

INDUSTRIAL ARCHAEOLOGY NEWS

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THE BULLETIN OF THE ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

FREE TO MEMBERS OF AIA



Cornwall Conference • Somerset's industrial past • Rolt Symposium • AIA awards
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INDUSTRIAL ARCHAEOLOGY NEWS 155 Winter 2010

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COVER PICTURE

Littlejohns Pit is a vast excavation for china clay in the St Austell district, seen during the AIA Cornwall Conference (see page 5).

Photo: Henry Gunston

AIA Cornwall Conference 2010

This year's Conference was held in Cornwall at the Tremough Campus of University College, Falmouth, on 3-9 September. Tremough House, on the outskirts of Penryn, was built 300 years ago by a local merchant as a private residence and the house has subsequently been a gentlemen's academy and a convent school. The house still stands on the campus but all buildings used by the conference were newly built for the college. The usual Rolt Lecture was replaced this year by a special Rolt Symposium to commemorate the centenary of Tom Rolt's birth. The main conference was followed by four days of field trips and evening lectures. Events were organised by the local Trevithick Society.

Rodney Hall

Conference participants who arrived by early Friday afternoon were able to go on a special conducted tour of Falmouth Docks which is operated by A & P Group Ltd, the largest ship conversion/repair company in the UK. We were guided most knowledgeably by the managing director, marketing director and a former long-time employee in three groups, visiting the engineering workshops, fabrication workshop (with a 400-ton press) and giant cranes. Vessels were under repair in the No.3 and No.4 drydocks but the massive Queen Elizabeth Drydock was vacant. About 450 are employed at Falmouth and we were impressed by the friendly relationship between management and staff as we walked around. We could photograph anything unless it was a grey ship (Admiralty).

In the evening the Conference opened with a formal welcoming by AIA Chairman Tony Crosby, and the Trevithick Society Chairman Philip Hosken. Kingsley Rickard, then gave a brief history of the Trevithick Society, the oldest industrial conservation society in the country, formed in 1935 to save the 1840 beam engine at

Levant Mine from destruction. Known initially as the Cornish Engines Preservation Committee, acquisition of other engines followed and the properties later gifted to the National Trust. Merged with the Cornish Waterwheel Preservation Society in 1971, the name 'Trevithick Society' was adopted and the society is still very active in a conservation and advisory role.

Allen Buckley then took us through the story of Dolcoath Mine, Camborne, one of the richest, deepest, famous and most important metal mines in Cornwall. Many well-known names in Cornish mining either worked there or were associated with it. Early output was tin, it later produced a significant proportion of Cornwall's output of copper ore before finally again being a major tin mine. Closed in 1930, the sett was later worked by South Crofty and is in the latest proposals to again mine for metals in Cornwall.

Philip Hosken led off Saturday morning with a review of Richard Trevithick. A brief run through the history of steam before 1800 set Trevithick's achievements in perspective. The problems of reduction in size and weight necessary to allow self-propulsion, having to force water into the boiler, and the engineering needed to prevent of leaks in boiler and pipe-work were highlighted. Finally the building of the replica of the 1801 'Puffing Devil' was described. Colin Bristow next recounted the research into a very early canal at Carclaze, an ancient tin streaming site, later a china clay pit. Leats were constructed to bring water to the upland site and tunnels at two levels dug to access the bottom of the pit. Tunnels and leats were made large enough to take tub boats, of which records remain but little can be traced on the ground today.

After a coffee break, Doug Luxford gave a lively explanation as to why there are so many Methodist chapels to be found in Cornwall. The close link between the number of working miners and the rise and decline of Methodism in



Visiting Falmouth Docks on the pre-conference tour

Photo: Roy Murphy



The engineering workshop at Falmouth Docks

Photo: Roy Murphy

Cornwall was followed along with the schisms within the denomination with each sect having their own chapel.

Members' contributions followed lunch. Marilyn Palmer described a hectic few days with television's Time Team excavation at the Derwencote cementation furnace. Aiming to discover structures and artefacts around the furnace, which could increase interest in the site, remains of a crucible furnace, a forge, workers housing and a charcoal furnace and rolling mill were found. The programme is scheduled to go out January 2011. Tony Crosby's 'holiday snaps' showed many sites of IA interest in Australia. The pictures were accompanied by much information. News of the AIA Restoration grants was presented by Mark Sissons, reported elsewhere. Cornwall is generally a county of small streams running down to the coast. Before steam, water power was used widely and Michael Messenger showed some of the sites where waterwheels either existed or were still extant at the time of his visit. John Watts described in his inimitable style the industrial remains to be found on the Bristol Channel island of Steepholm. Finally John McGuinness brought along some commemoration artefacts from his

collection and explained the story behind them.

The latter part of the afternoon was given over to the AIA Awards. Keith Falconer introduced the AIA Fieldwork Awards and winners (see page 5), commenting that there was a small number of entries of a high standard, and all from north of the border! The judges came to a unanimous decision. The Main Award (Voluntary) went to Brora Saltworks, near Wick, where Jacqui Aitken and her team of volunteers have excavated and recorded remains of the early salt industry over five years, a 'community exercise'. A special award was given to a project on eroding limekilns in Angus, using electronic recording and 3-D photographs to monitor erosion by the sea. The Student Award went to Nicholas Pilszak: Conservation Plan for ruinous Garpit Corn Mill, Ferryport-on-Craig, Fife. The Main Award (Paid) went to the M74 Completion Project by Headland Archaeology UK Ltd and Pre-Construct Archaeology (PCA), and Andrea Smith (Headland Archaeology) gave the conference a presentation on the M74 project. The work involved over 100 archaeologists during nine months in 2008-9, covering a total of 13 acres, prior to construction of the M74 south of Glasgow. The four main areas

concentrated upon were the Caledonia Foundry, South Laurieston Tenements, Govan ironworks and the Caledonia Pottery site.

Marilyn Palmer introduced the Publications Awards, which are described on page 9. Ian Wyre was on hand to talk on his Dissertation Award, which was part of an MSc at the University of York. The subject, forging virtual links with the past in Portsmouth, showing how changes had been made to buildings on the restricted W. Treadgold site, by recreating indoor and outdoor 3-D sequences through the ages from c1704-8 to 1988. Ken Hollamby and Stewart Squires also spoke about their book, *Building a Railway; Bourne to Saxby*, which won the Occasional Publications Award.

As usual, the awards were presented to the winners by the AIA President, Angus Buchanan after the formal dinner in the evening. The Cape Cornwall Singers male voice choir provided light after-dinner entertainment, singing Cornish and other ballads, unaccompanied except by pints from the bar.

Sunday morning's AGM proceedings received reports from the Council, Treasurer and Chairman. Importantly, Prof Angus Buchanan handed over as Hon President to Prof Marilyn Palmer. A presentation was made to Angus and Brenda Buchanan to mark the occasion. There was an election of officers (please see page 2 for a full list including new faces and posts). We received a report on the AIA/CBA industrial buildings day schools, of which only two now remain: in the East Midlands on 11 November, and in Lancaster on 21 February 2011. Paul Sautler gave a short presentation on the proposed AIA trip to Sweden on 30 May to 4 June 2011, which should prove to be 'an impressive IA experience'. Bill Barksfield is taking over from Paul as organiser of these visits. John McGuinness reported on progress with next year's Conference which is to be held in Cork.

As 2010 is the centenary of the birth of L.T.C. Rolt, a special Symposium on 'Remembering Tom Rolt' was held instead of the normal Rolt Lecture. We heard recollections from people who knew him. Angus Buchanan introduced the panel of speakers, and told of how he first knew Tom Rolt and his work in the creation of IA as a subject.



Andrea Smith (Headland Archaeology) and Peter Moore (Pre-Construct Archaeology), winners of the Main Fieldwork Award (Paid) for the M74 Completion Project

Photo: Mark Sissons



Stewart Squires (left) and Ken Hollamby receive their AIA Publications Award for their book on building the Bourne to Saxby Railway

Photo: Mark Sissons



Tunnel enthusiasts. Photographing the portal of Cornwall's longest railway tunnel which now takes a china clay lorry road to the shipping quays at Fowey Photo: Marilyn Palmer



China clay loading wharf at Fowey

Photo: Marilyn Palmer



Waiting to go below at the Rosevale Mine

Photo: Steve Dewhirst



Back to the classroom. Tony Brooks gives the AIA a lesson in mining at King Edward Mine

Photo: Steve Dewhirst

Angus's most abiding recollection is one of gratitude for his strong personal support, through the Council for British Archaeology, the Centre for the History of Technology, and the Bath Conferences on Industrial Archaeology. Tom Rolt pressed the case for a national society and the AIA was his last great institutional achievement. Keith Falconer, head of IA for English Heritage, also knew Tom Rolt at Bath. He spoke of Tom Rolt's perception of industrial landscapes and his associations with many monuments which later became World Heritage sites, including the Ironbridge Gorge, the Canal du Midi, and the Pontcysyllte aqueduct.

James Sutherland recollected the early impact Tom Rolt had on him. They first met in 1946 at the mouth of the Standedge Tunnel on the Huddersfield Narrow Canal, where they were trying to test the right of navigation. James's boat became stuck and he backed it out. Tom (who was secretary of the IWA) took charge and speeded the boat through the obstruction, without too much damage to the boat! James Sutherland was with Tom Rolt on the council of the Newcomen Society, and he said how Tom's writing made technical subjects intelligible. Julia Elton gave a bird's eye view on her observations as a young woman on the relationship between Tom Rolt and her father Sir Arthur Elton. Her father had reviewed Tom's books and she recalled

meeting him when he came to dinner with her father at their flat in 1971. Richard Hope described Rolt's work with the Talyllyn Railway Preservation Society in saving the Talyllyn Railway. The first 2 miles opened in May 1951. Tom was general manager and Sonia was booking clerk at Wharf, but work was hard and there were few other staff.

Finally, Neil Cossons described how Tom Rolt was 'a rock anchor' in the early days of IA. His engineering knowledge commanded respect. They first met at Stroud Technical College in 1963 at a one day conference, but their real friendship stemmed from the Bath Conferences. Neil also talked about hectic efforts to obtain a commemorative centenary plaque for Tom Rolt's Eaton Road birthplace in Chester, saved with not a moment to spare by Geoff Wallis of Dorothea Restorations.

A full report on the Symposium will appear in *IA Review*. Tom's widow, Sonia, was in the audience and a small exhibition of photographs of Tom's life had been compiled by Don Newing. This ended the Conference proper but evening lectures and field visits continued to the Thursday. A comprehensive booklet on the visits had been compiled and each trip was led by members of the Trevithick Society.

Three field trips were organised for Sunday afternoon. Par and Fowey harbours have been the

main export ports for china clay but shipments from Par stopped about two years ago and part is to be redeveloped. After viewing the empty harbour, the coach travelled to Fowey along the private road linking the two ports which was



Underground in the Rosevale Mine

Photo: Steve Dewhirst

converted from a railway line and includes a tunnel. No ships were alongside but the clay handling berths and the railway (from Lostwithiel) infrastructure were inspected at Fowey.

Another group donned helmet and lamp to take a trip through the small Rosevale tin mine near Zennor. Entering along an adit, features of interest were explained before vertical ladders up the narrow lode were climbed to emerge at a higher level on the hillside. A visit to the fascinating Wayside Museum nearby rounded off the afternoon.

The third trip was to the preserved Cornish beam engines at Pool, saved originally by the Cornish Engines Preservation Society and now in the care of the National Trust. Mitchell's whim engine and the pumping engines at Taylor's and Robinson's Shafts were visited, the latter the last Cornish engine to work on a Cornish mine.

On Sunday evening Ivor Bowditch gave a very knowledgeable talk on the china clay industry of Cornwall. China clay, or kaolin, is the decomposed feldspar constituent in granite, mica and quartz being unaffected. The rise and retrenchment of the industry was followed and the methods of winning the clay and its treatment with changing technology were explained. Uses, transport and export were also covered.

Tin mining occupied one group on Monday. Tony Brooks, a leading light of the King Edward Mine Museum project, greeted us as the 'literati (or was it glitterati?) of industrial archaeology'. The King Edward Mine was established to provide a practical teaching site for the Camborne School of Mines. Changes in the 1980s and 90s led to the buildings being made into a new museum of mining history. We toured the site especially to see different types of tin ore processing equipment which have been reconstructed. The original Holman winder has returned to its original site (in a newly-reconstructed engine house), Californian stamps, a round frame, buddles, a sand table, a Frue vanner and rag frames were all seen. Outdoor travels in the afternoon (in the rain!) took us to the remains of the mine buildings at Marriott's shaft, where parts of engine, boiler, compressor and winding engine houses remain, together with a miners' dry, complete with elegant Norman-style arches.

We then saw the West Basset stamps, where the stamping engine house partially survives. Lower down were the remains of vanner, buddle and calciner houses, all part of the treatment processes for tin ore.

Hayle was wet, very wet! Nevertheless as good industrial archaeologists we followed Kingsley Rickard around sites of mining engineers Harvey's of Hayle, their shipping wharves, timber sheds and foundries, demolished and partially intact and restored. At Poldark Mine, where old mine workings have been re-opened we had an excellent lunch and then scrambled underground. The tour of surface artefacts was in that day's rain but down in the stopes we were assured that the water we were paddling through was at least two days old, it taking that time to percolate through the ground.

County Hall in Truro was the venue where Pat Harvey, Chairperson of Cornwall County Council, formally welcomes the delegates on Monday evening. All then heard a talk by Adam Sharpe, who was part of the ad hoc committee who prepared the bid which resulted in UNESCO recognising the Cornwall and West Devon Mining Landscapes as a World Heritage Site in 2006. Unusually, the designation is not confined to buildings but is composed of whole landscapes, each illustrating different aspects of Cornwall's mining industry and portraying the impact mining had not only on the county but by emigration, the leading part played by Cornish people in mining throughout the world. Being landscapes and 10 sites meant very complex negotiations with landowners, Local Authorities and communities for protection, preservation and management of the sites. Afterwards a fine dinner was taken at Green Lawns Hotel at Falmouth.

Weather on Tuesday, and the rest of the week, was dry although threatening at times. One party travelled west to Porthcurno, at one time the largest cable station in the world and a centre for communication with the British Empire. Fourteen undersea telegraph cables came ashore in this remote cove linking all parts of the world. Tunnels dug for protection of equipment and personnel in WWII have been turned into a museum of undersea telegraphy since the site ceased being used as a training establishment in 1993. The tour included a talk and demonstration

of early telegraph equipment. After a quick visit to the beach to view the hut where the cables came ashore and lunch in the nearby pub, it was off to Newlyn which is a major fishing harbour. We had a quick walk through the fish market, empty at this time of day, followed by excursions along two quays with knowledgeable guides to view vessels alongside.

Wheal Peevor tin mine has pumping, winding and stamps engine houses in a group and exploration of this 'conserved' site found numerous interpretation boards which were backed up by Kingsley Rickard's extensive knowledge. The failure of traffic congestion on the A30 to hold us up meant we arrived at the Blue Anchor pub at Fraddon before it had opened. Rain greeted us again at Bodmin but rides on the ex-GWR heritage railway there in two directions meant we generally stayed dry, though in true 'real railway' style, the buffet car was not open due to staff shortage.

The National Trust is one of the largest land owners in the World Heritage sites and on Tuesday evening Jon Brooks talked about the Trust's work in West Cornwall. Problems encountered in the management of some sites and 'green' solutions to them were outlined. Conservation and consolidation work on mining structures in Trust ownership in West Penwith were described including the restoration of the tunnel from the dries to the man-engine shaft at Levant mine.

Ivor Bowditch led one group on Wednesday on a tour of sites linked to china clay production in the St Austell district. Littlejohn's Pit has its origins in the 1840s, with seven smaller pits amalgamated into one large one now covering 500 acres. We looked down on hydraulic hoses used to wash out clay, sand and mica from the pit walls. Bucket wheel clarifiers and hydrocyclones produce a pumpable slurry for further processing. Passing Nanpean, one of twelve 'china clay villages' which grew up in support of the industry, we reached the Meledor dry extraction site. Here the basic rock is dug dry and transported by 70-tonne dump trucks to a central site for separation and processing. At the nearby refining plant, more mica is removed from the clay, and a magnetic separator applied to remove unwanted iron staining. Customers in the paper, ceramic and



Inside the mineral dressing mill at King Edward Mine

Photo: Steve Dewhirst



Impressive architecture at West Basset Stamps

Photo: Steve Dewhirst



The Melbur dry processing china clay plant

Photo: Henry Gunston



The remains of the famous Levant Mine, perched on the cliff tops of West Cornwall

Photo: Roy Murphy



Ball mills and shaking tables in the dressing mill at Geevor Mine

Photo: Marilyn Palmer



Arsenic calciner and flues at Botallack

Photo: Marilyn Palmer

other industries demand high specifications for their clays, and further processing is required to satisfy their different needs. At the new Rocks drying plant, clay is passed into long vertical tubes, each containing a bladder which on inflating by hydraulic power forces water out of the clay to dry it. Travelling through abandoned clay country, with the distinctive conical 'sky tips' of waste sand brought us to Parkandillack, where volunteers have restored a Cornish engine built in 1852. The 50-inch cylinder engine, able to pump 750 gallons per minute, was built by Sandys, Vivian & Co, at Hayle, and first installed at Wheal Kitty Mine, near St Agnes. In 1912 it was moved to its present site, where it pumped china clay slurry until 1953. The engine now works on compressed air and the blackberries around the engine house were delicious!

The other group visited West Penwith, first with a brief stop in St Just to look round the town centre and parish church with its painted murals. Then to the former count house at Botallack Mine and an exhibition in a one-time stable annex. A guided tour of the ore dressing floors and calciner followed culminating with close inspection of possibly the famous Botallack Crowns mine, perched on ledges below the cliffs. Lunch was taken at Geevor Mine after the winding engine house at Wethered shaft had been opened specially for us. A very comprehensive tour of

Geevor's surface buildings followed, and by the end of it we should all have been able to obtain 'A star' in cassiterite processing. A quick run through a section of the underground workings showed us the conditions under which the miners worked. Walking along the cliff top path revealed other mining infrastructure covering a 200-year span and then the highlight for many, the Levant Mine winding engine running under steam. A final climb down the recently re-constructed spiral stone steps and through a tunnel brought us to the top of the man engine shaft, scene of the 1919 disaster when the riding rods collapsed.

That evening Tony Pawlyn recounted the little known steam trials of 1831 and HM steam vessel Echo. The Royal Navy was reluctant to use steam propulsion for its ships, let alone at high pressure. HMS Echo was an insignificant support vessel and suitable for experimentation. Harvey's of Hayle, Maudslay, Son & Field and Francis Trevithick were all involved with the trials at some time. For various reasons some trials were inconclusive but eventually, of course, the Navy became a steam navy.

Thursday found one group at the former clay port of Pentewan where the harbour is still in water but sand now blocks the entrance. A narrow gauge railway once connected to St Austell and the remains of this and rails from subsequent activity making concrete blocks from

the sand were viewed, as was the village. The St Austell Brewery provided lunch, following which a tour round the brewery, still owned by the original family, ended with a tasting session of some of their brews.

The second group visited Charlestown. The harbour and piers are mostly unchanged since 1791-1801 when they were built by John Smeaton in what was a rocky cove of St Austell Bay. Lock gates kept ships afloat for loading and unloading at all states of the tide. Copper ore was originally shipped but eventually china clay became the principal export. Loading chutes for tipping clay directly into waiting vessels remain on one quay while the other quay imported coal and timber. There was also a shipyard, ropewalk, lime kiln and a foundry. Commercial traffic and industry has ceased and the dock is now a home for a collection of tall ships often used for filming and the main employer is tourism. Charlestown also has the Shipwreck and Heritage Centre which displays a fine collection of artefacts and relics and was certainly worth the visit.

Grateful thanks to Owen Baker, Ivor Bowditch, Tony Brooks, Pete Joseph, Kingsley Rickard, Charles Thurlow, and Graham Thorne and all others who made the Conference so rewarding to participants. Personal thanks to Alan Crocker, Mick Edgworth, Henry Gunston Tony Jervis and the Editor for input to this report.

Somerset's industrial past in 2010

Members of the Somerset Industrial Archaeology Society (SIAS) have been involved either directly or indirectly in a number of interesting projects which have recently surfaced or continue to be monitored. This article gives a flavour of what has been going on during the past year. The author is the SIAS Archivist.

Brian Murless

At Nynehead near Wellington, two landowners are in their third year of a ten-year stewardship scheme for landscape management of an area which covers historic parkland and part of the Somerset section of the Grand Western Canal. The scheme has brought together English Heritage, Natural England, the Environment Agency and local authorities at district and county level. Currently the results of a feasibility study of the structures are being studied encompassing a carriage drive, a three-arched river bridge, two canal aqueducts and the remains of an innovative canal lift, designed by the engineer James Green, which once raised and lowered canal tub boats by 24 ft. Whilst some groundwork activities have been undertaken by the Waterways Recovery Group of the Inland Waterways Association, volunteers from the Grand Western Canal Trust and SIAS have also been at work in and around the lift. Finds have included segments of a 3ft diameter gear wheel thought to have been associated with one of the lift's guillotine gates.

Although a permanent solution has yet to be found to the unoccupied and deteriorating former woollen mill buildings at Tone and Tonedale at Wellington (*IA News 150*), the existing textile

business of Fox Brothers has been acquired by Deborah Meaden, widely known as an investor on the television programme *Dragon's Den*. She has also leased the former office block at Tonedale Mills as a showroom for both contemporary and historic woollen fabrics as well as housing a collection of archives and artefacts associated with the old company. In Rockwell Green on the outskirts of the town, Wessex Water has refurbished the conical cap and weathervane on the brick water tower which revealed the letters 'E P' on the flight end of the arrow. These are the initials of Edward Pritchard (1839-1900) of Birmingham and London who designed the tower in 1885. The neighbouring circular four storey tower, by Rolfe & Raffety and dating to 1934, has been extensively conserved due to the spalling (cracking) of the concrete. Treatment included the application of 1,000 litres of hard wearing paint to its external surfaces with a weatherproof coating on the top floor. Both towers are listed Grade II as is the nearby associated pumping station at Westford which contains original structural features and machinery such as the 1886 ram pumps by Glenfield & Kennedy of Kilmarnock. The future of this redundant, late Victorian pumphouse remains uncertain and a recent attempt at maintenance to the roof has been frustrated by the presence of bats.

This year sees the completion of a multi-faceted project on the West Somerset Mineral Railway, known locally as the Old Mineral Line, which carried iron ore from the Brendon Hills to the port of Watchet. The work began in 2008 when a consortium of organisations and individuals undertook conservation and interpretation funded

by the National Lottery. The impressive legacy that has resulted includes public access to mining remains (*IA News 146*) and railway features such as the 1,100 yd incline which climbs a vertical height of 803 ft at a gradient of 1 in 4 and on which was laid a double track of standard gauge rails. In addition to trail leaflets and a website (www.westsomersetmineralrailway.org.uk), a two volume limited edition of the archaeology and history of the mines and the railway has been published by the Exmoor National Park Authority. Its author, Mike Jones, has incorporated a lifetime's research and measured surveys by himself and acknowledges the dedication of his late colleagues, John Hamilton and Roger Sellick. A shorter book, *The Brendon Hills iron mines and West Somerset Mineral Railway* is due to be published later this year.

Westonzoyland Engine Trust has successfully restored to steam a single cylinder horizontal engine by James Culverwell of the Bridgwater Iron Foundry which had arrived at Westonzoyland from the Bristol Industrial Museum in July 1998. During its working life the engine had powered the mash rakes at Burnham Brewery, being removed when the site was cleared for redevelopment in 1966. Uncertainty about the date of manufacture encouraged Brian Murless to research the history of the iron foundry which flourished in Bridgwater from c1820 to c1908. One aspect to arise from this was that whilst examples can be found of Culverwell's ironwork ranging from railings to waterwheels, no other engines have come to light. Somerset iron foundries were producing small portable and stationary steam engines for farms, mills and workshops in the nineteenth and early twentieth centuries along with others fuelled by gas and oil but, with the exception of those made by Petters of Yeovil, very few appear to have survived.

The mill visitors' centre in the grounds of Hestercombe House near Taunton (*IA News 150*) has been officially opened, though a delay in sourcing sufficient line shafting has meant that some exhibits are still static. Following details which were published last year in this newsletter, SIAS gratefully received assistance from Dr Ian West, an expert on country house technology (*IA News 154*), leading to the acquisition by the Hestercombe Gardens Trust of an acetylene lighting plant. This was one of only two known complete examples remaining *in situ* in the British Isles, the other being in Northern Ireland. One surprise revealed during the restoration of the waterwheel at Hestercombe by Martin Watts was the name of WC Rafarel of Barnstaple on small embossed plates on the wheel's naves or centres. These appear to be contemporaneous with other parts cast by J E Vanstone of Black Torrington indicating the involvement of two Devon engineers in the construction of the wheel. An estate farm nearby at Volis also had a waterwheel originating from Devon. As there were numerous Somerset founders and millwrights available in the nineteenth century,



Comberow Incline, West Somerset Mineral Railway

Photo: SIAS Archive

the tentative conclusion is that the Portman family or their estate stewards had a role or policy in relation to the procurement and servicing of waterwheels.

The restorers of the nineteenth-century Dawes Twine Works at West Coker near Yeovil literally raised the roof in April. The Coker Rope and Sail Trust engaged the skills of the Carpenters Fellowship who employed tension straps and wire cables to move the building section by section up to 30cm back to its original position. Remarkably the heavy clay roofing tiles, of the Double Roman pattern from Highbridge and the ridges from Bridgwater, remained in place during this

operation, only one being broken. This work was a necessary prerequisite to ensure that the structure is safe and stable for future conservation activities to take place. There is a projected completion date of 2012.

The Parrett Works, a former engineering and flax complex at Martock, has a number of buildings listed Grades II and II*. SIAS was instrumental in obtaining statutory protection for these in the 1970s and the site is now primarily a small industrial estate. Concern had been expressed over the condition of the historic rope walk which for some years had been used as a byre. It has now been bought by a consortium of

neighbouring businesses. Unfortunately there has been no perceptible progress on the rebuilding of that part of the site devastated by fire in November 2007. Madey Mills nearby is recognised as a Grade II* listed building for its fine surviving historic features, which include a locally cast waterwheel, but has a 'C' rating on the *Buildings at Risk Register*. This category is defined as being in slow decay with no solution agreed as to funding its conservation needs. However, in March English Heritage thoroughly surveyed the building and it is understood that discussions have begun as to its future upkeep.

A planning application for a change of use resulted in the demolition of a site at Chaffcombe near Chard which had been established c1896 as Earl Poulett's Model Dairy Factory. Although subsequently developed as a cider works and even later as a council depot, a 15ft x 2ft 6in overshot waterwheel from William Sparrow's foundry at Martock survived from the early period, together with a primitive governor to control the penstock which was added when DC electrical generation was introduced. SIAS was unsuccessful in obtaining listed status for the wheelhouse and contents but the planning authority, South Somerset District Council, recognised the wheel as being of 'local historical interest'. Whilst its future remains uncertain consideration is being given to the best option for the wheel's preservation away from site. Chard Central Station, located appropriately on Great Western Road, was opened in 1866 at the (then) terminus of the Bristol & Exeter Railway's Chard Branch from Taunton. The surviving distinctive station building, with a characteristic railway canopy, will probably suffer a loss of setting as a planning application has been submitted for a large-scale housing development on adjacent land, formerly part of the station site. However, a rumour circulating that it was to be removed and rebuilt at Norton Fitzwarren on the West Somerset Railway was unfounded. The short-term threat remains arson and vandalism, a fire having already occurred, but there is a projected use of the building as a discount store.

Investigating Somerset's industrial past has previously been a somewhat disjointed process necessitating visits to both the Somerset Studies Library and the Somerset Record Office housed on separate sites in Taunton. This situation is about to change with the completion of the Somerset Heritage Centre at Brunel Way, Norton Fitzwarren on the former Taunton Trading Estate. Although purpose-built, the location will be known to military historians as the United States Army Stores (opened c.1942) which subsequently became the War Department Supply Reserve Depot until its closure in 1966. Apart from providing a one-stop centre for primary and secondary source material, the £8 million complex, funded well before the present economic downturn, will contain the reserve collections of the County Museum

Service, currently dispersed in stores throughout the county but now to be held in an adjacent building. Opening to the public is scheduled for the late autumn.



Culverwell Engine at Westonzoyland Pumping Station

Photo: Iain Miles



Dawes twine walk at West Coker, with its newly straightened roof

Photo: Peter Burnett

AIA Fieldwork and Recording Awards 2010

This year saw the bulk of the entries coming from Scotland which was perhaps a little unfortunate as it meant many of the winners could not attend the conference in Falmouth some 600-700 miles away. Once again, a big thank you the judges Keith Falconer, Amber Patrick and Mike Nevell for giving up their time to judge the entries.

The **Main Award (Paid)** went to the M74 Completion Project by Headland Archaeology UK Ltd and Pre-Construct Archaeology (PCA) for a vast landscape project centred around the M74 and demonstrates how the public can become engaged with industrial archaeology. As a work in progress we look forward to seeing many more reports about this project in the future. The award was collected by Andrea Smith (Headland) and Peter Moore (PCA) at the conference. A worthy runner up, and to whom we awarded a **highly commended award**, was Tom Dawson and SCAPE at St Andrews University for The Eroding Limekilns at Boddin Point Angus: Preservation by Digital Record. This included an impressive fly through animation of the lime kiln which had been recorded in 3D using modern technology.

The **Main Award (Unpaid/Volunteer)** went to Clyne Heritage Society for their important piece of recording on the Extractive Industries of Brora. The initial research strategy of rescuing evidence threatened by coastal erosion has blossomed into a full-scale project to understand early

coal-fired salt-making and relate it to general economic trends in this early outpost of Scottish industrialisation. The other entry for this category was from P. Lingwood entitled *Cwn Ystradllyn: An industrial landscape*. The report demonstrated some incredibly detailed recording of a number of vulnerable sites in the region and shows how talented some of our membership is in the physical recording of sites. Again this was another work in progress that we look forward to seeing more of in the future.

Finally, the **Student Award** went to Nicholas Pilszak: Conservation Plan for Garpit Corn Mill, Ferryport-on-Craig, Fife.

We are always on the look out for new entries so please send them in as soon as possible for next year. We already have one entry. Hopefully our new categories will encourage you to take part and if you see or hear of industrial archaeology projects near you, prompt people to enter. They don't have to be AIA members but it would be great to have some. For entry forms see the AIA website. Remember, marks are given for:

- Research Strategy (10),**
- Documentary Research (15),**
- Fieldwork (20),**
- Analysis/interpretation (30),**
- Presentation (15),**
- Advancement of the Subject (10).**

We are not only looking for the recording of sites but some analysis of their context in the region or nationally so that the site can be assessed in terms of its importance to the specific industry to which it is

connected, its rarity and any information it can provide about the processes carried out.

It is with regret that I have decided to have a break from running the awards after a stint of 15 years. Due to work and family commitments I no longer have the time needed to dedicate to council meetings and administrating the awards. I will be keeping in touch though with AIA and who knows in a few years time may be tempted back!

Victoria Beauchamp

AIA Publications Awards 2010

The number of entries was rather thin this year and few new societies submitted entries. This is a pity as the quality of local society publications continues to be very high.

The **Occasional Publications Award** went once again to the Society for Lincolnshire History and Archaeology, for *Building a Railway; Bourne to Saxby*, by Ken Hollamby and Stewart Squires, which was published jointly with the Lincoln Record Society. Charles Stansfield Wilson (1844-1893) was the engineer who supervised the civil works on the railway line from Saxby to Bourne. A keen amateur photographer, he took a series of photographs during the construction phase of the line from 1890 to 1893, 72 of which were mounted in an album: this is a priceless survival indeed, as photographs of the construction of a railway in Victorian England are extremely rare. This volume presents a selection of these illustrations, accompanied by full and extensive captions which tell the story of the construction, and detail the work of the men and machines involved. The judges particularly commented on the way in which each photograph has a well researched narrative describing the scene and features, and elaborating on the construction aspects revealed in each one. The excellent maps also received commendation.

The **Journals Award** was presented to Sussex Industrial History Society for Volume 40, edited by Brian Austen, which included Ron Martin's article and excellent drawings of a warehouse building at No.4 Winding Street, Hastings: Ron received the award on

behalf of the Society. The judges commended the layout of this volume and the selective use of colour, which made for an attractive format.

The **Newsletters Award** went to Leicestershire Industrial History Society, for their Spring 2010 issue, edited by Wendy Freer, who received the award on behalf of LIHS. She explained that LIHS has decided to produce a more regular and extended Newsletter rather than an annual journal. This issue was full of news and short articles and very well illustrated.

The **Dissertation Award** was given for the first time this year, having superseded the former Essay Award. We were somewhat late in sending out the information to Universities, but did attract a very good MSc thesis from the University of York by Ian Wyre on *Forging Virtual Links with the Past; rescuing the archaeological story of Treadgold Ironmongers of Portsmouth*. Ian explained how virtual modelling by digital means can tell the history of a site and explain its significance, and hopefully lead to better conservation plans for industrial buildings. Having already sent out the information for both the undergraduate and postgraduate awards early this year, we hope to attract more entries in 2011.

Marilyn Palmer

Cork conference 25 August to 2 September 2011

As stated at the conference in Cornwall arrangements are well advanced for next year's conference which will be in Cork and in the earlier week commencing 25 August. The last Monday in August in Ireland is not a bank holiday. The sleeping accommodation will be in the university hall, where each room is understood to contain a ¾ bed with one side against a wall. It should therefore be possible to offer a reduced rate for couples sharing a room. Food and the main conference will be held on the main campus, an attractive landscaped and historic site. Travel options include air to Cork airport or by sea overnight from Swansea to Cork. Currently outward journeys are on Wednesday, Friday or Sunday and returns on Thursday, Saturday and Tuesday.



Some of the volunteers on the Brora Project

Photo: J Aitken

The principle sites to be visited will be: The Ballincollig gunpowder mills, the Allihies copper mines and the Shannon River hydro-electricity scheme. It is intended to reintroduce the Friday seminar, with an Irish theme. The Rolt lecturer will be Professor Patrick Malone, winner of this year's Peter Neaverson Award, who will be coming from the USA for the event.

There can be little doubt that this promises to be a conference to be remembered. I therefore hope members will note the dates of the conference. I look forward seeing many of you in Cork in August 2011.

John McGuinness

Retirement of Peter Stanier from *Industrial Archaeology News*

Dr Peter Stanier has announced his retirement as Editor of *Industrial Archaeology News* from this issue. The previous Editor, Dr Peter Wakelin, announced that Peter would take over late in 1994 and his first issue was No. 92, Spring 1995. Peter's short note about himself in this said that he had been a member of AIA since the inaugural meeting in March 1974 and was present at the first national conference under the AIA banner at the University of Keele the same year. He added that he had kept a low profile but now felt it was time he put something back into the Association. That he has certainly done, with 16 years to



Peter Stanier receives a framed print in recognition of his long tenure as IA News editor from AIA President Marilyn Palmer and Chairman Tony Crosby during the Council meeting at Coalbrookdale on 6 November
Photo: Ian West

his credit, of four issues a year. At the same time, Peter has raised the profile of industrial archaeology in general by the books he has produced on the quarrying industry and on south-west England, together with the many courses he has run on industrial archaeology in various adult education centres. We shall all miss his work with *Industrial Archaeology News* but hope, of course, still to see him at annual conference and, perhaps, to read his own contributions! We all owe him an enormous debt of gratitude for all the work he has done since 1995.

*Marilyn Palmer
Hon. President*

South East Industrial Buildings day school

The AIA and CBA South East region Industrial Buildings day school was held on 5 July in the Percy Arms at Chilworth just outside Guildford in Surrey, and chaired by David Calow (Surrey Archaeological Society), Brian Grimditch and Mike Nevell. Lynne Walker updated delegates on the new PPS 5. Support came from members of the Surrey Industrial History Group (SIHG), part of the Surrey Archaeological Society. Glenys Crocker described gunpowder sites and the development of the Gunpowder Mills Study Group, while Prof Alan

Crocker spoke on paper mill sites. Andrew North, Chairman of the Chilworth Gunpowder Mills Group, told about protecting the gunpowder site and the problems arising when planners (and even archaeologists) fail to interpret the importance of apparently insignificant buildings. Chris Matcham (Surrey Wildlife Trust) and Paul Sowen (SIHG) introduced the often overlooked topic of collaboration between industrial archaeology and wildlife interests. Both gave many examples from above and below ground.

The afternoon was taken up by a tour of the nearby Chilworth Gunpowder Mills site, led by Andrew North and Alan Crocker. The mills were established in 1626 by the East India Company. Advances during the late nineteenth century included the production of cordite, but the works closed in 1920. Many of the buildings were demolished, and much of the site is now owned by Guildford Borough Council. The award-winning Chilworth Gunpowder Mills Group (see page 11) has been active in preserving and conserving the significant remains such as the charcoal and saltpetre stores, magazines, water-powered incorporating mills with their edge runner stones, a canal and tramway with a German-built swing bridge.

LETTER

Harper's bridges

We were interested to read Tim Mickleburgh's letter about the Harper bridges at Grimsby in your autumn edition, *IA News 154*. The bridge across to Duck Island in the River Freshney was drawn to our attention recently by Bruce Lincoln of Grimsby and DH visited the site earlier this year. On the bank side the ironwork of the original bridge is retained, but it is not attached to the modern bridge replacement immediately beyond. There is no original ironwork on the

island. While we'd like to think that the reason for the original structure having been retained was as a link with the history of the crossing, more likely it was to control access to the wildlife of Duck Island. It was an interesting find and a source of further information about the architecture of the bridges of that time. Details of the Harper light foot suspension bridges worldwide may be found at:

www.harperbridges.com
*D.R. Harper, T.M. Day
douglassharper@btinternet.com*

NEW EDITOR CHRIS BARNEY

Starting with the next issue of *Industrial Archaeology News*, February 2011, your new Editor is Chris Barney who has kindly agreed to take over the post. Please give him all your support, especially in the early issues as he begins to find his way. Keep sending in those news items, features and photographs. Chris Barney can be contacted at The Barn, Back Lane, Birdingbury, Rugby, CV23 8EN, Telephone: 01926 632094, E-mail: aianewsletter@btinternet.com.

AIA VISIT TO SWEDEN

30 May – 5 June 2011

An exploration of a major area of Sweden's rich industrial archaeology, with key visits to Skansen, the world's first open air museum, Falun copper mine, Sala silver mine, the Swedish Railway Museum, Angelsberg early iron working site, the Oil Museum, Eskilstuna (the Sheffield of Sweden), and Tumba paper mill.

Please see the enclosed flyer for booking.

VISIT THE AIA WEBSITE

www.industrial-archaeology.org.uk

St Pancras Station Hotel

It is expected that the lower part of the building will reopen as a hotel by the summer of 2011. Some of the apartments on the upper floors bought by private individuals are already occupied. The major part of the restoration work including all the heavy structural engineering necessary to make the building viable for the next hundred years or so has been done. Fifty years ago when it was in a dilapidated condition and regarded as a Victorian monstrosity there was a real risk of demolition, but even since then it could easily have suffered structural collapse. This state of affairs is at an end and it is largely the details of interior decoration which still have to be settled.

The public entrance to the hotel is at the southwest corner of the site and in the 1890s the original doors here were replaced by one of the first revolving doors to be installed in Europe. Invented in 1888 by Theophilus Van Kannel of Philadelphia, Pennsylvania, these were becoming popular in America for high-rise buildings where ordinary doors had proved hard to operate because there is a slight vacuum inside a tall building caused by air flowing upwards through stairwells, elevator shafts, and chimneys. Van Kannel's new design of door, essentially an air-lock, was easy for guests and visitors to use and saved heat in winter, especially important in the cold winters prevalent in North America (no Gulf Stream there). A new replica revolving door, this time made in Britain, is to be installed where the original American door was put in. The fine room above on the first floor with windows on three sides became the Ladies Smoking Room at about the same time. This was another innovation, almost unique in Europe, where ladies were permitted to smoke in public. The room is being restored to something like its original appearance.

Many of the new hotel bedrooms are not in the original Gilbert Scott hotel. An entirely new block to the northwest along Midland Road, built in a sympathetic style, will house most hotels guests at a more moderate price than the prestigious rooms overlooking the Euston Road. The new standard rooms will cost about £200-250 per night. The multi-room

Presidential Suite incorporating what was at one time the Hotel ballroom will almost certainly be beyond the means of almost all readers of *IA News* – perhaps about £8,000 a night! Only a tiny fraction of the hundreds of rooms in the original Hotel are being restored to anything like their original condition and even this is involving great expense. For the present phase of the restoration work about £100 - 180 million will be needed. In the rebuilding of the Hotel all kinds of printed ephemera have been brought to light, such as adverts, price lists, bills, receipts and dance cards found beneath the sprung floor of the ballroom which is to become part of the Presidential Suite: it is intended that some of this paperwork will be published as reproductions or in a booklet.

Part of the former cab road on the west side of the Station, the departure side, has been enclosed and converted into a covered glazed space where meetings and functions will be held. North of this the cab road paved with granite setts sloped down steeply and after a tight bend, inside what is essentially a short tunnel, emerged into Midland Road. Signs which read 'black cabs only' really meant what they said. The cab road exit was designed in the days of horse-drawn hansom cabs and only vehicles such as the London black cab have a turning circle small enough to negotiate the bend at the bottom of the slope. Latterly some drivers of 'white vans' chose to ignore the warning notices and descending the slope to the north at speed became well and truly stuck in the tunnel, the tight bend not at first being obvious. Apparently some of these vans had to be cut out to remove them, resulting in the destruction of the vehicle. Quite how tall these stories are is uncertain: from memory it was possible to negotiate the sharp bend, which was closed to traffic in 2001, in a small motor car. Some of the 'black cabs only' signs have been salvaged.

The celebrated St Pancras station ticket hall with its original linen-fold booking office and 'stone' figures of railway men at work will not be reopened to the public: it has been incorporated into the hotel. Railway travellers must now buy tickets on the floor below, for Eurostar at the south end of the station in what used to be the store

for barrels of beer from Burton-on-Trent. For domestic routes the booking office is on the same level at the north end of the station.

Robert Carr

Chilworth Gunpowder Mills Group receives Conservation Award

The 2010 Conservation Award of the Surrey Industrial History Group was presented to the Chilworth Gunpowder Mills Group and Guildford Borough Council on Saturday 10 July 2010 in recognition of their work over many years in recording, researching and restoration of the site of the former gunpowder works at Chilworth on the Tillingbourne. The award was commemorated by the presentation of a plaque by Mr Robert Bryson (Chairman, Surrey Industrial History Group) to Mr Andrew Norris, representing the Group and its constituent members the Guildford Borough Council and St Martha's Parish Council. The Guildford Borough Council was represented by Councillors Jenny Powell, Roy Hogben and David Wright. The award is the 28th in the series of annual awards made by the Surrey Industrial History Group.

The Chilworth Gunpowder Mills were established in 1626 by the East India Company using water power from the Tillingbourne, but later made powder for the King and for commercial sale. From 1885 a new type of powder was made for heavy guns, and from 1892 cordite, a smokeless propellant, was made in a

new factory. In WWI the Admiralty built a second cordite factory on adjacent land. After the war explosives factories merged, and most closed, as did the Chilworth works in 1920. The site was sold by the Duke of Northumberland in 1922.

Many of the buildings were demolished. Much of the site is now owned and maintained by the Guildford Borough Council. There has been much work in recent decades in research into the history of the site, the recording and interpretation of building remains and their conservation and repair, including removal of damaging vegetation. The Chilworth Gunpowder Mills Group, an informal association of local authorities and local history and natural history organisations, supports the care and management of the site and encourages public interest and involvement. This includes arranging activities on Heritage Open Days, the Parish Council's annual open evening and giving talks to interested bodies.

Numerous books and articles have been written about the mills. A short guide to the site and the history of powder making is *A Guide to the Chilworth Gunpowder Mills* (4th ed) by Glenys Crocker (SIHG 2005), and a more detailed account is given in *Damnable Inventions: Chilworth gunpowder and the paper mills of the Tillingbourne* by Glenys and Alan Crocker (SIHG 2000). A more extensive list may be obtained from info@sihg.org.uk.



Andrew North, Chairman of the Chilworth Gunpowder Mills group, explaining the saltpetre house during the recent Industrial Buildings day school (see page 10)

Photo: Peter Stanier

SS Robin returns to the Thames

At the end of June the restored steam coaster *Robin* (see *IA News* 147 pages 13 & 20) was lifted bodily onto a specially-constructed floating museum pontoon by two heavy-lift cranes at the Commercial Road slipway in Lowestoft. After being delayed five days by bad weather *Robin* finally left Lowestoft on Friday 17 September, on the pontoon being towed by Griffin Towage tug *Princeton*, 148 tons gross. The following day she arrived in the Thames estuary and berthed alongside Tilbury landing stage about 11am. She stayed there until the early evening when she was to be moved into Tilbury dock itself. The Port of Tilbury is giving *Robin* temporary accommodation for one year, generously without charge, until a suitable berth in London can be found. Can anyone give *Robin* a good home?

Present plans appear to be that *Robin* will remain on the pontoon, which itself will be used as part of the available museum, exhibition and classroom space. As a floating arrangement the whole ensemble will be relatively easy to move about in London as required.

Purpose-built in Szczecin, the pontoon took five days to reach England. The staircase on the port side, to give access to the main deck of the coaster, was also built in Poland and is integral to the structure. The pontoon is fitted with portholes; the spacious interior has generous headroom and is presently

bare and unfinished, perhaps reminiscent of the inside of the hull of an oil tanker. There will be disabled access to this exhibition and gallery space downstairs by means of a lift at the after end of the staircase but not to the deck of *Robin* herself as that is not wheelchair-friendly.

Robin is supported on the pontoon as a ship would be in a dry dock or floating dock. One can inspect the hull from close quarters and admire her fine lines. As an example of the best shipbuilding techniques of the late-nineteenth century, this will provide a good opportunity to see just how things were done. Subsequent repairs and patches are an eloquent reminder of the hard work the hull was subjected to during her long and arduous commercial career. The vessel appears to be fitted with the spare iron propeller which was usually carried on a ship. The normal propeller would probably have been bronze.

Robert Carr

The Railway Heritage Committee

On 14 October the government announced the abolition of the Railway Heritage Committee which has served the rail industry for the last 14 years, continuing the work of identifying railway records and artefacts for preservation, started by British Railways over 60 years ago. The acting Chairman, Peter Ovenstone, has said that the Committee has 'confirmed its

willingness to work proactively with Government, the rail industry, and the heritage and archiving sectors, during the winding down process, to see how the heritage of the modern rail industry can best be protected for the future. The strong support given to RHC by the rail industry – both pre- and post- privatisation – has emphasised the continued awareness of and pride within the industry of the value of its heritage.'

The Railway Heritage Committee was established by the Railway Heritage Act, 1996, and took over from the British Railways Board the role of designating historic railway artefacts and records. When no longer wanted by rail companies, the Committee can direct their disposal for safe keeping, including to the National Railway Museum, heritage railways and to local museums and archives. The Chairman and members of the Committee and its specialist sub-committees are all unpaid and the Committee has for many years operated with a paid staff of one, the Secretary.

During its life, it has designated many thousands of important artefacts and historical records which include Brunel's drawings of the Great Western Railway, some still in use as working documents today; the British Transport Films collection; paintings by Terence Cuneo; coaches from the Royal Train; a travelling post office sorting van; and the GNER archive. Since 2006 the railways owned by the Ministry of Defence have also been within the Committee's scope and a number of important artefacts have been designated as a result, including a coach used as a mobile hospital during World War One.

The National Archive at Kew contains the records of BR, but does not accept the records of private companies for safe keeping, and the challenge will be to safeguard the key archives and records of the railway industry which will be invaluable to future historians.

Robert Carr



SS Robin on the pontoon, berthed at Tilbury Landing Stage, 18 September 2010

Photo: RJM Carr

The loss of Old Oak Common

Many readers who took an interest in railways 60 years ago will be familiar with the locomotive depots designed by the eminent engineer C. J. Churchward. They were quite commonplace over much of the former GWR system and there was a

considerable concentration of Churchward buildings of various types at Swindon Works, now almost all gone. It will probably come as a surprise to be told that the only surviving remains of a Churchward roundhouse depot are the few buildings left at Old Oak Common in West London which remain after the demolition of the large four-turntable engine shed there circa 1964. This was the prototype Churchward roundhouse depot opened in 1906 and similar but smaller examples were subsequently built at many of the larger GW motive power depots.

Still at Old Oak Common, but due to demolished shortly, is a locomotive lifting shop in use until about a year ago for diesel loco running repairs, offices, a one-time canteen building, large stores building, boiler house and a former sand furnace building: in all there are eight Churchward buildings left. Attempts at listing are now pointless as the area is covered by the Crossrail Act. Ten or so years ago listing Grade II should have been straightforward but unfortunately transport enthusiasts, despite their fanatical devotion, have almost no interest in where and how their treasured machines were made, housed or maintained.

An excellent description of the Old Oak Common depot can be found in *An historical survey of Great Western Engine Sheds 1947* by E. T. Lyons (M I Struct E), 2nd edition with corrections 1974. In February 1907 when a young engineer, Sir William Stanier FRS presented his first paper 'The Equipment of a Running Shed' to the Swindon Engineering Society. This mentions Old Oak Common and was published in the Society's Transactions as paper 77. More information is also available on the GLIAS website (www.glias.org.uk). Click on News and use the links: there is an index.

Robert Carr

Hastings and Weston Piers: two contrasting tales

On 5 October arsonists managed to destroy much of Hastings Pier in East Sussex. The 1872 pier had been closed for four years because of safety fears. Earlier this year, Hastings Borough Council bought the pier with a compulsory purchase

order and gave it to the Hastings Pier and White Rock Trust, which had invited architects' designs for redevelopment just the day before the fire. This is a major setback and the Trust is now assessing the full extent of the damage. The narrow bridge section of the pier has been further weakened by the loss of the deck planks from the fire and needs emergency work to prevent it collapsing over winter. The Trust has therefore launched an Emergency Fund. See the website: www.hpwr.co.uk.

Meanwhile, later in October thousands of people queued in the rain when the Grand Pier at Weston-super-Mare reopened after a £39m refurbishment. The pavilion was destroyed in July 2008 by a massive fire caused by an electrical fault. The Grade II-listed pier first opened in 1904, but the first pavilion burnt down in 1930. Now, the third pavilion offers state of the art entertainments.

Sugar works dig on St Kitts

Caribbean Volunteer Expeditions are inviting volunteers to join in the

second 'dig for history' at the Wingfield Estate Sugar Works, St Kitts, West Indies, from January 30 to February 6, 2011. Wingfield Estate is one of the oldest sugar estates in the Eastern Caribbean, and has its origins in the first English settlement established in 1623. Sugar cane cultivation began here in the 1630s, and by the mid-1700s the estate was the largest and most advanced on St. Kitts. Cane was processed in the water and steam-powered sugar works until the 1920s. With its edge-of-the-rainforest location on the banks of the Wingfield River, this site must be one of the most picturesque in the Caribbean. The historic preservation project at Wingfield Estate involves careful excavation of ruined or buried remains, artefact conservation, mapping and photography, and assisting in the maintenance of existing restored structures. During the week we will also explore St. Kitts and enjoy some leisure time. The Group Leader is David Rollinson. A member of the Association of Caribbean Historians and a Heritage Conservation specialist, David is a former resident of St. Kitts & Nevis and has been

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involved in the preservation of Wingfield Works for many years. For more information related to the program, travel or island facilities please contact: David Rollinson, Email: droll@eastlink.ca

Blists Hill beaten by Ulster Museum

The Ulster Museum, Belfast, has won this year's £100,000 Art Fund Prize for museums and galleries. The three other short-listed museums were the Blists Hill Victorian Town (Ironbridge Gorge Museum Trust), the Ashmolean Museum in Oxford, and the Herbert Art Gallery and Museum in Coventry. Our readers' interest will lie in the Blists Hill Victorian Town, where the 54-acre site has been re-invigorated by creating an East Shropshire Coalfield town of c1900, brought alive by costumed staff and volunteers. The site was transformed last year, with many new features, such as a new visitor centre and a street of shops, including a Post Office, fried fish dealer, draper's shop, sweet shop and photographers, along with a clay mine experience and an inclined lift. Substantial conservation work has been completed on the historic wrought ironworks on site which offers one of the most powerful live demonstrations of any museum in Britain. Anyone who has not visited Blists Hill for some time will be surprised by the many changes.

New World Heritage sites 2010

The 34th session of the World Heritage Committee meeting on 25 July-2 August in Brasilia under the Chairmanship of the Minister of Culture of Brazil, João Luiz da Silva Ferreira, inscribed a total of 21 new sites on UNESCO World Heritage List.

Those with industrial archaeological associations include two new cultural sites: Australian Convict Sites (Australia) and the Seventeenth-century Canal Ring Area inside the Singelgracht,

Amsterdam (Netherlands). Two World Heritage sites that have been extended are: the Mines of Rammelsberg, Historic Town of Goslar and Upper Harz Water management System (Germany) and the Røros Mining Town and the Circumference (Norway).

Lincoln Castle: the end

The PS *Lincoln Castle* was built on the Clyde in 1940 by A&J Inglis and spent her life on the River Humber as a railway-owned ferry until she was taken out of service in 1978. Latterly she was moored in Alexandra Dock, Grimsby, close to the National Fishing Heritage Centre, where she served as a pub. Despite an offer (believed to be £100,000) by the Lincoln Castle Preservation Society to purchase her, the owner has destroyed the vessel by tearing her apart using a hydraulic grab. The accompanying picture was taken on 15 October by which time only the transom was recognisable.

Chris Lester

Silver-lead mine for sale

The mine heritage complex at the Llywernog Silver-Lead Mine Ceredigion, Mid Wales, is currently for sale after 36 years of private ownership and development. The sale is being handled by Chesterton Humberts via their Ludlow office. It is a large site with a good track record and ample room for expansion of facilities. The guide price is £350K with a possible, part private mortgage, available. An enthusiastic new owner is being sought who could breath new life into this 300 year old silver-lead-zinc ore mine. Website: www.silverminetours.co.uk

Goodbye Corus hello Tata

On 27 September Corus adopted the name Tata Steel which will appear on all its documents, vehicles and steel plants. British Steel merged with the Dutch steel company Hoogovens BV in 1999, when it



'Roll on – roll off' takes on a whole new meaning during the sad demolition of the former ferry Lincoln Castle
Photo: Chris Lester

became Corus. Then, in April 2007 Corus was bought by the Indian firm Tata, creating one of the world's top ten steelmakers, with a major presence in Europe as well as Asia. Tata Steel has a long and successful history, having pioneered the first integrated steelworks in India a century ago. Tata Steel Europe is Europe's second largest steel producer, with its main steelmaking operations in the UK and the Netherlands.

Two Tunnels Scheme

The cycling charity Sustrans has acquired the old Devonshire and Combe Down tunnels which were abandoned when the Somerset & Dorset Railway closed in the 1960s. The aim is to create a 4-mile cycle and footpath between Bath and Midford. Sustrans is paying nearly half the cost of the £1.9m project, with rest from fundraising and Bath and North East Somerset Council. The plan is to open the new Two Tunnels route in 2011.

Saving Wedgwood artefacts

Stoke-on-Trent's Wedgwood Museum was put into administration in March 2010, and local MP Tristram Hunt is pressing for the valuable collection

to be kept together and not dispersed. This is sad news, since the museum won the £100,000 Art Fund prize in 2009.

No rain for Droitwich Barge Canal

The Droitwich Barge Canal, disused for 80 years, has been restored by British Waterways but its opening was delayed in early September by a lack of water (no rain!). However, all should be well next year when the opening of the Junction Canal will complete a £12m project to create a 21-mile cruising ring in Worcestershire.

Killhope wins award

The North of England Lead Mining Museum at Killhope, Weardale, won the Small Visitor Attraction of the Year at the North East England Tourism Awards 2010, held at Ramside Hall, Durham, on 12 October.

Brewery site for sale

Hardy and Hanson's Kimberley Brewery, Nottingham, is up for sale. The site, in the Kimberley Conservation Area, ceased brewing at the end of 2006 after it had been bought by Greene King of Suffolk.

West of England

IA in the region remains in good health with an excellent 41st regional conference in Cheltenham in April, last. Organised by GSIA, the Gloucestershire Society, the whole programme was of interest but the quality of fieldwork came through in presentations on Bromsgrove nailers and their workshops, the Purton Hulks Ships Graveyard, Newcomen engines on the old south Gloucestershire coalfield and unrecorded early coal-mining in the Forest of Dean. Something of the vitality experienced at earlier regional conferences, and perhaps missing in some subsequent years, was the dominant impression at this well-organised day (see *IA News 154*, page 11).

A fine example of the spirit of adventure of times past was the rescue of the stock of the Victorian engineering and mineral water works of J. B. Bowler of Bath in the late 1960s by Russell Frears. His passing was mentioned in *IA News 154*, page 12, but it is perhaps worth noting here that a short film presented by Kenneth Hudson on the recording and rescue of the collection that was to form the core of the Museum of Bath at Work is now available on a DVD of historic films from this museum. AIA members who attended the pre-conference programme at the 1986 Bath Conference might remember Russell's showing of this film (in pre-digital days) and his account of his then risky venture.

On the conservation front, the economic downturn has certainly reduced the overall number of development applications in this

region's largest city and very few fresh 'industrial' cases have come before the Bristol's Conservation Advisory Panel. It is clear that the new PPS 5 (replacing PPG's 15 & 16) is now being used purposefully by developers and their agents and there is an urgent need for AIA members active in planning matters to adapt to the new statement and associated guidance. The advice may change but some of the old cases keep returning. A public enquiry recently went against proposals to develop the site of the listed Stokes Croft carriage works and permission to demolish William Bradford's maltings, next to the *SS Great Britain*, has come up for renewal as the previous scheme has not been implemented. Both cases have been reported in previous newsletters and the maltings has been on and off the agenda since the 1980s! It is indeed a 'long game'.

Brian Murless reports elsewhere in this issue (see page 7) on a number of interesting projects in Somerset. In summary, at Nynehead on the Grand Western Canal, volunteers from the Canal Trust and the Somerset IA Society have been active in and around the remains of James Green's innovative canal lift which once raised the canal tub boats some 24 feet. Segments of a gear wheel, thought to have been associated with one of the lift's guillotine gates, have been found. Also in the Wellington area, plans for the reuse of part of the Tone and Tonedale works have followed the purchase of the Fox Bros business by Deborah Meaden of the TV Dragon's Den panel. Wessex Water has refurbished and repaired two historic water towers on the outskirts of the town. The brick tower of 1884 has had its conical cap and weathervane refurbished whilst the later (1934) four-storey concrete tower has been repaired. Both are listed Grade II, as is the associated pumping station at Westford. The future of the latter remains uncertain, which is a pity as it retains original structural features and hydraulic machinery.

Elsewhere in Somerset, this year will see the completion of a project involving the conservation, interpretation and public access to the heritage of the West Somerset Mineral Railway which carried iron ore from the Brendon Hills to the coast at Watchet. There are trail leaflets, a limited two volume book on the



The condition of the former rope walk at the Parrett Works is a cause for concern
Photo: Geoff Fitton

mines and the railway, and a website (www.westsomersetmineralrailway.org.uk). At Westonzoyland, the Engine Trust has now restored to steam a single cylinder horizontal engine by James Culverwell of the Bridgwater Iron Foundry. This was acquired from Bristol Industrial Museum's stores, having previously worked at the Burnham Brewery prior to the clearance of this site in 1966. At Hestercombe House, near Taunton, AIA's Ian West has assisted in the acquisition of a rare acetylene lighting plant for the mill visitor centre. This was one of only two known complete examples remaining in situ in the British Isles, the other being in Northern Ireland.

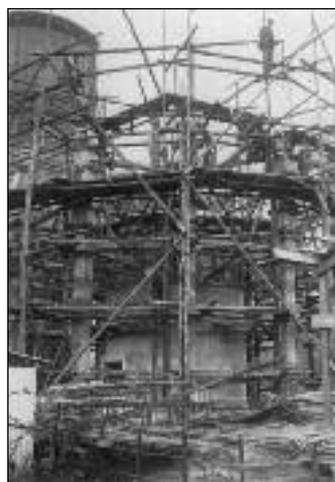
Finally, work on the conservation of the extremely fragile Dawe's Twine Works, near Yeovil, has been going well with a successful lifting of the roof. However, there is concern at the condition of the historic rope walk at the Parrett Works, a former engineering and flax-manufacturing complex at Martock.

In Dorset, there is good news from the Swanage Railway where, for the first time in 43 years, a steam-hauled passenger train ran from Swanage all the way to London. In late November 2009 the 11-coach Capital Christmas Express left Swanage for Waterloo, hauled by the 1940s Bulleid Pacific steam locomotive Tangmere. British Rail replaced steam with diesel on 5 September 1966, before closing the line six years later. The Swanage Railway has been working towards the day when regular trains can run again through to Swanage from Wareham on the main line. Money is now at last available for signalling

modernisation which will achieve this aim.

On a sadder note, 2009 marked the end of an era for the Great Dorset Steam Fair. Michael Oliver, MBE, founder of the renowned Fair, died aged 75 on 29 November. Around 1,000 people were said to be present for his funeral in his home village of Child Okeford on 15 December, which also featured the show's 'mascot' traction engine *Quo Vadis*, with music provided by a steam-powered fairground organ. Michael Oliver's first steam show was held in a field near Shaftesbury in 1968, which became the first Steam Fair at Stourpaine in the following year. This moved to Stourpaine Bushes in 1971, then to nearby Everley Hill in 1985 before arriving at its present 600-acre site at Tarrant Hinton three years later. From small beginnings, the five-day Great Dorset Steam Fair attracts around 200,000 visitors from home and abroad. The show is now run by Michael's son Martin and the 2010 event was a great success.

In the north of the region, a pair of replica tramroad wagons have now been installed near the original entrance of the tramroad to Gloucester Docks. The wagons were made by Dorothea Restorations of Bristol and were financed by the South West Regional Development Agency as part of the area's regeneration scheme. It is now some 19 years since the late David Bick and his colleagues first suggested this idea! On a more worrying note, there is widespread concern at proposals for adaptive reuse of the historic Stanley Mill at Kings Stanley. This Grade I listed woollen mill complex dates from 1813 and is



The Rockwell Green concrete water tower under construction in 1934
Photo: Wessex Water

noted for its fireproof construction and elegant cast ironwork. The mill was much admired by the noted Prussian architect Karl Friedrich Schinkel on his journey to Britain in 1826 and influenced his use of iron columns in his designs for Prince Albrecht's Palace after his return to Germany. The development proposals include the placing of 76 residential apartments within the historic mill buildings which would severely damage the fine interior and destroy the essential character of this historic building. It is also proposed to demolish many of the later buildings associated with the mill to build a further 70 new units. The building is on the 'at risk' register but such a development is seen as inappropriate for such an important industrial building.

The mothballing of the Lafarge cement works in Westbury, Wiltshire, was mentioned in our 2009 report and it has now been announced that much of this 1962 plant (featured in Kenneth Hudson's *Industrial History from the Air* (1984) when it was the Blue Circle works) will be demolished. The 120m stack, kilns and clinker (i.e. the product after the burning of the chalk and clay) plant will go. The mills for grinding and blending cement will remain when it continues as a depot only. This decision, the upcoming closure of the Keynsham confectionery factory after the Kraft takeover of Cadbury and new plans to 'facade' the Bath or Pitman Press works, mentioned in our 2008 report, raise issues for AIA and local societies. English Heritage, it seems, is reluctant to list twentieth-century industrial sites

and industrial archaeologists have never been quite sure of their 'cut-off' date. The inclusion of sites from the last century in gazetteers has been uneven and it is perhaps time to put their recording and/or conservation higher on the agenda. The current economic downturn and continuing demise of manufacturing adds great urgency to this debate.

Mike Bone

South West England

I wrote last year that recession was said to be good for heritage but the preponderance of bad news this year gives me room for doubt. Again there is a majority of news from the far west and I should welcome any contributions which could correct this bias.

The autumn of 2009 saw two discoveries in Cornwall, very different but each of interest. In September a granite outcrop mortar stone was reported in the Wendron Valley near the Poldark Mine. The stone had 17 hollows in its upper face, the result of prehistoric tin crushing. It is believed to have been in use around the second and first centuries BC. Its importance is that, unlike detached mortar stones, the outcrop has never been moved. It has now received Scheduled Monument status. The previous August, highways contractors working at North Wheal Crofty, Tuckingmill, near Camborne unearthed an engraved Cornish Wrestling trophy. It had been awarded to Sam Ham at Manor House, Jeppetown, South Africa. Investigations revealed that Sam,

born in 1880 near Camborne, went to South Africa to mine in 1906, returning in 1913. He had a successful wrestling career, being Middleweight Champion of South Africa in 1910. Sam retired from mining a victim of miners' phthisis (silicosis) and died in 1946. He is buried in Camborne. The cup, stolen by burglars in the 1980s, has now been returned to his family.

October saw the 90th anniversary of one of Cornwall's greatest mining disasters when the rod of the man-engine at Levant Mine at Levant Mine broke and 31 miners died. An ecumenical open-air service took place near the old miners' dry at Levant from where a spiral staircase and tunnel lead to the mouth of the man engine shaft. Many descendants of the victims were present. Publicity about the anniversary then led to the solution of a long-standing mystery. A poem, 'Lines on the Disaster', appeared immediately after the tragedy and was sold in a 2d broadsheet. The verses are still read and remembered but the author had hitherto been identified only by the initials KA. We now know that his name was Kirby Atkins and he worked as a compositor at a Penzance printer. His granddaughter recalled that Mr Atkins came home on the night of the tragedy and wrote the poem sitting at his table after his evening meal.

In November came news from Yokohama, Japan, of the death of Frank Okuno, great, great grandson of Richard Trevithick. Born in Japan, Frank owed his surname to his grandfather's adoption of his wife's name in order to be rewarded as a

Japanese citizen for his contribution to the country's railway development. Frank Okuno was very proud of his Cornish heritage and was a regular visitor to the county particularly on Trevithick Day.

Autumn was also the season for demolitions. Bartle's Foundry near South Crofty was threatened by a road scheme, essential for local regeneration. The building dated from 1861 and had been owned by South Crofty and Holman Brothers. In a novel use of World Heritage site status, a 'spokesman' for Cornwall Council justified demolition on the grounds that the building was just outside the designated area. At the time of writing no progress has been made with the road and the building still stands. Shortly afterwards bulldozers moved onto a far more important site, namely the last remaining vestiges of Holman Brothers' works in Camborne. This was the No. 3 rock Drill Works adjacent to Camborne station. To the surprise of few, once work began the buildings were found to be in a far worse state than anticipated and at risk of imminent collapse. Most of the site has now been cleared amongst continuing recrimination about the extent of demolition and what was to be retained. The World Heritage Site documents listed Holmans as having 'outstanding international value'. On a happier note in early 2010 a series of showings took place in Camborne of films from the Holman Collection now in the care of the Trevithick Society. A project has been undertaken to digitise this archive and, as well as the film shows, there was a three day 'memory shop' session as well as oral history recording. The season ended with an evening of music and pasties from the Holman Climax Choir. Funding is being sought to continue this programme. Finally on Trevithick Day the High Sheriff of Cornwall unveiled a memorial plaque to the Holman family and their connections with Camborne, adjacent to the sad remains of the No. 3 Works.

That we still have some way to go in securing acceptance of the value of industrial remains was apparent in May when workmen laying power cables ripped up granite setts or sleeper blocks on the Tresavean Mineral Tramways Trail. The blocks are to be replaced by the contractor but raise the issue



Westbury cement works, now under threat of demolition

Photo: Peter Stanier



The tunnel to the man-engine shaft at Levant Mine. This October was the 90th anniversary of the disaster which killed 31 miners

Photo: Marilyn Palmer

as to why the avoidance of such problems was not specified by those commissioning the work. The Tresavean case might be considered a sin of omission but the demolition of Plymouth's 1951 NAAFI (the last such purpose built survivor in the country) by its current owner the University of Plymouth is very much one of commission. The NAAFI designed by Messrs Joseph for a prominent site on the city's Armada Way was an elegant piece of public service architecture and is the most grievous loss to date of Plymouth's post-war Abercrombie city centre. The building was neglected by an owner determined to demolish it and allowed it to deteriorate, when a new use could have been found. English Heritage had previously refused to list and confirmed that decision in an emergency review. Plymouth Council was as usual careless of its unique post-war city

centre heritage. A totally unmemorable nine-storey block of student accommodation will replace it. The University's own Professor of Architecture had, in the definitive report on Plymouth's post-war buildings, rated it as a 'building of highest quality'. That a university should be responsible for such an appalling piece of vandalism is deeply depressing.

The archaeology of leisure does not always receive its share of attention, even in areas like the South West. In Plymouth a 70 year old diving board, adjacent to the listed Art Deco Tinside Lido was demolished last year. Closed since 2003, it was 70 ft high and was being used by local children for the dangerous activity of 'tombstoning', diving vertically into the water. The restored Lido in contrast is a great success as is its Cornish equivalent the tidal Jubilee Pool at Penzance. This unique structure celebrated its 75th anniversary in May. Here it was revealed that during the war its concrete base was strengthened to take two 6-inch guns for coastal defence, firing over the wall of the pool.

In February 2010 a nineteenth-century cobbler's shop, which had lain untouched for 28 years, was re-erected at Dairyland Farm World, a popular Cornish tourist attraction. It had been moved piece by piece from its original site behind the home of original owner William Spellers at Carharrack near Redruth. The shop was built in the back yard when William Spellers refused to pay increased rent for his previous shop in nearby St Day. Customers came to the front door and through the house to the shop. It closed in the

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1980s on the death of Stephen, William Speller's son. His sister Florence, now 99, contacted the Trevithick Society, which arranged its transfer and preservation.

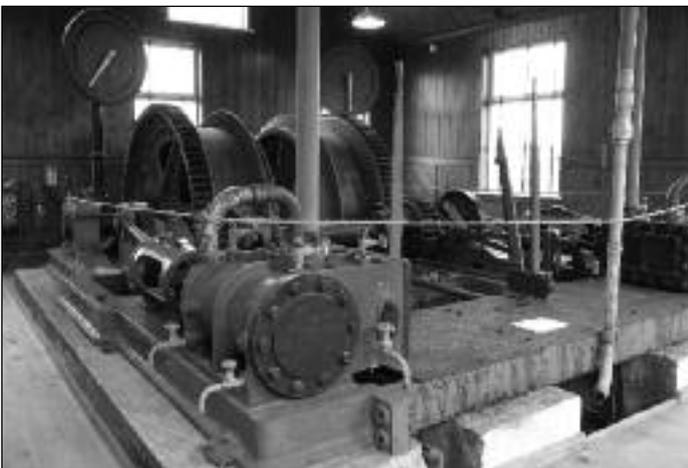
It is pleasant to end on a happier note with good news from some of the area's key museum sites. Morwellham Quay, the nineteenth-century copper port on the Devon bank of the River Tamar, has reopened under new management. New owners the Lister family already own the Bicton Gardens tourist attraction in East Devon. King Edward Mine, near Camborne in Cornwall, opened a new winder house this August. This is a replica of the original, burnt down in 1958, and houses the site's 1907 Holman winder, itself returned to King Edward a few years ago after sojourns at Castle-an-Dinas wolfram mine and Poldark Mine. Volunteers at King Edward mourned the death in July of Willie Uren. Willie had spent a lifetime in Cornish mining and mineral processing and was a tower of strength in the restoration work at King Edward. At Geevor Mine work continues to extend the

underground tour for visitors. The mine also received a visit from HRH The Duke of Kent in July to mark the inauguration of Geevor as a key centre for the Cornish Mining World Heritage Site. The Duke unveiled a plaque and opened new orientation and interpretation rooms.

Graham Thorne

Wales

Heritage bodies and local campaigners have been campaigning to save the mines rescue station at Wrexham after the site was purchased for development by a local business man. Attempts seemed to fall on stony ground until the building was recommended for listing by Cadw subject to a four week consultation, due to end on 3 September. The consultation period to determine whether the rescue station would be officially listed was underway when the diggers moved in and demolition began in mid-August. Wrexham council stopped demolition work stating that a safety certificate was needed before work could continue at the building. On 18 August Cadw spot listed the building for its special historic



The newly installed Holman winder in its house at King Edward Mine, a site visited during the AIA's Cornwall conference
Photo: Steve Dewhurst

interest, giving it immediate protection.

The Maesgwyn Road rescue station (SJ 3328 3507) is a Ruabon red brick building purposely built in 1913 by the North Wales Coal Owners Association to serve the mines within the North Wales coalfields. It retains (or maybe did retain!) its original form and layout including a rare example of a training gallery. Amongst others, the station trained those who helped in attempts to rescue miners from the 1934 Gresford disaster, when an explosion claimed the lives of 266 people. The centre closed in the 1980s and was subsequently used by the fire service.

Planning permission for demolition was granted to the current owner two years ago and Cadw were notified in an attempt to save the building. It seems the spot listing came too late. Contractors continued demolition work after the listing without either a safety certificate from the council or listed building consent. Reportedly the training gallery, possibly the most historic feature of the building, has been demolished. The gallery ran round the rear of the building at irregular heights to simulate a section of a coal mine. The house adjoining the station was built for the training instructor.

Legal action is currently (September 2010) being considered by Wrexham Council over the 'unauthorised demolition' of the Rescue Station. As we well know, it is a criminal offence to undertake unauthorised works to listed buildings and as the matter will hopefully be dealt with seriously.

Elsewhere in Wales, industrial archaeology appears to have benefitted from development. A rapid investigation by The Clwyd Powys Archaeological Trust (CPAT) in advance of construction works for a new dwelling at Dolafon Road, Newtown (SO 1138 9172) confirmed that substantial remains survived relating to nineteenth-century limekilns which are likely to have been constructed shortly after 1821 with the completion of the section of the Montgomeryshire Canal, which terminated at a basin to the west of the development site. The kilns were evidently disused by 1886 when they were depicted on the Ordnance Survey 1st edition 25-inch map. This shows a row of four limekilns with a small building to

one side. The limekilns still stand to around 2.7m with two large drawholes visible, built into a substantial stone revetment wall. Each drawhole would have served two kilns. The foundations for the small building were revealed following the removal of demolition rubble, along with part of a brick paved yard.

The limekilns are an important feature of Newtown's industrial past and are one of only two visible structures directly related to the canal basin. The other is the Commercial Mill, a nineteenth-century flannel and tweed mill around 100m north of the limekilns.

Again at Newtown, the remains of a small brick kiln were identified by CPAT in a pasture field on the south side of the town during topsoil stripping for a new water main (SO 1144 9100). The stripped area was then cleaned by hand and a programme of rapid excavation and recording took place over a four-day period. The kiln, identified as Great Brimmon Brick Kiln, occupied an area of around 8.5m north-east/south-west by 5.75m north-west/south-east and was readily identified by the intense burning which had taken place within the kiln. The remains were difficult to interpret and it seems likely that two phases are represented, with flues on slightly differing alignments. Each phase may have had up to eight linear flues spaced at regular intervals; around 1.0m apart and measuring c. 0.5m across and up to 0.2m deep, all of them filled with a mixture of coke and charcoal beneath a deposit of brick fragments.

The flues had been cut through a deposit of crushed and compacted fired bricks which formed the platform on which the kiln had been constructed. Two samples of fired but deformed bricks were recovered from the kiln, each measuring around 230 x 108 x 65mm (9" x 4 1/4" x 2 1/2"). These were of a type known as 'place' bricks, which lack the indentation, or 'frog', typical of later, particularly industrial-scale manufacture. Pottery found in the immediate area suggests that the kiln may date from the late eighteenth or early nineteenth century.

The brick kiln is of a type known as a clamp kiln, and is likely to have been a temporary structure, being used for a specific building project and subsequently dismantled, leaving

no obvious surface trace. The field containing the kiln is known locally as 'brick field', and information provided by the landowner suggests that the kiln may have been constructed to fire the bricks which were used to build Great Brimmon farmhouse, around 150m to the south-east, although this has now been replaced by a modern building. Unfortunately, it is not known when the farmhouse was constructed.

Nigel Jones, Clwyd Powys Archaeological Trust, is acknowledged for both these reports.

Pat Frost

Northern England

Just after I had finished writing the report for 2009 Cumbria was hit by some of the most severe flooding for centuries. Whilst this led to widespread damage to buildings especially in Cockermouth with the Jennings brewery being closed for a period, no major industrial structures were affected. Some mining sites in the Lake District fells were also damaged in places by wash outs but no major structures were lost.

However, the main structural damage was to the bridges of the area. The listed bridge, North Side (new) Bridge at Workington was total destroyed with the unfortunate loss of the life of PC Barker. The Grade 2 listed bridge at Lorton was also totally destroyed and numerous other bridges in the area were damaged, many being closed until repairs could be completed. The Lorton bridge is being replaced with a steel girder bridge instead of the original two arch stone bridge, although it will be covered in stone to camouflage the steel. A consultation is taking place for a

new design for a replacement for the North Bridge at Workington.

As already reported in *IA News 153*, Summer 2010, iron and steel making on Teeside came to an end with the mothballing of the Redcar blast furnace. The furnace was built in 1979 and its closure brings to an end 150 years of iron and steel making on Teeside since the discovery of ironstone in the Eston Hills in the early 1850s. Teeside had a total of 100 blast furnaces by 1875 producing two million tons of iron per year.

The first iron and steel works were built on the Redcar site in 1917 and the two blast furnaces were producing 500 tons of iron per day. Development of the new complex started in 1973 with the opening of the ore terminal on the river Tees. This was followed by the sinter plant, coke ovens and pelleting plant in 1978 and what at the time was Europe's biggest blast furnace in 1979. This furnace was capable of producing more iron than the 100 blast furnaces present on Teeside 100 years earlier. With the closure of the two smaller blast furnaces at the Cleveland works in 1993, the Redcar furnace became the only blast furnace in the North East of England.

Two major industrial sites in West Cumbria have now been totally cleared. The Workington steel works and rail mill has no structures left on the site and the same applies to the Marchion chemical plant above Whitehaven. With the way in which industrial sites are cleared in the present environment one does have to ask what will be the industrial archaeology of the late twentieth century?

Graham Brooks



North Bridge Workington, destroyed by floodwater

Photo: David Powell

Local Society and other periodicals received

Abstracts will appear in *Industrial Archaeology Review*.

- Brewery History*, 134, Spring 2010; 136, Summer 2010; 137, Autumn 2010
- Brewery History Society Newsletter*, 50, Summer 2010
- Bristol Industrial Archaeological Society Journal*, 42, 2009
- Cumbria Industrial History Society Bulletin*, 77, August 2010
- Dorset Industrial Archaeology Society Bulletin*, 28, September 2010
- Greater London Industrial Archaeology Society Newsletter*, 249, August; 250, October 2010
- Hampshire Mills Group Newsletter*, 90, Winter 2010
- Historic Gas Times*, 64, September 2010
- Leicestershire Industrial History Society Newsletter*, Vol2 No 1, 2010
- Manchester Region Industrial Archaeology Society Newsletter*, 132, June 2010; 133, August 2010
- Merseyside Industrial Heritage Society Newsletter*, 301, Summer 2010; 302, Autumn 2010
- Midland Wind & Water Mills Group Newsletter*, 97, August 2010
- North East Derbyshire Industrial Archaeology Society Newsletter*, 39, August 2010
- Piers: the Journal of the National Piers Society*, 95, Spring 2010; 96, Summer 2010
- Scottish Industrial Heritage Society Bulletin*, 56, September 2010
- Somerset Industrial Archaeological Society Bulletin*, 113, April 2010; 114, August 2010

Books

Brill Windmill Buckinghamshire. The History, Technology, Conservation and Repair of a 17th-Century Post Mill, by Luke Bonwick, Buckinghamshire County Council, 2010, 99pp, £10 + £3 P&P from www.shop.millsarchivetrust.org

A well researched and attractively produced book on a much-loved landmark. The drawings are particularly useful for anyone trying to come to grips with the mechanical and structural elements of a post mill. A history of the mill is followed by detailed descriptions of the structure and working parts of Brill Windmill, an analysis of how the mill has evolved, and ends with a proposed chronology. The next section deals with the programme of conservation and repair of the mill with which the author has been intimately involved, and the final part, is largely a report on the dendrochronology by Martin Bridge. The programme of conservation and repair in 2009 provided much new evidence, and the mill has been given a new lease of life. This post mill had been thought to date from the 1680s, but the latest research suggests the majority of the present mill represents a rebuilding of about 60 years later.

The Toll-houses of North Devon, by Tim Jenkinson & Patrick Taylor, Polystar Press, Ipswich, 2010. ISBN 978 1 907154 03 4. 120pp, 106 illus. £8.95.

This illustrated gazetteer lists some 75 surviving toll houses in North Devon, each with a photograph and a short description including references from census returns. There are also brief notes on over 100 vanished toll-houses. The introduction includes some background on turnpikes and their organisation in general, but only a single page is devoted to a summary of those of North Devon. The book complements a first book on South Devon (see *IA News 151*, p19), the fact that there are two volumes is a reflection on the extensive road network of a very large county.

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Email: susan.fielding@cbhc.gov.uk

**2 MARCH 2011
TOWARDS AN AGENDA FOR
THE HISTORY OF EARLY
MAIN-LINE RAILWAYS**

at the Conference Centre of the National Railway Museum, York, this workshop will explore the time between the opening of the first main lines and the comparative maturing of the industry in the last third of the nineteenth century. The afternoon will consist of two pairs of short position papers, followed by discussion. See the Institute of Railway Studies & Transport History website: www.york.ac.uk/inst/irs/

**2 APRIL 2011
SOUTH WEST & WALES
REGIONAL IA CONFERENCE**

at the Llanhilleth Miners Institute, near Abertillery, hosted by the Oxford House Industrial History Society. For details, contact Brian Absolon, Conference Organiser, Tel: 01633264819, E-mail: b.absolon@tiscali.co.uk.

**14-16 APRIL 2011
ELEVATORS AND
FUNICULARS OF THE WORLD**

at Santiago and Valparaiso, organised by Chilean TICCIH and Portuguese Association for Industrial Heritage, Municipality of Valparaiso, SEK-Chile International University and the University of Pavia-Italy. The survival of a most important group of elevators and funiculars in Valparaiso requires urgent attention and this international conference invites all with the relevant experience of conservation, intervention and technology. The main sessions are on history and development; conservation and value restoration; and projects and technologies for the future. There are also tours. For details, contact TICCIH Chile: congreso2011@ticcih.cl.

**21 MAY 2011
EMIAAC 81: THE IMPACT OF
LEADING MINING ON THE
PEAK DISTRICT LANDSCAPE**

at Matlock Bath, hosted by the Peak District Mines Historical Society. The conference explores the impact of lead mining on the Peak District landscape both underground and on the surface, with talks on the archaeology of mining, drainage and the challenges of filming undergrounds, followed by site visits. For details and booking form, go to www.niag.org.uk/emiac.html

**30 MAY - 5 JUNE 2011
AIA VISIT TO SWEDEN**

exploration of a major area of Sweden's rich industrial archaeology, with many key key visits. See page 10 inside and the enclosed flyer for booking.

**29 JULY - 1 AUGUST 2011
NAMHO 2011**

at Preston Montford Field Centre, Montford Bridge, Shrewsbury, the annual conference of the National Association of Mining History Organisations, hosted by Shropshire Caving & Mining Club and Shropshire Mines Trust Ltd. More information from www.namhoconference.org.uk

**25 AUGUST- 2 SEPTEMBER
2011**

AIA ANNUAL CONFERENCE
at the university, Cork, Ireland.
Advance notice only.

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

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



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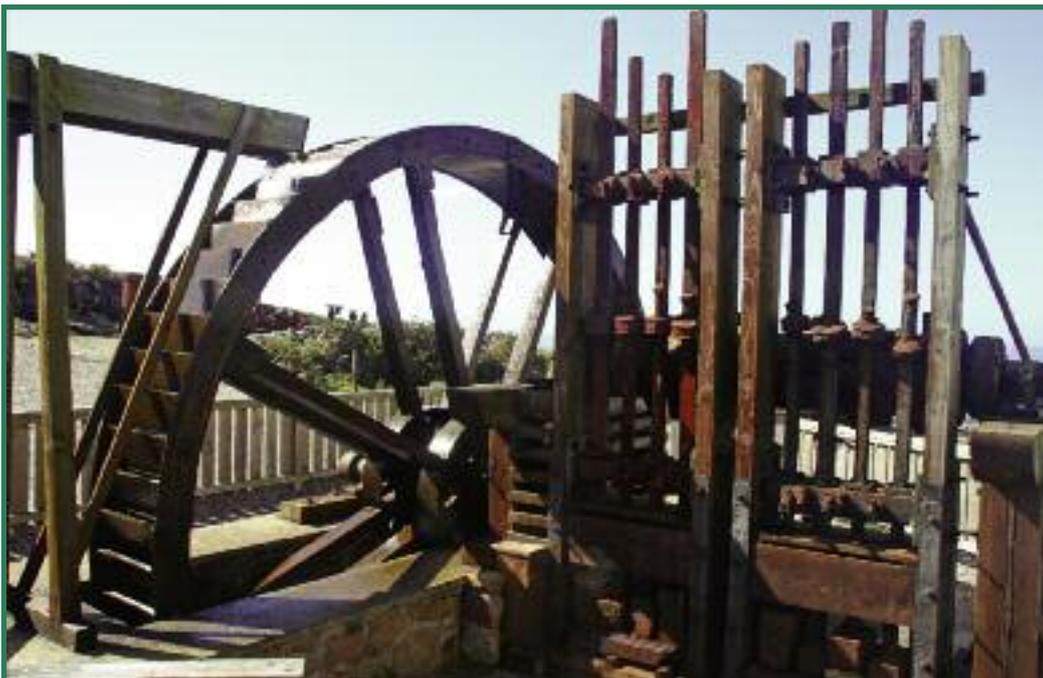
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Final copy dates are as follows:

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

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

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



The waterpowered Nanchedra tin stamps on display at the Geevor Mine in west Cornwall. See inside, page 5.

Photo: Marilyn Palmer