

INDUSTRIAL ARCHAEOLOGY NEWS

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THE BULLETIN OF THE ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

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Ironbridge weekend • underground quarry • Hordle coal yard • SS Robin
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INDUSTRIAL ARCHAEOLOGY NEWS 126 Autumn 2003

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COVER PICTURE

Daniel's Mill is a particularly attractive industrial site near Bridgnorth in Shropshire. It was visited on the occasion of the AIA Ironbridge Weekend on 12 April 2003 (see this page for report)

Photo: Peter Stanier

Ironbridge Weekend 2003: Power in corn and textile mills

The annual AIA Affiliated Societies Weekend, held at the Ironbridge Institute, Coalbrookdale, over 12-13 April was one of the best attended for many years and the theme of 'Power in Corn and Textile Mills' proved a popular one indeed.

Ray Riley

Beginning the proceedings appropriately with an analysis of waterwheels, Jeff Hawksley outlined the various methods that have been employed to maximise the amount of energy from the water available. Sluices were used to increase the speed of flow of slow running streams, but undershot wheels suffered from the dissipation of energy caused by the collision of water with the blades, known as shock loss; their efficiency was only 30-33%. Wheels using the gravity principle were by contrast 60-65% efficient. Low breastshot wheels were 40% efficient and high breast or pitchback wheels were an improvement on this. Jeff illustrated the importance of bucket shape in efforts to retain water for the longest possible time, and commented on factors controlling wheel speed: flow, head, drag from the stones and the governor.

Water turbines, for which an efficiency of 70-80% is claimed, may have been especially important in coal-short countries like France with abundant water supplies, but they were nevertheless much used in Britain after the 1880s, and in the 1920s for the generation of electric power. Alan Crocker has made a special study of turbines, and from catalogues has found that there was an almost bewildering array on

the market, produced by such makers as Armfield, Gilkes, Green & Carter, Howes & Ewell and Macadam Bros. in Belfast. He discussed the principles of the various types of turbine, and noted that between 1869 and 1950 there were 117 in operation in Surrey, of which 30 were in mills and another 30 in waterworks. Alan suggested that similar comprehensive studies might be undertaken for other counties.

Switching from general principles to restoration practicalities, and from water to wind power, John Boucher began by arguing that the best method of conserving windmills is to keep them in operation, the minimisation of maintenance costs being a vital consideration. While retaining the original fabric as far as possible, rotten wood has to be replaced, steel is frequently a replacement for iron, and present day health and safety requirements such as fire escapes have to be built in, as does electricity for evening visits. The use of modern equipment unavailable to the original builders, such as power tools and cherry pickers, facilitate the lifting of sails and indeed caps, at the same time allowing a new cap to be fabricated on the ground. Inevitably money is an ever-present issue.

In the final talk on Saturday morning, Mike Williams outlined the features of the steam power system in textile mills: engine house, engine, boiler house, chimney and power transmission, whether by shaft or rope drive. Having done that he reported on an investigation into steam power in south west England, where some 92 sites were discovered. In contrast to Manchester, where demolition is the usual fate, in



Ironbridge Weekend delegates inspecting the large waterwheel at Daniel's Mill

Photo: Peter Stanier

the South West re-use is common. Furthermore, many sites showed evidence of steam power having been added to the original water power structures.

After lunch a visit was made to Daniel's (corn) Mill in Bridgnorth, where flour is ground by courtesy of a 38-ft diameter waterwheel. Half the group was conducted round the mill by a guide whose idiosyncratic delivery was pitched at Women's Institute level, despite the many trenchant questions put to him. For some, the highlight was a Severn Valley train puffing along the viaduct behind the mill; the organisers had to admit that this was an unscheduled add-on. Subsequently the derelict Benthall (corn) Mill adjacent to the Iron Bridge itself in Ironbridge was inspected. Jonathan Briggs produced some historic photographs which gave rise to lively discussion about what was now to be seen. Further tests of the imagination were made at the after-dinner quiz, where bizarrely enough the right answer to many of the questions was not 'yes' or 'no', but 'nonsense'. Chris Irwin was the winner.

The Sunday morning session was kicked off by Alan Stoyel, who has undertaken a thorough survey of textile mills in south west England. Reliance was placed on water power for much longer than in Yorkshire, for example, and indeed a water-powered mill was actually built as late as 1890, while water-powered machine shops were by no means rare. Yet few turbines were installed. A small number of fulling mills has survived – the *louvres* on one suggesting that cloth had been dried within the mill. Not only were mixed use mills present, but also some mills had provision for hand processing, scotching the notion that hand looms belong exclusively to the domestic phase of the industry.

It may not have been a common event, but certainly from time to time post mills were shifted from one site to another in the eighteenth and early nineteenth centuries. Peter James described the trials and tribulations of moving Lowfield Heath post mill, near Gatwick airport, some three miles to another site much more recently, in 1987. As John Boucher had earlier demonstrated, modern technology facilitated dismantling, transfer and rebuilding, and similarly as much as possible of the old fabric was retained. Purists may object, but without such strategy a working mill would be an impossibility, while in any case repairs are constantly carried out during the life of any building.

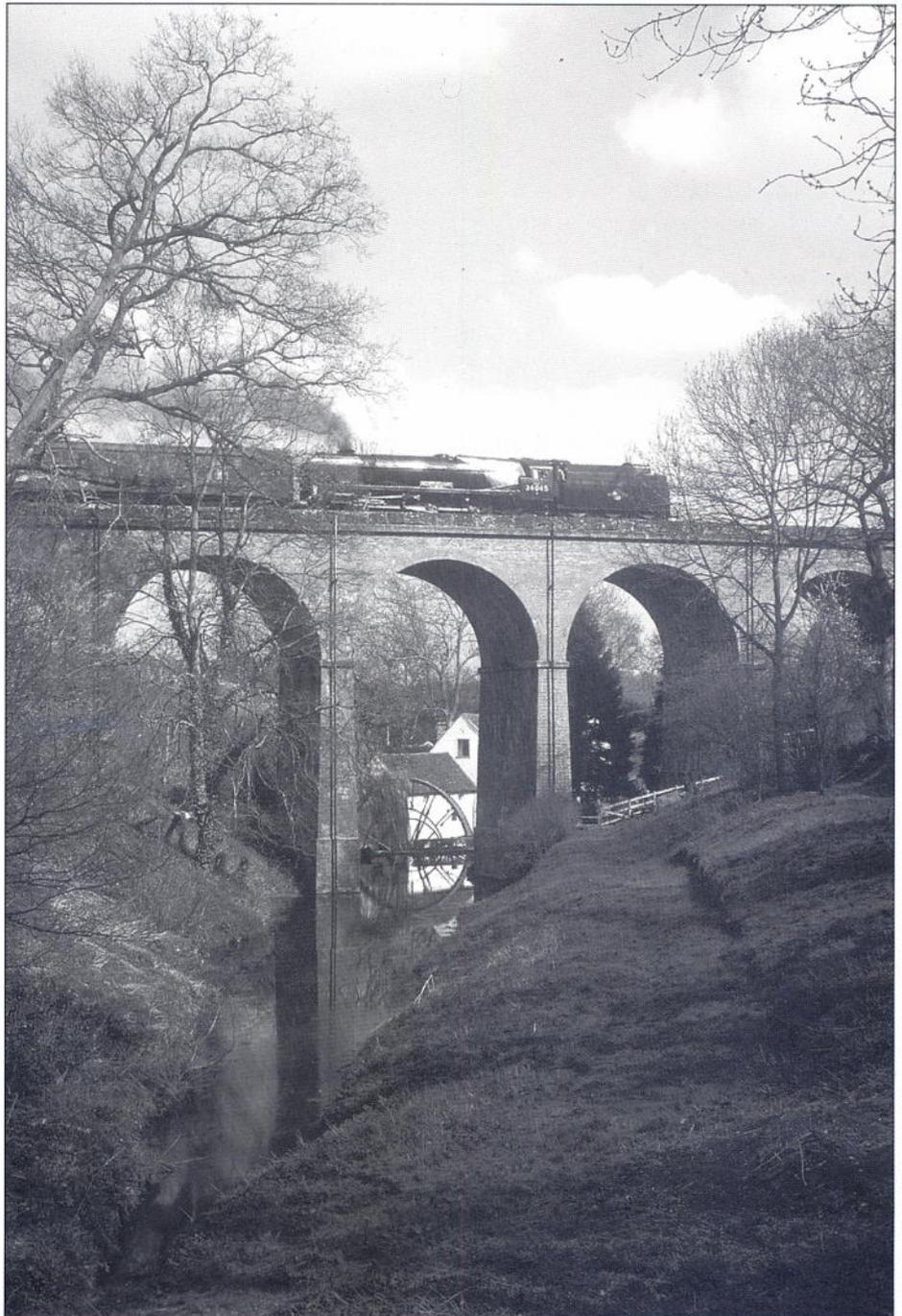
In the final presentation Jeremy Milnn described in considerable detail the evolution of power provision at Quarry Bank Mill, at Styal in Cheshire. His research made abundantly clear that as the mill grew in size and as new technology made its appearance, so there was constant modification to power supply. Since the mill was built in 1784, it is hardly surprising that the tracing of change has been very much a piece of detective work. Thus waterwheels were added in 1801 and 1807, an iron suspension wheel was in place by 1820, in 1824 a Boulton & Watt steam engine was installed, a relatively small horizontal engine came to power the mechanics' shop, and towards the

end of the century a large turbine was put in, working until 1959. One wonders about the hours involved in research were the exercise undertaken for other large mills in the country.

Rounding off the weekend, there were three members' contributions. Tony Bonson reported on Park (corn) Mill at Congleton, Cheshire, a Grade II* listed building, where not only the conversion plans of 1833 signed by William Fairbairn have survived, but also much of the machinery featuring in the drawings. The mill is thus an important testimony to the work of this celebrated engineer. Tony Yoward treated the audience to an account of his early involvement in IA, and then described the corn mill archive which he, together with SPAB, have created. Some 20 substantial donations, including those

from Ken Major and Alan Stoyel, have been received, and it is planned to proceed on a county basis. Furthermore, some 30,000 millers and millwrights are included in the archive. It is anticipated that the archive will be on-line in August 2003. Derek Brumhead spoke about the development of power at the 1788 Torr Vale (textile) Mill at New Mills near Manchester. It is Grade II listed, but lacks machinery; its future is doubtful. Derek led a visit to this mill at the Manchester AIA conference in 2000, and for those present the slides shown had additional relevance.

The conference attracted 51 people, suggesting the popularity of themes focussing on particular industries. However, corn and textile mills may be a hard act to follow.



A steam train of the Severn Valley Railway passes over the viaduct that overshadows Daniels Mill

Photo: Peter Stanier

Reopening an underground building-stone quarry at Gatton, Surrey

At the writer's suggestion a small underground stone quarry at Tower Wood, Gatton, was reopened by members of the Wealden Cave and Mine Society (WCMS) in August 2000. The quarry was last entered in the 1970s, so the location, layout and depth of the underground galleries were known. The primary reason, part-funded by Historic Royal Palaces (HRP) was to secure access to record and sample the building-stone beds in detail for scientific analysis. Gatton's stone was a variant of Reigate Stone, used extensively for fine ashlar and carved freestone in most important medieval buildings in London and the Home Counties, including Hampton Court and the Tower of London.

Paul W. Sowan

The Reigate Stone Research Project aims at a better understanding of the composition and seasoning and weathering properties of this unique British building stone, and research into appropriate techniques for its conservation. Often described as a calcareous sandstone, the stone in fact contains very little detrital silica and calcite in samples analysed to date. The stone is, however, essentially siliceous. The rock is extremely porous and swells and contracts far more, on wetting and drying, than other building stones, factors that probably explain its poor weathering characteristics. Established stone treatment methods for limestones and sandstones are, therefore, not necessarily appropriate or affective for Reigate stone, so HRP wishes to secure fresh samples for trialling new conservation techniques.

Gatton is a small rural parish in east Surrey, lying astride the Upper Greensand outcrop between Reigate and Merstham. As in almost all the eight or so mining parishes from Brockham to Godstone, Gatton had its share of underground mining and quarrying, and subsequently mining subsidence features. William Moore's building accounts for Loseley House (rebuilt 1561-69) mention stone purchased from quarries at Gatton. John Aubrey, writing in the late seventeenth century, specifically mentions underground quarries in the parish. The extensive outbuildings of Gatton Hall and the tiny parish church are built of the local 'Reigate stone'.

Quarrying was carried on in the nineteenth century. Gatton was amongst the 109 quarries surveyed by Charles Barry, H.T. De La Beche, William Smith and C.H. Smith as a consequence of the fire at Westminster Palace in 1834. Their report with reference to the selection of stone for the new Houses of Parliament was published in 1839.

Published mineral statistics in the 1850s indicate commercial quarrying, although this appears to have ceased by the 1870s, for Gatton does not feature in the annual reports resulting from the Metalliferous Mines Regulation Act of 1872.

Sparse documentary evidence, field walking,

and occasional documented crown-hole collapses point to one or two areas of certain underground quarrying alongside Gatton Bottom Road, and two more where this is probable. Access to four small areas of tunnels near Gatton Bottom Road has occasionally been possible since the 1950s, although by 2000 all access was again sealed. Possibly all these small workings were part of one or two large quarries, with intercommunication now impossible because of roof-falls.

It was decided to reopen Tower Wood quarry in Gatton, as the exact position and underground plan were known. With the agreement of the school authorities, funding from HRP and practical direction by WCMS, a very large mechanical excavator was hired for a day. The quarry floor was known to be 7.4 metres below ground level and the former crown-hole collapse was dug out to that depth, allowing access to the tunnels. A permanent access shaft of concrete rings was installed and fitted with a locked manhole cover to protect access.

The pillar-and-stall quarry consists of seven or eight sub-parallel extraction tunnels running steeply down-dip, interlinked by remarkably few and narrow man-ways through the intervening pillars. Ceiling heights are even lower than in the Merstham and Chaldon quarries, around 1.3 to 1.4 metres. As well as being very low (flat-out crawling over accumulated mud is essential to visit some areas), the quarry was found to be very wet, although not actually flooded. Large volumes of rejected rock or quarry spoil are stacked behind dry-stone walls down one side of each gallery. Numerous roof-falls have sealed off some parts, although no new roof-falls have occurred since the 1970s. The very narrow entrance drift to the southern extremity of the accessible working was identified, although this is now sealed and not recognisable at surface.

Quarry walls and working faces have toolmarks (picks and wedges) characteristic of dimension stone extraction, and low-level axle marks on tunnel sides and pillar corners indicating the use of low wheeled trolleys for stone movement (whereas sledge ruts are the norm in the Merstham and Chaldon quarries, and iron tramway plates were laid underground at Godstone). In one up-dip working bay there is an entirely different pattern of toolmarks interpreted as evidence that at this point rough lumps of rock for use as hearthstone were mined (probably by and for Gatton Hall) for whitening floors, doorsteps and hearths.

No datable finds have been discovered yet, although mid-nineteenth century clay tobacco pipes were recovered from nearby underground quarries in the past. It seems likely that Tower Wood is, or is part of, the quarry known to have been active in 1839-58.

Core samples from several beds visible in the quarry walls have been taken for analysis, and an accurate survey and photographic record made.

Samples from the quarries, and from extant medieval or later buildings have been examined by optical and scanning electron microscopy, X-ray diffraction analysis, and for porosity and dimensional stability on wetting and drying. The stone is so variable in composition that, in theory, matching stone in buildings to specific beds in the working faces in specific quarries should be possible. However, as to date quarries have been sampled at only six widely spaced locations (up to seven beds at any one site) for over 7 kms along the outcrop. There are no particularly good matches, and a far denser sampling grid, say every 100 metres, might be required to make this possible. The Chaldon-Merstham quarry tunnels complex alone contains at least 17 kms of accessible tunnels, but would be exceedingly difficult to sample on this scale, if only on account of the practicalities of powering electrically-driven core sampling drill so far underground, and the cost of scientific analysis of samples retrieved.

As the main focus of medieval quarrying appears to have been in the Reigate-Merstham-Chaldon part of the Upper Greensand outcrop (with extraction east and west of this known or strongly suspected to be of relatively modern date), the project team would like to re-enter a Reigate quarry to take samples. However, apart from the Colley Hill hearthstone mine (stratigraphically too high and known to be in an advanced state of collapse) it is believed that no underground workings in Reigate have been accessible for over a century. Although some entrance and crown hole collapse locations are known accurately, nothing is known of the underground layouts or the conditions of the quarries. Much of the Upper Greensand outcrop in Reigate is under residential property, where examination by WCMS tends to be welcomed only when collapses in well-manicured lawns or near expensive houses occur! However, one possible 'greenfield' site known to have been in use in the mid-nineteenth century has been identified, and discussions opened with the occupier.

Another possibility under consideration has been the location and descent of a well near Colley Hill which has been recorded as having broken through ancient building-stone galleries (at a lower stratigraphic level than the hearthstone mine tunnels at that location). This, in publicly accessible open space, would require negotiation with the National Trust, careful planning to avoid damage to an important botanical site, and elaborate measures to ensure public safety. There have, too, been one or two small crown hole collapses in the immediate area in recent years, so an examination of the ground here could be justified on health and safety grounds anyway, with the possibility of archaeologically valuable information being gathered at the same time. This option is not at present under active consideration.

D.K. Parkinson's Coal Yard, Hordle, Hampshire: a functional site within a socio-political landscape

This paper investigates the almost symbiotic relationship binding consuming society and local commerce. It commences with a conventional, functional, archaeological exploration of an active, local coal yard, and then introduces varied political, environmental, consumer, and ethical issues that may identify 'the coal yard' as a barometer of post-1950s British political, socio-economic, and industrial change.

Paul H Vigor

Whilst composing his submission for the 2000 Rolt Memorial Lecture (*Industrial Archaeology Review*, XXIII, May 2001, 6-9), the late Kenneth Hudson expressed concerns regarding established industrial archaeology's tendency to focus upon prestigious (usually heavy) industries and/or locations, to the detriment of minor commercial enterprises. He cited examples of oft overlooked, smaller community-centred productive, service, and retail industries, including small hotels, early cinemas, and traditional offices, showrooms, and retail outlets. Pressure is growing apace to preserve the British countryside by infilling urban plots and clearing brown field sites for residential and industrial redevelopment. Consequently, the resulting threat to Hudson's hitherto unrecognised minor industrial heritage has become immediate. It might be suggested that it has never been easier to sweep away the social, commercial, and community archaeology of the more recent industrialised past.

One of Hudson's unremarkable, community-based businesses is the local coal merchant's yard. The journey of a lump of house coal from seam to grate, past and present, incorporates some of the most cherished, and intensively

studied, elements of traditional IA. Extracted by mining, prepared for sale by engineering, and distributed via road, rail, canal, sea, and – in the case of the Berlin blockade (June 1948 to May 1949) – by air. However, little archaeological attention has been focused upon domestic coal's penultimate port of call – the local coal yard.

The coal yard surveyed in October 2002 is in Vicarage Lane, Hordle, Hampshire (SZ 273948). Formerly occupied by local coal factors Curtis Brothers, the yard currently provides a solid fuel retail and delivery centre south of the New Forest for coal merchant D.K. Parkinson.

The structures comprising the built archaeology of Parkinson's coal yard appear typical of the enterprise. The yard's buildings and bulk storage facilities are essentially functional – aesthetic considerations clearly did not feature in the original design brief. As if to emphasise its purely functional role, the yard's structures have been erected from correspondingly mundane materials. Consequently, it appears unlikely that such impermanent, low status structures will be considered worthy of future professional field archaeological recording, let alone securing any statutory protection.

The coal yard features two principal buildings. The first, a utilitarian structure (aligned east-west), houses an office, a counter for retail sales, facilities for the staff, and a showroom displaying fireplaces and fire-related sundries. This concrete block-built structure features a sloping corrugated iron roof. Its western end incorporates a secure storage area, presumably for the yard's more valuable, portable equipment and smaller vehicles - accessed by a concertina-type, folding steel door.

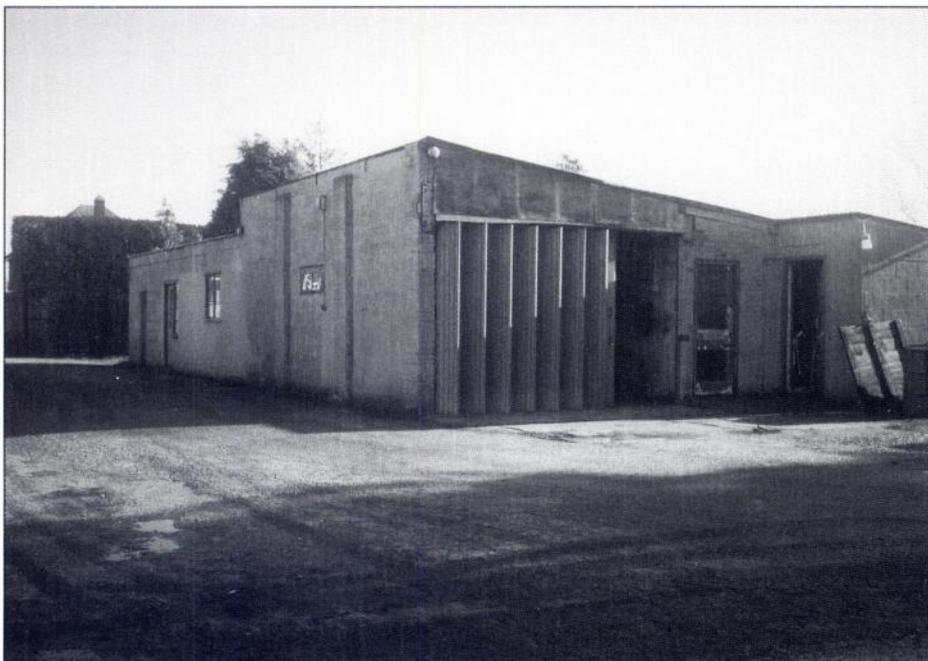
The second building is a green-painted,

corrugated iron clad, timber-framed shed (aligned north-south). The eastern side remains open to the elements, whilst the enclosed western side features two steel-framed windows. It appears to have been designed for garaging larger motor vehicles. Currently it provides covered accommodation for a forklift truck and, on occasions, a mechanical excavator. Two original doors *in situ* indicate the maximum height of vehicles originally accommodated, but the structure appears to have been adapted to admit taller vehicles. Most of the lowest run of corrugated iron along its open, eastern side has been removed - effectively raising the height of the entrance. The northern end of the building has been equipped with two excavator-loaded hoppers, chutes, and coal scales for bagging coal undercover.

The yard surface comprises both hard standing and fractured, decaying concrete. Loose, graded coal is stored in open coal staithe (or cells/bins), which have been traditionally constructed from redundant wooden railway sleepers, supported and reinforced by steel girders. Older staithe, in varying states of repair, are generally located around the southern, western, and northern boundaries of the yard. However, new staithe have been erected in the north-eastern corner, incorporating more modern ex-railway materials; Dow-Mac concrete sleepers have been utilised as uprights to reinforce the wooden sleeper-built structure.

The yard has accumulated a considerable quantity of both useful equipment and clutter over the years. Items observed include: tools of the trade such as shovels, brooms, sack trucks, and wheeled coal scales; several redundant fuel oil tanks and drums; a derelict delivery lorry; a considerable number of wooden pallets; railway sleepers; sheets of corrugated iron; sections of tower scaffolding; and a discarded ceramic sink!

Traditional coal yards are not as common as they once were, many having been abandoned, cleared, and built upon. Surviving coal yards (and merchants) have had to change with the times. These changes become archaeologically apparent when considering modern logistical issues including: transport, delivery, and bulk handling arrangements; yard location (yards no longer reliant upon railway transport); and sourcing reliable supplies of quality coal. With, perhaps, the exception of limited land sales from small, local mines (such as those of the Forest of Dean), today road hauliers carry most domestic coal (house coal, anthracite nuts, smokeless fuel, coal-based solid fuels, etc) from pithead, port, or processor to distant, local coal merchants' yards. Modern coal yards employ mechanised handling to a greater or lesser extent. As stated above, Parkinson's have equipped their yard with an excavator and a forklift. Following the traumatic contraction of the British coal industry in the 1980s, supplies of coal are as likely to be



Coal yard office, showroom, staff facilities, secure storage, etc, viewed from the west

Photo: P H Vigor



Corrugated iron garage and coal packing shed, viewed from the enclosed western side

Photo: P H Vigor

imported from overseas collieries as surviving British pits. However, Parkinson's express a preference for British coal – sourcing supplies from Daw Mill Colliery, Warwickshire (Warwickshire Thick seam); and Rossington, Yorkshire (Dunsil/Barnsley seam).

It is suggested that the socio-economic consequences of political, lifestyle, and ethical variables should be considered when interpreting primarily functional archaeological sites and structures. Whilst such an approach might not appear traditionally 'archaeological', it may prove

invaluable in assessing the meaning of such enterprises within the wider social and political landscape. Political legislation, changing consumer/lifestyle aspirations, and developing social conscience may significantly influence the status - and past, present, and future archaeology - of a commercial enterprise.

Both the coal industry and 'the coal yard' appear inescapably linked to post-war political legislation and intervention. From the mid-1950s the use of domestic coal fires declined, hastened by the Clean Air Act of 1956 which was passed to

combat severe urban air pollution, especially the infamous London Smog. Between December 1952 and March 1953 an estimated 12,000 Londoners died from smog-related medical conditions. The fatal effects of this darkest, and oft overlooked, chapter of British industrial history have been described as having constituted 'the greatest officially recognised urban air pollution disaster in modern history.' (D. Davis, 'The Great Smog', in *History Today*, vol. 52 (12), 2002, 2-3) The enforcement of Clean Air legislation may be shown to have influenced the archaeology of: local (especially urban) coal yards; the producers of 'authorised fuels' (especially smokeless solid); the manufactures, and retailers, of 'clean' heating and cooking equipment; coal-fired power stations; and domestic architecture.

Although open fires have been largely superseded by consumer aspirations to possess modern, 'clean' heating and cooking appliances, an almost primeval relationship with domestic fire has survived. This may explain the continuing popularity of coal effect-type electric and gas fires: the ghost of a living fire without the dirt and labour. It is, therefore, unsurprising that domestic fires have subsequently reasserted themselves – as social focal points. Today the living fire can be encountered within the domestic grate, in one's AGA/Rayburn, garden barbeques, and within the picket line's almost obligatory brazier. This apparent social resurgence of domestic fire may be confirmed by the current trend for building new homes with chimneys and fireplaces, and re-commissioning formerly blocked hearths. This lifestyle trend may ultimately ensure the economic survival of many small coal yards.

A potential issue of social conscience concerns the ethics of a post-industrial, developed economy importing coal from developing nations, coal from pits in industrialising countries being cheaper to produce than coal mined in Britain. This appears to be due to a combination of low wages paid to miners, and the lack of screening or washing the coal before shipment. Furthermore, concerns have been raised regarding health and safety in such pits, and the suspected employment of children underground. It remains to be seen whether ethical, or Fair Trade, buying practices will eventually affect the British domestic coal market and, therefore, the local coal yard.

Further research might be undertaken to assess the community usage of local coal yards. Within both active and dormant coalfields there may remain a culture of coal burning, whilst off the coal measures other solid fuels such as wood or peat may dominate. Worthwhile archaeological comparisons might be made with regard to coal usage, supply and marketing in areas including East Shropshire, the Forest of Dean and the New Forest.

Local coal yards may be interpreted as examples of an intermediate service industry within the wider industrial structure. As such, they complete the circulation of an industrially won mineral fuel (coal) from the place of extraction (the mine) to the consumer (whether a business,

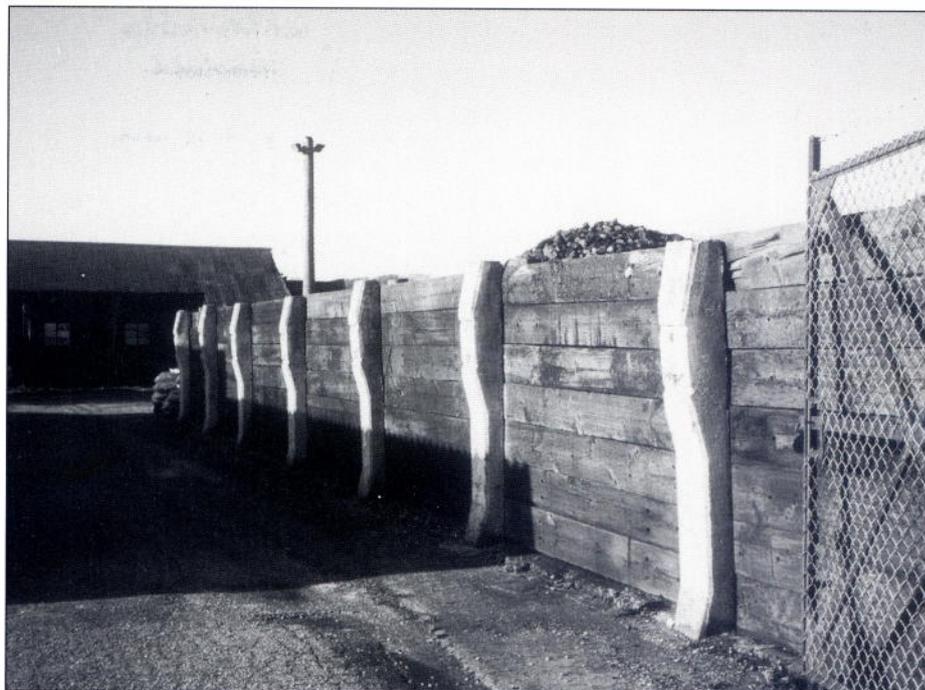


Wheeled coal scales pictured within traditional wooden sleeper-built coal staithe

Photo: P H Vigor

or private household). Such enterprises are worthy candidates for industrial archaeological study as they directly link industry to the community. To exclusively restrict archaeological and historical research to original places of manufacture risks misunderstanding the essential relationship that binds the primary, manufacturing, and service sectors of industry. It would appear that one sector cannot thrive without the other two.

This paper has sought to introduce the archaeological research potential in identifying, investigating and recording a minor commercial enterprise. It has also attempted to consider various aspects relating to the socio-economic/political context of a functional site. However, it remains to be seen how British IA, as a traditionally conservative discipline, will choose to define 'social analysis' and, furthermore, whether social analysis is subsequently encouraged to evolve as a valid constituent of twenty-first century IA field and archive research.



New coal staithes in the eastern corner of the yard, depicting Dow-Mac concrete sleepers in use as upright supports
Photo: P H Vigor

SS Robin and the Kampfners

One of the world's most important historic ships has been overlooked by the conservation movement and is in real danger of being broken up for scrap. Two photographers, Nishani and David Kampfner, have taken on the enormous task of rescuing the vessel by adaptive re-use, previously a solution applied to buildings.

Robert Carr

The SS *Robin* is a very remarkable old steamship built at Orchard House Yard, Balckwall, London in 1889-90. She was one of a pair. Her sister ship the *Rooke*, built alongside, was wrecked off North Wales one Christmas in the 1920s. At the time of building Lloyd's of London were wary of ships built of steel, which at least in Britain was regarded as a treacherous structural material. This was partly a legacy from the introduction of Bessemer Steel which started in 1856. Lloyd's only agreed to a specification for steel ships in November 1889. The *Rooke* and *Robin* were built by the London shipbuilder R Thomson under Lloyd's survey and it is indicative of their concern that Lloyd's surveyors visited the two ships while building no less than 83 times. The *Robin* is thus one of the first British steam coasters to be built of steel, and very well at that. She is a most remarkable survival (steel ships usually have a short life in salt water).

The *Robin* was launched in September 1890. She is 143 feet long with a beam of 22.9 feet and in her later days was 366 tons gross. Fitting out took place in London at the East India Docks but after that the *Robin*, and presumably the *Rooke*, were towed to Dundee where boilers and engines were fitted, aft. *Robin's* triple-expansion main

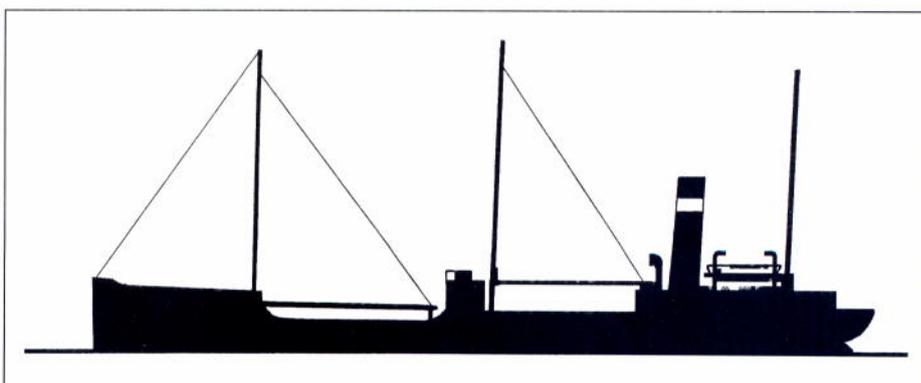
engine, still in situ, was made by Gourlay Brothers & Company, Dundee. Cylinder diameters are 12, 18 and 30 inches with a stroke of 21 inches. The *Robin* received her engine during the period 23 October - 11 November 1890, again under Lloyd's Survey, and both ship and engines received the classification '100A1 Lloyds (steel)'. Not only does the *Robin* still have her original triple-expansion engine but the boiler is original (and she steamed home in 1974).

After her building the *Robin* did not remain long on the British Register, she was sold to Spanish owners on 13 May 1900 and became the SS *Maria*. Her life there was a rough one, being used for many years carrying punishing cargoes of coal and steel scrap round the exposed Atlantic coast. Bilbao was a regular port of call. Amazingly she continued her work until the 1970s when she was purchased by the Maritime Trust and brought back to the UK in July 1974. Restoration work was carried out on a slip at Rochester on the River

Medway. Later she was displayed as part of the historic ships collection in the East Basin of the St Katharine Docks.

Sailing under the Spanish flag from 1900 *Robin* had escaped the serious risk of destruction of two World Wars and luckily survived the Spanish Civil War of 1936-9. Apparently there is still considerable affection for the old SS *Maria* in Spain and a possibility that she may go back there. Even though she spent most of her working life away from British waters she is just the kind of vessel that carried cargoes round our coasts for nearly a century.

Unfortunately in recent years the *Robin* has suffered sad neglect and has been languishing on the North Quay of the Import Dock, West India Docks, London for some years. So bad did her apparent condition become there was talk of the vessel being beyond repair and it was feared she might be cut up for scrap. Fortunately two saviours appeared in the shape of Nishani and



SS *Robin*, the quintessential 'dirty British coaster with a salt-caked smoke stack'



SS Robin at West India Quay

Photo: copyright Nishani & David Kampfner

David Kampfner. They are an energetic couple with a successful business background in photography and art direction who have taken on the gigantic task of trying to save the *Robin* which for too long has been left in a neglected state. Their plan to give the vessel some economic viability is to convert the hold into a landmark interactive photographic gallery.

The Kampfners produce some very exciting photographs. Their visual images tell a story or illuminate a situation in an immediate and compelling fashion and we are grateful to them for allowing us to use one of their photographs of *Robin* for this article. In a surprisingly short time they have gathered together conservation experts, local community leaders, senior local officials, some volunteer workers (more needed) and made University and funding contacts. Jim Fitzpatrick MP is now Patron of the SS Robin Registered Charity. Divers from Anglian Marine carried out a free underwater examination of *Robin's* hull in November 2002 and their report was rather encouraging.

The Kampfners really are doing a tremendous job, quite reminiscent of LTC Rolt, and need all the support they can get. In the last year things have been going from strength to strength. Recent good news is a donation of £10,000 from Credit Suisse First Boston towards restoration work. Also Multiplex who are building the large hotel close to *Robin* (as well as the new Wembley Stadium) have agreed to help with labour and materials.

Currently *Robin* is painted in her original livery; black hull with red boot topping, yellow-brown superstructure and black chimney with a white band. At her present berth she is not easy to make out in front of a 33-storey hotel and luxury apartment development with a good deal of building-site clutter around quay level - in fact the present colour scheme almost acts as a camouflage. It may be necessary to repaint *Robin*

in striking lighter colours in order that the general public notice the ship. No doubt this will appal purists but *Robin* is not a museum. She is to become mainly a photographic gallery and must advertise the fact in a modern environment. The Kampfners are engaged in adaptive re-use rather than preservation. It might well be pointed out that the traditional museum and conservation world has failed *Robin* and drastic measures are inevitable just to save her from disintegration.

What is tragic is that national resources have dried up. It seems no Lottery money is available and *Robin* appears to have few friends. The usual shipping enthusiast circles have not put in much of an appearance although there was a visit to the ship by the Duke of Edinburgh on 26 March 2003. The Duke was familiar with *Robin* through his work as Patron of the Maritime Trust in the 1970s when the vessel was repatriated from Spain.

A good deal of work has taken place in the hold over the winter. This is to be the location of the photographic gallery which will justify *Robin's* continued existence. Part of the hold was being used as a workshop and machine tools and obstructions have been removed revealing much usable exhibition space. The interior now has a clean silver finish and with new lighting being installed its use for photographic exhibitions now seems entirely plausible. Indeed galleries nowadays often prefer an industrial aesthetic, e.g. Tate Modern and The Wapping Project (the last active London hydraulic power pumping station). With the right promotion the Robin Gallery has a good chance of becoming fashionable in the Art World. A floating industrial gallery fashioned from the hold of a cargo ship will surely attract a major figure with imagination? Pains have been taken not to obscure the original cargo-hold interior, say by putting up a lining of boards, and the effect is

excellent. Hull plates, rivets, ribs and brackets etc are well displayed, along with evidence of repairs over the years.

However we are not out of the wood yet. Much still has to be done and the Kampfners have been putting in an enormous amount of time to the detriment of their own livelihoods. It could still end with *Robin* being towed away for scrap and this has happened with some other ship preservation attempts. Bear in mind that *Robin*, for her age, is something very special and probably unique. Unlike some better-known historic ships (e.g. HMS *Warrior*, PS *Waverley*) she is almost totally original and complete. Steam winches are still in their places and even the galley has its Victorian cast-iron cooking range. The latter is very hard to find nowadays even in a domestic context. *Robin* claims to be the oldest complete steamship in the world.

Robin is the quintessential 'dirty British coaster with a salt-caked smoke stack' of John Masefield's well-known poem 'Cargoes' published in 1902, 'butting through the Channel in the mad March days'. For this poem, with great perception, the steam coaster is chosen as the cargo carrier of the industrial revolution. We have so few physical remains (at least unsubmerged) from the great days of the British Mercantile Marine that in terms of ships *Robin* is almost all that is left. Unlike some other nations (eg Germany and the United States) we have retained no ocean-going cargo ship of any kind. The 1955 sludge ship SS *Shieldhall* currently based in Southampton is at 268 feet long about the largest preserved cargo ship we have and she is not even from the same century as *Robin*.

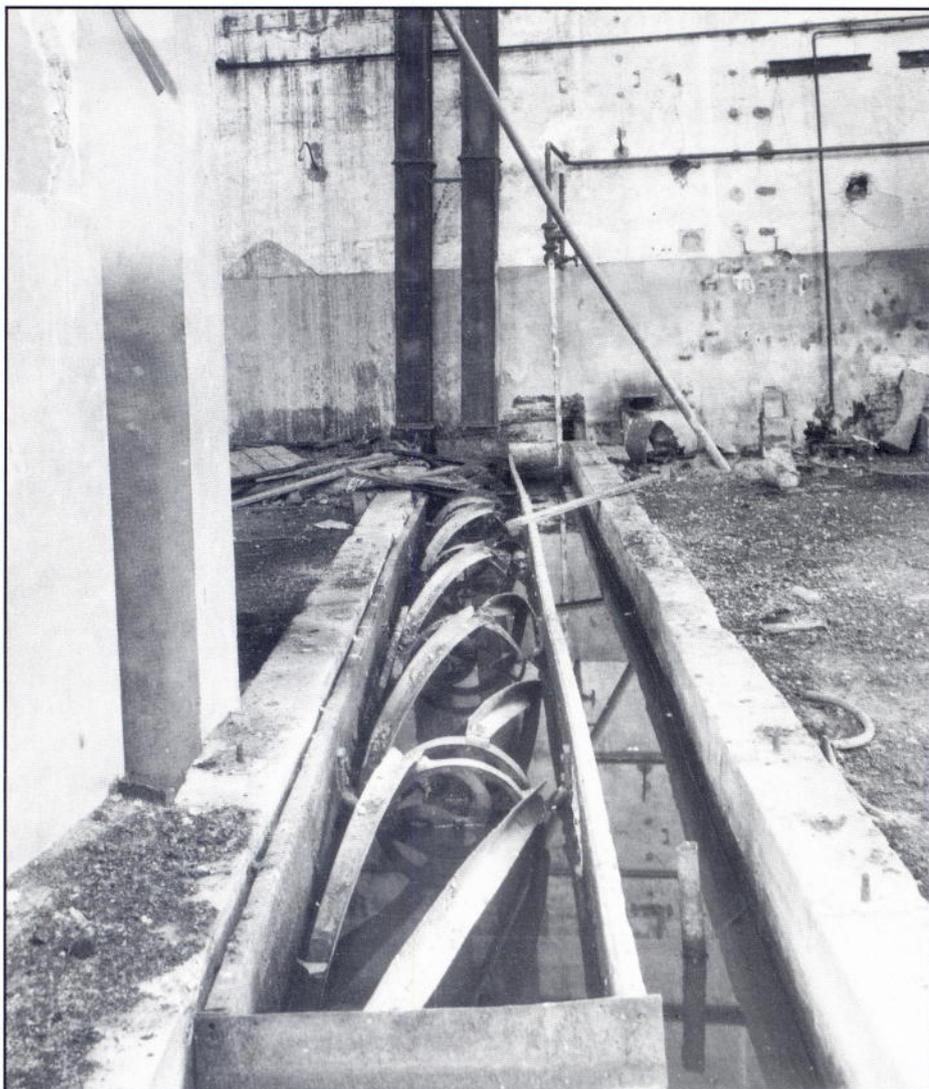
See the Robin website: www.kampfner.com/robin, or contact David Kampfner, Project Manager, SS Robin Registered Charity No 1095884, Hertsmeare Road, London E14 4AE, ☎ 020 7538 0652.

AIA Annual Conference

in
South-East Wales
at
Cardiff

5 – 11 September 2003

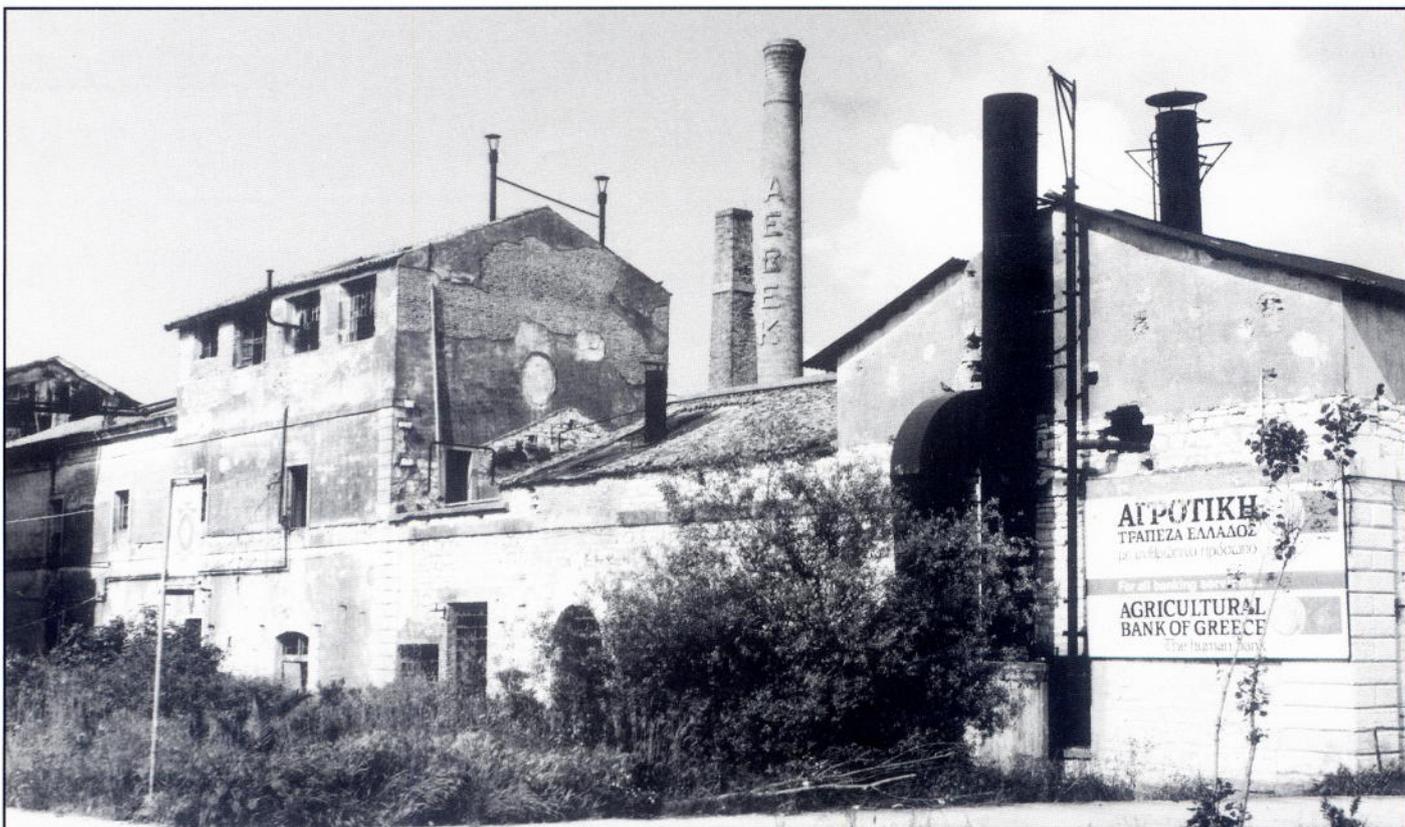
Details from
AIA Liaison Officer
(address on page 2)



CORFU FACTORY

On the island of Corfu in Mandouki, near the port area of Corfu Town are the derelict remains of what was presumably a factory very similar to that described by Paul Vigor in *IA News 124*. Most had been gutted when photographed in May 2001 and more may have gone by now, as the site was scheduled for development. However, the elongated lawn mower-type mixing trough did remain. The AEBEK lettering on the chimney doubtless refers to the name of the operating company, but it has not yet been possible to obtain any information on its history.

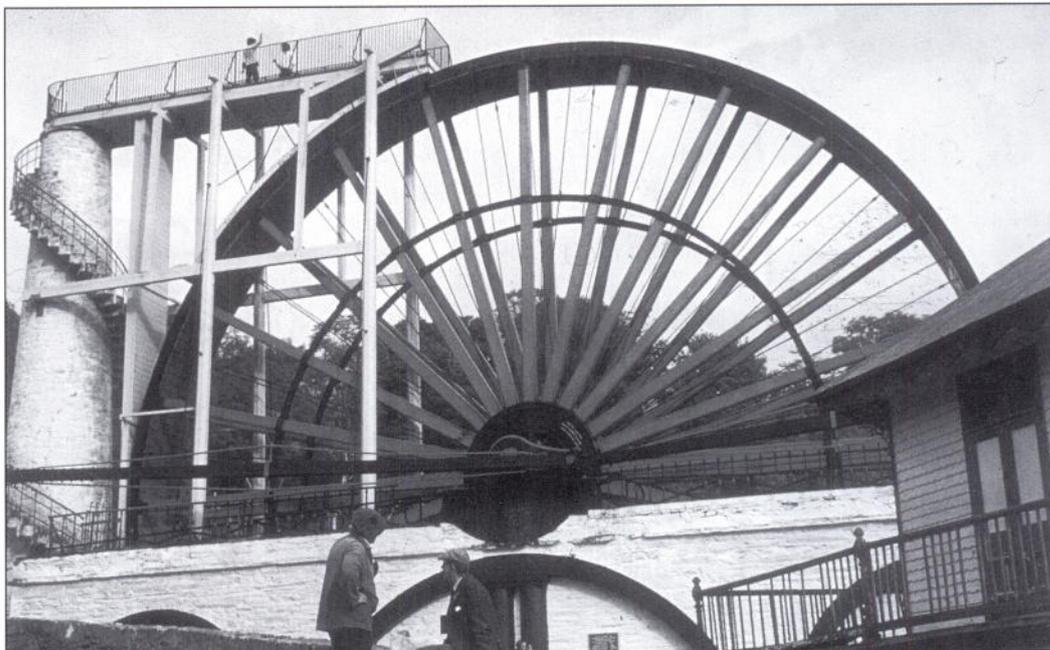
Photos: Colin Bowden



The birth of the AIA – 30 years on

The AIA was formally established 30 years ago, at the Conference held on the Isle of Man in September 1973. This was the last in a series of annual conferences devoted to the discussion of industrial archaeological themes, beginning with six in Bath (1965-70), then one in Bradford (1971) and one in Glasgow (1972). The subjects discussed had begun by being very general, such as 'The Theory and Practice of Industrial Archaeology', although there was much close scrutiny of definitions. But more specialised subjects such as 'lead Mining' and 'Twentieth Century Industrial Archaeology' gradually became more prominent, and right from the start there was ample space devoted to contributions from people attending. The possibility of forming a permanent society was considered at length, and at the Glasgow meeting Sir Arthur Elton, who had been a strong supporter of the conferences from the outset, moved the resolution calling on those present to meet the following year and to constitute themselves as a national society. The resolution was passed and duly carried out in the Isle of Man.

It is difficult to recall now the anxiety and even suspicion shown by some local societies who feared that the creation of a national body would inhibit their own freedom and prestige. But a considerable camaraderie had developed amongst the people who regularly



The Lady Isabella Wheel at Laxey, with Tom Rolt and Douglas Hague on the wall in front during the 1973 Isle of Man conference

Photo: Angus Buchanan

attended the early conferences, including a group of Manxmen who had demonstrated their enthusiasm for the subject by writing a book for David & Charles on the industrial archaeology of the island. They had already issued a cordial invitation to hold the 1973 meeting on the Isle of Man, so that the Foundation Conference was held at the Belle Vue Hotel, Port Erin, on 14-16 September that year. About 50 men and women attended. We were treated to a talk by Ewan Corlett on Iron Ships, only four years after the *SS Great Britain* had been restored to Bristol. Michael Rix showed us the curious water-powered roundabout in a children's

playground at Silverdale. Douglas Hague charmed us with his eloquence, and John Butt skilfully reported on the Steering Committee which had deliberated during the preceding year. An exciting visit was made to the old lead mine at Laxey, where the Lady Isabella Waterwheel had been recently refurbished. And a journey was made on the narrow gauge railway from Douglas to Port Erin.

More significantly, however, the assembly fulfilled the resolution to form a permanent society, equipping itself with a constitution and a team of officers as the 'Association for Industrial Archaeology'. Sadly, Arthur Elton had already died and

Tom Rolt, who was elected as the first President of the new Association, also died within a few months. The organisation nevertheless got off to a strong start, and the missionary enthusiasm of its leading advocates quickly secured it as a respected place amongst British conservation bodies. It immediately acquired international significance, moreover, because the willingness of industrial archaeologists from Sweden and the United States to attend the preliminary conferences had resulted in FICCIM – the First International Conference for the Conservation of Industrial Monuments – being held at

News from Upper Cwmtwswg

Dear Mr Editor

Calamity! Pugh's goat got into the dinner tent and ate all the sandwiches. All those weeks of cutting and spreading and slicing and that [expletive deleted] animal has devoured the lot. We are starting all over again and should be done by next month but it might not be a bad idea to bring a Mars Bar or two in case we are short.

Just to help things along the water heater has finally blown up in the schoolroom. And it looks like final too, but not to worry because Paul Yummie says he's got an old boiler he can bring along.

Dai Sponge got taken away to 'dry out' the other day but we are pretty confident he will get out in time to keep our bar going. Not much comes between Dai and his bar, except a certain corpulence.

I am relieved to say we will not have the rugby club to worry about. They are off to Paris, to the Stadt de France, for the weekend, if they don't get lost on the M25. Whether they find their way back to Dover is another matter. We can hope.

So there we are - we are all still working hard for you.

Yours fraternally

Jones the brush

Ironbridge in June 1973. From its inception, therefore, the AIA was able to act as a representative body on the international scene, and this has helped to ensure the high respect given to British industrial monuments amongst designated World Heritage Sites.

The care taken in preparing the ground for the formation of a national society over several years thus proved to be rewarding. The new Association was welcomed by most local societies and individuals who had been pursuing causes of industrial archaeological interest, and who came to appreciate the value of national and international representation.

Angus Buchanan
Honorary President, AIA

Insurance for AIA Individual and Affiliated Society members

Council frequently receives enquiries about insurance for archaeological activities. AIA is not well placed to provide cover at competitive rates. We recommend that your first enquiry should be to the CBA who provide cover for many individuals and societies involved with archaeological work. To have cover through them it is necessary for the individual or society to become a member of CBA. The rates for membership and cover depend on circumstances and cannot be usefully summarised.

Your contact should be Peter Olver, Finance Director, Council for British Archaeology, Bowes Morrell House, 111 Walmgate, York, YO1 2UA. ☎ 01904 671417, Fax 01904 671384, Email: admin@britarch.ac.uk.

If any Affiliated Society has obtained satisfactory cover elsewhere please would they put a letter or notice in *IA News* to tell others about it.

Richard Hartree,
Honorary Treasurer

Endangered Sites

Members may remember that a year ago we issued brief guidance about how to react when a site you believe to be significant is endangered, and promised further guidance and information on planning legislation. You may equally be wondering why that guidance has not yet appeared. It is not merely the lethargy of the Secretary: work had started on the notes when the government

announced that it was proposing to move the goalposts or even do away with them altogether. The consultative process and deliberations seem to be coming to an end, and when the new system is finally established we will endeavour to carry out our original undertaking.

David Alderton,
Honorary Secretary

Partnership in action: from Grain to Glass

Recent changes in the 'drinks' trades present an enormous challenge to those who seek to research, record and conserve the buildings, artefacts and records of these industries and their retail outlets. Such is the urgency of the situation that AIA joined with the Brewery History Society and English Heritage on 13 June 2003 at STEAM, the museum of the Great Western Railway in Swindon for a timely review of work done, the roles of the two societies and of English Heritage and to identify priorities for the future.

Time being scarce, beer provided our focus with presentations from the society members on maltings (Amber Patrick), brewery buildings (Lynn Pearson) and archives (Mike Brown) with additional expertise on brewing processes and plant from Roger Putman of Brewer International and pubs by Geoff Brandwood of CAMRA.

Keith Falconer, Head of IA at English Heritage, had earlier provided a context for the day and outlined EH's important emerging 'Strategy for the Historic Industrial Environment' – or SHIERS for short.

This will involve a programme of rapid, broad-brush assessments of individual industries (or areas) with customised strategies for dealing with these. Reports will include a review of present designations, the adequacy of preserved sites, the international context and an action plan to identify the need for future work and guidance. The process will involve close collaboration with national bodies. Implementation awaits EH approval but pilots for maltings and oasts are planned for later in the year. A SHIERS for breweries has been recognised as a high priority for the near future.

Discussion in the plenary session helped to draw threads together and to provide a focus for future work of the societies. After the theory came the practical, with visits to STEAM or (the most popular!) Archer's Brewery as optional extras. Archer's is housed in a conversion of the GWR's old locomotive weigh house and produces traditional ales in modern, stainless steel plant. My one regret at the end of a very successful day was that AIA members did not get the sort of notice of the event that was appropriate. As AIA chair, I can only apologise for this inconvenience and assure members that after discussion at our 28 June Council Meeting procedures have been put in place to avoid a repeat.

Mike Bone

Stop the Editor!

Readers may have noticed that for a third time the cover illustration is credited to your Editor. I had rather hoped that by introducing colour there would be a rush of offers, but there has been little response so far. Come on everyone, there must be

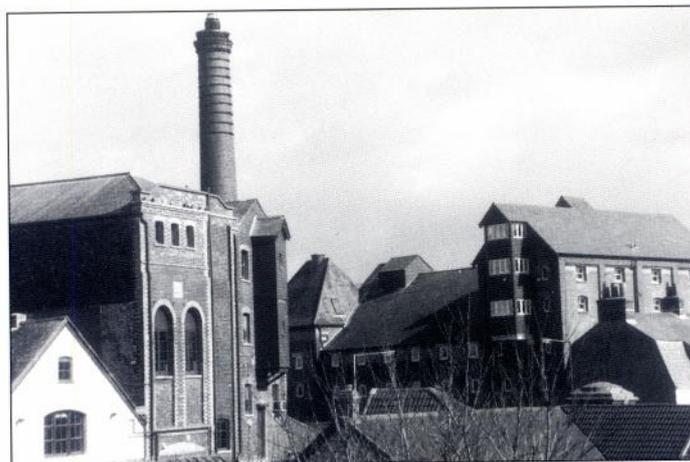
somebody out there with a camera (I've seen you all at conferences) who can submit a suitable colour print, slide or digital image. It can relate to topical news, or it can be a good 'industrial' image in its own right. The next deadline is 30 September, so just think of the fame and get snapping!

Peter Stanier

Industrial jewels in Catalonia

Not many wine cellars can boast of having been designed by famous architects but there are important examples in Catalonia that can. The Guell Cellars in El Garraf, built in stone and brick between 1895 and 1898, were designed by Antoni Gaudi and his pupil Francesc Berenguer. Another prime example is the immense Codorniu cellar complex, which dates back to 1551. In the 1890s, the Codorniu family decided to enlarge their premises. They hired Josep Puig I Cadafalch to do the design and he directed the first phase of the work, completed in 1906. According to *Cien Elementos del Patrimoni Industrial en Catalunya*, a treasure house of Catalan's industrial archaeology, from which this information has been culled, it represents an exceptional example of Catalan modernist architecture. In 1976, four of the buildings in the complex were declared National Historical and Artistic Monuments. Puig I Cadafalch also designed Can Casaramona, an old thread factory in Barcelona, built between 1911 and 1912. This spectacular building is counted one of the jewels of Catalan industrial architecture. Both of the Puig I Cadafalch complexes will be among the extraordinary sites to be visited during the AIA visit to Catalonia next Spring. For early details of this visit, apply on the flyer enclosed with this mailing.

Paul Saulter



The successful 'Grain to Glass' conference examined the drinks industry. This striking brewing and malting landscape, now converted to other uses, is at Weymouth

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Museum in Docklands opens

The task of establishing a museum of London's River and the Port of London in the former dockland area has proved a long and arduous one. The national press including *IA News* announced about four years ago that the new Museum in Docklands would open in January 2000 but sufficient funds could not be raised to achieve this. Further hard work has been necessary and the official opening of the Museum in Docklands finally took place on 20 May this year.

For the public opening on Saturday 24 May events spilled outside the Museum onto West India Quay. Among the attractions the steam tug *Portwey* was open to the public and the fireboat *Massey Shaw* projected a tremendous jet of water skywards. An intrepid young diver clad in traditional diving suit with brass helmet and supplied with air by a pair of stalwart handle turners through a trailing airline descended into the depths of the dock. This excellent demonstration was provided by the Historical Diving Society Working Equipment Group.

The new Museum, which is close to West India Quay station on the Docklands Light Railway, is No. 1 Warehouse, West India Quay, Hertsmere Road, London E14 4AL, ☎ 0870 444 3855, website: www.museumindocklands.org.uk.

Robert Carr

EMIAAC 65

The 65th East Midlands Industrial Archaeology Conference was held at New College Nottingham in May 2003, hosted by the Railway & Canal Historical Society on the topic of '400 years of rayles in Nottingham'. Three very different aspects were presented by the speakers.

Norman Shelley traced the very early development of proto railways from the first Babylonian evidence of 2245BC through Greek rutways to examples in Friborg in 1350. Known examples included those in Austria in 1519, Berlin in the late 1500's and an example in a Flemish painting in 1540. Agricola's *De Re Metallica* of 1556 gives some of the first detailed illustrations of early railways some using a peg in slot guidance system. At this stage the plot moved to Nottingham.



Out at last! A traditional diver at the West India Dock, during the public opening of the Museum in Docklands, West India Quay, Saturday 24 May 2003 Photo: R J M Carr

Huntingdon Beaumont had had colliery interests in Bedworth in North Warwickshire and Coleorton on Leicestershire. Through these mines he came across Francis Willoughby of Wollaton Hall as a colliery investor. Beaumont was a colliery entrepreneur with inventive flair but poor business acumen. He took a lease on Wollaton colliery, near Nottingham, from Willoughby and opened a land sale wharf at Wollaton Lane End. In 1604 he moved to Strelley Colliery. In order to retain his land sale wharf in the same location he laid a wooden rayle way from Wollaton to the mines at Strelley. The line opened in 1604 is usually recognised as the first railway in England. It had a life of between 12 and 18 years.

Beaumont moved to the Blyth Valley in Northumberland in the early seventeenth century to develop mines at Bedlington and Cowpen. Whether he developed railway lines in this area which was later to become the cradle of railway development for the world is not known. The use of wooden rails persisted in the Tyneside area and lines like the Tanfield railway of 1723 were laid with timber trams. These were later covered with iron strips. A practice which persisted in

the United States well through into the nineteenth century, even on locomotive worked lines in the form of highly dangerous strap rails.

Ian Yearsley spoke on the development of the street tramway. The early appeal of the street tram was driven by hard economics. A pair of horses could haul 26 passengers on the road and 46 on a rail mounted tram. The American G. F. Train founded early street tramways in Birkenhead, the Potteries and London. The Tramways Act of 1870 developed a standard for tramway planning and legislation, removing the need for individual urban tramway acts, although it banned local authorities from operating tramways. It was not however until the passing of the 1892 act that this ban was lifted. The capital requirements were of interest. A tramcar with a life of 20 years cost £200 but the 16 horses to operate it for a 16 hour day cost £360 and had a working life of four to five years. To avoid this cost there were trials using traction provided by batteries, naphtha, clockwork, cables and steam. Many of these systems had weight problems particularly with tramways, including that in Nottingham, laid on Winby and Levick's light weight

track. The Tramways Act of 1879 allowed mechanical traction.

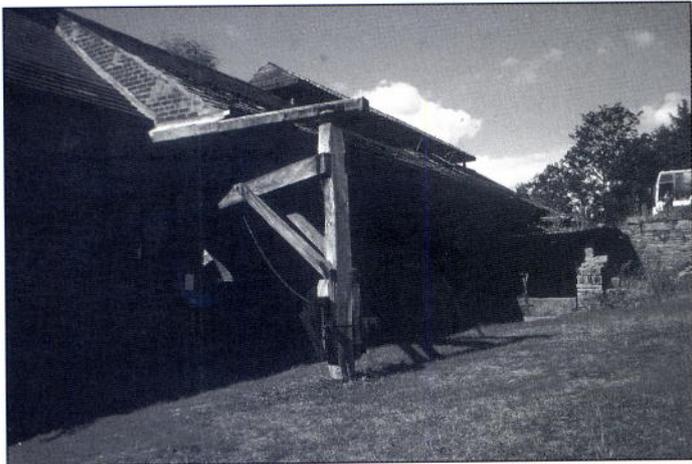
The first electric trams using American equipment cost around £500 and were twice as fast as a horse tram, giving huge operating economies. The big boom in electric tramways was from 1900 to 1903. The Nottingham system was electrified in 1901. The financing of tramways has a long history of loan financing with little provision for renewals and loan repayments. Loans were frequently for a period, typically over 40 years, which exceeded the equipment life of around 20 years. The history of Nottingham's tramways is in many ways typical of this country. Stock was improved in the 1920s with upholstered seats. 1923 was the peak year for the system. The introduction of the heavy duty pneumatic tyre in 1927 allowed the economics of bus operation to leap forward. In 1933 the interurban Notts and Derby route was converted to trolley bus operation with all tram operations in Nottingham ending in 1936. The new Nottingham trams that will start running in 2003 are not driven by hard finance but more as a solution to current urban traffic problems.

Colin Lea bought the conference up to date with a description of the development of NET - The Nottingham Express Transit system. Line one runs from the Midland Station through the city centre to Hucknall and the old Cinder Hill colliery site. It is due to open in November 2003. It covers a route along parts of the old Great Central line south of the city centre with street running and former colliery lines and ex Midland Railway lines to the north. The new 200 passenger trams with a top speed of 50 mph were built in Derby. They will follow the numbering sequence on from No.200, the last tram in the fleet of 1936. A further two lines in the city are under evaluation.

Mark Sissons

South Yorkshire Industrial History Society marks 70 years

The South Yorkshire Industrial History Society is having an exhibition at Kelham Island Museum, Sheffield, from 12 October to 27 November, to mark its 70th



Wortley Top Forge was acquired by the South Yorkshire Industrial History Society in 1953

anniversary and the 50th anniversary of its purchase of Wortley Top Forge. The exhibition will reflect the Society's history, the four historic industrial sites that it owns, and its other activities and interests. The Museum is open Monday to Thursday, 10-4, and Sunday, 11-4.45 only. It gives a good introduction to Sheffield's industrial history, and many of the displays are new. There is an admission charge.

The Society was founded in 1933 as the Society for the

Preservation of Old Sheffield Tools and Machinery. For many years it was called the Sheffield Trades Historical Society. We think it may be the oldest organisation set up specifically for industrial preservation and industrial history in a local area. It had its origins in the Sheffield Trades Technical Societies, which were formed in 1918 to bring together the Faculty of Engineering of the University of Sheffield and people from Sheffield industry - masters and craftsmen -

to encourage technical education, good practice and innovation. In due course the Cutlers' Company and the Trades Technical Societies joined forces to set up a body to collect obsolete tools and machinery, and record how they had been used.

The Society was active from the 1930s to the 1950s in ensuring the survival and preservation of the Tyzack scythe works at Abbeydale, now known as Abbeydale Industrial Hamlet, and a water powered cutlery grinding wheel, Shepherd Wheel. These then passed into City Council ownership and are now managed, like Kelham Island Museum, by the Sheffield Industrial Museums Trust.

In 1953 the Society acquired Wortley Top Forge, between Sheffield and Barnsley, which is Britain's only surviving water powered heavy iron forge. It dates from 1638 and worked until 1908; from about 1850 it specialised in making wrought iron railway wagon axles. It is now managed and opened to the public (Sundays from Easter to Bonfire Night) by a sister body, the South Yorkshire Trades Historical Trust, and a small team of volunteers. The Society also owns Rockley Furnace, the remains of a charcoal blast furnace of c1700; Rockley Engine House, a Newcomen engine house of 1813 for pumping an iron mine; Hoylandswaine Nail Forge, a row of three nailmakers' hand forges in a cottage garden; and Bower Spring Furnace, Sheffield, the remains of a furnace for steelmaking by the early cementation process. The Rockley site is open to the public, while the others can be seen from the street.

The Society now has around 200 members. It has a programme of lectures in Sheffield, Barnsley and Rotherham each winter, and a summer programme of walks and visits. Its Field Recording Group, and many individual members, are active in industrial history research and fieldwork. The Society works closely with the South Yorkshire local authorities, the South Yorkshire Archaeology Service, the Council for British Archaeology, and English Heritage, on planning, archaeological, and conservation matters affecting historic industrial sites. It produces publications including a Journal with articles about South Yorkshire's industrial history.

The Millennium Galleries, Sheffield, are having a major exhibition about Sheffield knives and cutting tools, 'A Cut Above the Rest', from 23 August to 26 October, so mid October is the time to visit Sheffield if you would like to see both exhibitions. It will draw on the remarkable collection of Ken Hawley MBE, who has long been a very active member of the Society and was Hon. Custodian of Wortley Top Forge for many years. The Galleries are in Arundel Gate in the city centre, and are open daily, 10-5 (Sundays, 11-5).

Enquiries: Kelham Island Museum, ☎ 0114 272 2106; Millennium Galleries, ☎ 0114 278 2600; The South Yorkshire Industrial History Society - Christine Ball, Hon. Sec., 75 Banner Cross Road, Sheffield S11 9HQ, ☎ 0114 236 1471, or Derek Bayliss, ☎ 0114 230 7693.

Derek Bayliss

Joseph Stott's architectural drawings archive

In 1981 when the Oldham architectural practice of Sanger and Rothwell closed down they deposited a large collection of drawings with the Oldham Local Studies Library. The significance of this collection is that it includes a large number of drawings originating from the practice of Joseph Stott, one of the leading Oldham architectural practices who specialised in cotton mills. Unfortunately the collection remained largely inaccessible because it was uncatalogued and stored in boxes with the drawings tightly folded or rolled up, hence they were difficult to access and easily damaged. It was not until over ten years later that Oldham appointed an archivist, when they were able to set about the task of cataloguing and conserving a number of their collections, of which the Joseph Stott collection was one of the larger tasks.

The conservation of the Joseph Stott collection took several years and it was made available to the public early in 2002. The plans have been flattened and are now stored in transparent sleeves. These can be viewed but initial access to the collection is by micro-fiche copies. There is a comprehensive 655-page catalogue. Altogether there are



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3,060 drawings in this collection, the vast majority of which are buildings for the Lancashire cotton industry, principally cotton spinning mills.

Joseph Stott initially worked for his brother Abraham Henthorn Stott but in the late 1860s he set up his own practice which after his death in 1894 was continued by his son George under the title Joseph Stott & Son. The early years of the practice are not so well represented but large numbers of drawings have survived for the mills built during the Edwardian period. There are no less than 310 drawings relating to the Soudan No.1 & 2 Mills at Middleton for example, and there is also a Contract Book covering this period which provides valuable information on costs. Apart from overall plans and elevations, plus a few perspective drawings, there are many detail drawings showing items like water towers, chimneys, reservoirs, structural iron and steel work, terra-cotta work and wooden panelling in boardrooms. Drawings supplied by contractors show steam engines, boilers, economisers, lighting systems, sprinkler systems and spinning machinery.

One might quibble about the title given to this collection which is 'Stott Architectural Practices', this should more accurately be 'Joseph Stott and successors'. Some plans from Ernest English and Sanger & Rothwell are included where they relate to works by Joseph Stott. Two plans originate from Stott & Sons,

the practice started by his brother, but there is nothing from the practice of his nephew Sidney Stott.

One might also wonder in this day and age about the practice of micro-fiche, should they not have been digitised? Some drawings have not micro-fiche very well and the originals will need to be viewed to study the fine detail, while many blue-prints are totally illegible. However, it is planned to digitise some drawings to make them available over the Internet on the 'spinning-the-web' web site which is being developed by a number of local authorities in Lancashire.

The collection can be viewed at the Oldham Local Studies & Archives, 84 Union Street, Oldham, OL1 1DN, phone: 0161-911 4654, e-mail: els.local.studies@oldham.gov.uk, web-site www.oldham.gov.uk.

Roger N. Holden

Recent industrial archaeological fieldwork in Yorkshire

Four evaluations of industrial archaeological interest have been undertaken in Yorkshire. An archaeological evaluation and watching brief were undertaken at Mill House Farm, Ackworth, West Yorkshire (SE 442 166) prior to a residential development on the site. Work was carried out in association with Mike Griffiths and Associates, on behalf of Shepherd Homes Ltd. Investigations were undertaken on the site of a corn mill, known to have been in existence from at least 1774, and converted from water to steam power by 1850. Archaeological excavations and a standing buildings survey encountered extensive and substantial nineteenth-century remains, which allowed for a greater understanding of the layout of the mill complex. The south-eastern area of the complex proved to be its industrial heart, and the likely locations of the boiler house, engine house and chimney were identified, including the excavation of a possible ash pit. The north-western part housed the remnants of water power and milling buildings, and an archway straddling the putative headrace was revealed. The disuse, dismantling and partial demolition of the mill left well-preserved remains beneath subsequent landscaping.

An archaeological evaluation

was undertaken prior to development at Britannia Car Park, York (SE 461 452), in association with Mike Griffiths and Associates, on behalf of Bellway Homes. Fieldwork, including evaluation trenches and the monitoring of a geotechnical investigation by AIG Ltd, was carried out on the site of the York Town Gasworks. These gasworks were the first to be constructed in York, known to have been in existence since 1823 and subject to considerable alteration during the nineteenth and twentieth centuries before going out of use in the 1970s. Though limited by contamination, the investigations revealed the surviving remains of the nineteenth-century gasworks beneath destruction debris deposited over much of the site, and proved the accuracy of a surviving 1945 plan. Below-ground remains included brick culverts, tanks and underground services, and various structures were encountered, including gas holding tanks, a benzene plant, coal gas purifiers and a chimney.

Our Historic Buildings Section carried out a measured survey and buildings assessment of seven structures on the Stanningley Engineering Works site, Town Street, Stanningley, West Yorkshire (SE 221346), on behalf of Bellway Homes. The work has demonstrated a long industrial presence on the site, with standing evidence for buildings dating to the early 1850s. This site is of particular importance as it may be the last surviving bridge-building works from the mid-to late nineteenth century in the country. The standing remains chart the shift in industrial bridge-building materials, from cast to wrought iron,

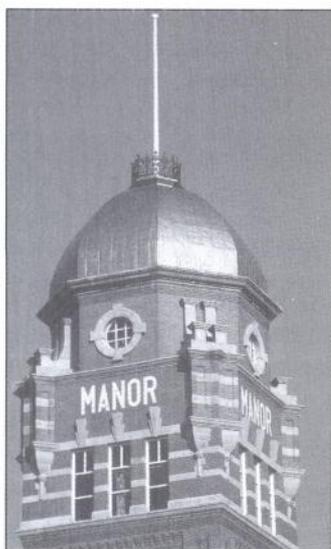
particularly in the use of these materials as components of the warehouse superstructures. A watching brief is currently underway, monitoring the demolition of individual buildings and below-ground works on the site.

A buildings assessment was also made of the Electric Press site in Leeds (SE 298339), on behalf of Panter Hudspith Architects. The work demonstrated that this site has a longer history than previously believed. The Electric Press building itself was originally constructed in the late 1860s, principally as a warehouse, but was then altered in the late 1890s to house a printing works. It retains features from both periods of use, and appears to have received little further alteration since the mid-twentieth century. The Stansfeld Chambers, immediately to the west of the Electric Press, formed the core of a mid-nineteenth century carriage works, and despite conversion to offices in the 1920s, the southern range of the chambers retains features of its original construction.

*Field Archaeology Specialists Ltd,
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Neath Abbey seeks friends

The Neath Abbey Iron Works Company was set up in 1792 by Quakers from Plymouth. The company was innovative in all areas of engineering and it was one of the players instrumental in the forging of the Industrial Revolution but it has received no recognition nationally or internationally. The site of the Neath Abbey Iron Company Works is still in existence and we are



Water tower of Manor Mill, Oldham. A cotton spinning mill built in 1906, drawings of which can be found in the Joseph Stott Archive

Photo: Roger N Holden



The Neath Abbey blast furnaces photographed in the early 1970s. The workshops to the left were later severely damaged in a fire

Photo: Laurence Ince

in the process of establishing it as an Industrial Heritage site. The site of the Neath Abbey Iron Works is of enormous importance in terms of the achievements of the Industrial Revolution but it will be lost to our future if it cannot be restored.

Most of the original engineering drawings are held in a private collection of gargantuan proportion (7,500 items). These are not simple sketches on the backs of envelopes, but are highly detailed working precision engineering drawings. Neath Abbey products span the entire range of the Industrial Revolution, including locomotives of numerous configurations, stationary steam engines with cylinders up to 125 inches diameter, ships of all types from iron hulled sailing ships to schooners, bucket wheel dredgers and day steam /sailing yachts, blast furnaces, gas plants, machine tools, cranes and the list goes on. Products were exported to most, if not all the continents of the world.

The Neath Abbey Iron Works Project is seeking to form a Friends of the Neath Abbey Iron Works. We need all types of skills, from secretary to treasurer and every one else in between. In the first instance, please would prospective members make contact with me, Rob Preston, 52 Bertha Place, Margam, Port Talbot, West Glamorgan, SA13 2AP. ☎ 01639 890505. E-mail: rob-lisa@rpreston51.fsnet.co.uk.

Rob Preston

Beehive and aviation buildings

The British Aviation Preservation Council were pleased that their nomination of the Beehive at Gatwick and its former owner, BAA Lynton, resulted in the top AIA award at Liverpool last year (*IA News 124*). The Beehive, the 1936 passenger terminal at Gatwick until the mid-1950s, is an excellent example of the bringing back into everyday use of a building of quality and historical importance.

The Beehive is not the only aviation building in England to have been restored and successfully re-used. Another good example is the pre-war passenger terminal at Liverpool Airport. After languishing for some years, it was recently renovated to become a hotel. There are other examples in the British Isles and elsewhere and *IA News* readers may be interested in a

conference the BAPC is holding at Gatwick on Saturday 11 October on the subject of the Re-use of Historic Aviation Buildings. This is part of the 100 Years of Aviation celebrations.

Places will for the most part be limited to BAPC societies and museum groups but some places should be available for AIA members. For details of the conference, send SAE to BAPC, 44 Le May Avenue, London SE12 9SU.

John King

ViewFinder on the way we worked

More than 20,000 previously unseen images revealing over 300 years of working life in England are now accessible through the National Monuments Archive's ViewFinder (www.english-heritage.org.uk/viewfinder), a new online digital picture library. The website has been made possible through a grant of £170,000 from the New Opportunities Fund and the co-operation of Oxfordshire County Council. The long term aim is to digitise most of the 10million archive items, normally only accessible by visiting the NMR in Swindon and London. 'England at Work' contains images ranging from the Saltaire World Heritage Site, the Northampton boot and shoe industry and national railway network to the building of concrete ships in WW1. The 'Henry W. Taunt Collection' gives a glimpse into Oxfordshire's rural traditions between 1860 and 1922.

ViewFinder will provide an unrivalled visual archive of England's working heritage. Never before has such an important visual resource been made accessible to all.

Final show of hands

'The Hand of Time' exhibition of photographs by AIA member Clifford Morris FRPS, together with associated poetry by Semba Jallow-Rutherford was first shown in Bath in 2001 (see *IA News 117*) and has subsequently had a successful tour attracting almost 40,000 visitors. The final showing takes place at Dudley Museum & Art Gallery from 6 September until 19 October (Monday- Saturday 10am -4pm). Five abandoned Midlands industrial sites are depicted and Dudley is the only showing scheduled for the West Midlands which is most

appropriate. After the exhibition closes it will be kept at the Walsall Local History Centre as a permanent public archive. We hope that Midlands members will take this final opportunity to see the exhibition. Clifford Morris can be contacted for further details, ☎ 01922 459669 or email: cliffmorrisfrps@aol.com.

Lydia Eva in serious trouble?

It is reported that the preserved *Lydia Eva*, a classic steam herring drifter built in 1930 by the King's Lynn Slipway Company and usually based in Lowestoft has of late fallen into extreme disrepair. She is in such a bad state the vessel can no longer be exhibited to the public. The ship's hull will require a huge expenditure if she is to be retained. *Lydia Eva*, which carries fishing number YH89 (YH for Yarmouth), used to be on display at South Quay, Great Yarmouth, from time to time. However this year the preserved diesel trawler LT412 *Mincarolo* (LT for Lowestoft) was there instead. This

side trawler of 1961 was the last fishing vessel to be built in Lowestoft, fitted with a Lowestoft-made engine. The *Lydia Eva* is in the care of the Lydia Eva and Mincarolo Charitable Trust Ltd.

Robert Carr

Hereford Gala Day

The Waterworks Museum (Hereford) held a Gala Day on 29 June, when various new exhibits were unveiled together with the plans for the Museum's new development project. All the steam engines were working and there was also a vintage vehicle parade.

Volk's Electric Railway anniversary

Volk's Electric Railway celebrates its 120th anniversary on 4 August 2003, with a commemorative run the day before launched by the Mayor of Brighton & Hove City. The railway, recognised by the *Guinness Book of Records* as the oldest public electric railway in the world, is superbly situated on the beach at

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Tel: (0117) 9715337 Fax: (0117) 9771677

Brighton, east of the Palace Pier. Members of the Volk's Electric Railway Association help with its preservation.

The British Archaeological Awards

The 2004 Awards will be launched by Lord Redesdale at a ceremony on 20 November 2003 to be held at the British Museum, London. Tickets will be £5 per head. The presentation of the Awards themselves will take place at Queen's University, Belfast, on 4 October 2004. The deadline for the submission of entries is 30 May 2004.

Robert Carr

Piano reprieve

The Piano building in Kidderminster beside the Staffordshire & Worcestershire Canal in Kidderminster has been spot-listed Grade II, despite permission to demolish being recently granted to developers of a cinema. SAVE hopes this will lead to 'some sensible

thinking' about the future of the group of canalside mill buildings here.

Wrong brew in Essex

There was a small error in Tony Crosby's article on surveying Essex breweries in *IA News 125*. The location of Ridley's brewery should read 'Hartford End' and not 'Hartford Heath'.

Industrial history? No thanks!

A recent survey by the Local Heritage Initiative, administered by the Countryside Agency and supported by the Nationwide Building Society, suggests that industrial heritage is the least popular category of 500 projects that have received grant support. It falls far behind archaeology, built heritage and customs and traditions. Is your scheme missing out? For information on LHI schemes, log onto www.lhi.org.uk, or ☎ 0870 9000 401.

Art and the Industrial Revolution – Ruskin 'defaces' a Turner view of Leicester

In the late eighteenth century artists took an interest in the development of industry and there are important works from this time inspired by industrial and related subjects. Even a painter as late as J. M. W. Turner (1775-1851) chose numerous scenes with an industrial connotation but by the time the Victorian age was fully underway attitudes had changed. Industry was being vilified and the art critic John Ruskin (1819-1900) was a leading light of this derogatory movement. An instance of this is a remarkable lecture he gave before an appreciative audience, probably in Oxford.

He referred to a watercolour Turner had made some years before of the riverside in Leicester. Ruskin exclaimed that although he had not been to Leicester (at least recently)

and that he certainly never would now, he knew very much what it would be like. On the glass covering the watercolour Ruskin painted in an iron bridge and coloured the river to indicate pollution from an indigo factory on one side and a soap works on the other. Where the two colours met he worked them together with almost malicious deliberation. The meadow which Turner had depicted in front of an abbey with the sun setting behind had red brick buildings and a chimney added and to finish off Turner's sky was suitably darkened all over to illustrate the present-day smoky atmosphere.

When Ruskin threw down his brush he was greeted by thunderous applause. In case the reader is worried the Turner seems to have survived and went to the Art Institute in Chicago. An account of Ruskin's great tantrum (or Victorian showmanship) can be found in *The Letters of A. E. Housman*, ed H. Maas, 1971, page 13.

Robert Carr

REGIONAL NEWS

Home counties

Back in the 1960s and '70s introductory courses on IA were quite common tutored by such pioneers as Kenneth Major, Edwin Course and Robin Atthill. They were usually organised by LEA adult education centres, or by the Workers Educational Association, which this year celebrates 100 years of service, in the provision of liberal courses for adults.

Many such courses led to the formation of local IA groups/societies and at least two societies came into being in the Home Counties region in this manner. At the beginning of the twenty-first century such courses, although not unknown are fairly uncommon, so it was pleasing to note that one such course was advertised by the WEA in Charlbury, Oxfordshire, subtitled 'Blankets, Barges and Brewing.' After a brief description of the origins of IA and the way the study has changed and developed over the past 40 years or so, the students, all of whom qualified for the University of the 3rd Age, examined the Witney Blanket Industry and noted how Early's once world famous mills are being redeveloped

for office accommodation and upmarket housing; walked part of the Oxford canal towpath and studied one of its independent industries (cement making near Shipton on Cherwell); and studied processes related to Oxfordshire's former breweries. Unfortunately a visit to Hook Norton's surviving brewery will have to be something for the future!

The South Eastern Region IA Conference, hosted this year by GLIAS at Greenwich, is supported by

many from the Home Counties region. One contribution to this year's theme of 'The Thames – waterway of the World' was from Stephen Capel-Davies, of the Berkshire Industrial Archaeology Group and the Wallingford Historical & Archaeological Society. Steve dealt with weirs, flash locks and flood control on the upper reaches of London's river. His excellent slides reminded the audience how temperamental the Thames can be, and gave interesting glimpses into

the age-old conflict between milling and navigation.

The Vale of White Horse IA Group were one such group to be formed on the manner described above (a LEA course in 1974-75). They are still actively engaged on their mill project at Charney Bassett (Oxfordshire). The group now works very closely with the local parish council. Members are also engaged sorting and cataloguing documents and archives rescued when Greene King took over, and closed the former Morland brewery at Abingdon, now largely redeveloped for residential and office accommodation. One 'green' aspect of the closure of Morlands, but presently still in existence (for how much longer?) are the hop poles and wires in its former hop garden at Southmoor, about 10km west of Abingdon.

Another Oxfordshire brewery, that of Morrell's Lion Brewery in the centre of Oxford, has also recently been more a building site than a brewery, as it too is being transformed into flats. Its very striking lion surmounted gateway is being preserved. This brewery was not so many years ago featured in an episode in the 'Inspector Morse'



Two women working at power looms in the Early Blanket Mill, Witney, Oxfordshire. From the Henry W Taunt collection (see 'Viewfinder on the way we worked' on page 15)

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