

ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

HONOURING INDUSTRIAL ARCHAEOLOGY

Industrial Archaeology came in from the cold with the British Archaeological Awards for 1988. At the ceremony held at the Royal Geographical Society on 17 November projects concerned with the industrial period won in two of the eleven categories. Given the strength and volume of archaeological work concerned with earlier periods, this was a considerable achievement.

The British Archaeological Awards are given every two years, with the support of leading archaeological organisations, including the British Archaeological Association, the Council for British Archaeology, the Young Archaeologists Club and the **AIA** as well as commercial sponsors. The awards for 1988 fell into eleven categories, ranging from the best archaeological essay by a teenager to the best educational film and the best preservation project. They were presented by Magnus Magnusson before a large audience of archaeologists and journalists.

The first award won by an industrial archaeology project was the Heritage in Britain Award, sponsored by English Heritage, Historic Buildings and Monuments for Scotland and CADW. The object of the award was to recognise the best project securing the long-term preservation of a site or monument. The winner was Liverpool Road Station in Manchester, restored by the Greater Manchester Museum of Science



After restoration: the 1831 platform extension at Liverpool Road Station with shops below, now a gallery and Heritage in Britain Award winner, Greater Manchester Museum of Science and Industry, Photo: GMMSI



Spotlight on Industrial Conservation: Granada Television's award-winning news centre in Liverpool.

and Industry. This comprised a complex of station buildings, platforms and shops built in 1830 and 1831: the first passenger station in the world. Only three years ago the buildings were derelict; but the Museum has restored them fully to house exhibitions and workshops. The Director of the Museum, Dr Patrick Greene, was delighted with the award, and felt it would greatly assist work on adjacent buildings by providing publicity and helping with fund-raising.

The second industrial winner was of the Ironbridge Award, a new category sponsored by the Ironbridge Gorge Museum Trust for the best project involving the adaptive re-use of an historic building or structure. Stuart Smith, who announced the winner, said that the award was principally aimed at developers. He said that it was 'extremely important that developers should recognise the need for archaeological integrity in their re-use of historic buildings'. The winner was a good example of such integrity: the conversion of the Albert Dock Traffic Office in Liverpool into the Granada TV News Centre, Stephen Reid, the General Manager of Granada News in Liverpool, said 'We're very pleased to receive the award and to be able to feel we have done a good job'. He said that Photo by courtesy of Granada TV they would be displaying the plaque alongside their Europa Nostra Award and an award for regional television programming, and it would be valued equally. He felt that many visitors to the Centre would notice the award and it would help to develop a sense of pride and identity for their operations in Liverpool.

The largest of the awards in financial terms, the Hepworth Heritage Communication Award for the best presentation of an ongoing excavation to the public was given for the Flag Fen excavations near Peterborough: a Bronze Age lake village 'immaculately excavated and vigorously presented'. This award was a cheque for £10,000 to continue the good work, presented by Hepworth Building Products.

Both professional and amateur projects were recognised in the awards, however perhaps the greatest achievement was that of a wholly amateur group, the Monmouth Archaeological Society. This succeeded in winning not one but two of the most prestigious awards: the Pitt Rivers Award for the best project by a voluntary group, and the Legal & General Silver Trophy for the greatest initiative in archaeology. The awards recognised work carried out since 1986 on sites in Monmouth which have uncovered new information about the town's history from Roman to Medieval times. More eleventh and twelfth-century pottery was excavated than from the rest of Wales combined, and evidence of a thirteenth or fourteenth-century forge was unearthed. The opportunity to excavate was won only after detailed negotiations with developers, and even led the Society to make a commercial tender and take on the work of constructing foundations for one building in order to ensure that work was conducted archaeologically.

Such awards are very important to the health of archaeology in Britain. They serve obvious and very significant functions in encouraging excellence and in achieving good publicity for the subject as a whole. However they are also a medium for the consolidation of the different branches of archaeology–diverse subject strands like urban archaeology and historical metallurgy, and the period studies like medieval archaeology and industrial archaeology. Philip Barker, Chairman of the Awards, was particularly pleased that industrial projects had been recognised, and hoped that future

NOTICEBOARD

Job vacancy

A full-time salaried industrial archaeological post is expected to be created early this year in connection with land reclamation schemes at the Minera lead mines near Wrexham in Clwyd. The work is expected to take between nine and 12 months. It will involve recording artefacts and structures uncovered during reclamation, and also undertaking minor excavations where feasible. If you are a prospective applicant or know of one, details can be obtained from David Bick, The Pound House, Newent, Gloucestershire (18 0531 820650).

Visits to Australia

A kind offer has been made to members of the **AIA** who may be visiting Australia and wish to investigate its industrial heritage. Philip Simpson (a member of **AIA** and Subterranea Britanica) and his wife Margaret will be happy to provide information and advice to industrial archaeologists visiting Sydney or New South Wales. Both are experts in the industrial archaeology of the region and have extensive sources of information on known sites. They also lecture on British industrial archaeology and have recently written a book which is con-

awards would increasingly help to 'bridge the gap that is sometimes perceived between industrial archaeology and other period archaeologists'.

Industrial Archaeology certainly made its presence felt at the Awards, and was recognised for its achievements alongside other branches of the archaeological family. Nevertheless, it is sad to note that industrial archaeological projects, though they won two awards, were not among the finalists of any of the other nine. There is still some way to go before most 'Industrial Archaeologists' regard themselves contributors to a broader discipline, and before most 'Archaeologists' embrace the industrial period with true enthusiasm. Let us hope that many examples of industrial archaeology are submitted for the next awards, in 1990. Details will be available from British Archaeological Awards, 317 Norbury Avenue, London SW16 3RW. Details of the lucrative Hepworth Award must be requested immediately.

Peter Wakelin

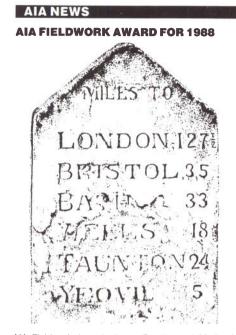
cerned with both Australian and British manufacturing and technology, *Old Farm Machinery in Australia: a fieldguide and sourcebook.* Previous visitors to them from Britain have included Kenneth Brown, Angus Buchanan, Neil Cossons and Kenneth Hudson; but they also wish to help less exalted amateur industrial archaeologists from Britain. They can be contacted at 32 Shirley Road, Roseville, NSW 2069, Australia.

Beam-engine houses gazetteer

Kenneth Brown of the Trevithick Society and David Bick are working on the preparation of a gazetteer of beam-engine houses in Britain, They would be very grateful to receive notes of any published work towards such an aim, or for any information about sites. Two eighteenthcentury examples already have come to light during detailed work on north-east Wales. One of these at Penrhos near Brymbo was built c1794 by John Wilkinson, possibly to house a Hornblower double-cylinder engine for pumping a coal mine. It appears the boiler was situated within the building, beneath the cylinder. The structure is urgently in need of repair. Readers able to help with the gazetteer should contact David Bick, The Pound House, Newent, Gloucestershire (您 0531 820650).



Beam-engine house at Penrhos, Clwyd (SJ 286532) built by John Wilkinson c1794 and later converted to a dwelling. The building was recognised during research for a new gazetteer (see appeals for information). The bob wall and arch and the chimney are shown. Photo: Brian Jones



AIA Fieldwork Award winner: Bentley and Murless's report on Somerset turnpikes. Drawing: P Webb

The **AIA** Fieldwork Award for 1988 was presented at the Swansea Conference in September. The winners represented the great rank and file of the Association, as members of a local society. Their modesty prevented them from submitting their work. It was left to the committee of their society to thrust them forward for recognition. Please let other societies nominate themselves or their members in this way, and let other individuals, humble or not so humble, submit work. The closing date is 1 May 1989.

The runner up for 1988 was a record of Skelton Ironstone Mines, Cleveland, by Simon Chapman. This was illustrated by 29 superb drawings of site remains. As a solo undertaking the results were exceptionally impressive, and the standards of both survey and drawing were impeccable. The judges commended it very highly.

The winning entry was by John Bentley and Brian Murless, in the form of two volumes published by the Somerset IA Society, entitled, Somerset Roads: the legacy of the turnpikes. This was agreed by the judges to be an enormous achievement of both fieldwork and documentary research. A wide range of documents was studied by the authors for approximately 1.5 days a week for seven years. January to March each year were devoted to fieldwork, when the greatest number of items was visible. A thousand photographs of some 900 subjects, and other unpublished documentation, are to be deposited at the county record office. Information was passed on to aid the re-listing programme, and the attention of the County Council was drawn to monuments at risk. This was a commendable conclusion to an excellent recording programme. A more detailed account of the work of the winners and the runner up will be published in Industrial Archaeology Review.

The judges for the 1988 award were Keith Falconer, Stephen Hughes, Dr Michael Lewis and Amber Patrick. Any project with an element of fieldwork may be entered for the award. Entries should be sent to Stephen Hughes, RCAHM Wales, Edleston House, Queen's Road, Aberystwyth, Dyfed SY23 2HP (100 is given to the award winner. Stephen Hughes

WORK GOES ON AT WESTONZOYLAND

With the growth of industrial archaeology and the appreciation of our industrial heritage a great number of important buildings have been taken permanently into care. Much of this work has been done by voluntary groups with little financial support. The tasks of such saviours often fall into three classic phases. First there is the battle to persuade people and organisations that a building can and should be saved. Second there is the struggle to conduct essential work of restoration. All this may take a few months, or several decades. However the last phase of conservation is even more difficult. Territories that are conquered must subsequently be held; and buildings restored must be conserved in perpetuity, no matter that the original drive to victory may long since have passed. Large industrial buildings are not static, but constantly decaying and needing repairs, sometimes of a very major nature.

The following article by Joan Day describes just such a struggle, being carried on at a nationally-important industrial site largely through voluntary effort. It proves that responsibility in perpetuity is not impossible when enthusiastic volunteers continue to invest both effort and imagination, and when support is forthcoming from national organisations and the local community.

Sixty or so enthusiasts gathered on a damp, cold Thursday at mid-day on 1 December to celebrate the latest project of the Westonzoyland Engine Trust when Anthony Burton climbed a succession of ladders to perform a topping-out ceremony on the refurbished chimney. While he unfurled the Union Flag at the summit to signify its completion, earthbound mortals raised glasses of mulled local cider. It was an occasion well worth celebrating. The drunken angle of the chimney had been a major cause of anxiety to officials of the Trust, and its £20,000 repair brought relief to all concerned. However, it is anticipated that the eventual cost of the current proposals to restore the whole building will be in the region of £30,000 more.

Two years ago storm damage drew attention to the chimney's deterioration when the odd brick or two fell, and cracks started appearing. The problem had been caused by lamination of the wrought-iron straps placed through the brickwork, which loosened the mortar. The chimney now has been carefully rebuilt, as far as possible by re-using the original bricks, hand-made from clay excavated just two or three fields away. Any necessary replacement bricks were placed in interior surfaces so as to preserve the outward appearance of the stack. The iron straps were replaced with stainless steel.

In view of its importance as the earliest steam land-drainage pumping station on the Somerset Levels, English Heritage have agreed to grant-aid 40% of the cost of restoration, excluding interpretation and visitors' facilities, while the Pilgrim Trust and local councils have made grants towards the chimney. In the mean-time the Trust has launched an appeal asking local firms to sponsor a course of bricks for £10. Individuals can sponsor a course for £5 and children can donate a brick for as little as 10p, by sending to the Appeal Co-ordinator, Mrs-Mary Miles, Rose Cottage, Lower Durston, Taunton, Somerset TA3 5AH.

This last November a 24-hour 'steam-up' was organised to aid the BBC TV 'Children In Need' appeal. It was felt that having raised funds for their chimney, 'it was time to do something for someone else', and more than a quarter of the membership turned out to help at some point. During the 24 hours the Wills engine was run continuously and others were operated at various times. There was no charge for admission but a fire bucket rapidly filled with £127,50; a happy coincidence, as the Easton & Amos engine was just 127 years old. A further £50 was received in later donations.

The substantial renovation scheme now underway is a large and protracted responsibility, undertaken by a small group of enthusiasts of the Somerset Levels with its membership largely drawn from the Somerset Industrial Archaeology Society. Their enthusiasm and determination demonstrates much to be thoroughly commended. The group was first formed in 1977, since when it has been registered as a charitable trust and has leased the site from Wessex Water Authority.

The buildings dating from 1830 house Easton & Amos pumping equipment dating from 1861 which consists of a vertical two-cylinder steam engine, with A-frames supporting an overhead crankshaft. Between the A-frames, a geared flywheel drives a horizontal bevel on a vertical shaft, to an Appold-type centrifugal pump in a well 15ft below. This plant was brought into



Hole in the sky: the main stack at Westonzoyland after dismantling and shortly before re-erection. Photo: Ian Watts

action once again by the Trust in August 1983. Then, in front of an invited audience it was started by Wally Musgrave, the last steam pump attendant on the levels.

Space was also found for the additional horizontal engine of 1896, once used to drive a pug mill in a local brick and tile works. It is the only known surviving example of the local firm of W & F Wills, which closed in 1983.

Open working days have followed regularly to the present time. Expenses of firing the boiler have been cut to a minimum by friendly collaboration with a nearby furniture manufacturer, who off-loads his waste at the roadside by the pumping station rather than paying for its clearance. It is transported to the boilerhouse by means of a narrow-gauge railway, all adding interest to the site.

Having achieved the first of their aims in getting their pumping equipment serviceable, and in action on 18 days in a year, the Trust had then to face the more long-term task of repairing the buildings, now Grade II listed, which had suffered some thirty years of neglect. The chimney repair was just the beginning of other plans yet to materialise. The slated roof on the building will be the next part of the projected repairs. A Visitors' Centre is planned which will feature *The Drainage of the Wetlands*, with a reconstruction of the engine room and attendant's house in the 1920s, and working models and displays.

The intrinsic fascination of the local wetlands scene, beside the River Parret, with withey rods steaming in their local kilns, is perhaps a little different from the usual industrial archaeological scene. It is one entirely to be recommended. As Anthony Burton remarked in his opening ceremony, the pumping station is part of the very reason for the existence of the surrounding Somerset countryside in the form that it is today. Joan Day

AFFILIATED SOCIETIES

By now, all Local Societies should have received a mailing which included the programme for the 1989 Local Societies' Weekend, and an application form. Further copies are included with this *Bulletin*. The weekend, from 14–16 April, should prove useful and interesting for members of Local Societies, and I hope that many will attend. There may be minor changes in the programme, due to the Council of Europe Conference, which is due to visit Ironbridge that weekend–we are hoping to arrange an event to meet their delegates.

Secretaries of Local Societies will also have received a letter requesting confirmation of their group's details, with contact address etc. This is for a new edition of the 'List of Local Societies', the last one having been compiled some years ago. Once replies have been received, I shall be producing an updated list, and would hope that this will be published by the middle of 1989.

In the last mailing from Ironbridge, you will have received a copy of the **AIA**'s new publicity leaflet. Further supplies of these are available, either by post from Ironbridge, or by collection at the April weekend.

Finally, may I repeat my plea for material for this 'Spot'–I am sure that a number of groups have never been 'Profiled'; also any comments or suggestions as to ways in which **AIA** could be of help to Local Societies would be welcomed. I look forward to hearing from you (13 Bromley Road, Midanbury, Southampton SO2 2AA) or to meeting you at the April weekend in Ironbridge. *Pam Moore*

ABERTAWE IA IN 1988



The Lord Mayor of Swansea, Councillor Howard Morgan, receiving copies of AIA publications, including the Swansea Conference Guide, from Dr Marilyn Palmer, President of the AIA.

The Association for Industrial Archaeology's Annual Conference is becoming increasingly popular. Over 140 people travelled to Swansea on Friday 9 September, to be rewarded by the best weather south Wales had experienced that summer. The maritime flavour of the conference was enhanced by the view of shipping in Swansea Bay from the third-floor dining hall of University College. It was therefore appropriate that the first evening should be spent in the recently redeveloped Swansea Maritime Quarter, where the Lord Mayor of Swansea, Councillor Howard Morgan, hosted a civic reception in the Maritime and Industrial Museum. The President, in her response to the Lord Mayor, reminded the civic representatives that Industrial Archaeology was not entirely devoted to the preservation of the industrial past, but was also concerned with the recording of industrial buildings and artefacts which perforce must disappear in today's changing industrial environment. Delegates then inspected the working machinery from the Neath Abbey Woollen Mill now preserved in the museum.

A series of lectures introduced the major industrial activities of the Swansea area, which included coal mining, copper smelting and iron, steel and tinplate manufacture. Graham Humphreys set the scene by surveying the entire development of the western coalfield; Robin Craig emphasised the importance of shipping in bringing copper ore into Swansea, first from Cornwall and then from world-wide. Paul Jenkins, who works in the tinplate industry, charted its rise and decline with an excellent series of slides of the older hand processes. David McLees outlined the attitude of CADW, the Welsh equivalent of English Heritage, to the problem of listing industrial buildings.

The traditional three Saturday afternoon excursions took delegates north and west of the city. One group went to the National Trust property at Aberdulais Falls, well known to readers of *Industrial Archaeology Review* for the excavations which revealed a multiplicity of industrial activities powered by this spectacular waterfall, and to the nearby Tennant Canal aqueduct and the junction basin restored by the Neath and Tennant Canals Preservation Society.

A second party visited the derelict remains of copper smelting in the Swansea valley, which were largely obliterated by the Lower Swansea Valley land reclamation project. A colliery engine house survives at Scott's Pit, which was restored by the South Wales IA Society (SW-WIAS) and is now the property of the City Council. A final visit was made to Morriston, a planned settlement built by John Morris in the late eighteenth century to house his miners and copper workers and to the remains of Morris Castle, his spectacularly situated industrial flats of the same period. The third group toured the now derelict remains of Llanelli Docks, a series of basins built at different periods for the export of coal and the import of copper ore.

The Conference Dinner was honoured by the presence of the Lord Mayor and Mrs Morgan who showed considerable interest in the excellent range of displays mounted by members and affiliated societies. Dinner was followed by the presentation of the Dorothea Award to the Mid-Gloucestershire Engine Preservation Society by Geoffrey Wallis of Dorothea Restorations Ltd. Professor Frank Llewellyn-Jones, President of SWWIAS and former Principal of University College, presented the AIA Fieldwork and Recording Award to John Bentley and Brian Murless of the Somerset IA Society: (For both these awards see the reports in this issue and Industrial Archaeology Review Spring 1989). A variety of members' contributions occupied the remainder of the evening.

On Sunday morning, Stephen Hughes of RCAHMW gave an illustrated lecture on the historical results obtainable from careful field-work in Industrial Archaeology. With Paul Reynolds of SWWIAS, the conference Organiser, Stephen helped to devise the conference schedule and co-write the well-received *Guide to the Industrial Archaeology of the Swansea Region.* The annual Rolt Memorial Lecture was presented by Professor John Butt of the University of Strathclyde, a former President of the **AIA** His lecture title, 'Landscape with Machines: A View from America' was a transatlantic reference to Tom Rolt's well known book. At the AGM, Peter White of English Heritage

and Hilary Malaws of RCAHMW were newly elected to Council. The President concluded the formal proceedings by expressing the thanks of all conference delegates to Paul Reynolds and SWWIAS for their excellent organisation.

The supplementary programme began immediately after lunch with two excursions, one to the Neath Abbey Ironworks and the Cefn Coed colliery winder, and the other to the Kidwelly Tinplate Museum and Burry Port. Neath Abbey Ironworks were well known for the steam engines they made and for their spectacular blast furnaces which are being conserved by Neath Borough Council. The Kidwelly Tinplate Works were probably the second to be established in Britain and are now the only survivor of the many works which once produced tinplate by hand processes. The President's Award for 1988 was later given to Kidwelly (see separate report). Burry Port was developed in the nineteenth century for the export of anthracite; a string of iron tub boats is incorporated in one of the breakwaters. Tinplate manufacture also developed here and the buildings of the Ashburnham tinplate works are a good example of the decorative use of copper slag blocks widely used in the area. This theme was continued in the evening by Alan Williams, who talked of the Swansea connection with the Bearhaven copper mines of Southern Ireland. Richard Pool, the Project Director at Aberdulais Falls, illustrated the work of the National Trust in unravelling the industrial history of this important site.

On Monday delegates remained within the City of Swansea, visiting first the Clyne Valley arsenic and copper works. These enigmatic remains would merit detailed recording and interpretation during the winter, when, as on so many other IA sites, the vegetation cover is penetrable. Swansea Maritime and Industrial Museum workshops are now situated in the buildings of the former Morfa Copperworks and delegates were able to view both the artefacts in store and the surviving machinery of the adjacent Hafod works, now sadly derelict after only a few years of disuse. The afternoon tour of the Swansea Valley also included the Gwernllwynchwith engine house, whose length suggests it housed a totally enclosed beam engine. Historical evidence indicates that this was a rotative engine of c1760; a very early use of this type of engine. That evening, Paul Wilkinson described his archaeological work on the Port Eynon salthouse on Gower and S K Jones. the influence of Brunel on the south Wales railwav system



The inpenetrable luxuriance of Clyne Valley arsenic works.

Photo: Carol Whittaker

The following day the group visited the Neath area, stopping first to look at the barge lock at Red Jacket Pill. This was built in 1817-18 to enable vessels to lock out of the River Neath and reach Swansea by a canal later superseded by the Tennant Canal. The only rain of the week marred the visit to the dock at Briton Ferry constructed by Brunel in 1861. An appetite for lunch was created by a long walk up and down the incline of the South Wales Mineral Railway and hunger was appeased at the excellent cafe at the Welsh Miners Museum in the Afan Argoed Country Park. This museum has a remarkable range of displays and artefacts within the confines of a very small space and deserves better accommodation.

For many people, the highlight of the week was what might be tomorrow's Industrial Archaeology, Port Talbot steelworks, visited on Tuesday afternoon. The four-mile long site was toured by coach, viewing the coking plant, import docks and blast furnace. Inside, we were privileged to view the Basic Oxygen Steel plant, continuous slab casting and shearing of the red hot slabs. The magnitude of the process was breath-taking. A slab was followed through the hot strip mill from rough rolling to coiling; the contrast between the quiet of the distant control room and the thundering noise of the travelling slab were very marked. We learnt the following day that the strip mill capacity was to be doubled and were privileged to be one of the few visiting parties allowed to the plant.

The lectures on Tuesday evening by Martin

CONFERENCE AWARD FOR 1988

Each year the **AIA** gives an award to an industrial conservation and interpretation project within the region visited by its annual conference. Unlike the Dorothea Award and Fieldwork Award, which are selected by special committees, the winner is decided during the conference itself and is the particular choice of the current President of the **AIA**.

In 1988 the conference was held in Swansea, and **AIA** President, Dr Marilyn Palmer, selected the Kidwelly Tinplate Museum for the award. It was recognised in particular for the enormous contribution made by local volunteers, who both campaigned against the site's clearance and carried out a great deal of the necessary work of conservation and interpretation.

Kidwelly (or Cydweli), 19 miles north-west of



Award winner: Kidwelly Tinplate Museum, the cold rolling mill. Photo: Amber Patrick

Cahn on Anthracite Iron in south-west Wales and the USA and Alan Crocker on Gunpowder set the scene for Wednesday's visits to the rural fastnesses north-west of Swansea, Mr Pritchard, a former worker at the Pontneddfechan gunpowder works, conducted the party along the scenic River Mellte to see the remains of the demolished incorporation mills and the water power installations. Delegates viewing the rock climbers abseiling off Dinas Rock feared that this was the only way into the silica mines, but instead scaled a disused tramway incline alongside the rock. Sharing their hard hats and torches, the group penetrated the pillar and stall workings on the dip slope. The mine provided silica for refractory brick making until the disappearance of open-hearth steel making. The other sites visited that day were connected with the anthracite iron industry: the restored Venallt blowing engine house and the Banwen furnaces, which are in urgent need of consolidation.

The fine weather fortunately lasted for our Thursday exploration of the Brecon Forest Tramroad, led by Stephen Hughes. The tramroad was built by John Cristie to open up the 15,000 acre forest. We first visited the model farm at Cnewr, actually that day fulfilling its original purpose by housing the annual sheep sale for the district. At Sennybridge, the warehouses at the terminus depot have been converted to housing and present a rural scene hardly redolent of its original past. At Grawen depot, the party walked a length of the tram-

Swansea, was one of the earliest tinplate mill sites in the world. The mechanical rolling of iron to make tinplate was invented c1720 by John Hanbury of Pontypool in Gwent, and resulted in enormous increases in the quantity and quality of tinplate compared with hand-beating. Manufacture at Kidwelly began in 1737 on the site of an older forge. The industry remained largely concentrated in this part of south Wales using local coal and iron and Cornish tin, until the late nineteenth century when competition from American steel strip and electrolytic tinning began to bring decline.

Although the remains at Kidwelly are incomplete, they are, sadly, the most substantial to be seen of the miriad small 'hand-mills' scattered over south Wales in the nineteenth century. However the process can still be traced: the repeated passing of wrought iron with handheld tongs between hot rollers, and the pickling, washing and annealing of sheets before being cold rolled and treated again, then dipped in tin.

The Kidwelly works closed in the 1940s, and clearance of the site was begun in 1974. However local historians stepped in to form the Kidwelly Heritage Trust and persuaded Llanelli Borough Council to acquire the site. The museum was established in 1980 and opened by the Prince of Wales.

The Museum's Curator, Sue Thomas, was delighted when told of the **AIA** award. She said, 'we often feel isolated here, and it is good to know that the work we are doing is valued by people from outside south Wales.' The President of the **AIA** presented the award, in the form of a plaque, at the site on 5 November. Over 80 people attended the ceremony, including the mayors of both Llanelli and Kidwelly, and members of the press. Enthusiastic reports subsequently appeared in several local papers.

road and studied large numbers of stone blocks which supported the rails. The rest of the day was spent along the Swansea Canal which also provided water for 40 installations along its length. At Abercrave, a stone-built weir diverted water from the River Tawe into the canal. The largest aqueduct on the Swansea Canal at Ystalyfera, built 1794-8, still survives unlike much of the lower section of the canal which has been in-filled.

The surviving members of a daily diminishing group were conducted by Paul and Stephen over Cribarth Mountain on Friday to view lime kilns and more tramroads. This was the first time for some years that the supplementary programme followed the main conference. From the organisers' point of view and in the opinion of many delegates the relaxed atmosphere after the formality of the conference was a preferable order, but university accommodation does not always mean that this is possible.

Paul Reynolds and Stephen Hughes, and the large number of their colleagues in SWWIAS who assisted, are to be congratulated on their faultless organisation and their willingness to share the rich industrial heritage of South Wales with members of **AIA**

Marilyn Palmer and Peter Neaverson

SITES AND MONUMENTS OF AN INDUSTRIAL LANDSCAPE

Sites and Monuments Records at national and county level at present severely under-represent the archaeology of industrial Britain, especially when compared to the levels achieved for earlier periods. With this in mind the Cumbria and Lancashire Archaeological Unit at the University of Lancaster is currently carrying out a study of the industrial landscape of Rossendale, a district at the heart of the development of Lancashire's textile industries in the eighteenth and nineteenth centuries.

An excellent historical survey of the area was carried out in the 1920s by G H Tupling, whose *Economic History of Rossendale* was published in 1927. This provides the starting point of the new archaeological survey. Funded for one year by English Heritage and North West Water, a principal purpose of the project is to gather archaeological evidence for the period 1650 to 1930 and compare the results with the documentary-based histories.

Information from Ordnance Survey maps, tithe records and other documentary evidence examined by local historians is being combined with interpretation from vertical aerial photograph surveys to compile a comprehensive list of industrial sites. For each site field notes and ground photographs are being supplemented by further aerial photographs, taken in co-operation with the Royal Commission on Historic Monuments in England.

The result of the research is a computerised database that is linked to the County Sites and Monuments Record and forms the basis for an archaeological interpretation of the development of Rossendale through the Industrial Revolution. Facilities have been developed to enable full-colour map plotting of sites directly from the database, as well as for the extraction of data in more conventional forms. Results of the work will be published in the summer. It is hoped they will be of interest to industrial archaeologists not just in Rossendale but elsewhere in Britain where sites and monuments lists still grossly under-represent features of the industrial period.

REGIONAL NEWS

The **Beatrice Preservation Trust** has been established to restore to working order the *Beatrice*, a wooden-hulled steam powered passenger vessel which formerly plied the River Severn (though she is thought to have been built on the Thames, c1890). It is estimated that the restoration to full working order, as an educational resource, will cost in the region of £65,000. The original steam engine from the *Beatrice* (she was converted to diesel power in the 1950s) has been rescued, and is on temporary display in Bewdley Museum. For further details, contact Jane Thomas, Secretary to the Trust, at 30 Trimpley Lane, Bewdley, Worcs., DY12 1JJ.

The Gladstone Pottery Museum was one of the most exciting of the new style of industrial museums when it opened in the early 1970s. Latterly, its fortunes have declined somewhat. Now plans are afoot to redevelop a portion of the site (mainly the buildings fronting Uttoxeter Road) as a new prestige four-star hotel. Apparently, this will be known as 'The Potter's Lodge', and will be an upmarket sixty-bedroom establishment where local businessmen will put up and entertain their clients. The complex will include a separate pub, and there will be an enlarged shop at the rear of the site. The museum will be 'up-graded', with 'real slums' being rebuilt in the vicinity of the present car park, and the visitors' experience will be improved with all the fashionable audio-visuals and hand-on exhibits John Powell

SOUTH-EAST ENGLAND

Members of the Surrey Industrial History Group have begun work on the restoration of a large gantry crane which was rescued in 1976 from the former Burton's statue foundry at Thames Ditton. The foundry operated from about 1870 to 1939 and its products included Watt's 'Physical Energy' in Hyde Park and the Liverpool 'Eros'. The crane is stored in the open air at the Old Kiln Agricultural Museum at Tilford near Farnham, where it is planned to provide an interpretive display as work proceeds.

EAST ANGLIA

The Royal Armament Research and Development Establishment (RARDE) at Waltham Abbey, Essex, was the venue for a meeting of the Gunpowder Mills Study Group on 1 October 1988. Talks on the Lea valley watercourses and mills, by John Boyes, and on powder mills of the Lea valley (which numbered about a dozen), by Ken Bascombe of RARDE. were followed by a talk on the Waltham Abbey site and a guided tour by Malcolm McLaren of RARDE. The Establishment, which is on the site of the former Royal Gunpowder Factory (1787-1945) and of seventeenth-century powder mills, is due for closure. Mr McLaren reported that there were plans to safeguard the future of the archive material and the more important structures on the site. Glenys Crocker

SCOTLAND

In Edinburgh, Slateford Maltings, which was once the largest floor-maltings in the world, has not operated since 1985 when it was closed down by Scottish and Newcastle Breweries. Following proposals to demolish the maltings in order to make way for a DIY warehouse, new plans have been put forward for conversion to alternative (possibly office) use, and the case has yet to be resolved. Elsewhere in Edinburgh, development is likely to engulf the East Silvermills area, leaving only the frontage of a cabletram depot of 1886 in Henderson Row. Similarly, in Perth, a leisure centre development is likely to destroy the fine red brick 'Dewars' bonded whiskey warehouse, but developers still await planning permission.

Also in Tayside, the city of Dundee has witnessed a recent trend towards the residential conversion of disused flax and jute mills. Two recent proposed projects include the Camperdown Works high mill (used in the BBC TV series Cristabel to simulate a bomb-damaged area of Berlin), and the Logie Works (Coffin Mill). Upper Pleasance Mill nearby was less fortunate, suffering fire damage and subsequent demolition in December. Fire also destroyed a cast-iron framed transit shed in Greenock during November, thwarting plans for its conversion into a museum of emigration. Contrary to the impression given in the last issue of the Bulletin, great efforts are being made in Inverclyde District by the Historic Buildings and Monuments Directorate to retain important industrial buildings within the redevelopment programme currently being advanced by the Invercivde Initiative. For example, the former Gourock Ropeworks in Port Glasgow has been spot listed (Category A), and although not listed, it is hoped that some use may yet be found for Clark Kincaid's Arthur Street Works (formerly Caird & Co) in Greenock

Glasgow appears to be buoyant in the wake of the Garden Festival, and with office space in demand, is embarking upon several largescale developments. The largest will embrace an area near the River Clyde to the north of the Broomielaw, and may involve applications for the demolition or conversion of several listed warehouses. Further north in Port Dundas, the conversion to dwellings of the vast North Speirs Wharf complex on the Glasgow branch of the Forth and Clyde Canal has now begun, and at the east end of the city centre, the extraordinary conversion of the Bell Street Bonded Warehouses to flats is nearing completion.

Threatened closure of Scottish industries continue to pose recording problems. Bilston Glen and Monkton Hall collieries near Edinburgh are facing threats of closure, and recently Barony Colliery in Ayreshire, the last pit in western Scotland, was also warned that a similar fate was likely in 1989. Other traditional industries are also suffering, with uncertainty facing the Hall Russell shipyard in Aberdeen as well as numerous oil exploration orientated yards such as Ardersier (Inverness-shire), and the Trafalger House (Scott Lithgow) and UIE (John Brown) yards in Port Glasgow and Clydebank. Reduced business has also forced closure of the Meadowside Granaries in Glasgow, thought to be the largest brick buildings in Scotland.

Miles Oglethorpe AIA Council

GREATER LONDON

Redevelopment affecting Industrial Archaeology in London is going on apace, as described elsewhere in this issue.

The New River, an early seventeenth-century water-supply aqueduct is shortly to be superseded by a new underground main and will not carry drinking water. Concern over its future is essentially ecological. However the proposed redevelopment of the reservoir area at Stoke Newington would result in four to eight storey housing on the site of the filter beds and the West Reservoir.

The former Bryant and May match factory, Fairfield Works, Bow, closed in 1979 and is to be

converted to housing. This will be a complex redevelopment, intended to provide affordable houses (starting at £60,000) of a high standard. GLIAS visited the works in March 1988. It consists of a large group of buildings with central fire-proof blocks dating from the 1870s and 1909. The machinery has been cleared and relatively little could be learned of the matchmaking process. However, health measures included hand and eye-washing facilities: match making was said to cause phosphorous necrosis or 'phossy jaw'; and the heating provision, by automotive-style sheet radiators, and the ventilating and fire-fighting arrangements were also of note. The works was best known for the famous 'match girls strike' in 1888, claimed to be the first example of union organisation by unskilled women.

In Docklands, first generation low-rise buildings built in the Enterprise Zone of the Isle of Dogs c1981 are being demolished for something bigger. Cannon workshops have gone, and Limehouse Studios have to make way for Canary Wharf. Almost the only survival of the East Greenwich Gas Works is the Sulphate House, with its dramatic parabolic roof, built in the 1950s for storing dry powder and recently used as a film studio. The whole of Blackwall Point is to be redeveloped. At the Royals, large scale building has not yet taken place although much ground has been cleared. *R J M Carr*

WALES

From Wales come three stories of destruction, controversy and re-use:

White Mill (alias Lovelodge), near Llandeilo, Dyfed, was demolished in the summer to make way for a housing development. The waterpowered corn mill retained most of its machinery at the time of demolition and indeed the Welsh Mills Group Newsletter (No12, April 1988) published a provisional report of the intact mill by Graham Darlington of the National Trust. The National Monuments Record, alerted by a local resident after work had started, managed to obtain a photographic record of the remains when most of the building had been reduced to rubble. The water-wheel has been taken to a mill in the nearby village of Trapp where it is hoped to re-use it, and a pair of grinding stones are intended for another local mill at Tregybe.

November 5 was the last day of operation for the Vale of Rheidol railway under British Rail ownership. One of the engines (No9 *Prince of Wales*) carried black flags and a wreath, and for a small band of **AIA** members, including Douglas Hague, the sight was a sad contrast to the memorable Aberystwyth conference when a sister engine wore an **AIA** headboard. In a highly controversial deal British Rail has sold the line to Tony Hills of the Brecon Mountain Railway instead of to the staff consortium who were prepared to take it over. It is believed that one of the conditions of sale is that the railway remains in its present location for at least five years.

Finally, Clogau gold mine, Bontddu, Gwynedd, which closed in 1986 is intended to be reopened in 1990 as a major tourist attraction. Clogau St David's produced the gold from which several royal wedding rings have been made. According to *The Times* Snowdonia Leisure PLC hope to transport visitors to the mine by cable car and then take them 2500' into the mine by train. Facilities for panning for gold will be set up at the mine entrance and the company hopes eventually to attract ¼ million visitors each year. *Hilary Malaws*

LONDON RE-BORN

The pace of re-development in Greater London is accelerating and causing changes of massive proportions. In the City it is difficult to miss the tremendous work in progress. There is loud noise from building work, and in the evening, when traffic is less, parts of large steel structures can be seen being trundled about.

One of the most significant and perhaps foreboding schemes as far as the conservation of buildings of the industrial period is concerned has been at Covent Garden. To fund improvement works at the Opera House a substantial component of commercial office development, including the demolition of listed buildings, has been proposed. In October 1988 the Court of Appeal dismissed an attempt by the Covent Garden Community Association to have planning permission for the redevelopment scheme revoked, and it is highly probable that substantial redevelopment will take place. In The Guardian (20 October 1988, page 23), Professor Malcolm Grant suggests that this court decision has by precedent effected a change in English law; to allow a trade-off between undesirable development and a 'good cause'. Several buildings occupying corner sites about London are in process of replacement. This seems a favourite kind of redevelopment and is

happening on the eastern corner of the Strand and Lancaster Place and the corresponding corner with Northumberland Avenue on the south side of Trafalger Square. At Camden Town the Sainsbury's supermarket being built on the site of the ABC Bakery has been looking something like a small football stadium. In Liverpool Road, Islington, the classical hospital buildings are being developed for housing, and at the Angel a large corner site between High Street and City Road has been cleared and reconstruction is underway. The Blue Coat Boy Inn was a casualty.

The Architects' Journal has noted that '..., the rules of Monopoly have been changed, now you can build over stations.' Big developments

at London railway termini are underway. The most massive of these will be the King's Cross/St Pancras redevelopment, which we hope will be featured in a future issue of the *Bülletin*, as it has considerable industrial archaeological implications.

The reconstruction of Broad Street and Liverpool Street station area is already well advanced, Broad Street having disappeared, and a good deal of Liverpool Street too. If you have not been recently, pay a visit; but be warned that a stranger can all but get lost in the new Broadgate which has not finished growing. The eastern part of Liverpool Street station reconstructed in 1891 has been built over above platform level and the view westwards from Bishopsgate is of a great new complex of office buildings stretching away to the north. Fenchurch Street has been dealt with, but Paddington, Marylebone, Baker Street and Waterloo are as yet little altered. Just to the south of Charing Cross station, work is well in progress constructing a fourteen-storey office block spanning the railway tracks. Holborn Viaduct station will almost certainly not last long, and immediately north of Blackfriars, even the newly re-opened Thameslink is likely to be taken into a tunnel to make way for more development.

With redevelopment so frenetic, London's stock of Victorian and early twentieth-century commercial buildings is being rapidly reduced. Replacement is mostly with buildings of Post-Modernist design (the Lloyd's Building is exceptional), and the inattentive may not appreciate how much is recent. Looking westwards over the city from near Whitechapel Road it is clear just how much is happening from the large number of cranes and the pounding of pile drivers. In the nineteenth century most of earlier London was swept away, and the same may be happening now. London in the mid 1860s was probably worse than this.





Destruction in Wales: White Mill during demolition, showing the pitch-back wheel, one of the stones and the remains of grain hoppers. Photo: © National Monuments Record for Wales

AWARDS

THE DOROTHEA AWARD FOR CONSERVATION 1988

Last year saw a considerable upsurge of interest in the Dorothea Award for Conservation. During the Spring it was gratifying to see press notices in various magazines, notably the railway press, and for a time the telephone and the postman were busy with requests for information. The inquiries reveal wide-ranging interests in conservation by voluntary groups and individuals. Another development this year has been the production of guidelines on good conservation practice; this theme has been receiving attention in museum circles recently, with an industrial collections conservation committee advising the Science Museum on staff training in the ethics of conservation. An invitation to comment on Geoff Wallis's Statement on Conservation was published in a supplement to Bulletin 15.3, and the AIA's guidelines build on the same principles.

Despite continued emphasis on written and other records as evidence of good conservation practice, records were once again the weakest aspect of the ten entries. There is plenty of evidence of interesting projects and good standards, but without records it is difficult for the judges to see how these, and the ethical decisions behind them, have been arrived at. More important for the sake of the things being conserved are the well thought-out choice of appropriate levels and techniques for conservation. The judges will continue to encourage these aspects of conservation both through their advice and through their choice of winners.

The Award has been made this year to the Mid-Gloucester Engine Preservation Society for the restoration and re-siting of a Fielding 80HP oil engine. Five years ago the engine was corroding away in a corner of a car park; now it occupies an engine house at the National Waterways Museum at Gloucester Docks. The judges were impressed by the consistently high standards of workmanship, and by the conservation records which showed attention to detail at every stage.

The Award was presented by Geoff Wallis of Dorothea Restorations during the Association's Conference at Swansea. A plaque was unveiled in October by Mrs Hobbs, wife of the engineer who maintained the engine in its early days. A £500 cheque will go towards the installation of line shafting to power a museum workshop.

Certificates of Commendation have been awarded to two projects. The Staffordshire Narrow Gauge Railway Society is restoring a Bagnall locomotive which once stood as a monument outside Stafford Station, and their preliminary research and documentation is outstanding. Credit is also being given to pupils of Brynteg Comprehensive School at Bridgend, Glamorgan, where the Railway Group is restoring an ex-Taff Vale Railway coach to run on the Gwili Railway, Carmarthen.

The Association's thanks are due to Dorothea Restorations Ltd, whose generosity and encouragement enables these awards to be made.

John Crompton David Palmer **7** Rob Shorland-Ball

1689.

AIA NEWSDESK

Information should be sent 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 between notification and the date of the event.

February 25 1989 MARITIME ENGLAND the history and future of historic ports and dockyards

At Burlington House, Picadilly, London. Organised by the Royal Archaeological Institute in conjunction with the RCHM (England). Booking forms requested with SAE from Miss W E Phillips, Assistant Secretary, Royal Archaeological Institute, Society of Antiquaries, Burlington House, Picadilly, London W1V 0HS.

March 6 1989 THE IRONBRIDGE LECTURE in Industrial History

At the University of Birmingham. Professor Roy Church will talk on 'Enterprise Culture, an Historical Perspective'. Details from The Ironbridge Institute, Ironbridge Gorge Museum Trust, Ironbridge, Telford, Shropshire TF8 7AW 2095245 2751

March 11 1989 SEVENTH SOUTH EAST REGIONAL 7th SOUTH EAST REGIONAL IA CONFERENCE

At the Westgate Centre, Chichester, with visits on Sunday 12 March. The theme is the museum approach to industrial archaeology. Details and booking forms from Gordon Thomerson, 42 Gander Hill, Haywards Heath, Sussex RH16 1RD @ 0444 450722

April 1 1989 SOUTH WESTERN REGIONAL IA CONFERENCE

At Kingston Murward Agricultural College, Dorchester. The theme is 'small industries'. Details from Brenda Innes, Dorset IA Society, 10 Gold Hill, Shaftesbury, Dorset SP7 8HB 10747 4548

April 5–9 1989 METALLURGY AND THE SEA

At Portsmouth Polytechnic. A meeting of the Historical Metallurgy Society concerned with

Membership Matters

Bargains galore!

Members of the AIA may be gratified to know the excellent value they are getting currently from their subscriptions. The printing and postage costs for the items that all members receive from the Association (two issues of Industrial Archaeology Review, four issues of the Bulletin, one World Industrial History and one regional guidebook) amount to £13.82. This means that a surplus of just over £1 remains from the ordinary subscription (or about £4 if payment is by covenant) for editorial work, for the Associations administration, and for its other important work in the fields of education and endangered sites protection. If any member takes pity on the Treasurer after reading these figures, he will be happy to receive donations!

What's your number?

Should members correspond with the Association over matters of subscription, it is an enormous help if they quote their membership numbers. This saves the Assistant Secretary a great deal of time. If you don't know your number already, run straight to the waste paper basket and retrieve the envelope in which you received this *Bulletin*. Your number is stated on metals used in ships from the earliest times to the present day. Details from Janet Lang, British Museum Research Laboratory, Great Russell Street, London WC1B 3DG @ 01 636 1555 April 14–16 1989

April 14–16 1989 AIA WORKING WEEKEND

At Ironbridge. Details from Pam Moore, 13 Bromley Road, Midanbury, Southampton SO2 2AA **April 14–16 1989**

IA IN THE FOREST OF DEAN

A residential course led by David Bick with lectures and visits to important industrial sites in the Forest. Details from Gillie Peacock, Cinderhill House, St Briavels, Glos. GL15 6RH ☎ 0594 530393; the course will be repeated on 2–4 June and 13–15 October.

April 26 1989 PERIOD PAINT

A short course at Osterly Park, London. On the subject of gilding in architecture and furnishings. Details from the Ironbridge Institute, as for March 6 above.

May 1 1989

AIA FIELDWORK AWARD

May 11 1989 CONSERVING ARCHITECTURAL CERAMICS

In London; details from Ironbridge Institute, as for March 6 above.

May 13 1989 GUNPOWDER MILLS STUDY GROUP

Visit to Chilworth, Surrey; details from Glenys Crocker, 6 Burwood Close, Guildford GU1 2SB @ 0483 65821

May 14 1989 NATIONAL MILLS DAY

For details of mills open to visitors, contact the SPAB Wind and Water Mill Section or your regional Mills Group.

May 14 1989 TWYFORD PUMPING STATION OPEN DAY

Twyford, near Winchester; details from Ron Mapp, 10 High Firs Gardens, Romsey, Hants SO51 8QA ☎ 0794 522842

the address label each time. A note of explanation for long standing members who thought they had an elite two or three-figure number: for technical reasons 1000 has been added to all these so that, for example, 218 is 1218. Both numbers are valid, but we prefer members to use the newer one in correspondence if possible.

Members multiply

The Association has recently been carrying on a quiet but effective drive for new members, mainly through reciprocal mailings of membership leaflets with other associations. This is one reason for the flurry of leaflets with recent issues of the Bulletin. The campaign resulted in over one hundred new members joining by September last year alone: and the expansion is continuing. Several thousand more leaflets will be distributed to other societies, and to libraries and museums, during the coming months. It is vital that membership continues to grow, in order to support our work and maximise our influence. Please try to introduce friends and colleagues to the Association, encouraging them, of course, to pay by covenant! Membership and covenant forms may be obtained from The Assistant Secretary, AIA, Ironbridge Gorge Museum, Ironbridge, Telford, Shropshire TF8 7AW @ 095245 3522.

May 18 1989 MILLS AND MACHINES: their study and conservation

A short course at Shrewsbury; details from the Ironbridge Institute, as for March 6 above.

June 10 1989 PRESERVING THE AVIATION HERITAGE

A short course at the Ironbridge Institute, details as for March 6 above.

July 28–30 1989 GUNPOWDER MILLS STUDY GROUP

Visit to Frederiksvaerk Gunpowder Mill, Denmark. The visit is timed to fit in with the International Congress on the History of Science, Technology and Medicine on 1–9 August in Hamburg and Munich. Further information from Brenda Buchanan, 13 Hensley Road, Bath BA2 2DR.

September 3—8 1989 SECOND INTERNATIONAL CONFERENCE 2nd INTERNATIONAL CONFERENCE ON THE HISTORY OF MINING

At Bochum, West Germany; details from Prof Dr Klaus Tenfelde, Institute fur Geschichte Abteilung fur Wirtschafts und Sozialgeschichte, Universitat Innsbruck, Innrain 52, A-6020 Innsbruck, Austria.

September 15–17 1989 AIA ANNUAL CONFERENCE

At Huddersfield Polytechnic. September 16–23 1989 INTERNATIONAL CONFERENCE ON THE HISTORY, TECHNOLOGY AND IA OF GLASS

In Lisbon; this conference, organised by the Associacao Portuguesa de Arqueologia Industrial, Apertado 5374, 1708 Lisboa Codex, Portugal, will cover glass making from the Roman period to the present day. Official bookings closed in December.

September 18–30 1989 IRONBRIDGE TRAINING EXCAVATION

Details from the Ironbridge Institute.

AIABulletin

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- 15 September for November mailing
- 15 December for February mailing
- 15 March for June mailing 15 June for August 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 and research 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. Further details may be obtained from the Membership Secretary, Association for Industrial Archaeology, The Wharfage, Ironbridge, Telford, Shropshire TF8 7AW, England @ 095245 3522.

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