

# INDUSTRIAL ARCHAEOLOGY NEWS

**150**  
AUTUMN  
2009

THE BULLETIN OF THE ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

FREE TO MEMBERS OF AIA



Pontcysyllte is new World Heritage Site • Fe09 Conference at Coalbrookdale • Longdendale Water Heritage at Risk • Stretham engine • Leeds towers • regional news • publications



## INDUSTRIAL ARCHAEOLOGY NEWS 150 Autumn 2009

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### COVER PICTURE

*The Pontcysyllte Aqueduct on the Llangollen Canal is the centrepiece of the UK's latest World Heritage Site (see this page)*

Photo: AIA

## The Pontcysyllte Aqueduct and Canal World Heritage inscription at Seville

*On 27 June the 33rd session of the World Heritage Committee meeting in Seville inscribed the Pontcysyllte Aqueduct and Canal (United Kingdom) on UNESCO's World Heritage List. The new World Heritage Site is 11 miles (18 kilometres) long, with all but half a mile in Wales. It follows the waterway from its feeder at the Horseshoe Falls on the River Dee above Llangollen to Gledrid Bridge near Rhoswiel. While the star attraction is the famous Pontcysyllte Aqueduct across the Dee near Wrexham, it also includes the Chirk Aqueduct and Tunnel. Congratulations to the three lead organisations, Wrexham County Borough Council, British Waterways and RCAHMW, and the many others who contributed to such a convincing nomination document. How was it all finally achieved? Our man in Seville reports.*

Stephen Hughes

Royal Commission on the Ancient &  
Historical Monuments of Wales

On the night of Saturday 27 June in Seville the culmination of six years of preparation work was finally rewarded. The location was not as romantic as might be thought as the deliberations of the august World Heritage Committee took place in what was an enormous windowless shed holding about 1,000 expectant people representing 186 nationalities from across the world. At times it felt as if all hope was lost in this strange land apart with interminable discussions on those prospective World Heritage Sites who had been condemned to the strange limbo of being 'referred' or, even worse, 'deferred'. An evaluation of each site might take half an hour or talking might lapse into the pattern of taking the greater part of a day in

which discussions might reach the level of the complexities of the comparative terminologies between the English and French translations.

Friday and Saturday in this vast dark air-conditioned space came and went with the Chair of the World Heritage Committee up on stage flanked by serried ranks of ICOMOS global site research specialists and raconteurs with dictionaries, backed by five vast screens centred on the personage talking with alternate English and French screens showing the inscription texts being examined paragraph by paragraph, and clause by clause, in both languages simultaneously. In front of this broad platform sat the 21 member-countries of the World Heritage Committee in serried desks at the front of the vast auditorium flanked to the sides by the official delegations of the other 165 countries. The United Kingdom delegation had managed to acquire about seven seats in the third row back and to one side of the stage. However, most of us from Wales were relegated to the back of the hall until the site before Pontcysyllte came up for discussion on what was a constantly changing agenda.

Back in Llangollen, the audience waiting at the Telford Inn were kept on tenterhooks with regular mobile phone reports as the delays in the agenda ground on and on and those of us in the darkened chamber were beginning to lose the will to live. We gradually realised that these labyrinthine deliberations were likely to spin out into a third day and that any prospect of seeing the world class city outside in daylight was rapidly receding. However, the World Heritage Committee delegates themselves had the same realisation and the Chair suddenly announced to our immense relief that the afternoon session would not finish at 7pm but continue into the night. The previous item to Pontcysyllte, that of



The Pontcysyllte Aqueduct from the air

Photo: Crown Copyright RCAHMW



*The Pontcysyllte Aqueduct crosses the Dee*

*Photo: AIA*



*The iron trough of the Pontcysyllte Aqueduct*

*Photo: AIA*



*Early iron bridge at Trevor Basin*

*Photo: Crown Copyright RCAHMW*

two watch-making villages in Switzerland, was announced and the Welsh bid partnership members from the Royal Commission, Wrexham and British Waterways prepared to move up to the front to join the representatives from Cadw and the rest of the United Kingdom delegation. Luckily the Irish delegation was prevailed on and kindly agreed to move so that the full bid team could be fielded to answer questions and prevent a possible referral, deferral or failure of the bid.

Tension heightened as the moment for Pontcysyllte's turn approached, but also a realisation that as the Swiss bid was approved close to 7pm that a natural break period was coming. Sure enough, as soon as the debate on the Swiss bid was concluded, and the two minute permitted thank you speech from the Swiss delegation and town mayor had finished and the applause died away, the Chair announced a one hour adjournment. A rapid phone-call back to the Telford Inn produced an audible collective groan from the assorted delegates gathered there.

At 8pm the bid partners were expectantly back at their desks and microphones but as usual the mass of assembled delegates were only just returning to their desks. Madam chair resumed her seat at about 8.20pm and announced that the bid for the inscription of Pont——te!?! was about to begin. Professor Michel Cotte from France gave a very supportive and positive ten minute presentation of the site, on behalf of the World Heritage Bureau of ICOMOS, copiously illustrated with Royal Commission images, but left the way open to further questions (and possible complications) by saying that not all the Nominated area had statutory protection and that the redevelopment of the adjacent and redundant Flexys Chemical plant needed careful planning to ensuring that the setting of Pontcysyllte was not compromised.

The Chair then gave the floor to the members of the World Heritage Committee and the TV cameras focussed on the Ambassador from Canada to give his reactions to the bid. He enthusiastically endorsed the bid and said this had a 'fantastic' Nomination Document for a monument of outstanding value. The Ambassador for Israel noted that this was a model nomination from the United Kingdom which as everyone knew produced exemplary Nomination Documents. He said that Telford's aqueduct was enormously impressive and that he was going to book his holidays there for later in the year. The Ambassador for Kenya supported the view that the nomination was of great value but that the British authorities should give deep consideration to producing a more pronounceable name for the use of future visitors and tourists! He had spent a long time in Britain but nobody hold taught him to pronounce Pontcysyllte. One of the other Ambassadors supported this view! The Ambassador for Barbados then commended the view but said she wondered if the Comparative Studies were thorough enough. She thought that it might have concentrated on Europe at the expense of the rest of the world. She said she knew of an earlier aqueduct of the 1770s that stood in the Caribbean, in Jamaica.

Sian Rees and Stephen Hughes rapidly conferred and decided that Sian would answer the two points raised by Professor Michelle Cotte of ICOMOS and Stephen Hughes the point raised by the Barbadian Ambassador.

The Chair of the Committee then announced that the State Party had the usual two minutes to comment on the points raised by ICOMOS and the members of the World Heritage Committee. Sian reached over to flick the switch on the microphone and explained that Wrexham County Borough Council was already in discussions with the owners of the Flexys Chemical Works site to produce an outcome that would be beneficial to the Pontcysyllte World Heritage site. She also explained that the whole canal was now scheduled as an Ancient Monument and under protection, but the two-minute buzzer went before she finished. She explained that her colleague, Stephen Hughes, would answer the point on the Comparative Study if given some extra time.

The Chair announced that further comments would now be sought from other members of the World Heritage Committee and then the floor could be given back to the State Party. The atmosphere among the bid team was now reaching a zenith of tension because the facts that the large areas around the three main sites, included at the behest of ICOMOS to safeguard the setting of the main aqueducts and Horseshoe Falls, were not scheduled as Ancient Monuments and that Barbados seemed to have suggested that the Comparative Study was deficient. This could have meant that the site would at least have been referred, or deferred, for one or more years while these points were resolved to the satisfaction of the Committee.

However, the other members of the Committee were firmly convinced of the merit of Pontcysyllte and then the floor was returned to the United Kingdom State Party. The microphone on the desk was given to Stephen Hughes, who pointed out that the United Kingdom had co-ordinated the international ICOMOS/TICCIH study on canals and as part of this had intensively studied all types of aqueducts including masonry examples. He added that the Outstanding Universal Value of Pontcysyllte was in it using a new material: cast-iron. This meant that a high light deck could be built with sides only 25 millimetres thick, and metal aqueducts were subsequently built all over the world and this was the importance of the monument. There is a danger in such gatherings of giving too much information as it had become obvious during the last few days of the meeting that at least a core of the World Heritage Committee were determined to ask questions on the least pretext.

The information given was deemed sufficient by the Chair and the World Heritage Committee and the paragraphs of the draft inscription appeared in both languages on the screen with the Chair rapidly tapping her gavel down on her desk to approve each paragraph in turn. It was possible to quickly turn a mobile telephone on so that the assembled throng in the Telford Inn could join in the applause, now echoing through the hall, at a considerable distance.



*The weir at Horseshoe Falls takes the canal feeder from the River Dee*

*Photo: Crown Copyright RCAHMW*



*A tight squeeze in the upper reaches of the canal at Llangollen*

*Photo: AIA*

Peter Marsden, of the Culture Department (former DCMS) in London was then given the floor (for two minutes) to say how pleased the United Kingdom was to have this site inscribed in Wales and England and then handed over to Isobel Garner, Chief Executive of Wrexham County Borough, who thanked the work of all the partners in the Pontcysyllte World Heritage bid and said *Diolch yn fawr* to the World Heritage Committee and Bureau.

Again the hall erupted in applause and a good proportion of the delegates of all 186 countries descended on the United Kingdom delegation to offer their congratulations and shake hands with all the inscription team bid. The Barbadian Ambassador came and congratulated the team.

Part of the following day was spent in trying to describe to a member of the Nigerian delegation what an aqueduct was and he assiduously wrote down the Coflein web address so he could go away and look at some pictures of Pontcysyllte.



*Mighty piers of the Pontcysyllte Aqueduct, seen from the valley floor*

*Photo: Crown Copyright RCAHMW*

## Fe09 Footprints of Industry Conference

*This important conference held at Coalbrookdale on 3-6 June commemorated the 300th anniversary of the first successful use of coke to smelt iron. It was organised by Paul Belford and hosted by the Ironbridge Gorge Museum Trust with the support of the AIA, Historical Metallurgy Society, Newcomen Society and Society for Post-Medieval Archaeology. Some 40 speakers contributed wide ranging papers to make this such a successful event.*

Marilyn Palmer

Those of you who came to the 'Crossing Paths or Sharing Tracks' conference at the University of Leicester in April 2008 were able to enjoy three days of papers on historical and industrial

archaeology from around the world. Paul Belford, Head of Archaeology and Monuments at the Ironbridge Gorge Museum Trust, went one better by managing to put on a conference which extended over four days in June 2009 and I for one attended all the sessions! This conference was intended to commemorate the 300th anniversary of the first commercial use of coke to smelt iron and took place, appropriately, within the shadow of the very furnace where Abraham Darby achieved success in 1709. It was supported by the four major British societies concerned with the study of this period, the Association for Industrial Archaeology, the Historical Metallurgy Society, the Newcomen Society and the Society for Post-Medieval Archaeology. Although we all made suggestions and representatives from the various societies chaired sessions, the

organisation was essentially Paul's and he is to be congratulated on the result.

Each day of the conference followed a particular theme. The first day was devoted to *Origins and Inheritance*, with separate sessions on the European Origins of Industrialisation and the Metallurgical Inheritance of Abraham Darby. The former included papers on the early medieval industrialisation of Europe and more specifically of part of Germany, as well as David Cranstone's firm belief that coal-fuelled salt making was as crucial a development in the long process of industrialisation as Darby's coke smelting process. Tim Mighall's paper on ancient copper and lead pollutions from peat bogs in central Wales and Scotland dealt with industrial activities from the Bronze Age to the Industrial Revolution, and the technique has considerable potential for locating metal working and smelting sites.

The important session on historical metallurgy had been introduced by Michael Darby the day before, who had opened the conference with a personal account of the rescue and restoration of the Old Furnace and the opening of the original Coalbrookdale Museum, with which his family had been closely involved. Other papers in this session included a closely argued one on cognitive archaeology and metalworking by David Dungworth of English Heritage, looking at the ways in which the techniques of smithing became inherent in the psyche of the metalworkers as they learnt their craft, and was concluded with a keynote lecture by Dr David Crossley of the University of Sheffield on new perceptions of the use of fuel and power between 1600 and 1800.

The second day of the conference had the bold title of *Towards Brave New Worlds* and began with a session on technology and society, which included Paul Belford's own paper on the industrial activities of the Roman Catholic Brooke family who preceded the Quaker Darbys in their exploitation of Coalbrookdale, both denied access to other professions because of their religious nonconformity. Ian West talked about his work on the social impact of artificial light in the workplace, which has shown that lighting did not have the effect of promoting increased shift work as has often been believed, while Colin Axon of the University of Oxford showed how the leisure driven economy of Bath acted as a stimulus for manufactured products which in turn fostered the development of engineering and technology.

The papers given in the session on Life and Death ranged widely from the workhouses of the industrial age to the contribution of skeletal analysis in determining both the health and industrial hazards experienced by the workforce to Dr Harold Mytum's contribution on the effect of mass production on the commemoration of the dead. The final session on Imperial Tensions included a fascinating paper on the archaeological work being done on the Great War camps on Cannock Chase, which housed over 100,000 troops from all over the world.



*Delegates at the Footprints of Industry Conference, taken from a telescopic mast provided by Aerial-cam*

*Photo: Adam Sandford*



*The old furnace at Coalbrookdale*

*Photo: Marilyn Palmer*



The Coalbrookdale furnace caged

Photo: Marilyn Palmer

The keynote lecture that afternoon was given by Marilyn Palmer on the ways in which the imaginative use of the sources available for the study of the industrial period, combined with a series of achievable research questions such as those being framed on a regional basis throughout England, could help bring together those working in the academic, curatorial and contract sectors of archaeology and ensure that the investigation and recording of sites undertaken in response to the planning process have a clear research focus.

The final day of the conference was concerned with *The Legacy of Industrialisation*, and the first

session dealt with the available resource. This included some intriguing new insights such as the paper presented by Miles Oglethorpe from Historic Scotland and Miriam McDonald from RCAHMS on how potential terrorist threats had led to an intensive recording programme on the infrastructure of Glasgow's water supply. Helen Gomersall drew attention to the need to develop appropriate techniques for dealing with the excavation of large-scale industrial sites as well as the conservation of the resultant artefacts, while William Mitchell from Birmingham Archaeology talked about the stratigraphic approach taken to the recording of the extensive range of artefacts

discovered in Evan's Silver Works in the Birmingham Jewellery Quarter.

The final session on Managing and Interpreting Industrial Heritage was international in scope, with papers on the Saarland and northern Spain as well as Keith Falconer's discussion of the ways in which the growth of industrial world heritage sites has changed the perception of industrial heritage over the last ten years. Sir Neil Cossons, appropriately, concluded the conference as Michael Darby had opened it, emphasising the ways in which the legendary status of Coalbrookdale was important to the creation of the Ironbridge Gorge Museum during the period in which he was its first Director from 1971 – 1983. Sir Neil's determination that the project should succeed was clearly a major factor in the iconic status enjoyed by the Ironbridge Gorge today and its status as a World Heritage Site.

The social events included a party for delegates and previous graduates of the Ironbridge Institute and a final dinner in the absorbing environs on 'Enginuity', delegates having to be persuaded to leave their experiments in developing horse power and controlling the flow of water to generate electricity to take their seats for food! There were 40 papers given during this conference and it has not been possible in this short review to mention them all. It is intended that many of them will find their way into the journals of the four supporting societies in the course of 2010 and 2011 which will enable their members not fortunate enough to attend this conference to gain some idea of the richness of current work being carried out on the study of industrialisation and its context.

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# Glossop and the Longdendale reservoirs

*The successful series of East Midland Industrial Archaeology Conferences began back in 1970. The 77th EMIAC was held on 16 May 2009 in Hadfield, Derbyshire, and was hosted by the Derbyshire Archaeological Society. The main topic was Longdendale Water which is probably better known as the dale to the east of Manchester that ends in the Woodhead Pass over the Pennines.*

Mark Sissons

Dudley Fowkes opened the conference by briefly outlining the Industrial Archaeology of this area of North Derbyshire, some of which was in Cheshire before local government re organisation. In the late eighteenth century the plentiful local water power and the geographical location between Derbyshire and Manchester saw the development of numerous cotton spinning mills. A second phase of steam powered cotton spinning development took place following the opening of the Peak Forest canal.

John Smith spoke on the development of the Glossop area with water as the key. His fascinating talk took the development back to the times of Glossop Abbey in the fifteenth century. The manor passed to the Howard family in 1606 with whom it remained until the twentieth century. From the 1770s Glossop tenants looked to the development of textiles to increase their income. Despite the development of fulling mills in the 1780s wool was a poor earner compared to cotton. Although the Snake Pass was turnpiked at this time it was a hugely unprofitable venture. It was the development of Howard Town on the outskirts of Glossop by the Howards' agent that saw real growth. Sites were developed along the Glossop Brook with leases for both land and water rights. These sites finally developed into the large mill complexes at Wren's Nest, Waterside, Sidebottom and Howard's Town, each of which employed over 2000. Further development saw bleaching, calico printing and paper making sites all driven forward by the energetic agent of the Lord of the Manor. Glossop became a borough in 1866 but this led to conflict as many of the mill owners preferred the town being run by the Lord of the Manor. The opening of the Manchester, Sheffield & Lincolnshire Railway saw Glossop left off the main line and it was the Lord of the Manor who funded the building of the branch line.

Tony Brocklebank spoke on the development of the Longdendale reservoir system. This huge complex of seven reservoirs was the work of John Frederick Bateman, who was born in Halifax 1810, the son of Moravian parents of Huguenot descent whose ancestors from the Le Trobe family included the architect of the White House and a Governor of the Australian state of Victoria. After an engineering apprenticeship in Lancashire he set up practice in Manchester and furthered his connections after marrying the daughter of Sir William Fairbairn. In 1833 he reported on the flooding of the River Medlock and this started a

lengthy period of work with the City of Manchester.

Manchester had received its first public water supply in 1506 but this was failing by the 1770s. A move to using wells and springs led to problems with polluted water. Pumping from the River Medlock was started by Sir Oswald Mosley, the Lord of the Manor and from 1808 the Manchester and Salford Waterworks Co. tried various solutions to the City's water supply. This period included a spectacular fraud perpetrated by the supplier of useless solid stone water pipes.

In 1846 the City of Manchester obtained an act of Parliament to acquire the waterworks company and develop new reservoirs. Bateman was appointed as engineer to this massive civil engineering project. He chose Logdendale as the site for a complex of reservoirs, a good choice for rainfall but a poor choice from a geological perspective. Work began on the reservoirs in

1848. Bateman subsequently needed to consult both Robert Stephenson and I. K. Brunel over methods to improve the stability of the underlying strata in the valley. He went on to construct five reservoirs in the valley with a further two in a side valley and a complex of tunnels and conduits. Of the Logdendale reservoirs the top three were for water storage, and the lower two for flow compensation to appease the local mill owners who had strenuously opposed the entire project. One third of the average daily flow had to be released as compensation water and a complex gauging weir and measuring tank were installed to allow the mill owners to check the flow rate.

The reservoirs were completed as follows: Arnfield and Hollingworth in 1854, Rhodeswood in 1855, Torside in 1864, Vale House in 1869, and Bottoms and Woodhead in 1877. Construction started on Woodhead dam in 1848 but instability



*The weir and flow measuring system below Bottoms Reservoir at Tintwistle*

*Photo: Mark Sissons*



*Tintwistle engine shed for the Manchester Corporation narrow gauge railway that serviced the reservoirs*

*Photo: Mark Sissons*

in the underlying rock caused the embankment to leak badly and it had to be abandoned. A second embankment was started in 1862 and was one of the first to use a concrete filled cut-off trench instead of puddle clay. The dam was finally completed in 1877. When the whole reservoir supply scheme was finally completed in 1884, it was a great achievement as the reservoirs were the longest chain in the world at that time. Bateman installed innovative valve gear powered by water turbines and rotating cylinder circular flow control valves.

On completion of the works Bateman wrote a book on the history of the waterworks company but the reports that he wrote for the waterworks committee are a far more accurate commentary on the true problems and massive overspends against the original budget. Although when completed this was the biggest water supply scheme in the country, Bateman knew that it was still insufficient. He proposed a joint Lake District reservoir scheme for Manchester and Liverpool but civic rivalry ensured that this was a non starter. He then went on to survey the Thirlmere scheme for Manchester and assumed that he would be appointed as engineer. Bateman had by this time moved his practice to London and it was his assistant, G.H. Hill who became the engineer to the Thirlmere project.



A view looking down Torside Reservoir

Photo: Mark Sissons

The Logdendale Valley over this time must have been a massive civil engineering site as the Manchester, Sheffield & Lincolnshire Railway was building the Woodhead Tunnel and the Manchester to Sheffield section of its main line at same time as the reservoirs were under

construction. The Manchester Corporation Waterworks Company also had their own 3ft gauge electrified railway running up the opposite side of the valley to service the reservoirs.

The day concluded with a tour of the Glossop area, the abandoned railway and the reservoirs.

## AIA NEWS

### Treasurer's Report for the year ended 31 December 2008

The Accounts for 2008 form part of the AGM papers enclosed with this issue of *IA News*. These show a surplus of almost £45k on Income & Expenditure for the year. However, that sum includes a donation from an anonymous donor of almost £39k, including the applicable gift aid, and the interest on our Restricted Funds of £2.4k. The donation of £39k is to finance the series of Restoration Grants advertised in the last issue of *IA News*. Adjusting for these two items, the true operating surplus is £4k. This surplus goes some way to eliminating the cumulative deficits of the

previous three years amounting to over £6k.

During the year we lost the office space available to us at Leicester University and coinciding with that James Gardiner, our paid Liaison Officer, left to take up a teaching post in South Korea. James's duties were taken over, in part, by David de Haan and Anne Lowes. At the same time, responsibility for the collection of subscriptions was outsourced to our publishers, Maney Publishing. These actions resulted in a saving of approximately £3.5k.

As you are all aware, the last twelve months has witnessed a dramatic drop in interest rates. Because of that, my projection is that about 75% of those savings referred to will be wiped out

resulting in the current year being no better than break-even. I have reluctantly recommended to Council a subscription increase for next year. Council recognizes that many of our members will also be suffering reduced incomes as a result of falling interest rates and consequently limited my proposed rise to £3 in 2010, to apply to all classes of membership. A further review will be undertaken during 2010. Bear in mind that the £3 increase will be the first increase for four years.

As usual I shall be available to answer questions at the AGM.

Bruce Hedge  
Hon. Treasurer

## INDUSTRIAL COOKERY SPOT

With the ever more elaborate activities of cooks on television, I wondered if they could be encouraged to advance into 'Industrial cookery'. The following lines came to me after recent visits to Sheffield, followed by reading *Steelmaking: 1850 to 1900* by K. C. Barraclough.

### CARBON CONTENT COOKING

Firstly, let's think about your cake –  
An Acid or a Basic bake?  
And if you wish to cook from ore  
It will, I fear, cost slightly more,  
Because you'll need to shop to buy  
A blast furnace to stand nearby.  
(But if you cook with scrap and pig,  
That furnace need not be so big.)

And now the next step on your path –  
Use Bessemer or Open-Hearth?  
(Place both outside, on concrete piles -  
Inside, they'll damage ceiling tiles.)  
And if your steely dough's not risen  
Just add a teasp. of spiegeleisen\*.

Now, quick! (before it all goes cold)  
Teem off into your ingot mould.  
Then whilst you pause (and puff a fag?)  
The lads will ladle off the slag.

Henry Gunston

\* Spiegeleisen: A triple compound of iron, manganese and carbon, added to adjust the final carbon content of the molten steel.

**A patent problem**

The Bingham Heritage Trails Association has been researching references to the town in the Nottinghamshire Library newspaper archives. A recently found reference in the *London Gazette*, 4 June 1796, records:

'His Majesty has been graciously pleased to grant unto John Strong, the Younger, of Bingham in the County of Nottingham, Plumber, his ROYAL LETTERS PATENT, bearing Date at Westminster the 31st of May inst, for his Invention of certain new Improvements in the Construction of PISTON CYLINDERS, SUCTION CHAMBERS, and VALVES, whereby the same may be more expeditiously repaired etc.... The above John Strong having received several orders for PUMPS, upon his new Principle, in London and in the country, he is in immediate want of three or four journeymen PLUMBERS – none need apply but men of experienced Abilities.'

We have tracked down the patent and although it covers improvement to the design of Piston Cylinders etc, we cannot decide what was novel about the idea as we have no information on how these devices were constructed before 1796. Was it an idea that caught on and was successful? If any AIA member has expertise in this area we would be grateful to hear from them.

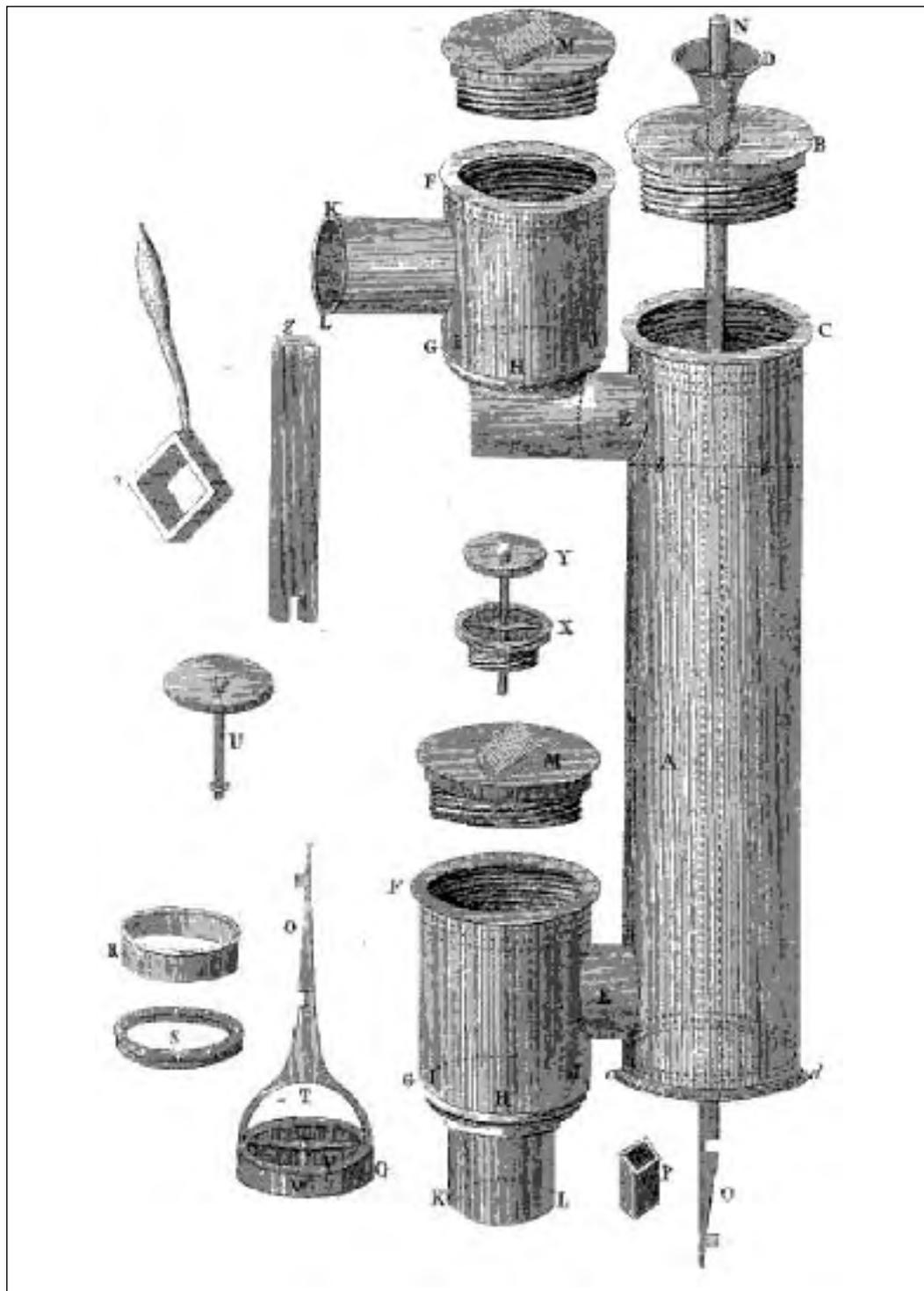
*Robin Aldworth  
me@robaldworth.plus.com*

**JOHN STRONG'S PATENT**

LI. Specification of the Patent granted to Mr. John Strong, the Younger, of Bingham, in the County of Nottingham, Plumber; for his Invention of certain new Improvements in the Construction of Piston-Cylinders, Suction-Chambers and Valves, whereby the same may be more expeditiously repaired, etc.

Dated May 31, 1796.

To all to whom these presents shall come, etc. Now Know Ye that, in compliance with the said proviso, I the said John Strong do hereby declare, that my said invention of certain new improvements in the construction of piston-cylinders, suction-chambers, and valves, is described in the plan and description thereof hereunto annexed. Witness whereof, etc.



**DESCRIPTION OF JOHN STRONG'S PISTON-CYLINDERS, SUCTION-CHAMBERS, AND VALVES.**

A. Cylinder where the piston acts.

B. A large male-screw, introduced into the top of the piston-cylinder at C, on the top of which is fixed a stuffing-box, represented as at D, if the piston-rod is required to work on the outside of the cylinder; but if not, the part

above the dotted line across the cylinder, marked b b, will not be required; the cylinder being carried upward the same diameter as at b b -and the piston-rod will then act in the inside of the cylinder all its length.

E, E. Communication-tubes, from the cylinder to the receptacles for the valves.

F G, F G. Receptacles for the valves.

H, H. Proper places for the valves to be screwed down upon the shoulders I J, I J.

K L, K L. Places where the suction and conducting pipes are to be joined.

M, M. Two large male-screws, introduced into the top of the receptacles for the valves, at F, F, lined with a collar of leather to make them airtight, for the convenience of repairing the valves when out of condition. Also a screw is to be introduced, in the same manner, into the bottom of the piston-cylinder, at c d, in order that the piston may be lowered, and taken out there to be repaired, when

the rod is required to be so long that a deal of inconvenience attends the drawing it up.

N. Top part of the rod that is attached to the piston, represented as put through the cylinder in order to be repaired; the piston being taken off for that purpose.

O. O. Key-joint, to separate this piston from the rod, that it may be repaired with the greater facility.

P. A square collar, put over the key-joint to make it secure.

Q. The piston.

R. A leathern collar, to go round the piston at W.

S. A collar of metal, screwed on the bottom of the piston ; the edge of the leather collar being introduced between it and the piston-bottom.

T. Place where the piston-valve acts.

U. Piston-valve, ground to be air-tight at V in the piston.

V. Piston-valve rests here when at rest

W. Where the leather is put round the piston.

X Y. A representation of the valve to be introduced into the receptacles F G, F G.

Z. The wrench to screw the valves down safe.

a. The wrench to screw the male-screws marked M, M.

N.B. By attaching another cylinder, exactly similar to the cylinder marked A, the steam may be made a continual one, one piston being up when the other is down.

**A Cardiff Bay ruin: the Taff Vale Railway terminus building**

Whilst visiting Cardiff Bay recently, I passed this building, now in an appalling state of repair. It was built in the early 1840s and was at one time the headquarters and southern terminus of the Taff Vale Railway, engineered by Brunel. Formerly used by the Butetown Historic Railway Society, it has been 'to let' for some years. It is literally only hundreds of metres away from the multi-million pound Welsh Assembly Government Building, and the Assembly members must pass it on their way in. It has Grade 2\* Listed Building status dating back to 1975, and additionally a most detailed survey, and drawings made in 1981-82 are now in the Welsh School of Architecture. The building is on both Cadw's and the RCAHM (Wales) databases.

It appears to me that no one seems to care about a historic, restrained and elegant early Victorian building. I know that the credit crunch is affecting many projects, but here is a 14.900 sq ft building with A3/A4 consent, that could surely be put to use?

If any AIA members are members of a local preservation group, I would gladly help.

Guy H. Ingram  
guy.ingram@tesco.net



A probable cistern dome at Ripon, Yorkshire

Photo: Phil Weston

**A water cistern?**

I would be very grateful anyone could help identify a structure recently uncovered during an archaeological evaluation in Ripon, North Yorkshire. So far, it's being described as a water cistern. The 'water cistern' consisted of a brick-built dome some 3m in diameter and at least 2.6m deep. A 0.9m diameter opening was located at the top of the dome. The cistern appeared to have been backfilled around a 0.22m diameter central post or pipe, since removed, leaving a void. It is possible a hand pump once sat atop the cistern. Four sherds of cream

ware pottery were recovered from a backfilled deposit suggesting a nineteenth-century date for the construction of the cistern.

The cistern was supplied by at least three culverts of similar construction, consisting of limestone capping slabs, four courses of bricks forming the sides and limestone base slabs sat on red brick plinths. Again, a pottery sherd indicates a nineteenth-century date. I would also like to know of any similar constructions and where I might find reference to them.

Phil Weston  
ASWYAS Project Officer  
pweston@aswyas.com



The neglected southern terminus building of the Taff Vale Railway, Cardiff Bay



Photos: Guy Ingram

**ADVERTISE IN IA NEWS**

## SERIAC 2009

This year's South East England Region IA Conference was hosted by Hampshire IA Society on 25 April in Winchester's Guildhall, on the theme of 'IA in Hampshire and the Isle of Wight'. Almost 200 visitors were welcomed by Bill White, President of HIAS.

James Freeman spoke first on operations of the King Alfred Motor services. After the Hants & Dorset Bus Co. took over in 1973 they started painting the buses red; the last green bus ran in 1975 and the old vehicles were sold off. In 1981 James purchased one of their old buses from a bus company in Wales. This led to the formation of the Friends of King Alfred Buses in 1985, and the group now has around 250 members. Other old company buses have been purchased including one from the USA. There are now over ten.

Rob Martin described the sixteenth-century alum manufactory on the Isle of Wight. Alum was a mordant used to set the colour in dyes but also for tanning to preserve the skins and for candle making and the pharmaceutical industry. William Kendal was licensed to search on the Isle of Wight and by 1564 this had passed to a Dutchman Cornelius de Voz. The strata of the shale at Alum Bay was upright, which made it awkward to extract which added to the difficulties; the process included considerable quantities of urine and kelp with the mixture being boiled and then refined, sometimes twice.

Celia Clark's talk was 'Vintage Ports, the future of historic dockyards'. With the armed forces of Britain, Europe and the United States all carrying out considerable reductions and regrouping of their naval bases, the closure of many historic sites is making them available for transfer to civilian use. Some countries are not interested in their heritage, while others such as Sweden have a good system for development. At home, English Heritage has done a lot of research and documentation but our conservation only started in the 1960s. The USA has a different system with their Community and Federal Authorities controlling the future uses. Dr Clark described various developments, some successful, others could have done better. She gave a comprehensive picture of various British sites and

what is happening at the moment to carry out a satisfactory change over, hopefully with imaginative long-term vision.

After lunch, Bill Fawcett talked about Francis Giles who was a surveyor involved in both canal and railway civil engineering. When George Stephenson's first Bill for the Liverpool & Manchester Railway came before Parliament he was one of those employed by the opposition to point out its faults, especially the passage across Chat Moss, for which George Stephenson never forgave him. He has been criticised by some historians, especially LTC Rolt, for some of the delays and over-runs of costs during some of the schemes he worked on. He was removed from the Newcastle & Carlisle Railway and the London & Southampton Railway. His scheme to extend the Basingstoke Canal to form the Berkshire & Hampshire Canal never materialised but he connected the Regents Canal to the Lea Navigation. He was engaged in works on the sea wall for the Mersey Commissioners and surveyed the approaches to Dublin harbour. But several of his schemes never came to fruition. He worked for both the Rennies who held him in high regard and considered him a very reliable surveyor.

John Mitchell discussed interpretations of the Titchfield Canal or New River in Hampshire. The traditional view is that in 1611 the 3rd Earl of Southampton built a canal to connect Titchfield with the sea, which included closing the estuary of the River Meon. Much evidence which is ignored by historians suggests that this work was carried out about 100 years later to provide river water to develop about 40 hectares of water meadows for improving agriculture. Richard Talbot was the surveyor and he only provided sluices at the river mouth to prevent sea water running back into the canal. No means was provided for the passage of shipping as no locks were built in the canal which was roughly the size of the Exeter Canal.

The supply of clean water to South Hampshire was Martin Gregory's subject. Winchester's water supply of 1839 supplied about 30 houses from wells to the west of the city. Although enlarged in the 1850s, the company suffered severe financial problems until the founding of the Winchester Water &

Gas Co. in the 1870s. As demand increased a new well was sunk at Twyford in 1898. This site was developed using Day Summers & Co. engines, at first horizontal compounds and then a triple expansion vertical one by Richardson Westgarth & Co. A Hathorn Davey triple expansion vertical engine of 1914 together with the original buildings, lime kilns and water softening plant are still in existence. Fortunately the pumping station buildings form a Scheduled Ancient Monument, only just listed in time to prevent their demolition. Southampton's water supply was first received from Mansbridge in 1851, followed by a pumping station at Otterbourne. A James Simpson two cylinder engine from Otterbourne, after languishing at Sherborne gas works site in Dorset for over 30 years, is now awaiting preservation.

At the end of the very enlightening conference, it was appropriate that two King Alfred Motor Buses carried visitors to the Twyford Waterworks from where water is still being pumped.

*Robert Cox*

## Heritage at Risk in the West and the known unknowns

At the time of writing, disappointment continues at the failure to find parliamentary time for the Heritage Protection Bill and at delays in consultation on the replacement of PPGs (Planning Policy Guidance) 15 & 16, so important for the protection and conservation of IA sites. However, the publication of English Heritage's 2009 *Heritage at Risk Register* is to be welcomed in that it has now been expanded to include Conservation Areas at risk.

For the AIA's West of England Region (this is the government's South West Region minus Devon and Cornwall), the *Register* provides a valuable snapshot of the threats to many of the region's major industrial and transport sites and buildings, i.e. those scheduled or listed Grade I and II\*. In the AIA's South West Region, some 18 are included, five of which are scheduled. This represents about ten per cent of the total listed buildings at risk in the government region but a much smaller proportion of those scheduled, the majority of the latter

are part of the region's outstanding prehistoric heritage.

The sites and risk-level (this is expressed differently for buildings and scheduled sites in the main) in the AIA's West of England Region can be summarised as follows. Sites are listed unless identified as scheduled.

## PRIORITY A (IMMEDIATE RISK – NO SOLUTION AGREED)

Bristol: Carriage Works, Stokes Croft (1862). Gloucestershire: Guns Mill Barn, Littledean (former furnace & paper mill, 1682). North Somerset: Birnbeck Pier, Weston-super-Mare (1860s). Somerset: Ropewalk, West Coker (late nineteenth century). Fussell's former Iron Works, Mells (nineteenth century, scheduled and described as 'declining') and Vobster Breach Colliery, Leigh-on-Mendip (late nineteenth century, also scheduled and declining).

## PRIORITY B (AS ABOVE, BUT SOLUTION AGREED BUT NOT YET IMPLEMENTED)

North Somerset: Elms Colliery, Nailsea (eighteenth/nineteenth century; scheduled but given B grade, as for listed buildings). Somerset: Top Mill, Higher Flax Mills, Castle Cary (mid nineteenth century).

## PRIORITY C (SLOW DECAY – NO SOLUTION AGREED)

Gloucestershire: Old Silk Mill, Chipping Camden (eighteenth century). South Gloucestershire: Brandy Bottom Colliery, Pucklechurch (eighteenth/nineteenth century; scheduled, but graded C). Somerset: Anglo Bavarian Brewery, Shepton Mallet (late nineteenth century), Westonzoyland Drainage Pumping Station, Sedgemoor (early nineteenth century), Madey Mill, Martock (seventeenth century), Tone Mills, Langford Budville (nineteenth century) and Tonedale Mills, Wellington (early nineteenth century).

## PRIORITY F (REPAIR IN PROGRESS WITH END USE IDENTIFIED, OR REDUNDANT WITH NEW USE IDENTIFIED BUT NOT YET IMPLEMENTED)

Bristol: Clifton Observatory (former eighteenth-century windmill tower). Gloucestershire: Lydney Docks & Harbour (1810-1821; scheduled, but graded F) and Railway Goods Shed, Stroud (1845).

The addition of a section on Conservation Areas (CA) is to be commended but the indication that only two of Bristol City Council's 33 such areas are at risk has already generated some scepticism and concerned e-mails between members of this authority's Conservation Advisory Panel (CAP). On a brighter note, Gloucestershire's CA Appraisals are commended in the *Register* and their document for the Stroud Industrial Heritage CA is cited as exemplary.

Many of the listed buildings and monuments on the *Register* will be well known to IA practitioners. But these represent only the tip of the pyramid. Grade II buildings are not included in this register or its predecessors and, as the recent South West Archaeological Research Framework (SWARF) publication points out, industrial sites are under-recorded in many of the region's Historic Environment Records (HERs), often the first point of reference for local authority archaeology officers when a development application is registered. If the list, schedule and HERs constitute what Donald Rumsfeld, called the 'known knowns', there are major challenges for AIA members in bringing the 'known unknowns' onto this record and to attempt to seek out what the former US Defense (sic) Secretary famously called the 'unknown unknowns' – the one's we don't know we don't know'!

Mike Bone

## Hestercombe sawmill, electric power and a mystery

Hestercombe House in Somerset, now on the outskirts of Taunton but once one of the country seats of the Portman family, is today well known for the recreation of several periods

of historic gardens including the rebuilding and interpretation of structural features within these landscaped areas. This work has been promoted by an active gardens trust and the next phase involves the renovations of the estate sawmill and associated workshops, generator and battery rooms as a visitor centre.

Power for the sawmill machinery came from shafting off the ring gear of an overshot waterwheel, 11ft diameter by 4ft wide overall, which was cast in the Devonia Works of James Edward Vanstone at Black Torrington, Devon, c1900. Arising from a survey of an estate workshop at Gerbeston Manor near Wellington in 1995, the Somerset Industrial Archaeology Society (SIAS) was able to secure the redundant machinery, lay shafting, etc there for display at Hestercombe. Alongside the surviving wheel is a Gilbert Gilkes turbine installed by Chas. Louis Hett of Brigg, Yorkshire for the generation of electricity in 1887 which will also be conserved.

As part of the project, exhibition space will be available to illustrate the various methods of lighting large country houses during the late nineteenth and early twentieth centuries. SIAS has identified items relevant to this theme and currently in store is a dynamo manufactured in the Newton Electrical Works, Taunton, a petrol-air gas Thermalume plant which lit a West Somerset bungalow and a weighty

electrical switchgear panel relating to a turbine at Stoate's Mill, Watchet. It is hope to add to this list a complete acetylene lighting plant still in situ in a house locally.

The project, which has been Lottery assisted, is underway and building work for the visitor centre involved removing the tiled flooring and concrete base of the generating room and battery house which had been subjected to a variety of farm uses over many years. This revealed a system of cast-iron piping about 9in below floor level which was previously unknown to the builders and not evidenced in the estate archives.

The pipes have an interior diameter of 4in and are ½in thick joined together by bolted flanges. The system seems to have commenced from a 10in square by 14in deep chamber which appears also to have had a similar pipe fixed vertically from it. After eight inches the exit pipe branched although only a short length of one branch has survived. The other curved around to the west end of the brick tailrace inspection pit where it went down vertically to the tailrace tunnel apparently terminating above the water-line.

Unfortunately, no recording was undertaken at the time but SIAS has made a drawing from the salvaged piping. Near the branch each pipe had a weighted arm on a pivot protruding from the pipes; this possibly activated a flap to regulate the amount of whatever flowed

through the pipes. This system seems completely unrelated to any other uses for the room and is the subject of some speculation. A gas plant at Hestercombe is unknown and other suggestions are for a generator or a pump. No doubt AIA members can provide a solution to this mystery.

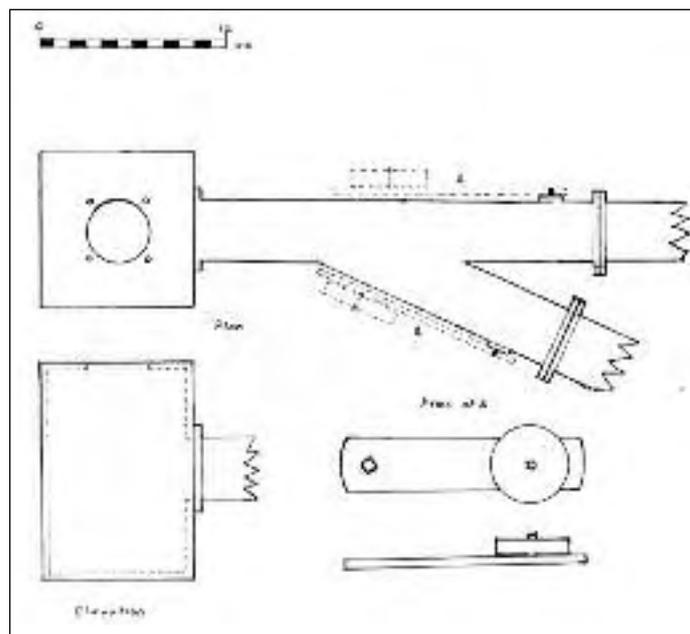
Brian Murless & Derrick Warren

## NEDIAS: a new voice in Derbyshire

As a more recent 'new kid on the block' the North East Derbyshire Industrial Archaeology Society (NEDIAS) members were somewhat surprised to hear of the demise of the Nottinghamshire group. It seems to many of us that the disappearance of industry only serves to spark new interest and to challenge local groups into widening research and recording, to ensure that memories are not lost. NEDIAS, which is based in and around Chesterfield, itself was formed only in the Millennium year, and has been finding its feet. An initial small group of interested amateurs got together to see whether there was wider interest, and now has approximately 60 members, with regular monthly speakers meetings, a quarterly 12-page Newsletter, and has recently started an occasional Journal for longer articles and more detailed research.

The relatively small area of North East Derbyshire was home to many famous names, almost all of which have closed, and covered industries including coal, iron and steel, pottery, coking, chemicals, oil extraction, glass, textiles, and heavy fabrication. Some of these are represented in the last *NEDIAS Journal No 2*, which contained research papers on the Sheepbridge Coal and Iron Company, on surveying the traces of a sixteenth-century lead smelt mill at Lineacre, on records of navvies working on the Dore & Chinley Railway, on the coking industry and on the infilling of the Bolsover rail tunnel. This is quite a wide subject base for this 90-page edition.

One current activity of the group is to document significant IA sites in and around Chesterfield, and complementing the excellent Gazetteer on the area originally produced by Derbyshire Archaeology Society and published



Some unusual pipework discovered at Hestercombe in Somerset. What can this be?

Drawing: Derrick Warren

in 2000. This new project aims simply to catalogue the surviving physical remains of the industrial past in this area. There are no strict rules governing the types of sites to be included, as we want to cover anything that might prove to be of historical interest. So, if in doubt, we err on the side of inclusion, and sites may be of any age and of any size. As a guideline, we will wish to include a site if (1) it is within the Chesterfield Borough Council or North East Derbyshire District Council area, (2) there is physical evidence present when the site is first included in the survey, and (3) it is of historical industrial interest in the broadest sense. This includes industrial buildings, evidence of mining and quarrying, transport infrastructure, housing built for industrial employees, and commercial premises with an industrial link such as brewery-owned pubs.

The research is intended to be recorded as a living document, and will be available on CD, a format which will enable regular and painless update, based on more recent feed-back and information. Further details of this new survey or of the NEDIAS Journal are available from [info@nedias.org.uk](mailto:info@nedias.org.uk).

### Stretham Engine Trust celebrates

A well attended reception was held at the Stretham Old Engine on 20 April to celebrate the 50th Anniversary of the Stretham Engine Trust: a landmark in Fenland drainage history. The Butterley beam steam engine and its associated scoop wheel and plant were installed in 1831 to drain some 5,600 acres of the Waterbeach Level near Cambridge. The scoop wheel is 37ft 2in diameter by 2ft 6in wide. Until 1925 it was the sole drainage plant for the drainage district, and it survived as a standby, last being steamed in 1941. Interest in preserving the engine led to the Newcomen Society forming a Trust and securing a lease to it of the premises from the Waterbeach Level Internal Drainage Board in 1959. Although it has not been possible to steam the engine again, an electric drive was commissioned in 1996 so that the engine mechanism can be turned over for visitors.

Keith Hinde OBE, Chairman of the Trustees, welcomed visitors and

then outlined the formation of the Trust and some of the many activities which have taken place since its formation. Lord de Ramsay DL, President of the Association of Drainage Authorities, who had also presided over the commissioning of the electric drive in 1996, then spoke in strong support of the activities at Stretham over the years, which had stimulated a wider public appreciation of land drainage history. It was essential for those who lived in and around drained areas to understand the historical context of current land drainage activities. David Noble, a Trustee, then presented Lord de Ramsey with an inscribed copy of Keith Hinde's excellent book *Fenland Pumping Engines*, which was well received. Finally, Edward Hinde, Engineer to the Trust, outlined work in hand, stressing the valuable input by unpaid volunteers, and plans for future work.

After an excellent buffet lunch, arranged by Mrs Gill Hinde, visitors then toured the site, guided by Trustees. In addition to the steam engine and scoopwheel, they visited the preserved diesel engine which took over from the 'Old Engine' in 1925. This is a Mirrlees, Bickerton & Day 4 cylinder air blast injection engine. It was relegated to standby duties in 1947 and last worked in 1966.

*Henry Gunston*

### IA in Nova Scotia

Industrial Heritage Nova Scotia (IHNS) has recently launched a new initiative that will allow anyone interested in the province's industrial past to make a personal contribution to its preservation. The Survey of the Industrial Archaeology of Nova Scotia (SIANS) aims to collect data on as many old industrial sites as possible. While most major sites are well known, countless others are overlooked because we are unaware of them. Anyone can help raise awareness by sending in information about sites they know about. This input is critical to the project's success.

The SIANS database will give us a better understanding of the historical and engineering importance of individual sites, and of the development of particular industries in Nova Scotia. It will enable people to find and visit sites more easily, and it will become a useful tool in arguing for the



*Stretham Engine House was erected in 1831*

*Photo: Peter Stanier*

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preservation of threatened industrial heritage.

Sites of interest like old mills, creameries and manufacturing plants dot the landscape of Nova Scotia and form an important part of our lives. The Sidney Tar Ponds are an example of an industrial landscape, as is the Starr Manufacturing Plant in Dartmouth. There, the arrangement of workers housing and their place of employment formed a unique cityscape, now sadly torn down. In contrast, the Lunenburg waterfront is an industrial landscape which has escaped destruction and is now a world heritage site and a major tourist attraction. But other sites important to our heritage are virtually unknown or recorded. As more sites get added to the database, awareness of the range of the province's industrial heritage will grow accordingly.

To find out more, visit the Industrial Heritage Nova Scotia website and click on the SIANS link: [www.industrialheritagens.ca](http://www.industrialheritagens.ca).

### Ben Rylands glassworks

The original 1867 Ben Rylands glassworks site at Stairfoot, Barnsley, South Yorkshire, has been redeveloped. The works pioneered the manufacturing of Hiram Codd's patent glass stoppered mineral water bottle in the 1870s. At the end of 2008 the site was undergoing preparation work for the building of a new old peoples care home when the site manager allowed a group of Codd enthusiasts access. The surface had around 8 inches removed, in which a few items were found including, luckily, a six ounce Rylands & Codd right on the surface! Of more interest was the revealing of the old No.1 flint glasshouse. What was thought to be just a buried brick wall was to those in the know immediately recognisable as the curved structure of the foundation and furnace flues of the original 1867 glasshouse. This was the very spot where the 1873 trials were completed with Ben's perfected groove tool that caused Hiram so many problems in those early Codd days. The site is now levelled and topped with white limestone ready for building.

The unique Codd bottle takes its name from the inventor and patentee Hiram Codd. The bottle had a glass marble trapped in its

neck so it could be re-used many times without the need for a new cork. When the bottle was filled under gas pressure, the marble was forced into the lip where it formed an airtight seal with an India rubber washer fitted in a groove.

*Coddoholics forum*  
<http://codds.3.forumer.com>

### Leeds and Florence: the tower connection

In June the Black Dogs artistic collective ([www.black-dogs.org](http://www.black-dogs.org)) based in Leeds ran a series of events and guided walks celebrating the extraordinary towers at Tower Works and the Holbeck Conservation area. The pin maker Col Thomas Harding opened the Tower Works in 1864 and the first chimney was a copy of the twelfth-century campanile of the Palazzo del Comune in Verona. A larger chimney, to extract fine metal dust from the works, was added by William Blackwell in 1899 and imitates Giotto's Campanile at the Duomo in Florence. Black Dogs has produced an unusual large foldout 'Tower Walks' leaflet, one side of which is a guided tour around the towers and industrial sites of Holbeck, Leeds, while the other side guides you around the medieval towers and historic sites of Florence.

### Germaine Greer praises the cooling tower

Germaine Greer's Arts Comment in *The Guardian* of 8 June 2009 was all for saving Britain's 'fabulous cooling towers.' She complained of the widespread demolition of recent industrial monuments, such as gas holders, and had much to say about the fate of the famous gas holders at St Pancras which lost out to the

new Channel tunnel rail terminal. She had yet more praise for cooling towers, which 'are even more fabulous creatures. Their hugeness, 400ft or so, already approaches the sublime.' Not all though - she found less favour with the 'girdles of finicking detail' around Sheffield's Tinsley cooling towers, now demolished (see *IA News* 147, p16).

### France's Great Saltworks World Heritage Site

Alongside the good news about the Pontcysyllte Aqueduct and Canal (see feature article) UNESCO's World Heritage Committee has added France's Great Saltworks of Salins-les-Bains as an extension to the site of Royal Saltworks of Arc-et-Senans, which was inscribed in 1982. This now becomes From Great Saltworks of Salins-les-Bains to the Royal Saltworks of Arc-et-Senans. The Great Saltworks of Salins-les-Bains, where brine has been extracted since the Middle Ages if not earlier, features three buildings above ground: salt stores, the Amont well building and a former dwelling. It is linked to Claude-Nicolas Ledoux's Royal Saltworks of Arc-et-Senans and bears testimony to the history of salt extraction in France.

### A train near you once again?

A report by the Association of Train Operating Companies has called for a £500m expansion in the network which includes reopening or adapting old lines and stations to meet increasing demands. Now, 40 years since the infamous Beeching cuts, there are possibilities of lines once again, for example, at Wisbech (Cambridgeshire), Brixham (Devon),

Leicester to Burton (East Midlands), Bordon, Hythe and Ringwood (Hampshire), Fleetwood, Rawtenstall and Skelmersdale (Lancashire), Ashington and Blyth (Northumberland), Cranleigh (Surrey), Washington (Tyne and Wear), and Aldridge and Brownhills (West Midlands). One can immediately see problems in those places where abandoned lines have been built on or bridges demolished.

### Surrey group studies more industrial past

The Surrey Industrial History Group is branching out. The group's 34th series of fortnightly evening Industrial Archaeology Lectures start at the University of Surrey on 29 September. In addition SIHG will be running morning lectures on industrial history at the Leatherhead Institute, carrying on from a series run for many years by past chairman Gordon Knowles. For further information contact Bob Bryson, Tel: 01483 302389 (Guildford course) or Ken Tythacott, Tel: 01372 452569 (Leatherhead course). Details are also on the SIHG website: [www.sihg.org.uk](http://www.sihg.org.uk).

### Saltash bridge celebrated

Waterside celebrations at Saltash have marked the 150th anniversary of I.K. Brunel's Royal Albert Bridge which took the railway from Devon to Cornwall and was officially opened on 2 May 1859. Network Rail is to start restoration and strengthening work on the bridge in the summer of 2010. The bridge is to be cleaned and restored to its original colour which should be discovered beneath at least 30 coats of paint.

### Box office hit for IA

The accompanying photograph, dated 15 October 2008, shows the AT&SF Railroad shops at Albuquerque, New Mexico, now redundant and in use from time to time as a film set. They feature as the setting for parts of *Terminator Salvation*, released in the UK in early June - and possibly the only reason for viewing the film.

*Photo: Neil Cossans*



## West of England

In Bristol and Bath, in the former County of Avon, redevelopment agendas have recently featured IA sites that have come up before, sometimes, on many occasions, as with the Stokes Croft Carriage Works which is on English Heritage's 2009 *Heritage at Risk Register*. Two significant developments in Bath and Bristol can be mentioned: plans for the future of Stothert & Pitt's Newark Works site in Bath have been put on hold as Sir James Dyson has now decided not to build his design school on this site. In Bristol, it has been necessary to replace the pitch-pine lock gates of the entrance lock to the Cumberland Basin with modern steel gates and to update the old hydraulic system, all necessary for flood prevention. This year marks the 200th anniversary of the opening of the Floating Harbour. A new book *Bristol's Floating Harbour: the first 200 years* by Peter Malpass and Andy King has just been published by the Redcliffe Press and the Bristol Threatened History Society will hold a symposium on 19 September 2009, with guided boat trips of the harbour in the afternoon.

A recent development application for a seemingly nondescript property on Jacob's Wells Road in Bristol, was brought to the Conservation Advisory Panel as part of a conservation area and provides an interesting example of bringing one of the 'unknown unknowns' into the public arena. The archaeological desktop which accompanied it briefly mentions a former brewery on the site but unpublished research provides some detailed evidence of the nature of this concern, the Clifton Genuine Beer Brewery, and its association with the leading radical politician of the day, Henry 'Orator' Hunt, best known for his contribution to the unrest that preceded the important 1832 Reform Act. There is also evidence for a large grain distillery on or near this site with two 'fire engines', one to pump water for a waterwheel and the other to assist with the distillery processes. It is hoped that, by bringing this information into the planning process, some remains of one of Bristol's lost industries might be uncovered if and when the development proceeds. Auction details of this site suggest that it

was of similar scale to that investigated by excavation at the Lochrin Distillery in Edinburgh which appears in *IA Review* (Vol XXXI No 1) for May 2009. This article demonstrates the potential for this sort of work in adding to our knowledge of industries that were once important but have disappeared from the official record.

The current economic situation has meant that Somerset IA Society members have had fewer planning applications for the redevelopment of industrial sites to scrutinise but the downturn in housing construction has had unforeseen consequences for two locations previously featured in *IA News*. At Tonedale Mills, Wellington, (*IA News* 98 and 146) work on the conversion of the former 1860s spinning block was abruptly halted at a time when part of the roofing and much of the fenestration had been removed. SIAS has asked the local authority to consider an urgent works notice but because of the uncertainty of a date for recommencing the work a less minimalist approach is the desired outcome with ideally emergency funding to fully weatherproof this Grade II\* building. On a more positive note, at the Tone Works, the former woollen finishing complex, there has been a further move towards the conservation and reuse of the historic machinery (still in situ) by the formation of a board of trustees on which SIAS has a representative. But the funding element through enabling a new build, housing development on an adjacent site makes a future timetable somewhat problematic.

The Eastland Road Tannery, Yeovil, (*IA News* 139) has had a worse fate, the roof and lowered first floor section being removed following safety concerns with elements of the structure that were leaning out towards the road. The remaining walls are braced. The conversion scheme to dwellings that was unfortunately granted permission (to which SIAS and the district council's own conservation department had both objected) should ensure that the roof will be reconstructed though the character and setting of the buildings have been irretrievably damaged.

In May the Coker Rope and Sail Trust, set up with the aim of preserving and restoring the listed Dawes Twinetworks at West Coker, announced that it had been



*Eastland Road tannery, Yeovil, now in a sorry state with its top floor removed*

*Photo: Peter Stanier*

awarded £80,000 by English Heritage and £40,000 by South Somerset District Council. These funds will permit basic onsite works and scaffolding has already been erected. An initial development plan, prepared by architects, has been submitted which concludes that further work such as allowing active exhibitions of the vintage machinery and the provision of offices, toilets and a car parking area will amount to a final cost for the scheme of around £1 million.

At Bridgwater, Castle House, the idiosyncratic mid-nineteenth century building with early elements of cement and concrete in its construction, may at long last have a secure future. SAVE Britain's Heritage has received £110,000 from English Heritage towards the cost of scaffolding and an architect to draw up plans for conversion to housing. It is hoped that negotiations with Sedgemoor District Council over an adjacent plot of land, the acquisition of which would improve the viability of the scheme, will have a favourable conclusion.

The eighteenth-century Ashton Windmill at Chapel Allerton near Wedmore has been restored to its original appearance by Cotswold Millwright Ltd, funded by its owner Sedgemoor District Council with a grant from the Society for the Preservation of Ancient Buildings (Mills Section). In May 2007 one of the sails had broken off in high winds and the others were in poor condition so the decision was taken to replace all four sails.

Like other IA societies, SIAS often faces dilemmas when

responding to planning applications as to the degree to which a building should be altered in order to be adapted to a new use. In Taunton a late Victorian collar factory is to be converted into workshops and at Longaller Mill, Bishops Hull, the existing nineteenth-century waterwheel is to be replaced by a modern wheel for the purposes of electrical generation. Although both buildings are protected, SIAS felt that the applications, for various reasons, were less than satisfactory and wrote submissions expressing objections to Taunton Deane Borough Council, with which it is a non-statutory consultee. In both cases the society's comments were noted and reflected in the planning constraints which accompanied the decisions of conditional approval.

SIAS has also been actively involved in plans to renovate the estate sawmill and electric generator plant at Hestercombe House near Taunton, which is reported in detail elsewhere in this issue of *IA News*.

In Wiltshire, the recession has caused Lafarge Cement to mothball the Westbury cement factory, although it will continue in use as a depot. This major landmark or blot beneath the famous Westbury White Horse on the northern escarpment of Salisbury Plain was opened in 1962 so perhaps qualifies to be 'industrial archaeology'. With the capacity to make 700,000 tonnes of cement a year, the factory employed over 130 people at its peak. Meanwhile, after stagnation at the site since 1992, developers have at last demolished the unlisted buildings at Kingston Mills,



Tonedale Mills spinning block: cause for concern

Photo: SIAS Archive



Weymouth's Harbour Tramway could be revived for the Olympic sailing events in 2012. It is seen here with a boat train in 1976

Photo: Jude James

Bradford-on-Avon. They included some much altered weaving sheds and constructions dating from the mid nineteenth century associated with the Spencer Moulton rubber works: the New Mills buildings, the concrete Lamb building of about 1916 and the gatehouse in Kingston Road. The only surviving pillbox in Devizes is being put forward for listing.

There is railway-related news from Dorset. History was made on 1 April when 'The Purbeck Pioneer' became the first passenger train to run from London to Swanage in 37 years. British Rail closed the Swanage branch in 1972 and pulled up the 7 miles of track between Swanage and Furzebrook in as many weeks. Volunteers of the Swanage Railway Trust have taken

30 years to reinstate the line. The event was organised by UK Railtours and the train hauled by a DB Schenker Class 66 diesel locomotive from Victoria Station was greeted by crowds waiting at Swanage. On 2 May the north Dorset town of Gillingham celebrated the 150th anniversary of the opening coming of the Salisbury & Yeovil Railway, part of the L&SWR line from Waterloo to Exeter. The railway had a lasting effect on Gillingham and encouraged new industries. A display in Gillingham Museum includes the elaborately carved ceremonial wheelbarrow and silver spade used by Miss Seymour who cut the railway's first turf near the town in 1856. Work is progressing on a project at Shillingstone on the much lamented Somerset & Dorset Joint Railway, where the old station building has been restored to good condition. It was opened by the Dorset Central Railway in 1863 and is the only station of that company to survive. The locomotive 'Morning Star' is on site in a partially restored condition. Lastly, the disused Weymouth Harbour Tramway of 1865 which runs down the centre of the streets from Weymouth station to the terminal for Channel Islands and Cherbourg ferries could become a light railway to carry spectators for the 2012 Olympics sailing events.

*Mike Bone and Brian Murlless*

### North West England

In Liverpool there was an official opening on the 25 March 2009, in not the best of weather and with much hyperbole from the politicians, of the new extension of the Leeds & Liverpool Canal to take boats from

Stanley Dock, past the Pier Head and into Albert Dock. At a cost of £22million, this has involved construction of two new locks as well as the re-opening of four locks on the Stanley Dock branch of the canal. However, as photographs show, the great Stanley Dock tobacco warehouse is still in the same empty state that we reported on in 2005.

Meanwhile, in Cheshire the Anson Engine Museum has been quietly making progress, with two major additions this year. Just before Easter they took delivery of a replica of Rudolf Diesel's first engine (the original is in the Deutsches Museum, Munich) that was built for MAN Truck & Bus last year for the 150th anniversary of Rudolf Diesel's birth. It now stands alongside the first British built diesel by Mirlees. Although primarily a museum of internal combustion engines, the other major addition this year is that the S.S.Stott steam engine from Albion Mill, Hazel Grove, Cheshire, has been rebuilt and should be in steam in time for the Three Shires Textile Festival, 4-19 July 2009. The Three Shires of this Festival are Cheshire, Staffordshire and Derbyshire. Although primarily an arts festival, there were other events of interest to *IA News* readers, including visits to two surviving textile businesses, R.A.Smart at Bollington, Cheshire, who Jacquard-weave silks in addition to printing a wide range of textiles, and Berrisfords at Congleton who weave ribbons.

The Manchester Region Industrial Archaeology Society visited James Thornber at Holmes Mill, Clitheroe, in May, one of the



The sails of Somerset's Ashton Mill have been restored recently

Photo: Peter Stanier

few surviving weavers in Lancashire. Still a family owned business they were established here in 1906, but the mills themselves date back to the 1820s, the original spinning mill now being used for warehousing. The weaving shed, dating from the 1850s but much rebuilt, houses modern Dornier rapier looms, 44 with Jacquards and 18 with dobbies.

Elsewhere in Lancashire news is not so good with three mills lost through fires, two over the same weekend. A large part of Woodfield Mill in Burnley was destroyed on Friday night, 21 November 2008, while St.Pauls Mill at Hoddlesden near Darwen was destroyed the following night. The latter is the most serious loss, being a weaving mill dating from 1861 and few weaving sheds survive from this early date. A fire which started on the evening of 21 April 2009 almost totally destroyed Maple No.2 Mill at Oldham, leaving just the tower and rope race standing plus, rather oddly, the dust flue on the opposite corner. Although press reports said the mill was over 100 years old it was not in fact built until 1915, being one of the last mills in Oldham, having reinforced concrete floors and was designed by Sidney Stott.

Another ancient landmark was removed from Lancashire in October 2008 when new owners Premier Foods took the production of Robertson's Golden Shred marmalade from Droylesden, in Manchester, where it has been since 1890, to Histon in Cambridgeshire. Not as bad as China, but almost as bad from a Lancastrian viewpoint. Of course Robertsons produced

more than Golden Shred, but the rest of their range of jams has been dropped, leaving Golden Shred as a meaningless brand name; the last time I brought a jar of Golden Shred I felt it had less shred in it and that it did not spread on my toast as well as it used to do. But of course it had never been the same since they dropped the famous golly in 2002, which had come under scrutiny from the political correctness police, but for those who are not squeamish about such things a website ([www.gollycorner.co.uk](http://www.gollycorner.co.uk)) is devoted to the collection of Robertson's golly brooches.

The huge change in economic conditions affecting the housing market in particular has meant that some of the regeneration projects mentioned in previous reports have stalled. At the Royal Oak Brewery site in Stockport mentioned in the 2007 report, just the brewery tower has been left standing following demolition of other buildings including the Mineral Water Manufactory, but no further work has been done. Again at the Cheadle Bleachworks site, mentioned in last year's report, most of the site has been demolished as planned and some foundation work for the new buildings started. Work has now ceased, but not before the contractors had pulled out one of the water wheels and thrown it into a skip, contrary to the instructions of the County Archaeologist. However, some people still have ambitions since at the end of May a developer unveiled plans for the Burnley Weavers' Triangle area with a development on the derelict Clock Tower and George Street Mill sites

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Cheadle Bleachworks, Cheadle, Cheshire, after the developers had ceased work on the site. The new development was to incorporate the chimney stump and parts of the original buildings seen here  
Photo: Roger N Holden

for both commercial and residential units. This followed purchase by the Burnley Council, helped by the Northwest Development Agency, of property including the famous Slater Terrace previously owned by Hurstwood Properties whose development plans had come to nothing. Some rather different development proposals come from Bolton where plans have been submitted to convert Egyptian Mill, off Halliwell Road, into an Islamic residential college for girls, while Springside Paper Mill, south-east of Belmont, which was working until recently, has been chosen by the Government as the site for a 1500 inmate capacity prison.

The University of Manchester Archaeology Unit (UMAU) report that over the past year they have been involved with excavation at Dicconson Mill, Wigan, a late eighteenth to early twentieth century combined cotton mill site with water and steam power. Other industrial sites surveyed include Tack Lee Works in Rochdale, Bath Vale Finishing Works, near Congleton, Cheshire and, moving to more recent industry, an electrical

sub-station at Park Bridge Ironworks, Ashton-under-Lyne. In the centre of Manchester they have continued excavation of workers housing, at Pump Street and Hilton Street, the latter including the engine house for a hat works. However, this will be the last report from UMAU because the unit is closing from the 31 July 2009. The director of the Unit is Mike Nevell, the AIA's Endangered Sites Officer, who gave the 2005 Rolt Memorial Lecture. The Unit has worked closely with the Manchester Region Industrial Archaeology Society and was involved in planning of the AIA Conferences in Manchester in 2000 and Preston in 2007 so its closure is a serious blow to industrial archaeology in the North West. UMAU also used to work closely with the office of the Greater Manchester County Archaeologist, known rather confusingly as the Greater Manchester Archaeology Unit, which will remain at the University for the time being.

The closure of UMAU is part of a more general retreat, caused by changes in Government funding, from public and community



The remains of Maple No. 2 Mill, Oldham, after the fire of 21 April 2009. No. 1 Mill to the left is still intact  
Photo: Roger N Holden



Robertsons Jam Factory, Ashton Hill Lane, Droylesden, Manchester. The original works of 1890 had become surrounded by later additions and by the time of this photograph (25 April 2009) demolition of more recent parts of the factory to the rear had already started  
Photo: Roger N Holden

engagement by the University with the Courses for the Public unit also closing from this summer; whatever happened to New Labour's slogan of 'life-long learning'? This used to be the Extra-Mural Department, which in the 1970s was headed by Owen Ashmore, a pioneer of industrial archaeology in the North West. The University says that there has been declining demand for these courses, that Government funding is now focused on professional development and executive education, and it will continue its tradition of engagement with the public in others ways.

Roger N. Holden

## South East England

By the time AIA members read this issue of *IA News*, the 100th anniversary of Louis Bleriot's flight from Calais to Dover on 25 July 1909 in an aeroplane of his own design should have been commemorated by a weekend of celebrations at Dover on 25 and 26 July 2009. The planned events included a recreation of the flight by four reproductions of the Bleriot machine and by numerous light aircraft, as well as other displays and flights taking place on and along the sea front at Dover. The event also commemorates the first crossing of the Channel between Calais and Dover in a hovercraft by Sir Christopher Cockerell.

Another aviation centenary was celebrated at the Southdown Gliding Club at Parham airfield near Pulborough by a 'Weiss Centenary Day' on 27 June. Weiss designed and

built a glider which was launched from the South Downs above Amberley. It was piloted by the 16-year-old Eric Gordon England and, although not the first flight, on this occasion the glider rose above its launch point by some 40 feet and landed in the valley after a flight time of 59 seconds. This is generally accepted as the first time a glider was recorded as gaining height, thus demonstrating the possibility of soaring flight. England remained associated with aviation as a test-pilot and designer, and founded a company that manufactured racing-car chassis based on the Austin 7 and other cars. Although the company failed in the recession in 1930, he continued to be active in aviation and gliding.

Brooklands Museum's Vickers Vimy replica flew over the bay at Clifden, Galway, as the finale of the Connemara Air Show, to mark the 90th anniversary of Alcock and Brown's pioneering transatlantic flight from Newfoundland in June 1919. The Vimy returned to England on 15 June from Galway Airport, flying over Brooklands on its way to Duxford, where it will remain until November 2009 when it will be retired to Brooklands as a permanent 'live exhibit'.

Work on the extension of the Bluebell Railway to connect with Network Rail at East Grinstead is progressing. The infill has now been removed to beyond the Imberhome Lane bridge, and a second phase of rubbish clearance will follow. At the moment work is concentrated on the East Grinstead station site. A connection there to Network Rail has already been made.

On 9 May 2009 at the Wey & Arun Canal, the formal opening took place of the waterway under Loxwood High Street. This required the complete rebuilding of the bridge and lowering of the waterway beneath it to give sufficient headroom, which in turn required the lowering of the water level in Brewhurst Lock and building a new lock beyond the bridge to restore the water to its original level. The project cost £1.8m, which made it one of the largest and most expensive undertaken by a volunteer canal trust. On the same day a new electric boat, capable of carrying 60 passengers, was named *Wiggonholt*. It is named after the Wiggonholt Association, an organisation dedicated to the preservation of rural Sussex, and which donated £80,000 towards its cost. It joins two other boats operating on the canal.

The Basingstoke Canal Authority was obliged to close the Deepcut flight of fourteen locks from 22 June because of structural problems. Funds for repair are very tight and no date has been given for re-opening. The remainder of the canal remains open.

At the Twyford waterworks near Winchester restoration of the boilers is proceeding, involving asbestos removal, structural repairs and replacement of the brickwork, so that the Hathorn Davey triple-expansion engine may be brought back into steam. This is perhaps a unique project, in that most preserved engines do not use their original boilers.

Following the closure of the Sittingbourne and Kemsley light

railway in December 2007, one of the UK's earliest pre-stressed concrete structures faces demolition. This is a one-kilometre long 118-span viaduct, built in the 1920s, at the Sittingbourne end. The owners wish to demolish it to build a shopping centre. Efforts are being made to secure listing for the structure and save the railway. The Finnish owners have however recently donated a mile of line in the middle of the route to the volunteer group concerned with preservation of the line.

A gantry crane from the Thames Ditton Statue Foundry was an exhibit at the Rural Life Centre, Tilford, near Farnham, for many years, having been rescued when the foundry building was demolished in 1975. Space limitations at the museum, which is primarily for items of countryside interest, have led to the crane being removed to a private collection at Manningtree, Essex. The crane dates from the building of the foundry in about 1874, and has wooden traverse beams, which are now in a somewhat decayed state. The crab, rails and other metal parts are of cast and wrought iron. The foundry cast bronze statues and other memorials until 1939. There are many examples of its work around the country, the most notable being the statue of the Duke of Cambridge in Whitehall and the Quadriga standing on the arch near Hyde Park Corner - perhaps the largest statue made by an English foundry, weighing 38 tons. There are many memorial statues and plaques for the Great War.

Alan Thomas

Local Society and other periodicals received

Abstracts will appear in *Industrial Archaeology Review*.

- Brewery History Society Newsletter*, 45
- Bristol Industrial Archaeological Society Bulletin*, 126, Spring 2009
- Bristol Industrial Archaeological Society Journal*, 41, 2008
- Dorset Industrial Archaeology Society Newsletter*, No.24, May 2009
- Greater London IA Society Newsletter*, 241, April 2009, 242, June 2009
- Hampshire IA Society Focus on Industrial Archaeology*, 72, June 2009
- Hampshire IA Society Journal*, No.17, 2009
- Hampshire Mills Group Newsletter*, 85, Summer 2009
- Histelec News: Newsletter of the South Western Electricity Historical Society*, 41, April 2009
- Historic Gas Times*, 59, June 2009
- ICE Panel for Historical Engineering Works Newsletter*, 120, December 2008
- ISSES Contact: Newsletter of the International Stationary Steam Engine Society*, September 2008
- Manchester Region Industrial Archaeology Society Newsletter*, 127, February 2009
- Merseyside Industrial heritage Society*, 294, June 2009
- Museum of Bath at Work Newsletter*, Spring 2009
- Midland Wind and Water Mills Group Newsletter*, 93, April 2009
- Northamptonshire Industrial Archaeology Group Newsletter*, 110, Spring 2009
- North East Derbyshire IA Society Newsletter*, 34, May 2009
- Piers: the Journal of the National Piers Society*, 90, Winter 2008/9
- Scottish Industrial Heritage Society Bulletin*, 51, June 2009
- Search: the Bulletin of the South Wiltshire Industrial Archaeology Society*, 89, March 2009
- Suffolk Industrial Archaeology Society Newsletter*, 104, February 2009
- Surrey Industrial History Group Newsletter*, 169, May 2009
- Sussex Industrial Archaeology Society Newsletter*, 141, January 2009
- Sussex Mills Group Newsletter*, 141, January 2009
- TICCIH Bulletin*
- Trevithick Society Newsletter*, 142, December 2008
- Triple News: Newsletter of the Kempton Great Engines Society*, 38, Winter 2008/9
- The Vision: Newsletter of the Friends of Newport Transporter Bridge*, 4/08 Winter 2008
- WaterWords: News from the Waterworks Museum, Hereford*
- Welsh Mines Society Newsletter*, 59, Autumn 2008
- Yorkshire Archaeological Society Industrial History Section Newsletter*, 76, Late Spring 2009
- Yorkshire History Quarterly*, 13/3 Winter 2008

Short Notices

*Black Avalanche: The Knockshinnoch Pit Disaster*, by Arthur & Mary Sellwood, Amberley Publishing, Stroud, 2009. 128pp, 15 illus. ISBN 978-1-84868-245-0. £14.99.

In September 1950 a bizarre disaster overtook Knockshinnoch Castle Colliery near New Cumnock in Ayrshire when torrential rain caused a field of peat to collapse and send a deluge of sludge down into the mine. Despite the deaths, one of the greatest and most complex mine rescues of all time succeeded in rescuing 116 men and two George Medals were awarded for heroism. This book, first published in 1960, tells the truth behind the pit disaster, following the lives of the colliery worker and the effects of the tragedy on their livelihoods. The book details each stage of the rescue and reports the reactions of those trapped underground. It also illustrates how peril and tragedy can unite people regardless of their class, age or gender.

*Brentford Dock and Railway*, by Diana Willment, Dandelion Publications, Brentford, 2009. 95pp, 43 illus. ISBN 978-0-9540590-5-7. £7.50.

There is a local tradition that I.K. Brunel built Brentford Dock and Railway, although this is apparently not mentioned in literature on the great engineer. It would seem that he did the designs but he was too preoccupied with other matters in the 1850s to be closely concerned with the work. He was already a sick man when the dock was opened as the Great Western Dock on 15 July 1859, exactly two months before his death. The project succeeded in bringing a line from the GWR at Southall to this transhipment dock on the Thames, giving access by lighter to London's riverside docks and elsewhere. The book outlines the planning and construction, the working life and final decline. Local cargoes included coal tipped from rail wagons into barges for the short journey to Brentford Gas Works, while more exotic imported goods were brought up river to the dock. A huge 40-ton crane of 1905 worked here but subsidence caused its demise in 1961 when the dock was very run down. It closed in 1964 and was later acquired for residential and marina developments.

*Camden Railway Heritage Trail: Primrose Hill to Camden Lock and Chalk Farm*, by Peter Darley (ed.) Camden Railway Heritage Trust, 2009. 18pp, 26 illus. £2.99, available from Peter Darley, 21 Oppidans Road, London NW3 3AG.

A handy, all-colour booklet guides the reader around a small area of London rich in IA sites including the Primrose Hill tunnel portals, Camden Roundhouse, Fitzroy Bridge, Camden Goods Depot, Regent's Canal, Camden Lock, stationary winding engine vaults, the 'Camden catacombs' and the Horse Hospital. A long-term project is to link heritage sites to create a walk through the social and industrial past, with an associated aim of restoring and preserving the sites and providing public access and information. It is a major potential educational resource for school history projects. The 2-mile trail also crosses some of London's most vibrant attractions.

Book news

*The Harveys of Hayle*

The Trevithick Society is to publish a revised edition of Edmund Vale's seminal volume *The Harveys of Hayle*. This history of the great Cornish engineering dynasty and its enterprises has long been unavailable since it first appeared in 1966. This new edition will incorporate additional material on the family and company, including the years up to final closure, surviving products of the foundry and what remains at Hayle today. Due for publication in October, the large format paperback of 370 pages will be available at £19.99, with 100 limited hardback editions at £35.99. The Society's books are distributed by Tor Mark, United Downs, St. Day, Redruth, Cornwall, TR16 5HY, whose retail arm, Willow Books operates from the same address (Tel: 01209 822011, website [www.willowbooks.co.uk](http://www.willowbooks.co.uk)).

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**4-10 SEPTEMBER 2009  
AIA ANNUAL CONFERENCE**

at the University of Lincoln, the AIA's annual conference, followed by field visits and evening lectures after the weekend. See the AIA website for more details.

**22-27 SEPTEMBER 2009  
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LATER HISTORICAL  
ARCHAEOLOGY IN BRITAIN  
AND DENMARK 1500-2000  
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at Odense and Copenhagen. Advance notice only. See the AIA website for more details.

**10 SEPTEMBER 2009  
STONE QUARRY  
LANDSCAPES**

at Dillington House, Somerset, a day school on the IA of stone quarries in the west country, with a visit to Ham Hill. Details from Dillington House, Ilminster, Somerset TA19 9DT, 01460 52426, Web: www.dillington.com

**3 OCTOBER 2009  
EMIAc 78: TRAMS IN THE  
LIMELIGHT**

at the National Tramway Museum, Crich, EMIAc 78 is hosted by the East Midlands Branch of the Railway & Canal Historical Society in conjunction with the National Tramway Museum. Lectures on Cliff Quarry, the Tramway Museum and East Midlands tramways, followed by guided tours of the museum and workshops. Numbers are limited. For details send SAE to EMIAc 78, 141 Allestree Lane, Allestree, Derby DE22 2PG.

**5-8 NOVEMBER 2009  
ARCHAEOLOGY OF BRIDGES**

at Regensburg, Germany, this international congress aims to provide a discussion forum for the identification of locations, development and construction principles of bridges in different regions and countries, from prehistory to the beginning of the nineteenth century, based on archaeological and historical research. For further information send an e-mail to bridges2009@t-online.de.

**7 NOVEMBER 2009  
WILTSHIRE IA SYMPOSIUM**

at the Wharf Theatre, Devizes, symposium including fibre matting, railways, secret underground cities, airfields and brickmaking. For details write to IA Symposium, Wiltshire Heritage Museum, 40-41 Long Street, Devizes, Wilts SN10 1NS, Tel: 01380 727369, or Email: wanhs@wiltshireheritage.org.uk.

*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.co.uk](http://www.industrial-archaeology.co.uk)*



*Cool praise. The Ironbridge power station cooling towers, seen from Coalbrookdale. Will we be fighting to save this familiar scene one day? See inside, page 14*

Photo: AIA

**INDUSTRIAL ARCHAEOLOGY NEWS**  
(formerly AIA Bulletin ISSN 0309-0051)  
ISSN 1354-1455

Editor: Dr Peter Stanier

*Published by the Association for Industrial Archaeology. Contributions should be sent to the Editor, Dr Peter Stanier, 49 Breach Lane, Shaftesbury, Dorset SP7 8LF. News and press releases may be sent to the Editor or the appropriate AIA Regional Correspondents. The Editor may be telephoned on 01747 854707 or e-mail: [aianewsletter@yahoo.co.uk](mailto:aianewsletter@yahoo.co.uk).*

*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.