IA in Portugal • Ironbridge weekend • RCHME • station archaeology
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Developments in Portuguese Industrial Archaeology

José Manuel Lopes Cordeiro

This article presents a brief survey of the rise and development of industrial archaeology in Portugal since the late 1970s, the recording of its industrial heritage, the range of survivals, achievements in conservation, the work of museums and universities, and some of the growing volume of relevant literature. The author is Editor of Arqueologia Industrial, the national journal on the subject.

The term 'industrial archaeology' first appeared in print in Portuguese in 1896, by Francisco Sousa Viterbo, but it was not until the late 1970s that there was a marked surge of interest in the industrial heritage. In his pioneer article 'Portuguese industrial archaeology - the mills', published in the August-September issue of 1896 of O Archeologo Português (The Portuguese Archaeologist), the most important archaeological review of that epoch, presently published by the National Museum of Archaeology of Lisbon, Sousa Viterbo not only laid the foundations to a new study area but showed how research and interpretation of the physical remains of past manufacturing activities, and peoples' memories of their operation, could be of relevance to understanding the modern world.

A background account of Portuguese industrial history cannot avoid stressing that the country was a latecomer. In fact, throughout most of its history, Portugal was a country where activities connected with agriculture, fishing and trade were more relevant than industry. Only after World War II did Portugal develop systematically and its economy start becoming thus a modern one.

In spite of this backwardness Portugal soon witnessed traces of the modern industry. Even in the eighteenth century, the country tried to keep pace with industrialisation elsewhere in Europe. The Royal Silk Twisting Mill of Chacim, at Trás-os-Montes, established in 1778, introduced the round silk twisting mill technology into the Iberian Peninsula from Piedmont in Italy, remains of which still exist. Also at that date the first modern cotton spinning mills were set up. Among them the Royal Spinning Mill of Tomar, the first British-type factory, established in 1789 by the French-Portuguese merchants J. Ratton and T. Lecussan Verdier, which also still exists, having operated until quite recently. The effort to industrialise reached the colonies too and, in 1767, the Nova Oeiras Ironworks was founded in Angola. Its remains were preserved and classified as an historic monument by the colonial authorities and the Portuguese government as early as 28 May 1925.

The Napoleonic Invasions (1807-1811) and their economic implications, namely the possibility of setting up factories in Brazil and the ability of this Portuguese colony to establish free trade with foreign countries, were among the main causes which destroyed the precarious industrial structure in Portugal of that epoch. Constitutional struggles in 1820-34 and further political instability delayed industrial development. The steam engine only arrived in Portugal in 1819, although some had been operating in Brazil since 1811. Nevertheless, before and after that period, water was an important power source of the Portuguese industry, mainly in the inland areas. Between 1850 and 1914 the pace of industrial development was fairly steady, accelerating after 1870.

Portugal has a great variety of metallic ores, but they are generally of low quality and a lot of mines have been exhausted. Tin and tungsten are
found at Panasqueira and Fundão in the centre of the country. The Torre de Moncorvo area has important deposits of iron ore although they are not currently exploited. Iron and copper pyrites are found around São Domingos and Aljustrel, and there are uranium deposits at Urgurêia in the central area. Coal is little exploited, the main beds being situated in Cape Mondego, São Pedro da Cova and Pejão. Quarrying of limestone, marble, granite and china clay is still important. However, the total number of mines in operation has decreased rapidly, mainly because of an inability to compete in international markets. Preservation is now urgent as most disused mines have been left to fall into ruins or, even, completely destroyed.

The fishing industry exists along the whole coastline, and is one of Portugal’s traditional resources, contributing substantially to the feeding of the population as well as supplying the canning industry.

Many survivals of traditional manufacturing activities have disappeared in recent years, but some remain of the shipbuilding tradition can be seen at places like Vila do Conde. In the seventeenth and eighteenth centuries many decorative tiles were used in both religious and secular buildings, and subsequently railway stations were decorated with glazed tile panels with regional motifs.

Coastal shipping and inland navigation provided the basic means of transport before railways and the development of an adequate road system in the nineteenth century. In 1821, a regular steamship connection was established between Lisbon and Oporto. Stage coaches began to operate between the two cities only in 1855, along a macadamised road. Road building continued on a considerable scale throughout the second half of the century. The first railway was opened in 1856 and by 1932 a network of 2,144 miles (3,450 km) had been constructed. The main commercial ports are located on the estuaries of the principal rivers: Lisbon on the Tagus, Setúbal on the Sado, and Leixões near Oporto on the Leça, the last an artificial harbour of 1886-1892.

Interest in Portuguese industrial archaeology began in the late 1970s, included in a wider movement to protect the national cultural heritage which gave rise to many initiatives aiming at preservation demanded by better informed public opinion.

The main initiatives which developed for the industrial heritage took place in the 1980s. Among them the first great exhibition, organised in 1985 in Lisbon, in a former thermo-electric power plant (Central Tejo) which for decades had supplied the capital with electricity. This exhibition, called 'Industrial Archaeology, a world to know, a world to preserve', was organised by the Heritage Institute of the Ministry of Culture. In the following year the First National Meeting on the Industrial Heritage took place. Over 200 people participated, showing the interest in industrial archaeology. The strong impact on public opinion of both these events led to the setting up in 1989 of an exhibition on the archaeology of the fish canning industry at Matosinhos, near Oporto.

The 1990s brought a wider diversification and sounder foundation of some existing projects. On the other hand, the founding of new IA societies slackened, although there are symptoms at present of a change. An important feature concerns the media, mainly print, which has devoted some space to the industrial heritage since the late 1970s. As regards current projects they are chiefly connected with the foundation of industrial museums, of which there are few in the country. Industrial archaeology have been included in different subject curricula at the Coimbra and Minho universities. At the former, Professor Amado Mendes gave lectures and supervised seminars on industrial heritage. At the latter, a research programme on industrial archaeology was established and the university publishes the national journal on the subject.

Recent changes in the government policy for the cultural heritage, namely the foundation of an Institute of Archaeology, will probably bring about proposals to preserve the industrial heritage. In a period when the Portuguese economy is undergoing a deep change - many firms are being shut down, some of them over 100 years old - and when, chiefly in urban areas, building development pressures threaten old industrial plants, some of them no longer active, it is urgent to start the systematic survey of the industrial heritage. This demands sufficient funding, so that we will be able to safeguard industrial structures, record the most outstanding architectural features and, when advisable, propose the listing of sites or structures.

The concern of some councils with recording the industrial heritage has had positive aspects and some surveys have been started (such as in Oporto, Amadora and Vila Franca de Xira). These examples are, however, rare and surveys of mines about to stop production, and closed narrow gauge railways, should be started before it is too late. In fact, the current situation of the railway heritage is cause for worry because the regional narrow gauge network was recently closed and the fates of station buildings and equipment, including some of the small museums already existing, are unknown.

In Leixões harbour, just north of Oporto, two 50-tonne Titan steam cranes remain. They were built in 1888 by the French Compagnie Fives-Lille, and were used to lay the foundations of the harbour piers. There is also a similar 90-tonne crane, but operated by electricity, built in 1924 by the Wergust Sciedam Company.

Few plants and structures have been classified. Among the most important is the set of furnaces of former dyeworks of the Royal Cloth Factory of Covilhã, which was classified in 1982. They are now on display in the Beira Interior University Wool Museum. Lisbon has the largest set of classified sites, among them the Rossio Railway Station, the Vívora Lamego Ceramic Factory, the Bairro Grandela (one of the working-class dwellings built at the turn of the century with a façade having an unusual triangular pediment supported by six columns) and the Auto-Palace Garage. In Oporto, the most
outstanding classified structures are two nineteenth-century iron bridges. One, the Maria Pia railway bridge, by Eiffel and built in 1877, was classified as a National Monument in 1982 and as an International Historical Civil Engineering Landmark, by the American Society of Civil Engineers in 1990. Now disused, its conservation and potential re-use are being studied. At Seixal, Setúbal district, a remarkable set of ten tide mills on the Tagus estuary has been classified since 1984.

Some buildings and equipments still in use - the best preservation solution - may be mentioned. Among them is the iron-framed Santa Justa lift, built in 1902 at Lisbon, the only remaining vertical lift, in neo-Gothic style, and a work of the Portuguese engineer Raoul Mesnier du Ponsard, and the Rossio railway station, by the architect José Luís Monteiro, in neo-Manueline style, built in 1886-87.

Industrial landscapes is an area which has been neglected. Portugal, in spite of a non-intensive industrialisation, possesses interesting industrial landscapes, such as the valleys of the Ave and Nabão rivers, where water power played an important role in the past. In an urban environment, town landscapes such as at Covilhã or Guimarães are of interest. A unique urban landscape can be seen at the mainly nineteenth-century port wine cellars of Vila Nova de Gaia.

Excavations on industrial sites are the weaker side of research. Not only are they scarce but the few results have not yet been published. It is impossible therefore to assess their scientific contribution to understanding our industrial past.

Portugal has no strong tradition of adaptive re-use projects. Industrial buildings have been re-used mainly to set up museums. An exception is the Ceramic Factory Jerônimo Pereira Campos, founded in 1896 at Aveiro, which was renovated and is being re-used to house a professional school and cultural centre. As is so often the case, only the main architectural features have been preserved, namely facades and one chimney. The inside of the building was totally restructured, and several outhouses demolished to create surrounding space. In Oporto, the former tram car shed of 1915 was made into the Museum of the Tram Car, where old trams have been renovated to the smallest detail. At Matosinhos, where fish canning was important, the local county council intends to turn a former cannery into a museum of the canning industry.

The Oporto Museum of Science and Industry Trust, a project launched by the Oporto County Council and supported by the AIP (the Oporto-based Industrial Portuguese Association) will be located in the former Moagens Harmonia, a flour mill dating from 1890.

The following industrial museums, sponsored by county councils, deserve special mention: the Corroios tide mill of the Municipal Ecomuseum of Seixal is a successful conservation project; the Portimão Municipal Museum displays a valuable sample of canned fish industry artefacts; the Setúbal Work Museum has been very active, mainly its educational department; the Cork Museum Project, at Moita, re-using a former factory, is about to start.

The Beira Interior University Wool Museum, at Covilhã, has retained the dyeworks of the eighteenth-century Royal Wool Manufactury, with the aim of making it a museum. Other plans for museums deserving mention include the hydro-electric power plant of Vila Franca do Campo, on São Miguel island (Azores), the Museum of Portuguese Enterprise of Explosives, and the Whales’ Museum on Lajes do Pico (Azores).

The Portuguese Railway Company also possesses a network of small museums located in railway stations, chiefly in the northern and central areas, where old steam locomotives, carriages and other railway relics are displayed.

The Aptom (Portuguese Association of Company Museums) has among its members the Electricity Museum (in a former thermo-electric power plant) and the Manuel da Maia Water Museum (in a former water pumping station), both in Lisbon, the Concrete Museum at Maceira-Liz, and the Santos Barosa glass factory museum at Marinha Grande, both near Leiria.

Publications in the field of industrial archaeology have increased. Nevertheless, these are mainly articles published in various journals. Books and studies of a wider range are scarce. In fact, some of these books are more concerned with economic history than industrial archaeology. The national journal Arqueologia Industrial, published since 1987 by the Industrial Archaeology Programme of the Minho University, and now by the Oporto Science and Industry Museum, started new series in 1993 and 1996, having undergone a deep restructuring.

For further reading, articles more readily accessible to British readers include:

Industrial Collections and Museums in Crisis?

Glenys Crocker

The AIA Affiliated Societies' Working Weekend was held at Ironbridge on 3-5 April 1998. This year's theme was concerned with the current and future state of industrial collections and museums.

The weekend began on Friday evening with the usual informal gathering for dinner at the Meadows Inn. The first talk on Saturday morning was by Ron Fitzgerald, formerly of the Leeds Industrial Museum and now a consultant industrial archaeologist, on Museums and the Industrial Archaeology Legacy. He pointed out that the consensus of the 1970s, on the importance of conservation and preservation, had more recently come to be challenged and also that enthusiasm for technology among the staff of museums had declined as the preponderance of qualifications in the arts and humanities over those in science and technology had become more marked among them. The situation was particularly worrying in local authority museums which did not have the benefit of trustees. He proposed that the AIA and the Newcomen Society should jointly approach the Museums and Galleries Commission to recommend an enquiry into the state of industrial museums, and at the end of the weekend the meeting agreed to support this proposal.

Liz Frostick of Birmingham City Museums gave the second talk, on The Discovery Centre, one of the components of the city's Millennium Point project which is being developed with Millennium funding and is to manage Birmingham's industrial collection. Robert Copeland then talked about Cheddleton Flint Mill and his experience on behalf of a management trust of following, successfully, the rigorous procedures necessary for obtaining registered museum status. The museum is also one of the few small establishments which have obtained lottery funding. Its trust was formed in 1987 to preserve and conserve the mill, according to the priorities of the day, and has since broadened its scope to collect exhibits relating to the preparation of raw materials for the pottery industry.

There followed a session of members' contributions on case studies. Alan Crocker, who had become a director of the company managing the Waltham Abbey gunpowder mills project, outlined the structure of the organisation and the potential conflicts of interest. He stressed that a substantial grant from the lottery fund is for the development of an Interpretative Heritage Site, as distinct from a Museum, which means that it cannot be used for the collection and curation of objects. John Crompton reported new developments at the Museum of Scotland, whose new building is due to open in November. His comments on the principles of collecting were illustrated by examples which included the control desk of a nuclear power station and the first transistor. Ron Martin then gave an account of an unsuccessful application for lottery funding on behalf of the Brede waterworks near Hastings.

In the afternoon, David De Haan, Head of Collections at Ironbridge, conducted a behind-the-scenes visit to the library and museums at Coalbrookdale, to see prints from the Elton collection, the archive store, Museum of Iron store and the costume collection, which includes items of Quaker dress. On Saturday evening we had the traditional dinner at Blists Hill, after which Stuart Warburton brought the house down with an improbable multiple-choice quiz about a number of bizarre early twentieth-century patents. What were they for? First prize: Tony Yoward.

On Sunday morning Carol Whittaker, Collections Manager of Falkirk Museums, spoke on Managing Industrial Collections. She stressed that the value of collections or objects is in their power to inform and educate future generations and that displays should stimulate the public to ask questions rather than be satisfied with the information as presented. In discussion, a warning was given against the acceptance of loans, which can lead to administrative problems.

Don Storer spoke on Standards and Care of Industrial Collections, on which he had carried out a survey in 1989. He paid particular attention to the moving and care of large objects, with which he had been much involved and which he illustrated with slides.

The last major talk was by Victor Middleton, on New Vision II: The Future of Collections. He had produced a study for the Association of Independent Museums in 1990 and was currently working on a second one, to be published before the Association's conference in September. Meanwhile it will feed into a government study on strategy for museums in England. He noted that developments such as Sunday trading, the growth of one-stop retail-leisure complexes and the decreasing leisure and rising income of the working population are factors which pose a real threat to the future of museums. The modern, forward-looking, new enterprise culture is hostile to the concept of heritage and non-statutory obligations of local authorities tend to be squeezed. In Scotland, where there is a statutory obligation to provide museums, the minimum standard tends to be applied. The present number of museums is not sustainable. On a positive note he suggested that a way forward is in co-operation with the corporate sector, particularly in the context of 'regeneration' for which there is currently some political will. This is in fact already happening, for example at Ironbridge, Swindon and the Scottish Maritime Museum. It was suggested in discussion that it may be more productive to engage with new regional rather than national frameworks.

Jur Kingma concluded the morning's programme with a short member's contribution on recent developments in the Netherlands. The Association's President, Hilary Malaws, chaired the final discussion. Carol Whittaker and Stuart Warburton were thanked for drawing up the programme and Gordon Knowles for organising the meeting.

David de Haan describes the finer points of the Elton Collection

Behind the scenes in the Museum of Iron's reserve collection
RCHME - business as usual!

Keith Falconer

In the couple of years since the last feature in Industrial Archaeology News, the Royal Commission on the Historical Monuments of England can report on an impressive body of IA work, much of which has emanated from a close working relationship with English Heritage.

The Commission's internal prioritisation of recording work, heavily weighed to threat and conservation needs, has favoured the industrial heritage and thus, despite cutbacks in government funding and staff resources, our industrial archaeological output continues to rise. The amalgamation of the Archaeological Survey Division and the Architectural Survey Division into a single Survey Division has not affected the Industrial Archaeology area as it already straddled the divide between Divisions.

English Heritage have partly funded surveys of textile mills in various parts of the country. Those on the mills of NW Derbyshire and the Derwent Valley have been completed, and the results await dissemination, while considerable progress has been made with the much more ambitious survey of textile mills in the south and west of England. Covering over a thousand identified sites in the eight counties extending from Oxfordshire and Hampshire to Cornwall, this rapid survey provides a context for the more detailed work already undertaken on individual mills of the West of England woollen industry centred on Gloucestershire, Somerset and Wiltshire. Further surveys are planned for the areas of historic Lancashire not covered by the Commission's book on the mills of Greater Manchester. This programme of surveys satisfies a RCHME priority, first formally identified in 1990, to assemble a wide enough range of material to attempt a work of synthesis on one of the key industries of the Industrial Revolution - the development of the English Textile Mill.

Other surveys being undertaken in association with English Heritage cover warehouses in Liverpool and Manchester, a desk-based study of inter-war road transport buildings and a national survey of maltings. In this latter survey Commission staff are providing detailed case studies and field, and graphic, support to Amber Patrick's report. In association with Oxfordshire County Council, a rapid survey of Banbury's industrial heritage has been undertaken.

The Commission also provides detailed surveys of individual sites to inform statutory protection and conservation. Thus the Commission's detailed building recording of the Homewell Parchment Works in Hampshire led to the Listing of this unique site and, similarly, to the protection of the early timber-framed wharf warehouse at Lechlade and to the Grade II* Listing of Torr Vale Mill, the gem of the New Mills cotton mills (see IA News 105). The survey of the early part of Boulton & Watt's Soho Foundry site, which was to be cleared for redevelopment, proved for the first time the survival of a significant amount of late eighteenth century fabric. The undercroft passages of the air furnaces and boring mill retained their arrangement as shown in contemporary diagrams and the site has now been protected.

On the conservation front, surveys have ranged widely. They have included an assessment and historical record of Caphouse Colliery, to underpin the National Lottery funded project of restoration and development, the process recording of South Crofty - the last tin mine in Europe, the detailed measured survey of water driven workshops at Abbeydale, to inform repair work, and the comprehensive reports on Cromford Mill and North Mill Belper to document the case for World Heritage Site designation.

The project on the field archaeology of Furness Iron and related woodland industries is drawing to a close with the recording of the iron furnaces.
themselves. The archaeological survey work on Dartmoor and Exmoor which has covered numerous mining sites of all ages is also reaching completion and it is hoped that a publication on the archaeology of Exmoor will result. The Commission is about to commence an ambitious programme to record the industrial sites highlighted by English Heritage’s Monuments Protection Programme. This will comprise a series of projects dealing with individual industries and will greatly enhance the deposited records already created at Step 3 of the MPP.

A book on military explosives manufacturing sites, building on the detailed survey of Waltham Abbey gunpowder works, is due to be published in the autumn and will be a major contribution to our knowledge of not only gunpowder but later explosives production. A project on the buildings of the Cold War has also developed out of our work on the Defence of Britain and includes many sites of IA interest such as the Chicksands radio interception aerial site.

The recording of individual sites and landscapes continues and notable recent cases include the St Peters Street frontage of the Great Northern Railway Warehouse in Manchester, Gun Wharf at Portsmouth, with buildings ranging from late eighteenth century storehouses to post-war diving towers, Royal William Victualling Yard at Devonport, Morris’s first car factory in Cowley, the extractive landscape of Meldon on the fringe of Dartmoor, the manganese mine workings at Hartshill Hayes in Warwickshire and the Shaugh Bridge china clay works in Devon. The survey of Avonside Ironworks in Bristol has been published in BIAS Journal 30, while the record of Derby Railway Works has also been completed.

The redevelopment of the Swindon Railway Works site where the Commission has its Head Office, National Monuments Record Centre, continues apace, informed by continuing recording work by the Commission. The GWR Designer Outlet Village located in magnificent 1874 erecting shops sponsored a leaflet outlining the history of the site and recently celebrated over four million visitors in its first year and are looking to expand into the remaining early workshops. Work has now started on the new GWR Railway Museum in the 1865 R Shop while the fire-proof Pattern Store with its huge water tanks has been converted into a public house.

The Commission itself has opened an exhibition area and shop - The Gallery - as a window to its collections and as an outlet for its publications which include the recently acclaimed book on Farmsteads. Publications in the pipeline include, in association with English Heritage, the volume on military explosives manufacturing sites already mentioned and, in association with the Cornwall Archaeological Unit and English Heritage, a second volume on the archaeology of Bodmin Moor - this one dealing with the industrial landscape.

To make its survey and recording capabilities more widely known and available to the commercial market the Commission has produced a brochure pack on its Survey Services with separate inserts detailing its work on Aerial Survey, Archaeological Sites and Landscapes, Building Recording and Interpretation, Buildings in their

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**INDUSTRIAL ARCHAEOLOGY NEWS 106 7**
Edication
Re 'Education' in IA News 104, Spring 1998, page 15; whilst it is heartening to learn that the School of Archaeological Studies at Leicester has accepted Industrial Archaeology 'fully as part of the discipline of archaeology within a university context', one wonders whether Leicester really is the 'only university in Britain' to do so. At the University of Newcastle upon Tyne, for example, Industrial Archaeology has formed part of the undergraduate course within the Department of Archaeology since 1990. Students within that department can study and research (and have done so and are doing so) Industrial Archaeology as part of their second or third year of studies, as an 'assessed work' module, as a subject for their final-year dissertation, as part of a taught Master's degree (including their dissertation), and as PhD studies. 
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Cast-iron shooting butts
Further to the correspondence in IA News 105 concerning cast-iron shooting butts, I would like to add that similar plates are known from Bedfordshire and the Yorkshire Dales. In 1995, during scrub clearance on a rifle range in acombe at the foot of Dunstable Downs in Bedfordshire, eight plates were revealed fronting one of three earthworks buttts (TL 006207). These butts were constructed in 1902 but replaced earlier examples dating from c1859. Every plate measured 6 feet by 2 feet on a frame attached to the rear edges, whilst the six central ones bore a pattern of squares (each square 6 inches by 6 inches) and interlocking circles. Initially their quality suggested they might be re-used flooring, but enquiries at Ironbridge drew a blank.
However, a couple of months ago my volunteer assistant, Trevor Ball, was on a walking tour in the Yorkshire Dales and by chance came across exactly similar plates to those he had seen with me at Dunstable Downs. They lay near the junction of two footpaths beneath Attermire Scar near Settle (SD 838641). Clearly, these were purpose-made targets, having on the back of one 'T. Richards & Co, Bishopsgate, London; Wood Target 1860'. Enquiries of Robert White, Archaeological Conservation Officer for Yorkshire Dales National Park Authority, confirmed the presence of a rifle range and butts at Attermire from at least the late nineteenth century. Coincidentally, it was Robert White who, so years ago, first noted the rifle butts at Dunstable Downs for the Bedfordshire Historic Environment Record.

Checking of the London Directories by another former colleague, Alan Cox, now of the RCHME's Survey of London, revealed the Richards family to be ironmongers there in the 1810s and 1820s, becoming Richards, Wood & Co. in the 1830s, during which time they moved to Bishopsgate Street. By 1846 the firm was Thomas S. Richards & Co., becoming Richards & Co. by 1860 and described in the 1870s as iron merchants and iron target manufacturers.

I hope this adds something to the discussion on what were evidently purpose-made items.

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Watercress
I refer to David Eve's article 'Springhead Gardens and the watercress industry'. From both the summary and his last paragraph, it would appear that he, and therefore probably others, are unaware of an article published in the Southampton University IA Group Journal, No. 1, 1996, 15-21: 'Watercress growing in Hampshire: a forgotten industry?' by Steve Fletcher and Dave Goodwin.

In this article, we give a geographical background to the industry, a brief history of the industry in Hertfordshire and a comparative history of Hampshire watercress growing. We then go on to cover, for Hampshire, the layout and equipment of sites, the growing year, and transport. A bibliography is followed by a gazetteer locating and describing 30 sites, in the basins of the Itchen and the Test, and the valleys of the Meon, Wey and Loddon.

This article is by no means comprehensive in history, description or the gazetteer, but was intended as a stimulus to local industrial archaeologists to continue work in more detail. I believe David Eve would also find it stimulating in furthering his understanding of the Springhead and other Kent sites.

In addition to the above, I will admit to having a grateful of detailed information about the Hertfordshire watercress-growing industry which I have been able to research in more detail, with Mr Goodwin's assistance. I lack the luxury of leisure to write it up and publish it, but whilst I await this good fortune, I am happy to correspond (preferably by e-mail) with other interested researchers.

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Railway request
I am currently undertaking research on various aspects of the railways in the Dunedee and North East Fife areas, with particular reference to those which served the Dunedee Harbour Authority docks - both the North British and the Caledonian Railways had connections to these. In addition to the harbour area I am trying to find illustrations of NBR/LNER services and/or installations in the 1920s and 1930s in the same area.

A further project concerns the two branch lines from Wimbleden to Sutton and to West Croydon via Mitcham, both of which I knew while at school in the 1950s.

Any assistance which can be given will be greatly appreciated - including details of anyone or any organisation who might have information of relevance.

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Napier Power
The Napier Power Heritage Trust was formed by a group of retired Napier engineers, with the aim to research, record and preserve the once-neglected engineering history of our company, D. Napier & Son, one time of Acton in West London. In the few years we have been operating, we consider we have been remarkably successful in bringing together the disperse history of our famous company.

We are well familiar with the Napier engineering history of this century, dealing with motor cars and the various aero engines that the company designed and developed: the most famous of a long line of engines being the Lion, 'W' shaped engine, and the Sabre, sleeve valve engine of Typhoon and Tempest fame of World War Two.

Unfortunately, the same familiarity does not apply to the history of the last century, which is not well documented due to loss of company records related to reorganisational moves since leaving Acton in 1967.

As an example of our lack of information of that era, we recently received notification of a Napier rotary beam engine of 1859, discovered quite by chance by the Stationary Steam Engine Society in the University building in Madrid. It was claimed to be Spain's first steam engine, used for the Mint, although we think it more likely to have been supplied to the Spanish Arsenal in the 1860s.

We are most interested to know for what purpose the engine was used, and w would be grateful for any information on this, or other early Napier engines, known to readers.

Geoff McGarry
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Roy Barratt, Burton-on-Trent
R.S. Baxter, Nevada, U.S.A.
Mrs T. Britnell, Northampton
Arthur Brown, Northampton
M. Brown, Rhoose
Gerry Browner, Dublin, Ireland
Audrey Bunyan, Stanmore
Mr S. & Mrs J. Burman, Yeovil
S. Chaplin, London

J. Clark, Cambridge
I. Gentle, Edinburgh
C.P. Giles, York
Jonathan Gill, Oxford
D.R. Goddard, Witney
Dr W.L. Gordon, Birmingham
Jamie Hamilton, Edinburgh
Martin Hargreaves, Corby
Peter Jackson, Billingham
D. Jamieson, London
C. Lorigan, Reading
Dr John Lyons, Walsall
Stephen Miles, Taunton
G.L. Pallister, Newcastle upon Tyne
Dr Robert Roach, Keele
Neil Robertson, Sheffield
Dr Andrew Ronald, Skene
S. Rowson, Cardiff
Angela Simco, Bedford
Diana V.K. Smith, Kings Lynn
Miss J. Wardropper, Shrewsbury
Nicola Wray, York
Ann F. Yeates-Langley, Lincoln

NEW QUIZ TIME
Following the response generated by the Editor’s QUIZTIME in IA News 104, readers are invited to try this one.

Dr John B. Sayer of Worthing has sent this photograph of a mug, which is owned by a friend in Canada. The mug is said to be of Pinxton (Derbyshire) manufacture, and has been dated to four years either side of 1800. It appears to be decorated with a view of a mill which, because of the Pinxton origin, is likely to be in the Derby/ Pennine/Peak area. Well, does anyone recognise it?

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ADVERTISE IN IA NEWS
See page 4 for details

John A. Severn (1932-1998)

John Severn's sudden death on 3 June left Nottinghamshire's industrial archaeology the poorer. John was a founder member of the Nottinghamshire IA Society when it was established in 1976. He was elected to the committee as a technical officer. As an architect, his forte was building recording and he was soon helping other NIAS members learn the rudiments of recording and drawing. He wrote up his notes on building recording for the NIAS Journal as well as often providing drawings for the recording work undertaken by the society and producing his own articles. He became Vice-chairman in 1985-6 and then President in 1992. He was always active in the East Midlands IA conferences organised by NIAS.

John Severn had many interests including transport, in particular trams, model making, dovecotes, on which he produced several publications, and churches and chapels in Nottinghamshire and the East Midlands.

John was always ready to help whatever the problem. Most of his recording work was concentrated in Nottinghamshire and the surrounding areas. His contribution to the IA of those areas was great and he will be sorely missed.

Amber Patrick

John Knill (1913-1998)

Sir John Knill, Bt, who died on 15 April, was one of key figures in the early moves to restore the Kennet & Avon Canal. From 1948 until 1954 he owned a small canal carrying company based on the Grand Union Canal at Rugby, and his narrow boats were the last to trade commercially to Newbury on the Kennet & Avon - Columbia carried salt from Cheshire for Newbury laundry in 1950. He campaigned hard to prevent the canal being abandoned by Act of Parliament in 1955, and many years of piecemeal restoration followed until the whole length was officially re-opened in 1990. His life on the canals, John Knill's Navy - Five years on the Cut, was published posthumously in May.

OBITUARIES

INDUSTRIAL ARCHAEOLOGY NEWS 106
Welsh museum closure a ‘scandal’

Cardiff MP Rhodri Morgan has called the closure of the Welsh Industrial and Maritime Museum a ‘scandal’, according to The Western Mail, a newspaper which further labelled it an ‘act of vandalism’. News of the imminent closure of the acclaimed museum in Cardiff broke, quite unbelievably, at a social evening in the museum ostensibly marking its 21st birthday. The anniversary was marked by publication of a newsletter of the Associates of WIMM which, after setting out the background to the establishment of the museum, went on to point out that it was about to be closed to allow for redevelopment. None of the formal congratulatory speeches made any reference to the planned closure, but invites fortunately noticed the report in the newsletter and were able to put questions to the staff and Council members present. The President of the National Museums and Galleries of Wales attempted to explain that the secrecy and lack of information was due to commercial pressure for confidentiality. He said that the museum was being forced to leave, that it required more space anyway, and that it felt it had to accept Cardiff Bay Development Corporation’s offer for the site (reputedly £7.5m) in order to maximise resources for the future.

A letter expressing deep concern at the museum’s closure without any agreed plans or funding in place for its replacement has been sent on behalf of the AIA to the Secretary of State for Wales. Council are particularly concerned that large parts of the collections may be put in store, without public access, or offered to museums elsewhere, without a timetable for their reinstatement as a national collection with full public access. At the time of writing (end of June) a reply is still awaited but it is anticipated that the AIA will at least be included in the consultation exercise that the National Museums and Galleries of Wales have now begun, following the considerable media attention the closure has received within Wales.

There is more on this in the Wales Regional News (page 15).

Whither IA?

A special conference on the current state of practice in the field of industrial archaeology and on future directions for the discipline is being held at Lowell, Massachusetts, USA, on 12-14 November 1998. Jointly sponsored by the Society for Industrial Archeology, Lowell National Historic Park, and the Historic American Engineering Record, the conference will feature a series of commissioned presentations by some of the foremost practitioners of IA in the United States, Canada and Europe. Topics will include critical reflections on the past quarter-century of practice, public agencies and IA, theory and interpretation, education and new directions in IA.

Those attending will be encouraged to participate in special ‘break-out’ discussion groups to evaluate various issues stemming from the formal presentations. Publication of the papers and commentary from the ‘break-outs’ is anticipated after the conference. The conference promises to provoke serious discussion about the contributions of IA to scholarship and other disciplines and about future prospects for the field. The contact address for further information is given on the Diary page.

Station archaeology

The best industrial archaeology in London is around and to the north of the two great rival railway stations of King’s Cross and St Pancras. As readers of IA News may already know, due to the lack of private finance it is now uncertain that the intended rapid rail link from the Channel Tunnel at Folkestone will be completed all the way to St Pancras. A fast line might just be built as far as the outskirts of the capital or even to Stratford in east London. If Eurostar trains are not to be brought to St Pancras, the future not only of the station and its famous hotel but also of all the IA just to the north is very much in the balance. There is considerable land for redevelopment, say for offices, but its value is very much dependent on the completion of the rapid rail link from Europe.

Most of the money which has been available for the refurbishment of the St Pancras station hotel has been spent on renovating the outside. Inside, apart from essential repairs, not a great deal has been done other than the uncovering of small patches of the Victorian decoration on walls and ceilings. This exploration of the past by laboriously scraping off the more recent plain paint has revealed some remarkable work which must have been alarmingly expensive even in Sir George Gilbert Scott’s time.

Small patches of this richly coloured decoration against a pale plain background are indeed striking, but what would be the effect if a whole room were restored? When first opened, the St Pancras station hotel had its critics and there was quite a consensus that at least some of the decoration was garish and vulgar. One begins to have a little more sympathy for the ‘evil depoilers’ of the 1950s and 60s who painted over the then madly-out-of-fashion walls and ceilings in order to create a suitable environment for office work.

It takes about six hours’ painstaking work by a skilled conservator to uncover a rectangular sample, a few square inches in area, of the original decoration. What would be the cost of restoring a whole room, let alone all the hotel? While you are about it why not restore the rest of the Midland Railway and run period trains to match?

If the Channel Tunnel rail link is never completed to St Pancras, the Grade I listed hotel could become a problem building. Much of the interior decoration of the walls and ceilings was originally done using stencils. Would it be possible to revive this process to redecorate the hotel? Who would put up the money and to what purpose?

Sir George Gilbert Scott provided excellent accommodation for the directors of the Midland Railway and some of these rooms are still in quite a good state of decoration and well worth a visit. Here little expense was spared and, situated to the east of the hotel near the clock tower, the Board could look down (literally) on their competitors next door at King’s Cross. The rivalry between the Midland and Great Northern Railway Companies in the latter part of the nineteenth century is somewhat difficult to understand from just a London perspective, but if one takes into account railway development in the rest of Britain and especially that around the Erewash Valley near the Notts/Derbyshire border (the Great Northern built Benerley viaduct and Derby Friargate station around this time), things become clear. From sharing King’s Cross station from the mid 1850s the two companies became bitter enemies, the main issue being the coal trade which the Midland, with some success, tried to monopolise. Gilbert Scott had hoped that the Midland directors would hold their board meetings in his new accommodation at the St Pancras hotel but they never would move from Derby.

Robert Carr

Manchester’s baby

An exhibition, ‘The Birth of the Baby Manchester - the Modern Computer, 1948-1998’, is being held at The Manchester Museum, University of Manchester, from 16 June to 19 September. The digital revolution began at the university 50 years ago when Tom Kilburn and Freddie Williams successfully ran the first program on ‘The Baby’, the world’s first stored-program computer. The exhibition is a celebration of advances made in computer technology over the years since. It is an exhibition for all people interested in computers and their history. At the same time a new exhibition at The Museum of Science and Industry in Manchester, ‘Futures’, looks at the history as well as the future of leading edge technologies. Its launch on 18 June was linked to the Digital Summer 98, which aims to celebrate nationally and internationally the 50th anniversary of the birth of the computer and its significance. The Small Scale Experimental Machine, nicknamed ‘The Baby’ has been rebuilt and is just one of the sections of the exhibition.

For information on both exhibitions, contact The Manchester Museum, University of Manchester, Oxford Road, Manchester M13 9PL. 0161 275 2634, or The Museum of Science and Industry in Manchester, Liverpool Road, Manchester M3 4FP. 0161 832 2244.
Landmark in Plymouth

Delegates staying for the full programme at this year's annual conference in Devon will be visiting Devonport Dockyard and may be interested to learn of recent developments at Crownhill Fort, completed in 1987 and the largest and least altered of the great ring of 'Palmerston Follies' built around Plymouth and the Dockyard, a project of industrial proportions. Crownhill Fort was acquired by the Landmark Trust in 1987 and opened to the public in 1995. Self-catering accommodation is offered in the Officers' Quarters. Earlier this year, the world's only working Moncrieff Disappearing Gun was installed here. Weighing around 18 tons in total, the gun is a 7-inch Armstrong breech-loader.

The Landmark Trust, founded in 1965, rescues and restores buildings of historical or architectural importance, giving them a new life as holiday accommodation. There are now over 200 properties, many unusual. There are some industrial ones too. In Devon there is also the Old Lighthouse on Lundy Island, while across the Tamar in Cornwall is a converted engine house at Danescome Mine. Elsewhere is an Italianate railway station in Staffordshire, Edale Mill, Derbyshire, Tangy Mill, Kintyre, Lock Cottage on the Worcester & Birmingham Canal and an ornate Victorian water tower in Norfolk, while a property above the Ironbridge Gorge Museum shop in the High Street gives unique view across to the famous bridge. A superbly produced handbook (£9.50 incl p&p) is available from The Landmark Trust, Shottesbrooke, Maidenhead, Berkshire SL6 3SW.

2LO calling

In 1923 the BBC, less than a year old, leased rooms from the Institution of Electrical Engineers at Savoy Place. Under its dynamic director, John Reith, the BBC grew and rented as much space as the IEE could spare for its studios, offices and performers' rooms. They even hired rooms next door in Savoy Hill Mansions - today the IEE's Savoy Hill House, but then a residential building still sporting bomb damage from the Great War. The BBC called their rented home Savoy Hill, a name that became synonymous with a unique period in broadcasting history.

'2LO calling - the BBC at Savoy Place 1923-1932', the IEE's 1998 Archives Summer Exhibition, goes back to that era. From Marconi and the birth of broadcasting to John Reith locking the door for the last time in 1932 as the BBC left for Broadcasting House, the exhibition looks at what the BBC did here - its programmes, technology, the little-known television experiments and its relationship with its landlord. Visitors can see rare photographs of the BBC and a wide range of documents and objects. These include the original lease, in which the IEE asked the BBC not to make 'any noise, sound or smells' that would travel outside their rooms, some beautiful wireless sets of the period, a rare example of John Logie Baird's 'television' set, sketch plans by John Reith and the IEE's occasionally exasperated correspondence with its unique tenant. The exhibition is at Savoy Place, central London, from 5 August until 25 September 1998; entry is free. For further details, contact the Archives, 0171 344 8436.

Oldham textile plans

A £70,985 grant from the Heritage Lottery Fund will enable Oldham Archives Service to have a nationally important set of textile mill architectural plans conserved and catalogued. Additional funding will come from the National Manuscripts Conservation Trust and from Oldham Metropolitan Borough Council. The 4,000 drawings by the eminent Oldham architects Joseph Stott and his son George represent some 80 mills built between the 1870s and 1930s. No comparable accumulation is known to exist. While many plans uniquely reflect Oldham's heyday as the cotton capital of the world, some were made for mills much further afield, for example, in Glasgow and Germany.

Oldham's pre- eminent position in the textile industry is at last being well represented in the archive record. Business and workforce records have been completed already, so the new cataloguing will add the essential third element to the Oldham Textile Archive, providing a comprehensive and multi-disciplinary resource for wide-ranging study at many levels.

Paul Sillitoe

Honours

Congratulations to John Hume, an Honorary Vice-President of the AIA, who received an OBE in the New Year Honours for services to historic monuments. Formerly at the University of Strathclyde where he directed the Scottish IA Survey, he is now Chief Inspector of Historic Buildings with Scottish Heritage. Ken Hawley was given an MBE in the more recent Queen's Birthday Honours for services to industrial conservation. He has been involved at Wortley Top Forge for over 25 years. His other great achievement is the Hawley Collection of Sheffield-made cutlery and edge tools, now at the University of Sheffield.

IHBC in Wales

A Wales branch of the Institute of Historic Building Conservation was launched on 19 June at Tredegar House near Newport. Speakers established the specific characteristics of Welsh architecture, the unique challenges it represents and examined initiatives currently being made in its conservation.

Heritage Engineering

Consultants and contractors in the restoration of historic engineering including feasibility studies for Heritage Lottery Fund and ERDF funding. Recent projects have included restoration work on P.S. Waverley, a Victorian Underground Car, PS Maid of the Loch, a scheduled Bascule Bridge, various wind and watermill work, and a successful HLF/ERDF study for the Scottish Mining Museum.

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INDUSTRIAL ARCHAEOLOGY NEWS 106 11
Dorothea open day
An open day and reception was held at Lowfield Heath Windmill near Gatwick Airport on 26 June to celebrate the amalgamation of Ernest Hole & Sons, Millwrights of Sussex, and Dorothea Restorations Ltd. The company is now the biggest specialist restorer of historic machinery and metalwork in the UK, with a full-time staff of over 25.

Eighty conservation professionals and mill enthusiasts came from as far away as Ironbridge to view the mill's restoration, displays of Dorothea's past projects, and an exhibition of engineering "curiosities and failures" which included a dozen worn-out bronze bearings, a 'boxing-engine', and a bolt with both left and right-handed threads. Director Geoff Wallis appeals for any other unwanted historic engineering curiosities for the company's growing collection.

Lowfield Heath Windmill was saved from destruction by volunteers and moved to its present site near Gatwick Zoo in the 1980s (see IA News 98, page 15). Dorothea expects to complete reinstatement of the millwork to full working order by the end of August. After launching a new millwork brochure and a slide show of the company's extraordinarily varied work, the party gathered before the mill to watch the sails turn under wind power for the first time on the present site. The buck of the mill is immovable, but fortunately the wind blew from the correct direction!

Filling a dock
The dry dock at the former Aire & Calder Canal repair yard at Goole is to be infilled, after an unsuccessful attempt to have it listed. Our attention was drawn to this by Brian Slater, the Railway & Canal Historical Society's regional secretary for North East England.

The town of Goole grew up as a port for transferring cargoes from the canal, which was extended from Knottingley in 1826, to ships which came up the Ouse from the Humber. It was well known for the transfer of coal by hoists from 'Tom Pudding' container boats which worked in trains with a tug; a system developed in the 1860s by the canal's engineer William H. Batholomew.

The dry dock is thought to date from the 1850s or '60s and was used latterly to repair tugs. It was kept by British Waterways when the port was taken over by the British Transport Docks Board in 1962, and later by Associated British Ports. The last occupier was the contractor A.F. Budg, who brought in a boat too large for the dock - it remained there after the firm's demise and at last had to be partially craned out!

It is believed that Associated British Ports intend to demolish two adjoining workshops or warehouses and use the material to fill in the dock. Applications to have the buildings and dock listed have been turned down. The dock is between the canal and tidal Dutch River.

Sailing at last: the Lowfield Heath Windmill open day  Photo: Dorothea Restorations

Edwin's 67th
Oogen of Hampshire IA and the Southampton University IA Group, Dr Edwin Course has organised his 67th and final field tour 'Industrial Heritage in the Welsh Valleys', on 28-31 August 1998. Between 1965 and 1998, he has arranged 27 week-long tours and, with the 1998 tour, 40 weekends. During this time, trips have covered England and Wales, plus sorties into Scotland and Belgium. After such a record, he is deservedly looking forward to what will be his last tour weekend. In case there are still vacancies, he can be contacted at 18 Craven Road, Chandlers Ford, Eastleigh S053 2HD.

News from TICCH
At the very end of June, International Committee on the Conservation of the Industrial Heritage (TICCH) national representatives from Finland, Argentina, Russia and western Europe met in Barcelona. The proceedings were held at the Museu Nacional de la Ciencia y la Tecnica de Catalunya, in a restored woollen mill of 1907, and at the Museu de la Historia de Catalunya, housed in a dockside warehouse.

Last year's proposal for individual membership was discussed. From 1999, new annual subscriptions ($20 US, or £12.00 at today's exchange rate). Application forms will be circulated, and a web site set up.

Other ideas which were discussed included the exchange of information on industrial tourist trails, seminar on industrial heritage and education, prizes for the best reuse of industrial buildings, and the success of some European countries in gaining EU Raphael grants for co-

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Touchdown. The Avery weighbridge pillar arrives at the Black Country Museum's Racecourse Colliery after its journey from Westonzoyland  Photo: Stephen Howard
Short Notices

Piers of the North, by Tim Mickleburgh (author, 1998) 44pp, 16 ills, £2.00 ISBN 0 9518127 1 8.
A brief review of piers around the north coastline of Britain anticlockwise from Skernesg to Menai Bridge, including Scotland and its offshore islands, Northern Ireland, the Isle of Man and even the freshwater lakes of the Lake District. Obtainable for £2 inc. pp from the author, 33 Littlefield Lane, Grimsby DN3 2AZ.

Account of John Knill's experiences of commercial carrying on the waterways in the post-war period. Published posthumously (see Obituary in this issue), obtainable for £9.95 post paid from John Knill & Co, c/o David Jowett, 11 Upper Leazes, Stroud, Glos GL5 1LA.

Even a book like this has some IA content! Packed with information, it was launched in June at Three Mills Island (where the 1776 tidal mill is open) on Route 7, described as 'more than a tour of East London's industrial history' and includes Abbey Mills sewage station, the Royal Docks, sugar refineries and breweries. Other routes follow canals, such as the Lee Navigation and Grand Union. Enthusiasts will say there is no better way to explore away from the car.

Books Received

Industrial Archaeology Review has received the following books for review.

Among the rich archaeological heritage of Trafford are the Trafford Park industrial estate and the Manchester Ship Canal. These are included in this study of one of the most varied and interesting historic landscapes within the North West which has highlighted the borough's continuity with the development of the rest of the region and its unique features.

This volume examines the main types of buildings in Tameside, considering their historical context, their form and the factors which have led to particular designs. Evolutionary developments have occurred in many of these building types and the reasons for such changes are also examined.

Does archaeological investigation help us to understand industrial society? This book sets out a coherent methodology for the discipline which expands on and extends beyond the purely functional analysis of industrial landscapes, structures and artefacts to a broader consideration of their cultural meaning and value. Industrial Archaeology provides an indispensable and up-to-date guide for undergraduates and postgraduates in archaeology and heritage management, and is an essential handbook for those working in planning departments, and contract archaeologists.

An updated version of the 1967 book by the late Rowland G.M. Baker. The book attempts to describe the history of the main industrial work within the borough as well as related items of interest which may not be recorded elsewhere.

The sixth in a series of studies of the archaeology and history of the Tameside area. This volume chronicles research into the transition from an apparently quiet rural backwater into one of the most active zones in the Industrial Revolution. It analyses the first phase of the transition from a feudal to an industrial society.

This book presents the results of recording undertaken in recent years in the Borough of Stockport by archaeologists based at the University of Manchester. Much of this work was carried out prior to redevelopment.

Number four in a series of 12 volumes. Seventeen articles have been brought together to illustrate the history of dam technology from ancient to modern times. Technical issues that underlie differences in various dam designs represent important - at times even critical - components of these articles. Some of the articles help illuminate why various human societies have built dams and how social factors have influenced the process of dam design.

Local Society and other periodicals received

Abstracts will appear in Industrial Archaeology Review.
BIAGscope (Newsletter of Berkshire IA Group) 38, Spring 1998
British & Irish Archaeological Bibliography, Vol.1, Nos.1 & 2, April & October 1997
Context, No.57, March 1998
The National Trust Annual Archaeology Review, No.5, 1996
The Record (RCHME Newsletter), No.21, Spring 1998
PHEW Newsletter, No.77, March 1998
Scottish Industrial Heritage Society Bulletin No.4, June 1998
Somerset Industrial Archaeology Bulletin, No.77, April 1998
Suffolk Industrial Archaeology Society Newsletter, No.62, April 1998
Sussex Industrial Archaeology Society Newsletter, No.98, April 1998
Trevithick Trust Newsletter, Nos. 9-14, April 1996 - February 1998

Early Surveying at Levant Mine, Cornwall. Cover illustration for Industrial Archaeology - Principles and Practice. Photo: Royal Institution of Cornwall

INDUSTRIAL ARCHAEOLOGY NEWS 106 13
North West England
The good news in February 1997 that Stockport council had been successful in their bid for lottery funds for the Stockport Hatting Museum was soon followed by bad news for the industry itself, when Christy of Stockport, the last hatmakers, announced the closure of their Hillgate Works. The old company had been on the Hillgate site since 1820, and their work was described by Penny McKnight in IA News 105. Manchester Region Industrial Archaeology Society now see a detailed survey of the site as an urgent necessity.

Available 'free' is a nicely presented, well illustrated booklet In Brindley's Footsteps. This is a self-guided 14-mile walk taking in the sites and scenes of Salford, Trafford and Wigan's great industrial past. For those of us not fit enough to cope with a walk of this magnitude, it has been divided into nine stages, allowing you to cover the route in sections. The booklet has been written by Royston Futter, Project Coordinator Steam, Coal and Canal, which is an imaginative project that aims to celebrate the importance of the Bridgewater Canal, corridor to the UK's industrial heritage by creating the first Linear Industrial Park. All enquiries should be made to Royston Futter, 1a Chapel Place, Daveyhulme, Urmston, Manchester M41 7LE. Please send a SAE for a copy of the booklet.

The work of the Wet Earth Colliery Group, last mentioned in this column in 1994 (IA News 89), continues. The group's original aim was to trace James Brindley's tailrace at Clifton, near Manchester. Six years after tracing the route, the group are still clearing out silt and colliery waste. Visitors should now be able to follow the water course from the wheelchamber back to the River Irwell. According to Alan Davies, one of the original explorers, the most striking aspect of the tailrace has been its tortuous route from the wheelchamber, which is very surprising if it is the work of the genius hydraulic engineer. This very interesting site is well worth a visit. The Wet Earth Colliery Exploration Group can be contacted via Alan Davies at the Lancashire Mining Museum, 0161736 1832. The group meets every Saturday at Clifton Country Park.

Garston was originally an agricultural and fishing village, upstream of the Port of Liverpool, which became a small port and manufacturing town later annexed to Liverpool. As a result of the St Helens Canal & Railway Company building a dock and railway system, for the export of domestic coal to Ireland, the area became a magnet for a range of industries including copper works, shipbuilding, tanney, Wilsons bobbin works (the largest in the world), Francis Morton Iron Works, exporting metal buildings across the world and supplying the iron work for the Liverpool Overhead Railway. Sugar works, bottle works, metal and chemical industries could all be found in Garston, which also became the major import centre for the banana trade. Current economic development is set to erase many of the last remnants of this once proud industrial scene.

On the River Mersey, lie the still surviving Garston Docks, and the old Liverpool Speke Airport. Much of the former dock land, which once accommodated 93 miles of railway sidings and storage, is no longer required and the former Northern Airfield has been vacated since Speke Airport moved to the new runway site further upstream. These two considerable areas of vacant land, together with several other discontinued industrial sites have led to the formation of Speke & Garston Partnership and the Speke & Garston Development Company, to develop vacant land for industrial and commercial use. The effect of all this activity, in IA terms, is that much has disappeared and much more will disappear and drastically change. The Merseyside Industrial History Society and the Garston & District Historical Society have been working for many years to record endangered features, and this activity has now been stepped up as much as possible, within resources of time, energy and finance. Hopefully, the listed airport building will be preserved as a hotel or for other uses. The more recently abandoned Bryant & May matchworks is being adapted to serve a variety of industrial and commercial purposes. The Docks are holding their own, and the one surviving industry, the Garston Tannery, struggles on.

A lottery bid submitted last year, for the construction of a new glass museum and visitor centre in St Helens, celebrating the contribution made by Pilkington Glass, established 1826, to the growth of the town, has now been successful. The centre will be on the north bank of the canal, incorporating the site of the old Cone House and linked to it by a new bridge.

The Anderton Boat Lift Trust has submitted plans for a new Visitor Centre to Vale Borough Council, and also awaits a decision on its application for Heritage Lottery Funding to restore the lift. It is hoped the new centre will generate revenue towards the ongoing maintenance cost of the lift.

A River Weaver Navigation Society is being formed by members of IWA's Chester District Branch. The Society's object is to preserve and improve the Weaver for navigation between Winsford and the Manchester Ship Canal. Details from the Chairman Ron Evans, 3 Beech View Road, Kinsley, Warrington. ☏ 01925 788763.

Edwina Alcock

Northern England
Interest in maritime archaeology was given a great boost this year by the film 'Titanic.' This tragic vessel had a sister ship, the Olympic, launched in 1910. After 22 years of service, crossing the Atlantic 500 times, she was taken to Jarrow on the south bank of the Tyne in 1935 for breaking-up. A feature in The Guardian (29 January 1998) drew attention to a house in Southport, Lancashire, where the walls of its hall, dining room and sitting room were lined with panelling from the Olympic. These had been bought by one Mae Bamber, a former mayor of Southport, and were installed in her home by a team of 12 workmen who took over a year to complete the job.

There are even bigger remains of the Olympic to be found in Northumberland. In Alnwick, seat of the Dukes of Northumberland, there is a fine coaching inn, the White Swan. It is a major venue for social events and there are few better public rooms than the Olympic, with its splendid paneling and dance floor which came form the liner. Your correspondent has played his clarinet in bands there.

In Haltwhistle, West Northumberland, other remains are found in a completely different setting, the paint factory owned by Akzo Nobel, but still known to many older locals as the Hadrian Paint works. John Smith founded a furnish works in Haltwhistle in 1850. It was a successful enterprise and by the end of the century was making a range of products, including high quality enamel. In 1921 Smith merged with a Newcastle firm, Hayle Robson and Barnett & Co. Ltd. (HRB), makers of dry colours and paints; for a while the firm prospered. However, by 1929 the economic climate had turned harsh, and the closure of the Haltwhistle works was proposed. The Smith family decided to break with HRB and to set up a new factory in Haltwhistle, a very brave decision in a town where unemployment stood at 43%. The Smiths invited T.T. Walton, sales director of HRB to join them. And so the firm of Smith and Walton, and eventually the Hadrian Paint Works came into being.

The construction of the factory is a tale of ingenuity and vigour. Land was bought from Haltwhistle Rural District Council at a cost of £66 per acre. The factory was put up entirely by employees of the old furnish works and unemployed coal miners. The structural steel was bought as bankrupt stock from Spencers of Newburn, the firm which in 1904 had made plates for the SS Mauretania. The roof was bought from the North East Exhibition on the Town Moor in Newcastle, where the Turbinia had

Speke Airport

Photo: Speke & Garston Development Co.
been one of the star attractions. The offices, works canteen and toilets were bought at the auction of the remains of the Olympic. Your correspondent recalls with much pleasure being shown, in 1965, the sale catalogue by Mr Douglas Smith, great grandson of John Smith, founder of the varnish works. The first sod was cut on Boxing Day 1930, and by June 1931 the first varnish was produced. The firm survived the Depression. During the Second World War, under State direction, it produced camouflage paints. Post-war, it engaged in a number of mergers, especially with foreign firms in order to promote exports. In 1961 it was taken over by Wallpaper Manufacturers Ltd, which group in its turn was taken over by Reed Paper Industries in 1965. Currently it is part of the Akzo Nobel organisation. The factory, a credit to the commitment of the Smith family to the people and town of Haltwhistle, can be viewed in total from the old viaduct over the South Tyne, built in 1852 to take a branch from the Newcastle & Carlisle Railway to Alston and the lead mines.

One of the major works of engineering in the lead-mining area of Alston Moor was the Wensfell Level. It ran for 5 miles from Alston southwards to Nenthead and was planned by the Commissioners of Greenwick Hospital to explore and drain the orefield. Work was begun in 1776 under John Smeaton's supervision, and continued for 50 years. Plans were recently unveiled in Alston to re-open part of the level and to re-introduce boat trips along it. Once again, hopeful eyes are raised towards the National Lottery and to Brussels for funds.

The glass industry of the North East almost disappeared in 1997. It was saved by the combined efforts of the Wearside Training and Enterprise Council and the University of Sunderland. They provided a home for the handful of glassmakers from the firm of Hartley Wood, which closed in the autumn of that year. The glassmaking industry on Wearside is very old, going back to the seventh century and cited by that famous North East writer, Saint Bede. In the 1820s, the North East accounted for two-thirds of English glass production, and Sunderland at one time employed over 1,000 glass blowers.

The firm of Hartley Wood (visited during the AIA's 1997 conference) was one of the region's leaders. In 1847, it pioneered a cheap process for rolling glass for use in railway stations, market halls and greenhouses. In more recent years its reputation was based on high-quality stained glass - the restored Rose Window at York Minster is a fine example. That this kind of product will continue to be made, as part of the University of Sunderland's National Glass Centre, is gratifying. That this handful of craftsmen is all that is left of a once-great regional industry, is sad.

Fred Brook

Wales
The event which has recently caught the headlines in Wales has been the closure of the Welsh Industrial & Maritime Museum (WIMM) in Cardiff. Anyone who might have visited the museum of the last few years will have noticed that things have been getting more than a little run down, in ever more stark contrast to the huge levels of investment being ploughed into the area around the museum within the Cardiff Bay Development.

This period of a lack of investment in the museum has coincided with various, and ever less spectacular, attempts by the National Museums and Galleries of Wales to promote a new facility within the bay development. This has variously involved an Inax movie theatre, an underwater museum to study the local marine life, and a centre to interpret the undoubted former significance of Cardiff Docks itself. Despite repeated attempts, which are still ongoing, none of these schemes has attracted enough funding to go ahead, and meanwhile the old WIMM has been in terminal decline.

This decline culminated in its closure at the end of May. The steam engines are to be removed, the building torn down and the site redeveloped for shops. Its collections, which are of significant archaeological and historical value, are to be housed in a disbursed factory unit near Cardiff and the National Museum is promoting the idea of a new 'Gateway' museum on another site in Cardiff Bay, as an introduction to Wales as the 'World's first industrial nation'.

It is hard not to be critical of the National Museum regarding this saga, particularly concerning the lack of investment in the museum over the years. The building was originally constructed around a number of large engines, which once a week or so were steamed. Although additions were planned, their failure to materialise left a facility largely dedicated to steam engines. As such this might have been fine in itself, however, for a National Museum dedicated to all the various aspects of Welsh Industry, the building's almost sole concentration on large permanent static displays removed both the space and the flexibility, which are essential for such a museum.

Having now closed the museum and sold the site, the National Museum has embarked on a consultation exercise regarding its future plans for its industrial collections and for its proposed 'Gateway' museum. Amongst other changes signalled in the document is a shift in collecting policy to favour twentieth and twenty-first-century items, the advocacy of a central Collections Centre and an aspiration to 'show industry in its most natural context'. Many of the proposals are to be welcomed and will go some way to providing the people of Wales with appropriate facilities. Let us hope that this time they are successful in their realisation.

Stephen Grenter

REGIONAL NEWS

Regional News

Please support your Regional Correspondent by sending relevant material which may be of interest to our readers.

Region 1: SCOTLAND
Dr Miles Oglespero, Royal Commission on the Ancient and Historic Monuments of Scotland, John Sinclair House, 16 Bernard Terrace, Edinburgh EH8 9NX

Region 2: IRELAND
Michael Coulter, Department of Environment, Historic Monuments and Buildings, 5-33 Hill Street, Belfast 1

Region 3: NORTHERN ENGLAND
Cumbria, Northumberland, Tyne and Wear, Durham and Cumbland
Fred Brook, Hartland, Redburn, Hexham, Northumberland NE47 7EA

Region 4: YORKSHIRE AND HUMBERSIDE
North, South and West Yorkshire, and Humberside
Derek Bayliss, 30 Muskoka Avenue, Bents Green, Sheffield S11 7RL

Region 5: NORTH WEST ENGLAND
Lancashire, Merseyside, Greater Manchester and Cheshire
Mrs Edwina Alcock, 5 Friars Walk, Formby, Merseyside L37 4EU

Region 6: WALES
Stephen Grenter, 16 Fordor Trem-y-Foel, Parc Bryn Coch, Mold, Clwyd CH7 1NG

Region 7: WEST MIDLANDS
Shropshire, Staffordshire, West Midlands, Warwickshire, Hereford and Worcester
John Powell, Ironbridge Gorge Museum Trust, The Wharfage, Ironbridge, Telford, Shropshire TF8 7AW

Region 8: EAST MIDLANDS
Derbyshire, Nottinghamshire, Lincolnshire, Leicestershire and Northamptonshire
David Lyne, 10 Sonerville Road, Leicester LE3 2ET

Region 9: EAST ANGLIA
Cambridgeshire, Norfolk, Suffolk and Essex
David Alderton, 48 Quay Street, Halesworth, Suffolk IP19 8EY

Region 10: GREATER LONDON
Dr R.J.M. Carr, 127 Queen's Drive, London NW 4 2BB

Region 11: HOME COUNTIES
Oxfordshire, Berkshire, Buckinghamshire and Hertfordshire
Phil Morris, 71 Van Diemans Road, Farnham, Suney GU10 8LS

Region 12: SOUTH EAST ENGLAND
Hampshire and Isle of Wight, Surrey, Sussex and Kent
Chris Shepheard, Rose Cottage, 22 Ridgeway Hill Road, Farnham, Surrey GU9 8LS

Region 13: WEST OF ENGLAND
Somerset, Avon, Gloucestershire, Wiltshire and Dorset
Mike Bone, Sunnyside, Avon Close, Keynham, Bristol BS18 1LQ

Region 14: SOUTH WEST ENGLAND
Devon and Cornwall VACANT

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23-26 August 1998
STEAM AND WATER IN THE WEST COUNTRY
at Dillington House, Ilminster, course with visits and lectures on canals, drainage, pumping, nuclear power and railways, mainly in Somerset. For details, contact Denise Borer, Dillington House, Ilminster, Somerset TA19 9DT. ☎ 01460 52427.

2-3 September 1998
CORNWALL WITH THE AIA
at Camborne School of Mines, an opportunity to spend two extra days even further west before the AIA Conference. For details, send SAE to Paul Saultor, 10 Coach Lane, Redruth, Cornwall TR15 2TP.

4-11 September 1998
AIA ANNUAL CONFERENCE 1998
at Seale Hayne Agricultural College, near Newton Abbot, Devon. Friday seminar and weekend conference followed by programme of field visits and evening lectures. Booking forms and information from David Alderton, 48 Quay Street, Halesworth, Suffolk IP19 8EY.

8-10 September 1998
TICCIH II LATIN AMERICAN CONFERENCE
in Havana, Cuba, on rescue, preservation and re-use of the industrial heritage. Registration: Consejo Nacional de Patrimonio de Cuba, Calle 4, No.8-10, El Vedado, Ciudad de La Habana, Cuba. ☎ 53-7-341930, Fax 53-7-662106.

10-13 September 1998
INTERNATIONAL EARLY RAILWAYS CONFERENCE
at St John's College, Durham. Sponsored by Beamish Museum, The Newcomen Society, The Locomotion Trust and the Institute of railway Studies. Enquiries to NEEH (Railway Conference), Department of History, 43 North Bailey, Durham, DH1 3EX. ☎ 0191 374 2013, e-mail: S.F.Ketelaar@durham.ac.uk

11-13 September 1998
CULTURAL HERITAGE OF THE INDUSTRIAL PERIOD
at Stockholm and Norrköping, Sweden, international seminar on the cultural heritage of the industrial period. For information, contact Inger Jonsson, Head of Research Department, Museum of Work, Laxholmen, S-602 21 Norrköping, Sweden. ☎ +46 11 189800, Fax +4611 182290 e-mail: inger.jonsson@ekhist.uu.se

3 October 1998
COMMERCIAL VEHICLE HISTORY DAY SCHOOL
at the Museum of Science and Industry in Manchester, on the history and development of commercial road transport in Britain. Information from Bernard Champness, The Museum of Science and Industry in Manchester, Liverpool Road, Castlefield, Manchester M3 4FP.

10 October 1998
SECOND WATERWAYS CONFERENCE
at Birmingham Central Library, to build on last year's successful conference in Manchester. Details from Tony Conder, National Waterways Museum, Llanthony Warehouse, Gloucester Docks, Gloucester GL1 2EH. ☎ 01452 318054.

17 October 1998
EMIAC 56 HERE FOR THE BEER
at the Bass Museum, Burton upon Trent, East Midlands IA Conference with lectures on brewing in Burton, its Victorian heritage and the role of railways in beer distribution, and field visits. Details from David Fletcher, 141 Ashby Road, Burton upon Trent, Staffordshire DE15 0LQ.

22-24 October 1998
BRITISH SHIPBUILDING CONFERENCE
in Clydeside, with two days of visits followed by conference papers, hosted by the Newcomen Society. Details from the Newcomen Society, The Science Museum, London SW7 2OD.

24 October 1998
NORTH WEST IA CONFERENCE
at Merseyside Maritime Museum, the 22nd NWIAC, hosted by Merseyside Industrial History Society. Details from Kevin Wilde, 82 Bishopsgate Street, Liverpool L15 1EW. ☎ 0151 733 1869.

12-14 November 1998
WHITHER INDUSTRIAL ARCHAEOLOGY
at Lowell National Historic Park, Massachusetts, on the current state and future directions for IA. For information, contact Gray Fitzsimons, Park Historian, Lowell National Historic Park, 67 Kirk Street, Lowell, MA, 01852-1029, USA. ☎ 978-275-1724, Fax 978-275-1762 e-mail: gray_fitzsimons@nps.gov.

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

INDUSTRIAL ARCHAEOLOGY NEWS
(formally AIA Bulletin ISSN 0309-0051) ISSN 1354-1455
Editor: Dr Peter Stanier
Published by the Association for Industrial Archaeology. Contributions should be sent for the Editor, Dr Peter Stanier, At Beach Lane, Shaftesbury, Dorset SP7 8LF. News and press releases may be sent to the Editor or the appropriate AIA Regional Correspondents. The Editor may be telephoned on 01747 854707.

Final copy dates are as follows:
30 March for May mailing
30 June for August mailing
30 September for November mailing
30 December for February mailing

The AIA was established in 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, conservation and publication. It aims to assist and support regional and specialist survey groups and bodies involved in the preservation of industrial monuments, to represent the interests of Industrial Archaeology at national level, to hold conferences and seminars and to publish the results of research. The AIA publishes an annual Review and quarterly News bulletin. Further details may be obtained from the Liaison Officer, AIA Office, School of Archaeological Studies, University of Leicester, Leicester LE1 7RH. ☎ 0116 252 5337 Fax: 0116 252 5005.

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