

# ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY BULLETIN

Volume 18 Number 3 1991

## FACING UP TO THE PRESENT

In late Spring 1991 the manufacture of compound fertilizer will cease at ICI Billingham after almost seventy years. With it will go parts Teesside's industrial landscape, possibly including the 'Nitram tower', in which nitrate of ammonia is granulated on the same principle as a lead shot tower. This raises the question of how well traditional industrial archaeology is fitted to record and document 'modern' industries, and the often very rapid changes in technology, design and landscape which they bring about.

The Government bought the Billingham site in 1917 on the advice of the chemical firm Brunner Mond, to build a munitions factory which in peacetime would make fertilizer. Munitions were never produced there, and in 1920 the Government sold the site-two farms, some huts and land-plus relevant patents, to Brunner's.

Ammonia was first produced on site late in 1923, based on the synthesis of nitrogen, steam and water gas by the Haber Process, pioneered in Germany before the war, and obtained by Brunner's after the war by blatant espionage! From an early date 'waste' gases were re-used in other processes, and the factory expanded rapidly and became increasingly integrated. It also introduced to the area new demands in high quality engineering able to withstand the high pressures required in synthesis -250 atmospheres by the 1930s-and the need for new skilled process workers.

In 1926 Brunner Mond became part of Imperial Chemical Industries. By 1929, Billingham employed over 7,000 people and produced 134,000 tons of ammonia, and 456,000 tons of its sulphate. Anhydrite, an essential raw product, was being mined from under the site. and the Company had built 2,000 houses for its workforce. The Wall Street crash of the same year caused the collapse of the fertilizer market, and Billingham was forced to diversify, to oil from coal, and a new plastic, Resin X, or Perspex, both invented and developed on site. Caustic soda and cyanide were also produced, and workers with their families moved en masse from out-dated works in Glasgow and Tyneside.

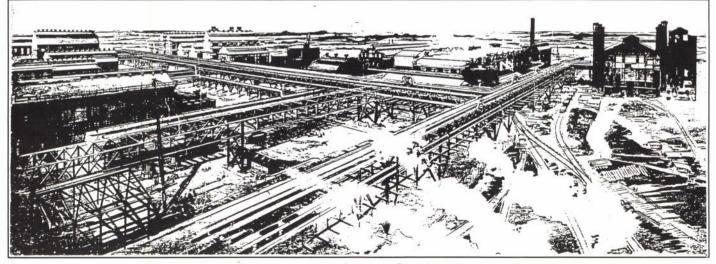
The Billingham site still occupies a vast area, although now with large gaps. Its workforce is only 4,000, from a peak of about 19,000 in the early 1960s. A number of structures survive from the 1920s, such as cooling towers and the huge concrete and steel parabolic silos built to match the shape taken naturally by piles of sulphate or nitrate granules. In some cases they survive because they are too close to existing plant to be demolishable; others may go soon.

There may be a good aesthetic and architectural argument to have a silo listed, but sadly not a practical one. ICI clearly is not in the position or of the mind to conserve its past in this particular way. Billingham is still developing – as compound fertilizer making ends, the new Monomer 8 plant, at the forefront of chemical technology, is being erected. To its credit, staff are at last collating the fine collection of photographs of the works dating from the 1910s to the 1990s, and adding to the collection daily, and an archivist works on the site.

What industrial archaeology can do in such a case is uncertain. The company understandably is cautious of people photographing the site because of the terrorist risk. It is also hard to conceive a practical scheme whereby even part of the site could be conserved. A pumping engine, headstock or water mill is compact, largely safe (no potentially disastrous leaks of ammonia there), and transformed by time and our own conventions into being worthy of our nostalgic and emotional attention.

But such sites, like our time, are finite. We are lumbered with the self-proclaimed title of industrial archaeologists, though we do little to record current industrial practice. It is quite wrong to assume that modern-day industries are bound to be recorded somewhere or other. As in the past, the most familiar is often the least documented. Future generations, interested in our non-glamorous industries, will be denied the detailed account of, say, late twentieth-century chemical manufacture that we would love to have for eighteenth-century iron-making. We are lucky at Billingham that the company is doing some recording, but industrial archaeologists can not easily be involved.

If even a site so central to twentieth-century industrial history as this might disappear with little attention from industrial archaeology, and no attempt at conservation, what will be the



A Portion of the Billingham Works of the Synthetic Ammonia and Nitrates Ltd., Stockton-on-Tees' from a drawing by Keesey, 1927

fate of our computer factories, our photo labs, our power stations? How many of our industries are being recorded seriously?

If we do not take a more expansive view of industrial archaeology, we may restrict it to a set number of restored or gloriously derelict sites. We may also restrict future interest in the discipline, and thereby support for the sites which do interest us. Could industrial archaeology become just one further passing phase of the fashion for nostalgia, which held sway for

## LOSING LONDON'S POWER STATIONS

Deptford East power station, constructed in the 1950s, is shortly due for demolition. Proposals for the area drawn up by architects Sheppard Robson and chartered surveyors Grimley J R Eve include 33,000 square metres of class B1 business space, 600 residential units, a 150 room hotel, a 2,250 square metre retail store and perhaps berthing arrangements for passenger ships. That so much new property can occupy the site of just one power station illustrates the enormous pressures for rapid redevelopment at London's power stations. In addition a leisure facility is proposed on land reclaimed from the Thames, which might be a museum based on a maritime theme. Greenwich Reach Redevelopment, a collaboration between ARC Properties and Arena Industries would be a £175 million project on a site covering four hectares.

The Deptford East station had seven coal-fired chain-grate boilers delivering steam at 62 bar, 482 degrees centigrade, to three 55-MW Metropolitan Vickers turbines. In the basement it was claimed some of the pumps were second hand from the PLUTO (pipe line under the ocean) project. Just to the south of Deptford East power station is the site of the world's first central power station, built for the London Electric Supply Corporation by Sebastian de Ferranti in 1889. Power was supplied to central London at 10,000 volts AC, 83 Hz (hint - divide 5,000 by 60). In the south wall of the

two decades but which will surely soon go out of vogue? Mark Rowland-Jones

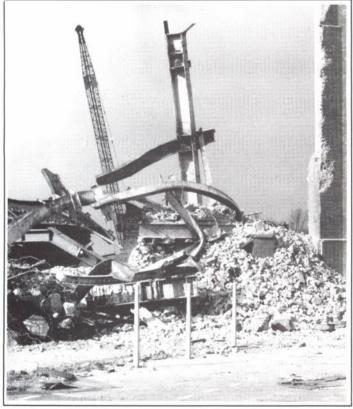
A few industrial archaeologists and organisations, most notably perhaps the Royal Commission on Ancient Monuments in Scotland, have already been involved with recording the less-appreciated of contemporary industries—but interest in such subjects is far from widespread and certainly does not match the rates of loss. London's power stations, dis-

present East station red painted arches from Ferranti's pioneer building can still clearly be seen.

At the site of Croydon B power station, built a little before Deptford East, there were plans for a £300 million retail and leisure complex by the Carroll Group of companies. Ideas were to retain the two 300-feet high chimneys as a landmark and the boiler house was to become a 600-feet long shopping mall. In the adjacent turbine hall the single span roof would accommodate 200 speciality shops. The complete scheme would have provided 673,000 square feet of floor space. Other notions included a 200 bedroom hotel and a bus and coach station.

However, despite these plans to re-use the Croydon B power station main building, it was demolished at short notice before English Heritage had time to pay a visit (see *The Daily Telegraph* 2 February 1991) and the site is now to be used by an IKEA furniture store. In late February only the chimneys and east wall of the power station remained, with considerable metal wreckage to the west. SAVE and the Thirties Society had campaigned to have the building listed.

Croydon B power station had eight Simon Carves pulverised fuel coal-fired boilers delivering steam at 41 bar, 454 degrees centigrade, to four Metropolitan Vickers turbo-generators which produced 52.5 MW each at 12 kilovolts. There were also gas turbine generating sets for



rapid increases in output. The building was steel framed, faced with good quality brickwork, and the roofs were of steel lattice-girder construction Particular care was taken by the architect. Robert Atkinson, to ensure that the external appearance of the station was appropriate for the surrounding, partly residential area. For instance, on delivery coal was dropped into a pit beneath the station and carried to the top via internal bucket lifts instead of the usual external convevors. Coal arrived by rail and the power station had its own fleet of steam and diesel shunting locomotives.

Acton Lane power station in Harlesden is likely to suffer a fate cussed by Bob Carr in this issue, raise similar problems. However, real hope of more attention for the chemical industries in the near future is provided by the formation of the AIA Chemical Industry Interest Group, reported below.

The Editor would welcome further discussion of the importance and problems of recording and conservation in similar industries, or, alternatively, of the arguments for concentrating scarce resources wholly on more conventionally appreciated subjects.

similar to other London stations. It was one of the last CEGB stations to retain steam railway locomotives to handle incoming coal trains. The last two locomotives were both outside-cylinder 0-4-0 saddle tanks: Little Barford was built in 1939 by Andrew Barclay's Caledonia Works, Kilmarnock (no 2069), and ED3 Birkenhead was built by Robert Stephenson and Hawthorns Ltd in 1948 at their Newcastle upon Tyne works (no 7386). The name Little Barford originated from the power station of that name in Bedfordshire. The locomotive is now preserved at the Foxfield Light Railway, near Stokeon-Trent. ED3 Birkenhead is at Southall motive power depot just to the south east of the station.

CEGB Acton Lane was built just after Deptford East. In the power station itself seven chain-grate coal-fired boilers supplied steam at 41 bar, 454 degrees centigrade, to five 31-MW Richardson Westgarth turbines. The generating sets were commissioned from 1954 to 1958. The turbine hall has a precast ferro-concrete frame rather than one of steel, which was expensive at the time of construction due to shortages. Like Croydon B, Acton Lane had cooling towers, unnecessary at the Thamesside sites. The latter had the additional advantage of direct delivery of seaborne coal.

The first generating station at Acton Lane, Willesden power station, was built for the Metropolitan Electric Supply Company in 1899 on a nine acre site. Part of this original site is incorporated in the present 16 acre power station site. At first, three vertical compound marine-type steam engines drove directly the two-phase 1.5-MW alternators, producing electricity at 500 volts, 60 Hz. Ownership was transferred to the London Power Company in 1927 and following installation of new plant the final capacity of the station was 155 MW by the time of closure in 1964.

At Battersea things seem still to be dragging on, but outline approval for redevelopment on sites near the power station has been granted (see *The Evening Standard*, 30 July 1990). In recent years only the B station at Battersea has been generating. From 1954, six pulverised fuel coal-fired boilers supplied steam at either 41 bar, 427 degrees centigrade, or 93 bar, 510 degrees centigrade, to four Metropolitan Vickers turbines or a 6-MW Richardson Westgarth turbine. The Metropolitan Vickers turbines had powers of 1.35 MW (two), 60 MW and 100 MW. The magnificent Egyptianesque A station control room at Battersea is reported to be safely secure, at least for the time being.

Power stations of the type described above, built from around the end of World War II, supplied 33 kV for local use and during peak periods 132 kV to the National Grid. The mixture of sizes and manufacturers for plant in London power stations of this period is reminiscent of British Railways' dieselisation programme. *R J M Carr* 

2 Should Croydon B Power Station have been preserved? (see the cover article likely to suffer a fate 'Facing up to the Present' and 'Losing London's Power Stations', above)

## **DISCOVERING THE LION SALT WORKS**

Continuing examination of the Lion Salt Works site over the last twelve months as part of the project for the restoration of the works has discovered new documents relating the story its former activity. An office letters book was found on a beam in the blacksmith's shed. The book lists all correspondence to and from the works from July to November 1911. Also from the smithy, the remains of a diary dated 1896 gives names of narrow boats delivering coal to the Thompson's Sunbeam Works at Wincham.

From the attic of the small manager's office, two bundles of papers are now being studied. The first contained invoices for goods supplied to the works in 1910, the second letters sent from the Thompsons' Liverpool office between 1905 and 1908. The letters when

## AIA NEWS

## **NEW MEMBERS OF AIA**

Since January 1991

Mr Henry Gunston, Wantage Oxon. Mr & Mrs B F Hood, Englefield Green, Surrey. Dr D C Hunter, Pyrford, Surrey. Mrs Lorna Couchman, Basingstoke, Hampshire. Mr A J Stoyel, Faringdon, Oxon. Miriam Stead, Sevenoaks, Kent. Royal Commission for Historic Monuments, Exeter. Dallas C Wood, Hamilton Museum of Steam, Ontario Dr D Chapman, Wirral, Merseyside. Mr M R Wilson, Bexleyheath, Kent. SWETS, Pietermaritzburgh, South Africa. Mr Edward Tiller, Fordingbridge, Hampshire. Dr Keith Budd, Menston, Ilkley, Mr H A Hall, Trowbridge, Wiltshire. Mr K V Mercer, London. Ms Clare Hartwell, London. Ms Kate Clarke, Much Wenlock, Shropshire. Mr C J McFee, Oxford. Mr D J Turner, York. Mr N J Cochrane, Crawley, West Sussex. Mr Andrew Pye, Exeter, Devon. Miss J K Moss, Stapleton, Bristol. Dr Colin Rynne, Cork, Eire.

studied in association with the surviving account ledgers, deeds and correspondence will provide a detailed analysis of the trading practices of a small family salt business.

Between 1914 and 1918 salt was shipped to over seventy railway stations as far afield as Glasgow, Aberystwyth, Grimsby and Bristol. During the same period the pattern of coal supply became increasingly varied, and numerous collieries provided fuel for the furnaces.

The accounts and letters refer to 91 named narrow boats shipping salt, coal and other commodities to and from the works. They provide a great deal of information about the distribution of salt from the works to Liverpool and Manchester via the Anderton Boat Lift.

Overseas exports included shipments to Guatemala, Africa and Noumea, French Cale-

## **CONFERENCE CONVERSION**

AIA members who attended the 1989 AIA Annual Conference in West Yorkshire will remember the warehouse on the Ramsden's Canal that they saw every time they hopped on or off a coach at the conference venue, Huddersfield Polytechnic. The Aspley Basin canal warehouse, built in 1780, has now been converted into flats, and photographs of them have been sent to the *Bulletin* by Bob Cooper.

The warehouse was in an extremely dangerous state at the time of the conference and looked as though it might not survive a hard winter. However work on conversion started soon after the conference. It is well worth comparing the appearance of the building now with how it looked before conversion (pictured on page 21 of the West Yorkshire conference quide). It can be argued that some of the character of the building has unnecessarily been lost, for example by inserting concrete and steel balconies at the loading doors instead of wooden ones like the originals, by running drainpipes down the decorative quoins at the corners of the building, and by inserting more new windows than were strictly necessary. Nevertheless, it is satisfying to see that the building has been saved in some form, when it would otherwise almost certainly have disappeared. Perhaps we can also learn from consecutive examples, and one day historic buildings will be converted to new uses whilst losing as little of their character as possible.

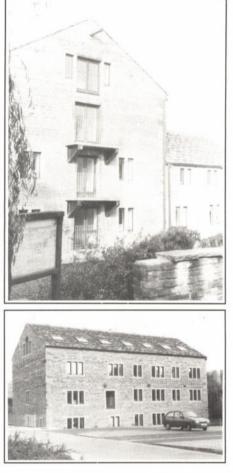


A Giant felled: Croydon B Power Station during demolition in February 1991 - see opposite Photo: R J M Carr

donia. Metal stencils for labelling salt sacks to these destinations were found in the smithy.

On the practical front work has been carried out on the horizontal steam engine which drove the brine pump. It is hoped to repair the piston later in the year, and to power it by compressed air. Research into the engine is continuing as it does not have a manufacturer's name cast into the base plate. Servicing and parts are known to have been supplied by the firm Marcus Allan of Manchester in 1910.

Upon the formation of the Lion Salt Works Trust a development plan for the restoration of the works will be published. In the meantime a small exhibition has been produced for on-site description and interpretation. Visitors to the site will see the first stages of a unique project. Andrew Fielding, Project Officer, Lion Salt Works



## **CHEMICAL INDUSTRY GROUP**

David Tomlin and Patrick Graham are keen to revive the AIA's Chemical Industry Group after a lapse of several years. They hope there are sufficient people interested in the history and industrial archaeology of the chemical industry to support a small informal group. Membership will be open to all whether or not they belong to the AIA.

The Group is expected to operate mainly by the distribution of communications and documents to group members together with the holding of formal meetings where and when it is practical. It is intended to hold an informal meeting during the AIA Annual Conference this year at Dudley. There will not be a fixed subscription, but members will be expected to defray postage and reprographic costs which arise. Anyone interested in the Group should contact David Tomlin, 36 Redcar Road East, South Bank, Middlesborough, Cleveland, TS6 6YP or Patrick Graham, Flat 16, 66 Shepherds Hill, London N6 5RN **20**81 348 3212.

3



## THE BATTLE OF MANSION HOUSE SQUARE

A legal tussle which might prove crucial to the future of Britain's conservation areas and listed buildings has finished in the House of Lords. It seems that Lord Palumbo, property developer and chairman of the Arts Council, will get his way and demolish the Mappin and Webb building and seven other listed Victorian commercial buildings adjacent to the Mansion House in the City of London.

It has been the end of one of the most notable architectural battles of the twentieth century. On the one side have been ranked the conservationists, led by SAVE Britain's Heritage, the Victorian Society and English Heritage, and including persons as notable as the Prince of Wales amongst their supporters. On the other have been the city developers and the enthusiasts, like Lord Palumbo, for giving contemporary architects a chance to create great works on important sites.

The legal battle has raged since a public inquiry was held in 1984 to decide on a scheme to build a tower designed in 1969 by the late master of modernism. Mies van der Rohe. Decisions on the site have been made by three Secretaries of State for the Environment, Jenkin, Ridley and Patten, and the matter has ended in the House of Lords with a new scheme for the site by James Stirling. The legal course through the saga has been tortuous, and there are now serious concerns about the precedents set by the case for permitting the demolition of listed buildings, even in conservation areas like Mansion House Square, This was the reason that SAVE Britain's Heritage fought the battle so tenaciously.

The outcome has been regarded as partially a technical verdict based on the wording of statements by Nicholas Ridley in 1989, and the Law Lords made it clear that the case should not open the floodgates for redevelopment of conservation areas simply on the basis that the new buildings proposed might be judged to be better than the old. However SAVE has now been left in serious difficulties by the excesses of the British legal system, with costs of a quarter of a million pounds. The address of SAVE, for those who may be able to help, is 68 Battersea High Street, London SW11 **1**228 3336.

## AIA NEWS LAUNCHING A POLICY FOR INDUSTRIAL ARCHAEOLOGY

Last summer all members of the AIA were circulated with, and invited to comment on, a draft policy for industrial archaeology prepared by the Association for public discussion. After a period of internal consultation following the Guildford conference, the document was refined further and launched to wider consultation on 11 March.

A meeting was held at the Science Museum in London to which representatives of institutions influential in the matters of concern to industrial archaeologists were invited. The document, entitled Industrial Archaeology: working for the future had been pre-circulated to all concerned. After a presentation outlining the main points of the policy, an open discussion was chaired by Dr Neil Cossons, Director of the Science Museum. Some thirty bodies were represented, including English Heritage, the Royal Commissions on Ancient and Historical Monuments, Cadw, the National Trust, the Ironbridge Institute, the Institute of Field Archaeologists, the Museums Association, the Public Record Office and British Coal. Many points were raised in a fruitful discussion, and several compliments were paid to the Association for its enterprise in developing the policy and for the general consensus that it seemed to have achieved. Many of those present felt that an overall policy for industrial archaeological research and conservation in Britain was vital in order to focus efforts and highlight problems which must be overcome if the discipline is to develop further.

The meeting and the policy document have represented an enormous amount of work for the AIA, but it is hoped that they will prove a crucial impetus in the development of industrial archaeology in Britain. Drafting of the document by Marilyn Palmer, Peter Wakelin and John Crompton has gone on for two years, and successive versions have been reviewed by all members of Council. The organisation of the consultation meeting by Carol Whittaker and David Alderton has been a mammoth task. The cumulative total of time invested by all those individuals who responded to the consultations and attended the meeting must also be considerable

Formal submissions following on from the Science Museum meeting were requested from those who attended and from all AIA's affiliated societies by the end of April, and it was expected that a final version of the policy would be circulated later in the year and published in *Industrial Archaeology Review*. From then on, it will be the task of all concerned to work towards the policies outlined, and to see that the highly desirable developments they represent will actually take place.

## L'ASSOCIATION DU PATRIMOINE PORTUAIRE

A small but international group of people concerned with the heritage of our ports has recently established a new organisation to promote the study of port heritage on an international basis, and to encourage the preservation of the archaeology of our ports. *L'Association du Patrimoine Portuaire* intends to produce a journal periodically as an exchange of information between port historians and engineers throughout the world, and to encourage improved standards of recording, interpretation and preservation of historic dock and harbour structures.

Initially the Association will operate principally by correspondence. The committee will arrange meetings and conferences on specific topics when there is evidence of support for such activities. It is intended that one of the first products of this initiative will be an international gazetteer and typology of port cranes, many examples of which have disappeared without trace in recent years as a result of containerisation. If you would like to know more of the activities of APP, contact Dr Paulo Oliveira Ramos, Rua Joao de Deus 13 (4 frente), 1200 LISBOA, Portugal, or John Robinson of the Science Museum, South Kensington, London SW7 2DD.

## HELP!

## Artifacts for loan

The Bath Industrial Heritage Centre has some nineteenth-century items from its collections available for Ioan. They include a small mounted grindstone and a large unmounted grindstone, two screwing machines, one large capstan lathe made by Arthur Herbert of Coventry, a five-wheel grinding machine, a bell-ringing carillon from Bath Abbey and three countershafts with pulleys and hangers. Full details of each item can be obtained from Stuart Burroughs, Bath Industrial Heritage Centre, Camden Works, Julian Road, Bath BA1 2RH 20225 318348.

## Mill engine available

Mr John Marsh of Automasten, Hyde, is looking for a home for a 63 feet long, 27 feet wide, 30 feet high, horizontal compound tandem mill engine, made by Buckley and Taylor of Oldham in 1887. It produces 1,454 horsepower, has a 19-feet diameter flywheel and five-feet cylinders. It is already dismantled. His company collected it with the idea of placing it somewhere as an industrial monument. It came out of Ferm Mill, Oldham and weighs approximately 130 tons. Mr Marsh's telephone number is 061 368 3445.

## Waterways Recovery

The Waterways Recovery Group is running a large programme of voluntary working parties to help restore canals all over the country this summer, including the Montgomery, the Wilts and Berks, the Pocklington and the Sleaford Navigation. They are also helping at the Ellesmere Port Boat Museum. The work is well organised and well worth while. For the pleasures of spending a week up to your thighs in mud, making bonfires, or heaving bricks you have to pay out only £3 per day! The money goes towards your food and keep, but beer has to be bought separately. So much more relaxing than lying on a beach in the Bahamas....

Details are available from John Glock, Waterways Recovery Group, 47 Melfort Drive, Leighton Buzzard, Beds LU7 7XN 20525 382311.

## SMALLSMITH'S DIARY

18 March

Debate got very heated in the pub tonight (on our return from a trip to see some bell-pits, appropriately) about the sad demise of the British coal mining industry, particularly in South Wales with a mine closing every few months it seems, and all in the name of privatisation to come. Neill took the line about the need for profitability and efficiency, which left Bolt in a cleft stick, for though he despises any idea which could be called new (and most things that Neill says), he also hates trades unions, and the very name 'Scargill' makes him more than usually irritable. Mrs D questioned the point of an efficient industry if it employed no-one and gave nothing back to those who had worked in it. My dear wife got a little too heated in response to one of Neill's very balanced comments about the power of market forces in true economic regeneration, and said that current Government policies were 'a load of tripe and useless'. I do not like to reprimand my wife in public, but I had to agree with the others that we should really strive to ensure that IA is not mixed up with politics.

25 March

Unlike last year I was well enough to attend this year's Buttockbarn IA Group AGM. Once again Neill held forth. This year his theme was better marketing for the group, and how a well-designed corporate image was what the group needed. At this point Mrs D said that what we needed was a theodolite, or failing that at least a tripod with the requisite number of legs, not two and a third made up of a bit of one of Bolt's old cold frames. But this played into Neill's hands, and he was quick to point out how a dynamic logo on marble-effect paper would get us the funding which would enable us to purchase such luxuries; and we had to get our basics sorted out first. The motion was carried on his eloquence and Neill is to look into getting us that all-important logo. It's a funny thing, but sometimes I think even he believes some of what he says!

2 April

Bolt, Neill and the remarkable Mrs Dobbin came round for supper last night. Bolt clearly was not in the best of tempers. It seems that two unknown people dressed as holiday boaters had banged on his door soon after midnight demanding the lock gate be opened; and then had run off into the night shouting 'April fool!' when he appeared in his nightshirt and Great Western Railway guard's cap. I must say Neill also looked rather fatigued and said something about it having been 'a 'rough night'. But as my wife later reminded me, it was he who remembered the detail about the GWR cap.

## NEWS ITEMS

## **GORGE PUBLIC INQUIRY**

The proposals to build a new road bridge in the Ironbridge Gorge, within sight of the Iron Bridge itself, were subject to a public inquiry last summer, as reported by John Powell in *Bulletin* 18.1. The result of the inquiry and the final decision of the Secretary of State for the Environment are now known. The Secretary of State followed the advice of his inspector, Mr A W Machin, and refused planning permission for the new bridge.

Evidence against approval for the bridge was submitted to the inquiry by English Heritage, the Ironbridge Gorge Museum, Wrekin District Council, the Ironbridge and Coalbrookdale Civic Society and the AIA (represented by John Crompton). The advice of the inspector was motivated by the influence the new bridge would have in detracting from the character of the Gorge and in introducing increased and heavier traffic, as well as by the damage likely to local ecology, archaeological remains and the Museum's plans for improving visitor transport around the Gorge. Most importantly, however, it was argued in the public inquiry report that 'the world's first iron bridge would be devalued in status' by imposing a modern steel bridge in the focus of attention, and that the scheme would adversely affect other important views of and through the Iron Bridge.

The inspector accepted the pressing need for a new bridge to replace the listed reinforced-concrete 'Free Bridge' at Jackfield, built in 1909 (see the article on this bridge in *Bulletin* 14.2). In his view, a new bridge just downstream of the Free Bridge would not have an unacceptable impact on the setting. After several years of argument, it now seems that Britain's only industrial 'World Heritage Site' is free once again from a proposal which might have despoiled it.

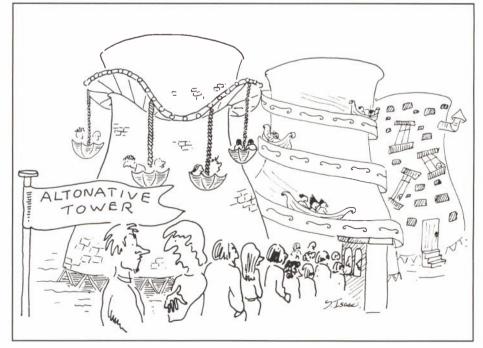
## **BUILDING CONSERVATION COURSE**

The College of Estate Management and the Royal Institute of Chartered Surveyors have recently decided to open their training courses to people who are not Chartered Surveyors. Included in their prospectus of courses is the RICS Diploma in Building Conservation. The course is a two-year part-time study programme combining distance learning at home with short periods at the College of Estate Management at Reading: in all taking up about nine hours a week for a forty week year. Modules included in the course cover the history of building, conservation theories, recording and research, the organisation of conservation, the management of historic buildings, conservation techniques, the re-use of buildings, legislation and grant aid, archaeological conservation and the history of interior design. Entrance to the course is open to all suitably qualified professionals involved with building conservation, and to other who may qualify for entry by experience. Further details

can be obtained from the Director of Courses, College of Estate Management, Whiteknights, Reading RG6 2AW 20734 861101.

## LEVERHULME TRUST AWARD

The Sussex IA Society has been awarded a grant by the Leverhulme Trust to finance an industrial archaeologist to work full-time for two years completing a survey of sites in the whole of East and West Sussex. The post has been advertised, and it is hoped that an appointment will be made imminently. It is an impressive achievement that the Society has been awarded one of the Trust's grants, which are allocated quarterly to a selection of projects out of many competing for funds. The success is particularly impressive considering that it is very unusual for research grants of this sort to be given to voluntary organisations, the vast majority of the beneficiaries of Leverhulme Trust awards being university or polytechnic departments



'It's not as good as the log-shute at Bingley Five Rise'

## **REGIONAL NEWS**

## SOUTH-EAST ENGLAND

SERIAC 1991, the ninth annual conference of industrial archaeology societies in South-East England, was hosted by the Greater London IA Society (GLIAS) on 23 March. The meeting was held at the Science Museum, by invitation of the Director, Neil Cossons, and was unusual for a regional conference in addressing national and indeed international issues, the subject being Current themes and problems in industrial archaeology. Pam Moore of Southampton University IA Group and the AIA discussed some interesting cases, illustrating the main courses of action available in dealing with industrial archaeological sites. Anthony Streeten of English Heritage explained the statutory framework and the role of his organisation. Leslie Soane gave a superbly illustrated talk on the approach of the Railway Heritage Trust. In the afternoon session, the scheduled speaker on the National Trust's viewpoint was unable to attend. However, Rick Pool stepped in at short notice and described the Trust's project at Aberdulais Falls in the Vale of Neath. Thomas Wright then explained the role of the Science Museum's PRISM (Preservation of Industrial and Scientific Materials) Fund, which now supports conservation projects as well as acquisitions. The last session introduced an international perspective with Dianne Newell's observations on the state of industrial archaeology with particular reference to Canada (where she herself is based), the USA and Spain. Among the problems she identified was the negative influence of 'heritage' on the pursuit of history. Neil Cossons gave a final summing up and consideration of future problems and challenges, and then many of the 170 delegates set off across London to Kirkaldy's Testing Museum in Southwark. There, GLIAS provided hospitality and some concrete blocks were tested to destruction on the 1864 testing machine. The next SERIAC will be held at Southampton University on 21 March 1992.

**Rodborough Buildings** in Guildford, the early purpose-built multi-storey car factory built by Dennis Brothers in 1901, which has been threatened with demolition for a road widening scheme, is to be retained. A public consultation exercise is being undertaken regarding its future use and its place in the redevelopment of the riverside area of the town, Work began in March 1991 to prevent further decay of the fabric of the building.

The Surrey Industrial History Group's project on the recording of **Second World War Defences** is continuing. In association with the Fortress Study Group, the United Kingdom Fortifications Club and others, the Group is hosting a symposium at the University of Surrey on 2 November 1991 (see Diary).

From Hampshire, Pam Moore reports that **Bursledon Windmill** is now producing flour and open to visitors. Hampshire now has flour produced regularly and in quantity by wind power (Bursledon), inland water power (Headley) and tidal power (Ealing). However a fire caused serious damage to **Longbridge Mill** at Sherfield-on-Loddon near Basingstoke in January. Although it is hoped that restoration will be possible, certain areas of the mill, such as the bin floor, were a total loss. After some years of uncertainty, part of the **Bursledon Brickworks** has been purchased by the Hampshire Buildings Preservation Trust for a Museum of the **C**onstruction Industry, which will be an ambi-

tious, long-term project. The fate of **Hockley railway viaduct** is still in the balance. The application for listing has been turned down, but it is hoped that proposals by the Monumental Organisation may provide a means for preservation. The **Tram 57 Group**, involved in the restoration of former Southampton tram cars, was featured recently on a BBC South programme. The Group still seeks a site for the cars to run, and this becomes more pressing as work nears completion.

The Sussex IA Society has recorded an unusual cement kiln, which is threatened with destruction, at **Beddingham** near Lewes. SIAS has been awarded a grant by the Leverhulme Trust to finance an industrial archaeology Research Recorder for two years (see News).

The East Kent Mills Group is appealing for people to learn the skill of dressing millstones in order to help the operators of several mills which are now grinding regularly in the county. Twelve windmills, four watermills and the **Chart gunpowder** mill at Faversham are to be open to the public in Kent in 1991.

**Glenys** Crocker

#### **GREATER LONDON**

English Heritage considers that large numbers of listed industrial buildings in the **Greater London** area are at risk simply from neglect. These are mostly listed grade two and are predominantly in the east of London, the boroughs of Tower Hamlets and Southwark having the most examples. Considerable sums of money are required just to secure the continued existence of this industrial archaeology.

At **Crossness** it is understood that good progress is being made but the Filter Beds, Green Lanes, **Stoke Newington**, may not be retained in the planned redevelopment. The contact for the Save the Reservoirs Campaign is Hilary Everett, 91 Lincoln Court, Bethune Road, N16 **2081** 802 5944. 'Duck Day' was held on 18 November, at which two local MPs, Diane Abbott and Chris Smith, spoke during a wreath laying ceremony at the statue of Sir Hugh Myddleton to the south of Islington Green. A march had been held along the course of Middleton's New River from the Castle pumping station, Green Lanes, with the marchers carrying ducks (not live ones).

A new entrance lock which will only admit fairly small craft has been installed at Regent's Canal Dock (confusingly now known as 'Limehouse Basin'). To the north of the dock itself considerable works are in progress for the construction of the Limehouse Link. The work is reminiscent of the extension for the East London Railway beneath the Eastern Dock of the London Docks by Sir John Hawkshaw in the 1870s. At the west end of Regent's Canal Dock the warehouse latterly used for the storage of tea has gone. To the south east the main Hough's paper mill site is completely flattened but the office building to the west of it is still standing, although gutted. A few cottages once alongside the entrance to the Limehouse Cut remain, but nothing else here. Shoulder of Mutton Alley no longer has an alley-like appearance. The single-storey building on the riverside which was used by Hough's immediately to the east of the dock entrance lock is still there. Hough's Wharf has received renovation and almost resembles New Concordia Wharf. To the west of the new entrance lock new housing development is in predictable Enid Blyton (ie Noddyland) style.

At the Hotel Inter-Continental on 27 March Conrad Ritblat were due to hold a large auction of **British Waterways**' canal-side sites in Greater London and beyond. This included a number of sites in East London, in Hackney and Stratford. Just to the east of Battersea Power Station is a water pumping station site at which buildings will shortly be demolished. It is hoped the Greater London IA Society will be able to make a brief recording visit before demolition. Further south, at Croydon airport, hangar buildings to the south west of the control tower have been demolished.

Hounslow Council have granted outline planning permission for a hotel development on the former gasworks site at Brentford, which will include purpose-built premises for the Musical Museum. At present the collection of automatic musical instruments gathered together by the late lamented Frank Holland MBE (see his obituary in Bulletin 17.1) is housed in a disused church. St George's, which will be demolished if the plans come to fruition. After 27 years it is felt the instruments should be housed in better conditions. It is intended that the new museum will open in 1994. Meanwhile regular demonstrations will continue in the nearby church. This will be open on the Saturdays and Sundays from April to October, 2-5 pm, and on extra days in July and August. Further details can be obtained from the Musical Museum, 368 High Street. Brentford, Middlesex TW8 0BD 2081 560 8108. R J M Carr

## YORKSHIRE AND HUMBERSIDE

The Elsecar Project, set up by Barnsley Council to care for the 1794-5 Newcomen atmospheric engine and the nineteenth-century colliery workshops, continues to make progress, though it has been hit by cuts in local government spending. Work has not yet begun on the engine, but the aim is still to restore it for its bicentenary. A project director is being appointed to find funds for this and to take charge of the tourism side of the project. Earl Fitzwilliam's private station is being fitted out as a visitor centre on the ground floor and offices above. Further tenants have been found for the workshops, including craft firms and a Bottle Museum, and a local printer may set up a working museum of old printing presses.

**Barnsley** was the centre of an important linen industry in the nineteenth century, but few of its buildings remain. One of the few is a small part of **Taylor's Mill** in Peel Street. It includes both spinning and weaving shops, and was built in the third quarter of the century as an addition to the main mill, which was demolished in the 1960s. It is now faced with demolition to make way for a new development, though attempts are being made to have it spot-listed.

Well Meadow in Sheffield is a unique group of buildings of around 1850 including the workshops and crucible furnaces of a steel and file-making works, and associated houses, some of them back-to-back. It has been described as 'the urban equivalent of Abbeydale Industrial Hamlet', and has been listed, but it is now empty and the owners have applied for permission to demolish it, which is being opposed by local societies.

After the previous scheme for **Sheffield Canal Basin** fell through, the Council has approved a £70 million scheme by Norwest Holst including offices, shops and homes. The listed warehouses and Sheaf Works office block would be restored.

The reconstruction of the **North Bridge** in **Hallfax**, described in the last issue, has been given the annual award of the Yorkshire Association of the Institution of Civil Engineers. The **Museum of the Working Horse** at Halifax has had to close its doors because of financial problems despite 35,000 visitors in 1990.

The unique three-storey waterwheel tower at **Lumbutts** east of Todmorden, which once had waterwheels at three different levels to power Fielden's cotton mill, is being restored (after its floors were rotted by chicken droppings) for use for abseiling by Lumbutts Activity Centre.

The DoE has rejected plans to restore the 1795 **Rochdale Canal** where it is culverted under a road junction at Tuel Lane, Sowerby Bridge. Since the reopening of the Rochdale section at Walsden, this is the only remaining blockage on the canal.

The National Fishing Heritage Centre in Grimsby is open from May. It commemorates the town's historic fishing industry,and includes the preserved fishing smack *Perseverance* which was the last all-sail vessel to work from Grimsby. *Derek Bayliss* 

## SCOTLAND

**Dundee Heritage Trust** has approved proposals to acquire Verdant Works, West Henderson's Wynd, Dundee, as the site for its Textile Project. Dating from the 1830s, the works was originally a flax mill which later worked jute. By 1857 the mill spun jute and tow, powered by two steam engines. It employed 400 people, including handloom weavers. In 1901 the premises were acquired by Alexander Thompson and Sons and renamed Verdant Works. The company manufactured flock and refined metals, a use which has continued to this day

## AFFILIATED SOCIETIES

By the time you read this, the 1991 Ironbridge Weekend will seem a distant memory – although I hope a pleasant one! Preliminary details of the 1992 event will appear in the next issue of the *Bulletin*. May I reiterate my request for comments and suggestions from affiliated societies on these weekends—their format, possible speakers, or topics to be considered for future programmes.

I am pleased to say that the **Sheffield Trades Historical Society** have sent me the relevant details for the presentation of an affiliated

## **ARTHUR RAISTRICK**

The Association is sad to announce the death, on 9 April 1991, of its Honorary Vice-President, Dr Arthur Raistrick. He was aged 95.

Dr Raistrick was widely acknowledged as one of the pioneer spirits of industrial archaeology in Britain as a lecturer and writer on the subject since before the war. Many of his writings have had a seminal influence, especially concerning subjects such as metalliferous mining, the Yorkshire woollen industry, and the role of the Quakers in the Industrial Revolution. He was one of the chief proponents of the establishment in 1959 of the Coalbrookdale

The Verdant works, Dundee, courtyard and offices

and is being relocated to nearby premises.

The collection of buildings, all listed category A, are attractively grouped around a cobbled courtyard. Though in need of considerable repair and restoration they each illustrate the variety of operations in Dundee's textile industries. The Trust will first carry out essential repair and maintenance work. Full restoration will follow over a three-year period and the Trust's collection of historic jute and linen working equipment will be installed in due course. Public access to Verdant Works will be provided at the earliest opportunity. Commercial activities in some parts of the works will help to support the running costs of Verdant Works as a museum of Dundee's jute and linen industries. Recognising the importance of Dundee's heritage of industry and the urgent need to secure the future of these significant buildings, the National Heritage Memorial Fund is giving a grant of £100,000 to cover the purchase of the works. The capital cost of the completed project, including fixtures and fittings, will be up to £2 million.

societies profile in this issue. The Society was formed in 1933, making it one of the oldest such societies in Britain, in response to the realisation that the remarkable industrial heritage of the area was already being eroded. In the 1950s, the Society played an important part in saving Abbeydale Industrial Hamlet and the Shepherd Wheel, and it has since been involved in other projects, including the preservation of Rockley iron furnace and colliery engine house near Barnsley. Currently, members are working to restore Wortley Top Forge. The Sheffield Trades Historical Society has a

Monday of each month. Its journal, *Cutting Edge*, is published annually. More details of the society and its activities are available from the Honorary Secretary, Nicola Moyle, the Industrial Museum, Kelham Island, Alma Street, Sheffield S3 8RY. I hope that more affiliated societies will provide

membership of 170 and meets on the first

me with profiles for inclusion in future issues of the *Bulletin*. Please send these, and any other comments on affiliated society matters, to me at 20 Stourvale Gardens, Chandlers Ford, Hampshire SO5 3NE. *Pam Moore* 

Company Museum, which was the kernel from which grew the Ironbridge Gorge Museum Trust. Amongst his prodigious number of some 120 articles and books have been *Industrial Archaeology: an historical survey*, one of the most important early texts for the discipline as a whole, *Quakers in Science and Industry*, *A History of Lead Mining in the Pennines* and *The Making of the West Yorkshire Landscape*. The many who knew him will mourn his loss, but they will also be intensely grateful for his long, productive and influential life.

An appreciation of Dr Raistrick will be published in a future issue of *Industrial Archaeology Review*.



## AIA NEWSDESK

## June 3 1991 DESIGN IN MUSEUMS

a seminar organised by the Museums Association at the Museum of London, concerned with the needs for, and achievement of, high standards of design in museum presentations. Details from Mrs Rachel Shah, Museums Association, 34 Bloomsbury Way, London WC1A 2SF 2071 404 4767.

#### June 12 1991 INTERPRETING THE BUILT ENVIRONMENT THROUGH MUSEUMS

a course organised by the Weald and Downland Museum and the Ironbridge Institute, at Ironbridge. Details from Department D, The Ironbridge Institute, Ironbridge Gorge Museum, Trust, Ironbridge, Telford, Shropshire, TF8 7AW 20952 432751

#### June 22-29 1991 THE INDUSTRIAL ARCHAEOLOGY OF SLATE AND COPPER

a residential course at Plas Tan y Bwlch, Snowdonia, led by Michael Lewis and Merfyn Williams. Details from Plas Tan y Bwlch, Maentwrog, Blaenau Ffestiniog, Gwynedd LL41 3YU 2076685 324.

#### July 5-7 1991 A BABBAGE/FARADAY BICENTENARY CONFERENCE

at St John's College, Cambridge, to discuss the lives and works of Charles Babbage and Michael Faraday, organised by the Newcomen Society, the British Society for the History of Science and the British Society for the History of Mathematics. Details from Dr J.M. Wheeler, 131 Richmond Road, Cambridge, CB4 3PS.

#### July 22-26 1991 MUSEUMS ASSOCIATION ANNUAL CONFERENCE

on the subject of 'Disputable facts: innovations in interpretation', at Newcastle upon Tyne. Details available as for 3 June.

#### August 10-17 1991 PRACTICAL INDUSTRIAL ARCHAEOLOGY

a residential course at Plas Tan y Bwlch, Snowdonia, led by Michael Lewis, Merfyn Williams and Richard Williams. Details available as for 22-29 June.

# August 17-23 1991

ANČIENT MINES

a residential course at Plas Tan y Bwlch, Snowdonia, concerned with Roman and earlier metal mining Details available as for 22-29 June.

#### August 28-30 1991 6th INTERNATIONAL CONFERENCE OF THE ASSOCIATION FOR HISTORY AND COMPUTING

at Odense, Denmark. Details from Hans Jorgen Marker, Danish Data Archives, Munkebjergvaenget 48, DK-5230 Odense M, Denmark.

#### September 2-4 1991 ARCHAEOLOGICAL SCIENCE

a conference on scientific methods in archaeo-Jogy, at the University of York. Details from Dr J. Szymanski, Department of Electronics, York University, Heslington, York YO1 5DD 20904 432354.

#### September 2-26 1991 INDUSTRIAL ARCHAEOLOGICAL TOUR OF CHINA

organised by Occidor Adventure Tours Ltd. Details from Occidor, 10 Broomcroft Road, Boghor Regis, Sussex, PO22 7NJ 20243 582178.

## September 13-15 1991 AIA 1991 CONFERENCE

in the Black Country, with a pre-conference programme from 9 September. A booking form

was circulated in the last AIA mailing.

#### September 23-25 1991 MUSEUMS AND HISTORIC BUILDINGS IN COLD CLIMATES

a conference on protecting historic buildings and their collections in these harsh environments, at The National Gallery, Helsinki, Finland. Details from Andrew Millward, The Manchester Museum, The University, Oxford Road, Manchester M13 9PL **2**061 275 2667.

#### September 22-27 1991 ANNUAL CONFERENCE OF THE BRITISH ASSOCIATION OF PAPER HISTORIANS

at Ambleside in the Lake District. Details from Jenny Hudson, BAPH, Wiggins Teape Research and Development, Butler's Court, Beaconsfield, Bucks HP9 1RT 20494 675652.

#### October 11-14 1991 ORES AND MINES

a residential course at Plas Tan y Bwlch, Snowdonia, on the study of ores and mines of lead, copper and gold from pre-history to recent times. Details available as for 22-29 June.

#### October 17 1991 INTEGRATED STRATEGIES FOR HERITAGE POLICY

a day course at Ironbridge. Details available as for 12 June.

## October 18 1991 FUTURE POLICIES FOR CONSERVATION

a day course at Ironbridge. Details available as for 12 June.

#### November 2 1991 BRITAIN'S WORLD WAR II DEFENCES

a symposium at Guildford organised by Surrey Industrial History Group concerned with the history and construction of Britain's antiinvasion defences, including discussions of current research. Details from Gordon Knowles, 7 Squirrels Green, Great Bookham, Leatherhead, Surrey KT23 3LE 20372 458396.

#### November 4 1991 INDUSTRIAL PRESERVATION

a day course on the philosophy of preservation, at the Science Museum. Details available as for 12 June.

#### **November 4-8 1991** THIRD GLOBAL CONGRESS OF HERITAGE INTERPRETATION INTERNATIONAL

at Honolulu, Hawaii, on 'Interpretation, presentation and the travel industry'. Details from Gabe Cherem, Department of Geography and Geology, Eastern Michigan University, Ypsilanti, Michigan 48197, USA.

#### November 26 1991 THE ARCHAEOLOGY OF INDUSTRIAL BUILDINGS

a day course at Ironbridge. Details available as for 12 June.

#### August 16-21 1992 SOCIETY FOR THE HISTORY OF TECHNOLOGY ANNUAL CONFERENCE

at the Uppsala, Sweden. Details f win Uppsala Turist & Kongress, SHOT, St Persgatan 4, S-753 20 Uppsala, Sweden. Proposals for papers can be sent to Profess Hakon Win Andersen, Center for Technology and Socicly, University of Trondheim at Lade, N-7055 Dragvol, Norway.

#### September 8-9 1992 TWO HUNDRED YEARS OF GAS PRODUCTION IN BRITAIN

an international conference at the Museum of Science and Industry in Manchester. Others of papers should be submitted by 1 June this year. Details from Dr Alan Wilson, Museum of Science and Industry, Liverpool Road, Manchester M3 4JP.

#### September 11-13 1992 AIA ANNUAL CONFERENCE FOR 1992

at Cheltenham, with a post conference programme until 16 September. Details will be mailed to members in due course.

#### September 10-13 1993 AIA ANNUAL CONFERENCE FOR 1993

at Ambleside, Cumbria, with an additional programme 8-10 and 12-14 September. Details will be mailed to members in due course.

Information for the diary 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 up to the date of the event.

Regional Correspondents for the Bulletin Change of address:

Region 14: **SOUTH WEST ENGLAND** John Stengelhofen, Higher Pencobben, Gwithian, Hayle, Cornwall TR27 5EE

20209 713411

# AIABulletin

ISSN 0309-0051

Editor: Peter Wakelin

Designer: John Stengelhofen

Edited from the School of Humanities and Cultural Studies, Wolverhampton Polytechnic, Castle View, Dudley, West Midlands, DY1 3HR, and published by the Association for Industrial Archaeology. Contributions should be sent to the Editor at the above address. Local news and press releases should be sent to the appropriate AIA Regional Correspondents, names and addresses for whom are given regularly on this page. The editor may also be contacted on 0222 465511 extension 269 (a fax is available on this number), or 0222 513775.

Final copy dates currently are as follows:

- 30 June for August mailing
- 30 September for November mailing
- 30 December for February mailing
- 30 March for May 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 Industrie 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. 2095245 3522.

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