps a small industrial loco shunting a few wagons in the mill yard would suffice. Might they have horses in the mill stable like the ponies at Caphouse Colliery?

The bus garage at Ditherington was originally built in 1920 with a single two bay range and a single storey office. In the mid 1920s a second floor was added to the office and in 1929 two more garage ranges were built increasing the total capacity to 53 vehicles. All the construction is in a matching style; the garage ranges have steel frames and brick cladding. The Ditherington bus garage seems to be quite popular nationally. You can already buy a kit to build a model of it. See www.kingswaymodels.com,

Robert Carr

Call for partners in UK

Bonjour, Bonjour, A friendly help request from France...

I'm writing in the name of a French network named "Au fil de l'eau" (Along the river). I don't know if you've already heard this name before. We are six post industrial sites in the North of Brittany with three sites involved in a conversion process (cultural, artistic, social or environmental).

We would like to apply (very soon!) for a European co-operation program between the North West of France and the South of England (the pdf file is a map of the potential partner regions). The name of the program is INTERREG 4a. This is the link to the official website <http://www.interreg4a-manche.eu>

We are actually looking for partners on the other side of the Channel. Attached you will find a brief description of our network and another one (bilingual) to present our ideas for this co-operation. Of course, we are flexible. The possibility to interact common ideas with our English partner would be greatly welcomed.

Our dream would be to find a similar network in UK or a public authority with different sites on its area.

Hope to hear from you soon, If you have any further questions, please contact us.

Friendly greetings from France,

Perrine Meyer
Coordination du projet Palacret
 22140 Saint-Laurent
 Tél : +33 2 96 12 11 28
www.lepalacret.org

Dounreay

In IA News 161, Dr Carr made some flattering comments on my earlier e-mails, for which I thank him. However, I feel he has credited me with more

than I deserve. I must point out that I had no direct part in the design of the Dounreay reactor. I helped in laying the scientific foundation of the structure but the task of specific design and construction was the work of gifted people other than myself.

If you would like further information on the scientific background that engendered the reactor, I am willing to help. However, I merely helped to pose the problems that the brilliant engineers had to solve before construction could begin, some of which I mentioned earlier. I am amazed at the short time scale involved for solving those problems and I felt this should be acknowledged.

On the subject of the preservation of the Sphere itself, I have my own personal feelings. I recognise the contribution that Robert Oppenheimer made in providing H S Truman with the atomic bomb and as such I consider 'Fat Boy' at Hiroshima is a monument to Oppenheimer, something which he greatly regretted. In the same vein, I feel that the Dounreay Sphere is a fitting monument to the unheralded James Codd, who had the foresight to discover how to tame that bomb. I feel that more appreciation should be made of the constructive aspects of life than the destructive aspects, which generally seem to prevail.

One thinks of Aldermaston as the Bomb Research Establishment and Harwell and Winfrith as the Energy Research Establishments, which is too polarised a viewpoint. Both contributed constructively but politics seems to concentrate on nuclear power as a military capability without taking note of nuclear energy as being a highly beneficial civil capability. Hence we all know of Oppenheimer but only a very few know of Codd.

Alan Pope



Ditherington Bus Garage

Photo: R Carr

Britannia Lions

Does anyone have any ideas that may help me and others in finding out where the lions on the Britannia Bridge on to Anglesey were made? All four lions seem to be identical.

They were made about 1848, of 11 blocks of local limestone and weigh about 80 tons. Who would have the skill at that time to make these?

I would be very grateful for any information.

Gareth Owen

garethwynowen@hotmail.co.uk



Britannia Bridge Lion

Free to a good home

A complete run of back issues of the "Bulletin" and IA News from issue 116 [Spring 2001] for anyone who could collect them.

Graham Vincent

52, Langdon Road, Bath, BA2 1LS
01225-338459 grathetrain@gmail.com

Tesson Mill, St Peter's Valley,

Jersey

For some years I have been investigating both the written history and the archaeology of Tesson Mill on behalf of The National Trust for Jersey. We are writing up for publication. The building itself has been renovated as flats but the (restored) waterwheel and the standing remains of the engine and boiler houses are being preserved and retained.

Please see - www.nationaltrustjersey.org.je/showcase/lemoulindetesson.asp

Although the oldest archaeological remains date to the seventeenth century a mill is recorded from the late thirteenth century. It was rebuilt in about 1650, enlarged in about 1812 and again in about 1835 at which time a steam engine was introduced but this was replaced by a second engine and new boiler house within a couple of years.

The second engine had fallen out of use before the great fire in 1908. However, the engine house still stands along with the entablature and most of two spring beams of the house built engine. I would have expected a new mid/late 1830s beam engine to be independent of the engine house and supported on an A frame or column; indeed, we have such a description from Boulton & Watt in a reply to the owners of Tesson. Unfortunately, the enquiry was not followed up so all we know about the engine is that it was not a new Boulton & Watt engine!

The beam and cylinder have long gone. However, on excavation we were very pleased to

find the Condenser Pit with the lower sections of the Condenser (with cold water inlet and internal sprinkler), Air Pump and Hot Well in situ.

The comparison of the condenser/air pump and hot well as depicted in drawings and illustrations of early Boulton & Watt engines indicate that we may have the remains of a second hand early Boulton & Watt beam engine which may have come from Bristol.

The main curiosity: we have the remains of a flat sheet of perforated zinc encased in a clay layer set above floor boards and set into the wall above the original (and perhaps second) steam engine.

Was this a 'strengthened' for the clay layer either as an early fire protection (but zinc has a low melting point!) or a form of 'damp-proof course' to protect the upper part of the mill which was used as dry storage?

Any suggestions would be greatly appreciated.

Chris Aubin

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**VISIT THE AIA
WEBSITE**

www.industrial-archaeology.org

NEWS

Ironbridge Gorge £20M stabilisation funding discussed

Talks are taking place over who will pay for £20m of stabilisation work in the Ironbridge Gorge. Telford and Wrekin Council said it was negotiating with the government. They are bracing themselves to borrow enough to pay for around a third of the price if the government will pay the balance.

The gorge has a long history of instability with a number of incidents with serious consequences. There is an excellent account of this to be found on the website www.ironbridge.org.uk/learning/resources/.../landinstability.ppt.

The bridge itself has suffered structurally owing to land movement in the valley. Motor vehicles were prohibited from crossing the bridge in 1934 because of the wear and tear and at one point its condition was such that it was going to be sold for scrap.

Paul Gossage, spokesman for Ironbridge Gorge Museum Trust, said: "It was first talked about in the 1940s and in the late 60s and early 1970s it began to rear its head again. The council was going to pull it down and had bought some land to build a new bridge. In 1946 they

demolished some buildings and were going to knock down the toll house, then in 1971, there were moves to secure the bridge. The council had set aside £20,000 to demolish it but agreed that could go towards its protection. The Trust managed to raise thousands of pounds to preserve the bridge. Other funds came from the new body which later became English Heritage. The Museum Trust, which was very young, raised about a third of all the cost."

In total, £147,000 was spent on repairing the bridge, reinforcing and resurfacing it. The work was carried out from 1972 to 1975.

£1.5 Million Fund to help Museums

The Association of Independent Museums (AIM) has announced a new £1.5m scheme in partnership with Biffa Award, a fund that awards grants to community and environmental projects across the UK.

Over the next three years, the National Heritage Landmarks Partnership Scheme is inviting independent museums and industrial sites to bid for grants from a fund of £500,000 per year to create interpretation and education projects

detailing the history of industrial development. Proposals need to demonstrate significant impact and heritage benefit.

According to a statement from AIM, the scheme aims to 'transform derelict buildings and sites into inspirational resource by creating a network of key projects that tell the stories of people, processes, industrial development and change'.

Up to four projects will be selected in each annual funding round, with a maximum £120,000 available to each applicant.

AIM Chairman Matthew Tanner says: "We are delighted that Biffa Award is supporting this important initiative – it will open up new perspectives of our national heritage as well as providing much needed investment into some of the most important industrial sites in the UK."

Museums Association collections coordinator Sally Colvin said: "Well done to AIM for establishing this innovative partnership. I'm sure the new funding opportunity will be welcomed by museums and I hope it results in some excellent projects. It's great to see industrial heritage getting the recognition it deserves." More details at www.museumsassociation.org/news/11042012-aim-partnership-scheme.

Swanage is Pier of the Year 2012

SWANAGE has been chosen as PIER OF THE YEAR 2012 by the National Piers Society's 650 members. It is the first time the Dorset pier has won the award and is a worthy reward for the very active and enthusiastic Friends group who help run it. No fewer than 22 different piers received nominations this year: Blackpool North (which recently changed hands) and Clevedon in North Somerset tied for second place.

The Grade II listed Swanage pier was the second to be built in the resort, opening on 30 November 1895 and slightly shorter than its predecessor, the remains of which are still visible. Passenger steamer traffic transferred to the new pier in 1896 and continued until the outbreak of World War II when, in common with the majority of South Coast piers, the pier was breached (i.e. cut in half) as a precaution against German landings. When the missing section was replaced in 1948 the piles were lined in concrete. The downturn in UK holidays in the 1960s saw off regular steamer traffic, though p.s. *Waverley* and m.v. *Balmoral* still call in during the summer season and pleasure boats offer excursions along the Purbeck coast.

Under a succession of private owners the pier gradually fell into disrepair until in 1994 the Swanage Pier Trust was formed and successfully applied for a restoration grant from the Heritage Lottery Fund. The Friends have faced formidable challenges to keep the structure in good order, not least the voracious "gribbles" (wood eating worms) which attack the landing stage. In spite of voluntary effort in running the shop, manning the gate and the museum, the pier's annual maintenance bill is in the region of £130,000. Income is derived from parking fees, entrance tolls and the Diving Club.

Derek Tarrant, Chairman of the Swanage Pier Trust, said: "It is a real honour to receive this prestigious award on behalf of all the volunteers and supporters who work so hard to keep the pier open for everyone to enjoy".

Projects Big and Small

Examples of major and minor schemes which the Railway Heritage Trust have supported in accordance with their brief to encourage the conservation of railway buildings and structures.

Kings Cross

Network Rail's redevelopment of Kings Cross station has been highly praised for its bold reorganisation and the creation of new features around the original buildings. The Railway Heritage Trust has been able to support three projects associated with the original train sheds.

The footbridge over the centre of the station linked two office blocks, but was of little use to the passenger and obstructed the view along the station. Network Rail removed it, replacing it with a modern footbridge that was more accessible, but less visually intrusive. The original bridge has been relocated to Ropley on the Mid-Hants Railway, where the Trust funded its re-erection to give public access to a new boiler and carriage shed.

At the centre of the bridge was a massive clock, immortalised in innumerable films, from 'The Thirty Nine Steps' to 'Elizabethan Express'. The removal of the bridge meant that the clock needed a new home and the Trust gave a grant towards its re-erection on Platform 8. In this location it balances an equally old timepiece on Platform 1 so that a passenger in either train shed can usually see a historic clock.

The Trust's third recent intervention has been much more spectacular. The electrification of the

East Coast Main Line in the 1980s was done to a very tight budget: one outcome was that the wires which transmit electric power to trains in the Kings Cross train sheds were suspended from steel gantries. These, whilst functional, were visually intrusive, and disrupted the view along the train sheds. The Network Rail project team managed to find enough savings in the project to fund some 60% of the cost of replacing the gantries with headspan wires, and approached the Trust to put in the balance of the funding, which it was delighted to be able to do. This work has opened out a much clearer view along the shed. The Trust does not see these three projects completing its work at Kings Cross, and intends to fund two more projects there. One covers the repair of the canopy that projects beyond the main roof at the end of Platforms 8 and 9 where the Trust is looking to fund the restoration of some missing tension ties on this structure, removed many years ago. Their lack means that the structure is not stable and has had to be propped for many years.

Finally, the Trust will support repairs to the former Great Northern Railway and London & North Eastern Railway war memorials. These memorials with the names of the fallen were originally on Platform 8 and were then moved to the new front concourse in the 1970s, where the company plaques remain on a temporary mounting. The Trust is working with Network Rail to find a suitable permanent location on the station to re-erect all the memorials.

Eridge, Sussex

At Eridge, in Sussex, Southern Railway has completed renovation work on what had formerly been the private waiting room for the Marquess of Abergavenny. The room, located off the booking hall at street level, has been refurbished with wainscot boarding, the fireplace has been



Swanage Pier



Kings Cross Station Clock

resurrected, and the timber flooring given a welcome makeover before complete redecoration of the space. The majority of the work was very skilfully undertaken by one of Southern's own in-house maintenance teams. The station is home to the Sussex Community Rail Partnership who assisted in the opening ceremony at the end of November when the waiting room, now a customer lounge, was officially opened by the current Marquess of Abergavenny. The Railway Heritage Trust gave a grant of £2,000 to this project.

Kinghorn, Fife

Meanwhile, at Kinghorn in Fife, local artist Lynette Gray has completed the restoration of the former ladies' waiting room in the station building as a classroom, the second phase of a project to restore the non-operational parts of this building. This work follows Lynette's conversion of the upper floor of the building to a studio in 2011. The overall work has involved removing the very poor decoration of the building, reinstalling a collapsed floor, relocation of Network Rail's winter material for the station, rewiring the whole building, some new doorways and a total redecoration. The Trust has given grant support, totalling £13,500, to both phases of this project, which was also supported by the Scottish Government's Stations Community Regeneration Fund.

Andy Savage, Executive Director of the Railway Heritage Trust, said: "Both Eridge and Kinghorn are excellent examples of how, with the Trust's support, redundant space on historic railway stations can be brought back into valuable use for the railway or the community. This can be done by the Train Operator, as at Eridge, or by private individuals, as at Kinghorn."

Abraham Darby 1707 Patent

The original Royal Patent granted to Abraham Darby for the production of cast-iron cooking pots is in an open letter to Mr Darby from Queen Anne has been found in the National Archive.

Written on parchment, the 1707 letter gave him sole permission for 14 years to cast iron cooking pots and other ironware, using sand and a special casting box.

This sand method was a departure from the traditional method of casting using loam or clay, resulting in a more efficient process and superior product. The text starts:

Anne, by grace of God, to all to whom these presents shall come, greeting. WHEREAS our trusty and welbelov'd ABRAHAM DARBY hath by his petition humbly represented unto us that by his study and industry and expense he hath found out and brought to perfection a new way of casting iron bellied pots, and other iron bellied ware in sand only, without loam or clay, by which iron pots and other ware may be cast fine and with more ease and expedition, and may be more afforded than they can be by the way commonly used, and in regard to this may be of great advantage to the poore of this our kingdome,

who for the most part use such ware, and in all probability will prevent the merchants of england going to forreign markets for such ware, from whence great quantities are imported, and likewise may in time supply foreign markets with that manufacture of our own dominions, and hath humbly prayed us to grant him our Letters Patents for the sole use and benefit of the said Invention for the terme of fourteen years.

Grimsby Ice Factory

J&E Hall, one of the most famous refrigeration companies, has added its weight behind efforts to save the Grimsby Ice Factory. They join other supporters from the air conditioning and refrigeration industry including Telford-based contractor 3CL (another recent addition), ACR News, Advantage Air Systems, Business Edge, Heronhill and the Institute of Refrigeration.

Significantly, it was J&E Hall of Dartford which installed the refrigeration plant during the 1930s upgrade. Equipment which is still standing in the Ice Factory and which helped to gain the Ice Factory's Grade 2 Star listing.

The Great Grimsby Ice Factory Trust which is co-ordinating efforts to save the historic building and its unique refrigeration equipment paid tribute to J&E Hall's long and expansive history, adding 'We are proud that J&E Hall still recognises the Grimsby Ice Factory as a part of that history.'

Built in 1900-1901, the Grimsby Ice Factory produced, at its peak, 1100 tons of ice per day and helped to make Grimsby the largest fishing port in the world. It is understood to be the earliest remaining ice factory in the UK. The factory ceased production in 1990, and in September of that year it was granted Grade II* status by English Heritage, and thereby protected from any immediate possibility of demolition.

The Ice Factory is now in a state of near dereliction. The current owners, Associated British Ports, inherited the building when it was already in a poor state. Since then, a number of issues have combined to produce a situation of stasis: the enormity of the task of repairing the fabric, the North East Lincolnshire Council's concentration on other priorities, the lack of any obvious use for the building; the demands of commerce and security requirements for the docks. As a result, the survival of this great piece of our industrial heritage hangs in the balance.

Grimsby Ice Factory was named one of the 'Top Ten Endangered Buildings' for 2010 by the Victorian Society. There is an excellent website – grimsbyice.co.uk/

Transport Book of the Year 2012

A book profiling the impact of World War II on the supply of coal to Ireland's railways has been named Transport History Book of the Year 2012. by the Railway & Canal Historical Society.

Peter Rigney's *Trains, Coal and Turf – transport in emergency Ireland*, was given the honour by the

Society in its annual book awards – sponsored by the Charitable Trust.

The book, published by Irish Academic Press, also took the Railway Book of the Year award jointly with Peter Skellon's, *Bashers, Gadgets and Mourners – the life and times of the LNWR coal tanks*, published by Bahamas Locomotive Society.

In their award citation, the judges said: "The supply of fuel has received little attention from railway historians. This book treats the availability and quality of fuel for locomotives in a particular context – that of the Great Southern Railways of neutral Ireland in the Second World War.

"Telling comparisons are made with other neutral countries – Sweden, Spain, Switzerland and Argentina, all of which suffered breaks in coal supply from their sources in Britain and Germany.

"It is not a simple story and the author skillfully deals with the relations between the Irish government and the railway, the Irish government and the British, and the Irish railway and its British suppliers. Peter Rigney's quality and breadth of research sheds new light on Anglo-Irish relations during wartime."

Peter Skellon's book *Bashers, Gadgets and Mourners – the life and times of the LNWR coal tanks*, is a biography of a class of locomotive which was a workhorse on the London & North Western Railway and its successors for nearly 80 years.

The judges described it as "an accessible tribute to those who worked with the locomotives that provides insight for outsiders to understand the rewards of joining the railway preservation movement".

For the 2012 awards, the Society introduced a new category – The Popular Transport Book of the Year. This rewards sound interpretive works not necessarily derived from an author's own original research.

The winning book for this new category was *Early Railways 1569-1830*, published by Shire and written by Andy Guy and Jim Rees.

The judges described it as "a first class piece of work in the best Shire tradition – well illustrated and attractively designed".

"This is a welcome overdue introduction to early railways and the judges confidently expect it to stimulate a new generation of enquirers into the archaeology of tramroads and pioneer locomotive design."

For more information please contact Steve Rowson, book awards administrator, on 029 20 633 184 or email bookawards@rchs.org.uk.

Catalyst for Windermere

The Windermere Steam Boat Museum has been awarded £500,000 from the Catalyst Endowment Fund, a joint initiative between the Department for Culture, Media and Sport, Arts Council England and the Heritage Lottery Fund. Designed to bring new money into the cultural sector, the programme offers match-funding to help arts and heritage organisations secure their financial stability by building a new endowment fund or developing an existing one.

Wales

Melingriffith Wheel turns again

The Melingriffith water wheel and pump has undergone its second restoration in recent years and its operation is now being demonstrated, albeit by electric power.

The engine is an iconic *in situ* survival of industrial machinery from the late eighteenth century. It was designed by Watkin George, Richard Crawshaw's partner and engineer at Cyfarthfa Ironworks, and first installed in 1795 to pump water into the Glamorganshire Canal from the tail race of the Melingriffith tinplate works. The canal needed this water for its final five miles through seven locks to Cardiff. It is likely that the pump was last used in earnest in about 1929 when the Patent Fuel trade ceased at Maindy and Blackweir but it was probably kept in working condition for occasional operation until this section of the canal was purchased by Cardiff Corporation and closed in 1944.

In the twenty years since its first restoration over the period 1974-1989 by Oxford House Industrial Archaeology Society (Risca) and the Inland Waterways Association the engine had received no maintenance. In 2008 an active local 'Friends' group was set up to reactivate the project and campaign for the engine to be saved. This resulted in its owners, Cardiff City, committing £50,000 to the project which CADW match-funded with a further £50,000.

With funding in place, Cardiff commissioned Opus International to carry out a complete structural and site survey. The report concluded that the oak A-frames and rocking beams replaced in 1985-6 were deteriorating and unsuitable for long-term conservation and should

be replaced with Ekki. This is a very durable tropical hardwood which has been imported to the UK for 200 years and is widely used by CADW as a substitute for European oak.

The contract for complete restoration to working order was let to Penybryn Engineering Ltd of Hengoed. Unfortunately, the specification did not include for the simple replacement of the low-level wooden dam in the leat, to divert water through the wheel. Cardiff with Opus favoured electrical operation of the wheel (at more capital cost) rather than water power. This is a matter of regret on several fronts, not least that it would have avoided silting up the tail race. It was decided in the interests of safety that the wheel and pump should be driven by a geared electric motor, driving on to the outer stub-axle of the steel tubular main shaft, which had been installed in 1978 to replace the decayed wooden axle tree. Also, as the pumps were not to lift water it was necessary to add approximately one ton in iron weights to each piston to balance the pump's motion.

The work was carried out in early 2010 and the restored engine was first operated publicly on 14 April 2011 and was featured in the European Heritage Open Doors events in September. For 2012 there has been a full programme of public 'turnings', talks and guided interpretive walks that describe the water supply of Melingriffith tinplate works and the Glamorganshire Canal, and the tramroad connection with the Pentyrch Ironworks at Taffs Well. There is no doubt that seeing such an ancient engine in motion is an awe-inspiring experience; it attracts many passers-by to stop and look – even including cyclists and road runners on the Taff Trail (from Cardiff to Brecon) that skirts the site. However,

the facts that the water levels are wrong, the waterwheel is driven by electric motor and the pistons are not pumping water do present challenges to the onlooker.

Stephen Rowson

Pont Briwfad

Another wooden viaduct in Wales is set to disappear. The Grade II listed Pont Briwfad crossing the River Dwyrdd immediately south of Penrhyndeudraeth is a narrow and weight-restricted combined single-track railway and road bridge. To reduce the speed limit for rail traffic and obviate the six-mile road detour via Maentwrog for heavy road vehicles, a single-span concrete replacement in the same position is to be built. Snowdonia planners are allowing demolition of the viaduct 'due to the economic advantages to be gained'. Opened in 1867 by the Aberystwyth and Welsh Coast Railway (just about in the pocket of the Cambrian Railway by then, due to impecuniosity) it was dual-role from opening with a toll for road-users. Seemingly, the surface was metalled from the start. The estuary of the Drwyd or Traeth Bach has a very long history of water-borne trade, in particular slate. This was curtailed by the 1867 crossing. The golden sands of the river will remain but the characterful interlude in the traveller's journey will vanish.

Terry Evans

Swansea District Line.

Currently, the late-morning and return train from Cardiff to Fishguard Harbour, connecting with the boat to Rosslare, travels via the above route. No other regular passenger service does this. The route from Court Sart Junction to Llangennech on the Llanely Railway will soon see the centenary of its opening to all traffic in July 1913.

Constructed at high expense to speed transatlantic voyagers and mails to Paddington and Dover (for the Continent), it has deep cuttings and many engineering features. Three tunnels include Llangyfelach 1958 yd, Penllergaer 280 yd and Lonlas 924 yd at a ruling gradient of 1:120. River crossings are numerous, mostly steel trusses plus a fine brick viaduct over the River Loughor, but including a gem listed Grade II. This is the River Nedd crossing erected by the Rhondda and Swansea Bay Railway in December 1894 and used by the GWR who took running powers in 1906. It is of five fixed plate girder spans of between 40 ft. and 52 ft. 6in, possibly altered in 1913, with a centre-pivot movable Pratt truss with a curved upper beam of 167 ft. 6 in. This is curved inclined and skewed, the only example in the UK, and the roller race is of cast iron. The operation was hydraulic and the bridge is now fixed. A Brunel pupil SH Hockney was the engineer. Machinery was supplied by Sir Wm Armstrong Co and the structure by Finch Foundry of Chepstow.

Further west on the route to the port another listed Grade II bridge is crossed on the South Wales Railway over the Tywi at Carmarthen, (the mid-day boat train uses the Carmarthen avoider).



Melingriffith Wheel looking upstream showing the tailrace exiting the tinplate works site. The original wooden dam was on the left to raise the level of water to drive the wheel
 Photo: Stephen Rowson

Brunel provided a two-span bridge with 50 ft clearance but this was replaced in 1908/1910 by five fixed spans and one 50 ft steel Scherzer rolling bascule, electrically driven. Manufactured by Cleveland Bridge and Engineering of Darlington, its total length is 385 ft. This is also non-functional.

The First World War soon stopped the eastbound White Star Line, Booth Line and Cunard calling at Cobh and Fishguard where transfer was by tender. Southampton took over after 1918 and the deepwater quay proposals of the GWR were never realised.

Terry Evans

Newport Transporter Bridge

At present operating to a restricted timetable, the 106 year-old bridge seems doomed to a future of six months as a tourist attraction and six months of part-time working per annum. Local feeling over the cuts is running high. With the Middlesbrough bridge suffering closure owing to corroded bolts, no full-time functioning transporter will remain in this country.

Terry Evans

Northumberland

Lynemouth smelter to close

Joining the Holyhead aluminium smelter on Anglesey, the plant at Lynemouth, Northumberland is to cease production. The coal-fired power station which provides energy for the smelter has long been disliked by Brussels politicians. The system at the site was once integrated, with coal moving by conveyor from Lynemouth/Ellington colliery into the adjacent bunkers. With closure of the colliery complex spoiling the economics of the operation and bauxite moved by rail from Blyth docks the site cannot compete, having been in existence from the 1960s.

Oxfordshire

The Last Rymer and Paddle Weir on the Thames

The *Oxfordshire Guardian* reported during March that the Environment Agency (EA) has suspended its £2.6 million plan to reconstruct the last remaining rymer-and-paddle weir on the river Thames at Northmoor, upstream of Oxford.

In this type of weir, vertical removable timbers are slotted into the bottom of a weir frame, resting against strong cross members. In front of the rymers (and with edges resting on them), separate square or rectangular paddles are lowered on the end of poles to block the flow and raise the weir level to a set height. In earlier days, many weirs across the were of this type. Before installation of pound locks, swinging cross beams

allowed boats to pass after the paddles and rymers in front of them had been lifted out. Mike Hill, Chairman of the Northmoor Weir campaign team comments: "There is a lot of heritage value in the lock station, the lock keeper's house, the lock and the weir together and we've already been told by heritage groups that it is one of the best examples they have seen of a complete station".

The EA is concerned to increase the speed of weir operation and to protect their staff from the heavy lifting involved in positioning rymers and paddles. The replacement work has been suspended to allow more local consultation.

Henry Gunston

Wantage Tramway Locomotive Shannon Didcot Railway Centre

An appeal was launched during 2011 for funds to return the unique George England 0-4-0WT known as *Shannon* or *Jane* to full working order. However, costs and circumstances have resulted in the appeal being put on hold for the time being. The National Railway Museum reported: '*Shannon* is a particularly rare and special locomotive in the collection, due to her age and style of manufacture. To ensure that her originality and character are kept for future generations, we are writing a Conservation Management Plan for the engine. It is a fascinating and necessary piece of work, and will stand for all time alongside the locomotive as a significant conservation management tool.'

Henry Gunston

Abingdon County Hall Pumping Plant

Around 1902, a pair of Crossley gas engines were installed in the basement of the historic County Hall to power three-throw Taylor pumps to assist

the town water supply. This equipment has recently been taken out for overhaul and is currently being replaced back on site. There will be more news when the pumps and engines are opened for public display later in the year. A museum is housed upstairs in the main building and on the building's roof a Bun Throwing Extravaganza takes place each year.

Chinnor Windmill Restoration

The post mill at Chinnor in Oxfordshire was built in 1789 and operated until 1923, when milling ceased and it was abandoned to the elements. Over the following 44 years it became increasingly dilapidated and it was finally demolished in 1967 to be replaced by housing.

However, some parts of the original structure were saved and in 1980 a group of volunteers commenced the reconstruction of the mill, making use of surviving parts rediscovered in a Millwright's yard in Essex. About half of the structure of the original mill survived. The missing parts had to be made from scratch, based on the large numbers of photographs of the decaying mill taken by enthusiasts over the years.

The mill is unusual in having six 'feet' and a supporting ring held on arches – for extra stability – rather than the usual four. It has, otherwise, a conventional post mill layout.

Reconstruction is well advanced and last year the reconstructed buck was lifted onto the post. In February, on a day of rain and snow, the ladder was installed.

Much remains to be done before milling can recommence: fitting the sails and completing the drive to two pairs of millstones, reinstating the sack hoist, and recovering the flour dresser, currently at Pitstone in Bucks.

George Crutcher



Chinnor Windmill about 1950



Chinnor Windmill new ladder installed

Photo: Adrian Marshall, Chinnor Windmill Society

London

Thames Cable Car

The cable way across the Thames from near the ExCeL Centre in Newham to North Greenwich opened for public use at midday on 28 June this year. This river crossing 1.1 km long is designed to carry 2,500 passengers an hour and will run for seven days a week. The system has been under test for some time and has recently been carrying volunteer passengers as guinea pigs.

Named the Emirates Air Line, this is the United Kingdom's first urban cable car. From a distance the motion is strongly reminiscent of the aerial ropeways commonplace in industrial use in the twentieth century. Rather than buckets carrying minerals or spoil, 34 passenger cars are suspended from the cable. The Monocable Detachable Gondola system is being used with a single cable for both propulsion and support.

Robert Carr

Former Great Western Coffee House Saved

Good news is that the 1901 former coffee house near Westbourne Park underground station at 56 Great Western Road TQ 249 817, the last remaining purpose-built temperance bar for the Great Western Coffee Tavern Company has been saved from demolition. There were similar Great Western temperance refreshment taverns at Reading, Swindon, Newport, Swansea, Bristol, Exeter, and another in London at Smithfield as well as the Westbourne Park example. The idea was to give railway workers an alternative to the public house. The basement of the Westbourne Park building was originally the Carlton Hall, used for meetings and adult education. It could accommodate about 300 people.

The Great Western Railway Coffee Tavern Company Ltd went into liquidation in 1912 and the Westbourne Park premises were then used as a deeds office by the GWR. For the past 30 years the building has housed a small firm making furniture. The site was threatened by the construction of Crossrail; it was intended to build an electricity substation here. There was a campaign, involving the Victorian Society, to save the building.

Robert Carr

East Midlands and Leicestershire

Great Central Railway,

22 years after the project announcement, the £5 million double track restoration of the Leicester to Loughborough main line, steam enthusiasts dream reached a final stage this month with the opening of a restored 55 lever signal box at Swithland sidings near Mountsorrel, Leicestershire. This box controls not only the main line but very extensive exchange sidings and a branch line to Mountsorrel Quarry.

Califat Victorian Coal Mine Site .

This is the site where the Leicestershire Industrial History Society have, for a number of years, been excavating, recording and helping to preserve two sites dating back to the 1830s and the inclined plane terminus of the Leicester to Swannington railway, one of the world's first.

Back in the 1979 a wrought iron 'Haystack' boiler from the Newcomen era was discovered on the Califat site where it appears to have been used as a water storage vessel for the inverted beam engine known to have been installed there.

Due to its frail condition and the fact that the site was not secure, this boiler was donated to the Steam Museum at Abbey Pumping station in Leicester. After being on show in the open for some years, the boiler was transferred to Snibston Heritage site in Coalville under an artefacts swap when the City and County museums went their own way.

It languished there also unprotected, in a storage yard without any descriptive labelling until last year the Swannington Heritage Trust, having made great strides and effort to make the site attractive and secure, applied to have the Boiler back to its original site.

This was accepted, but despite having had little or no maintenance since it left the site the County Council insisted on a cover or roof being put over the boiler in its new location which gives it a somewhat peculiar appearance.

This is not helped by the fact that for expediency rather than historical interpretation the SHT chose to re-site it on top of the mine shaft rather than adjacent to its original position. Try explaining that to visitors eager for a meaningful site interpretation!

That apart, it is a welcome addition to this well run site which also incorporates a superbly restored, but sail-less, windmill.

Leicestershire Industrial History Society

The Leicester City Council under its first appointed City Mayor, Sir Peter Soulsby appears to be paying a great deal more attention to the preservation of Industrial Heritage buildings in the City than before. For example Sir Peter has instigated a Heritage Partnership with representatives from several local and regional organisations (including the LIHS) and in this context we also work closely with the local branch of the Civic Society and the Victorian Society.

David Lyne LIHS

Dorset

Steam up again

There is good news from Dorset when news is so often of the loss of yet another industrial monument. I can report that 27 April 2012 saw the official opening of the new engine house for a rescued, restored and working steam engine at the renamed Sherborne Steam and Waterwheel Centre. Despite a threatening weather forecast, the sun shone as a large gathering heard the speeches before local MP Oliver Letwin cut the ribbon at the door of the Hindley Building within which the engine was gently working in steam.

Almost in the shadow of Sherborne Castle, the historic water pumping station at Castleton had a magnificent 26 ft diameter waterwheel which was powered by streams at three levels to drive pumps from 1869 to 1959. The wheel was supplemented by steam power in 1876, followed by a gas engine in 1898, two oil engines in 1928-32, and electric pumps in the early 1940s. Wessex Water still supplies Sherborne's water from here. The rest of the site has been a museum for about



Haystack boiler which is now back at the Califat Coal Mine site

25 years, during which time the giant wheel was found to be too badly corroded to be repaired, so a complete replacement wheel now turns for visitors on open days.

The first steam engine was made by E.S. Hindley of Bourton in north Dorset. It was a horizontal engine with an 11 ft diameter flywheel but was expensive to run and was scrapped in about 1928. The newly restored engine is of a similar size and has not come far. Also from Hindleys, it worked just a few miles away at the Gillingham brickworks from 1866 until 1934. A high chimney dominated the brickworks beside the railway station until closure in the 1960s, and the site is now only remembered in the place-names and Brickfield Trading Estate. The engine was saved from being scrapped in 1972 by Tom Stewart who stored it in parts for many years with two other rescued steam engines at the old Sherborne gasworks site. Recently, the engine was donated to the museum and its superb restoration was undertaken by Richard Vincent of Henstridge. Funds were raised to build a completely new slate-roofed engine house which is furnished with authentic cast-iron frame windows and the whole fits into the site amazingly well – almost as though it had always been there. Top marks for all involved. The old

Lancashire boiler has been replaced by a vertical boiler acquired from Rotterdam. Also attending the official opening was a Hindley steam lorry, another restoration by Richard Vincent.

The Sherborne Steam and Waterwheel Centre has an extensive collection of engineering artefacts relating to the water industry. Among them is a wheel from Nether Cerne, which is believed to be among the oldest dated all-iron waterwheels surviving in England. Part of a rim is known to have been cast with 'Daniel Maggs Bourton Dorset 1819' but this was lost when the remaining pieces of the wheel were brought to Sherborne in 1996.

Maggs was a predecessor of E.S. Hindley & Sons, who were contracted to maintain the big wheel at Sherborne after their steam engine was installed. Maggs and Hindley created a business which employed up to 200 workers and exported its products around the world, from a foundry tucked away in the most unlikely place at Bourton on the Dorset-Wiltshire border. They made agricultural machinery and waterwheels, including one of 60ft diameter at the foundry site. In the 1870s Edmund Samuel Hindley was making vertical and horizontal steam engines, boilers, hydraulic cider presses, portable cider presses and mills, cider screws and apple mills. By

around 1900 there was a London showroom when E.S. Hindley & Sons were making steam lorries, gas and oil engines, pumps, dynamos, hoists and saw benches. The firm was bought out in 1927 by Alfred Dodman of King's Lynn and unemployment caused by the foundry's closure was only relieved when it became a milk products factory. The site is awaiting redevelopment but there are still traces of the foundry and adjacent flax mill, as well as the large Factory Pond. Surviving Hindley waterwheels today include one of 1902 from Maiden Bradley, now displayed at the Kew Bridge Steam Museum, while just upstream from the foundry is a 1921 pumping waterwheel at Stourhead Gardens. Two small Hindley steam engines are preserved in Dorset, one of 1890 at the Weymouth Brewery (Brewer's Quay), and the other in Sherborne Museum, a 'No. 5 Alcazar' steam pump of 1925 for pumping tar and waste liquids at the gas works.

The Sherborne Steam and Waterwheel Centre is worth a visit if you are in the area. Open days are held from May to October, usually the first and last Sundays in the month. For details, see the website:

www.castletonwaterwheelmuseum.org.uk.

Peter Stanier



Restored Hindley engine at the Sherborne Steam and Waterwheel Centre

Photo: Peter Stanier

The South East Surrey

The Rural Life Centre at Tilford, near Farnham, has constructed a half-scale working replica of a Wealden iron blast-furnace of the type used for smelting iron in the Weald of Sussex and Surrey until the early nineteenth century, before the industry moved north to the coalfields after the introduction of coke furnaces by Abraham Darby. The work has been undertaken under the leadership of an RLC volunteer, Gerald Baker.

The bellows are powered by a water-wheel, although the water has to be pumped electrically. The wheel also drives a pair of trip-hammers, although originally these would have been on a separate site. The furnace has been fired, and it is intended that some iron ore should be smelted, although this can be a dangerous process. A charcoal-burning kiln has been set up at the museum to provide a supply of charcoal, of which at least four tons will be required.

The work has been financed by the Surrey Hills Sustainable Development Fund with further contributions by the Farnham Institute Charity, the Wealden Iron Research Group, the Surrey Industrial History Group and RLC volunteers. The project has been awarded the 2012 Conservation Award of the Surrey Industrial History Group.

Some of the extensive 'caves' at Reigate, which are tunnels dug principally for the extraction of silver sand for glass making, and are open to the public on the second Saturday of each month from May to September, have recently been improved as a visitor experience. These include artefacts and displays relating to east Surrey mines and building-stone quarries and to post-mining uses to which the tunnels have been put. Further details may be obtained from www.wcms.org.uk.

Sussex

The reconstruction of the lock at Ifield on the (derelict) Ouse Navigation started in 2005 and is estimated to be complete in about 2015. It was one of 19 locks built when the Sussex Ouse was made navigable between 1795 and 1812. The work has required the clearance of trees and scrub and the removal of silt and rubbish from within the chamber. The walls have been considerably damaged by the growth of vegetation and require much rebuilding, which has yet to be completed. Lock gates will have to be built and installed, and various authorities will have to be persuaded to allow water into the cut again.

An Archimedean Screw turbine has been installed at Coultershaw Mill, on the River Rother near Petworth. It develops 15 kW of electric power. The work has included the repair of the sluices. The work was managed by the Coultershaw Trust.

Wey and Arun Canal

Planning permission has been sought for the restoration of two more locks, Southland (No. 7) and Gannets Bridge (No. 8).

The Lordings waterwheel is now back in operation after the failure in 2009. The single wheel not only carries out the function of pumping up water into the canal from a nearby river but also provides the power to do so.

Hampshire

The 'Aeronautica' project for a heritage site at Trafalgar Dock, Berth 50 at Southampton has collapsed, in that the plans of the developer chosen by the Southampton City Council for the

Waterfront area, Morgan Sindall, include the relocation of the Red Funnel terminal to that site. Some of the heritage ships may be included in the Morgan Sindall plan, but the Calshot Spit lightship now needs a new owner, or it may be scrapped. The heritage workshop with the 'Tram 57' restoration project and the Dunkirk Little Ship has no security of tenure. Solent Sky, the aeronautical museum, now intends to extend on its existing site.

A footbridge, dating from 1893 and listed Grade I as part of King's Cross station, where it spanned the full width of the platforms, has been removed. After shot-blasting and painting at Eastleigh works it is being installed in two parts across the lines at the Ropley station of the Mid-Hants Railway. It will provide vantage points for trains and of the locomotive yard.

Work continues on the restoration and development of the Twyford Waterworks. An application has been made for an HLF grant, and if it is forthcoming the 1906 Babcock boiler and Hathorn Davey engine should be in operation late in 2013. Numerous other restoration and improvement projects are also being undertaken.

The RAF Ibsley Airfield Heritage Trust is taking over responsibility for the Control Tower, its restoration and re-use as a heritage centre.

Three of the forts in the Solent, namely Spitbank, No Man's Land and Horse Sand Fort are now under the single ownership of Clarenco. The first two named have or are being restored to provide hotel accommodation and facilities for 'corporate events'. Horse Sand Fort is to be turned into a museum showing the artefacts and history of the three forts. Access will be by a flotilla of boats from the Royal Clarence Marina in Gosport.

Alan Thomas

NOTICES

Industrial Archaeology of Wales Dayschools

Continuing the industrial archaeology theme which was so successful in England, we are running a similar series of dayschools in Wales this year. In association with the RCAHMW and Blaenau-Gwent Council, the first event will be on 4 September 2012 at Bedwelty House, Tredegar. It will be of interest to anyone who wants to learn about the industrial past, but particularly for those who want to get more involved, or who are already engaged in investigating, preserving and presenting the past.

Talks will include how we investigate the industrial past and interpret the evidence, and also ask questions about how we decide what should be kept. A similar event is planned for North Wales in the New Year. It is hoped that these events will lead to further thematic training days run by the CBA with the help of professionals in their field on specific topics and industries through lectures and site visits. Places are £15.00 per head, £10.00 for concessions. To book for the September event, please, contact the CBA's Events Officer Sophie Pointon on 01904 671 417 or email her, sophiepointon@britarch.ac.uk

Leicester Cycle Co.

During the 1890's The Leicester Cycle Co. was the town's largest bicycle manufacturer, producing over 500 machines a week. This original advertising poster details the "Peregrine", weighing in at a mere 23½ lbs and guaranteed to support a 12 stone rider! The Peregrine was a particular favourite with racing men and was used on numerous record breaking rides, including Land's End to John O'Groats and London to Edinburgh.

Cyclemagic who opened a community cycling centre in Friday Street, Leicester, in 2007 on part of the site originally occupied by The Leicester Cycle Co. planned to manufacture NEW "Peregrines" for the growing numbers of vintage bike pedlars requiring replica machines. However, on 7 July they announced that they would be closing their business.



PUBLICATIONS

Local Society and other periodicals received

Abstracts will appear in *Industrial Archaeology Review*.

Bristol Industrial Archaeological Society Bulletin, 135, Summer 2012

Bristol Industrial Archaeological Society Journal, 44, 2011

Cumbria Industrial History Society Bulletin, 82, April 2012

Dorset Industrial Archaeology Society Bulletin 33, May 2012

Greater London Industrial Archaeology Society Newsletter, 259, April 2012; 260, June 2012

Hampshire Industrial Archaeology Society Focus on Industrial Archaeology, 78, June 2012

Hampshire Mills Group Newsletter, 97, Summer 2012

Histelec News: Newsletter of the South Western Electricity Historical Society, 50, April 2012

Historic Gas Times, 71, June 2012

ICE Panel for Historical Engineering Works Newsletter, 134, June 2012 *Industrial Heritage*, 36/1, Spring 2012

London's Industrial Archaeology, 10, 2012

Manchester Region Industrial Archaeology Society Newsletter, 139, February/March 2012

Merseyside Industrial Heritage Society Newsletter, 316, May-June 2012

Midland Wind and Watermills Group Newsletter, 102, April 2012

Northamptonshire Industrial Archaeology Group Newsletter, 121, Winter 2012; 122, Spring 2012

North East Derbyshire Industrial Archaeology Society Newsletter, 46, May 2012

Piers: the Journal of the National Piers Society, 103, Spring 2011

Railway and Canal Historical Society Bulletin, 437, May-June 2012

Somerset Industrial Archaeological Society Bulletin, 119, April 2012

South West Wales Industrial Archaeology Society Bulletin, 114, June 2012

Suffolk Industrial Archaeology Society Newsletter, 117, May 2012

Surrey Industrial History Group Newsletter, 187, May 2012

Sussex Mills Group Newsletter, 154, April 2012

Trevithick Society Newsletter, 155, Spring 2012

Triple News: Newsletter of the Kempton Great Engines Society, 42, Winter 2011/2

WaterWords: News from the Waterworks Museum, Hereford, Spring 2012

Welsh Mines Society Newsletter, 66, Spring 2012

Yorkshire Archaeological Society Industrial History Section Newsletter, 85, Late Spring 2012

Books

Limekilns and Limeburning around the Valleys of Hodder and Loud, Helen Wallbank and Frances Marginson, Slaidburn Village Archive, 2012, 148 pages, £8 plus £2 p&p.

A detailed field survey by a small and dedicated band of local residents undertaken between 2008 and 2011. Over 180 lime kiln sites were surveyed across fifteen parishes within the Forest of Bowland in north Lancashire, of which the majority have inevitably been demolished or have collapsed.

Written with the general interested reader in mind, the first part of the book discusses how lime kilns were operated and how they were made up, and it considers the history of lime burning within Bowland. The bulk of the book consists of a full gazetteer of all surveyed sites, with more than fifty full colour photographs plus archival photos.

Contact d.johnson.50@btinternet.com>

Tracks and Trackless, Barry M Marsden, Amberley Publishing 2012, 128 pages, 90 black and white images, contemporary cartoons, plans etc, ISBN 978 1 4456 0536 4 £12.99

A pictorial journey through the history of trams and trolleybuses in Chesterfield, from the inauguration of a horse tram service in the 1880s to the last trolleybuses in 1938. A collection of often rare images showing the impact of these new forms of transport and how the people of Chesterfield marked their passing.

Within these Hills, A Study of Corris Uchaf, Sara Eade, 208 pages, extensively illustrated in colour and black and white with maps, plans and diagrams, ISBN 978 0 9565652 1 1 £25.00 from saraeade@webleicester.co.uk

A lavishly produced and minutely detailed account of the Braigoch slate quarry, Upper Coris tramway and the social life of a Merioneth village. Beginning with the history of the mine, the ownership, leases and accounts and continuing with lists of employees, wages, even accidents, the book continues with a description of the tramway with its locomotives. The central section covers the lives of six individuals, and their families in considerable detail. These are mainly owners and managers but they include the remarkable Jenny Jones who was with her husband and baby at the battle of Waterloo, marrying at 14 and dying, aged 95 having had nine children. The final section describes life in the village, its inns shops and the five chapels. Although it might have been better if some of the detailed lists had been provided as appendices this is an extraordinary production.

BITS AND BOBS

A Glass Steam engine!

It's true and you can see it working – go to:

redux.com/stream/item/2134517/Working-Model-of-Stephenson-s-STEAM-ENGINE-made-of-GLASS-Rare

Britain from Above

The Britain from Above website was launched on 25 June by English Heritage and the Royal Commissions on the Ancient and Historical Monuments of Scotland and Wales. So far there is access to over 16,000 images from the Aerofilms Collection, dating from 1919 to 1953. It is planned to increase this to 95,000 within two years. You will be surprised how many images include industrial sites, and you are offered a chance to identify the location of those which have confounded the experts. Have a look at www.britainfromtheair.org.uk.

More than just a timetable!

The ABC Railway Guide is in the process of building up a comprehensive photo gallery of every British railway station currently in use. Visit www.abcrailwayguide.co.uk

Building Stones

The British Geological Survey (& English Heritage) has draft spreadsheets showing Building Stone Quarries and Stone Buildings at: www.bgs.ac.uk/mineralsuk/mines/stones/EH_project

This is a useful resource searchable by county, with a map, although there are some errors and inconsistencies.

**10-16 AUGUST 2012
AIA ESSEX CONFERENCE**

Our annual conference in 2012 will be held at Writtle College, Chelmsford.
Full details on AIA website

**4 SEPTEMBER 2012
INDUSTRIAL ARCHAEOLOGY OF WALES DAYSCHOOL**

Bedwelty House, Tredegar – see page 22

**22 SEPTEMBER 2012
OPEN DOORS AT THE HETTY PIT**

Trehafod, Pontypridd. The winding engine famous for refusing to operate at the 2003 Cardiff Conference visit will be running on compressed air

**06 OCTOBER 2012
EAST MIDLANDS ROAD HERITAGE**

The Milestone Society, Snibston Discovery Museum, Leicestershire, www.milestonesociety.co.uk

**13 OCTOBER 2012
EMIAIC 84 – TRANSPORT AND TRADE IN THE TRENT VALLEY**

Retford, Nottinghamshire. Talks on the history of the town, and on the wider trade between the East Midlands and the Humber estuary by road, river and canal.
www.derbyshireas.org.uk/EMIAIC84

**20 OCTOBER 2012
CULTURAL HERITAGE POLICY AND ITS IMPACT ON INDUSTRIAL AND TRANSPORT HERITAGE.**

Riverside Museum, Glasgow
Round table discussion on heritage policy and its impact on the industrial and transport historic environment, museums, archives and survey with special reference to Scotland.

**22-23 OCTOBER 2012
CONSERVATION OF ARCHITECTURAL IRONWORK**

Conservation Studies CPD Course, at Holyrood Park Education Centre, Edinburgh. Aimed at professionals and craftspeople, this course is an introduction to the conservation of ironwork. Lecturers: Geoff Wallis and Chris Topp. info@nhig.org.uk, Bethan Griffiths 07941 127024 or NHIG, Lyndhurst, Carlton Husthwaite, Thirsk YO7 2BJ

**25-27 OCTOBER 2012
II JORNADAS ANDALUZAS DE PATRIMONIO INDUSTRIAL Y OBRA PUBLICA**

Conference on the Heritage of the first Andalusian industrialization and the beginnings of the Industrial Revolution in the Cadiz Bay (Spain).

**26-28 OCTOBER 2012
INDUSTRIAL HERITAGE CONFERENCE**

London, guided walks, discussions and visits. E-Faith (Industrial Federation of Associations of Industrial and Technical History) www.heritageofindustry.co.uk

**4-11 NOVEMBER 2012
XV TICCIH INTERNATIONAL CONFERENCE: POST-COLONIALISM & INDUSTRIALISATION – THE INDUSTRIAL HERITAGE OF OTHERS – TAIPEI TAIWAN**

The meeting will examine the close connections between historical, political, racial, environmental, economical, technical, and social questions of industrial heritage. Info and draft timetable: www.ticcih.org Contact: Dr. Hsiao-Wei Lin: linhw23@cycu.edu.tw

**10 NOVEMBER 2012
THE BUSINESS OF RUNNING A CANAL – EVIDENCE FROM THE PEAK FOREST CANAL**

at Manchester (Radisson Edwardian) Free Trade Hall at 14.15. The Railway & Canal Historical Society's Clinker Lecture will be given by Grahame Boyes, author of a forthcoming book on the Peak Forest Canal. Public lecture – all welcome.

**13 – 18 MAY 2013
(Provisional)
AIA OVERSEAS VISIT**

to The Ruhr to explore coal mines, coking plants, blast furnaces and steel works. See *Overseas visits page* for more details.

Information for the diary should be sent directly to the Editor as soon as it is available. Dates of mailing and last dates for receipt of copy are given below. Items will normally appear in successive issues up to the date of the event. Please ensure details are sent in if you wish your event to be advised.

More Diary Dates can be found on the AIA website at www.industrial-archaeology.org



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Final copy dates are as follows:

- 1 January for February mailing
- 1 April for May mailing
- 1 July for August mailing
- 1 October for November mailing

The AIA was established in 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, conservation and publication. It aims to assist and support regional and specialist survey groups and bodies involved in the preservation of industrial monuments, to represent the interests of Industrial Archaeology at national level, to hold conferences and seminars and to publish the results of research. The AIA publishes an annual Review and quarterly News bulletin. Further details may be obtained from the Liaison Officer, AIA Liaison Office, The Ironbridge Institute, Ironbridge Gorge Museum, Coalbrookdale, Telford TF8 7DX. Tel: 01325 359846.

The views expressed in this bulletin are not necessarily those of the Association for Industrial Archaeology.



Cake presented to Keith Falconer on the occasion of his retirement from English Heritage – see page 4