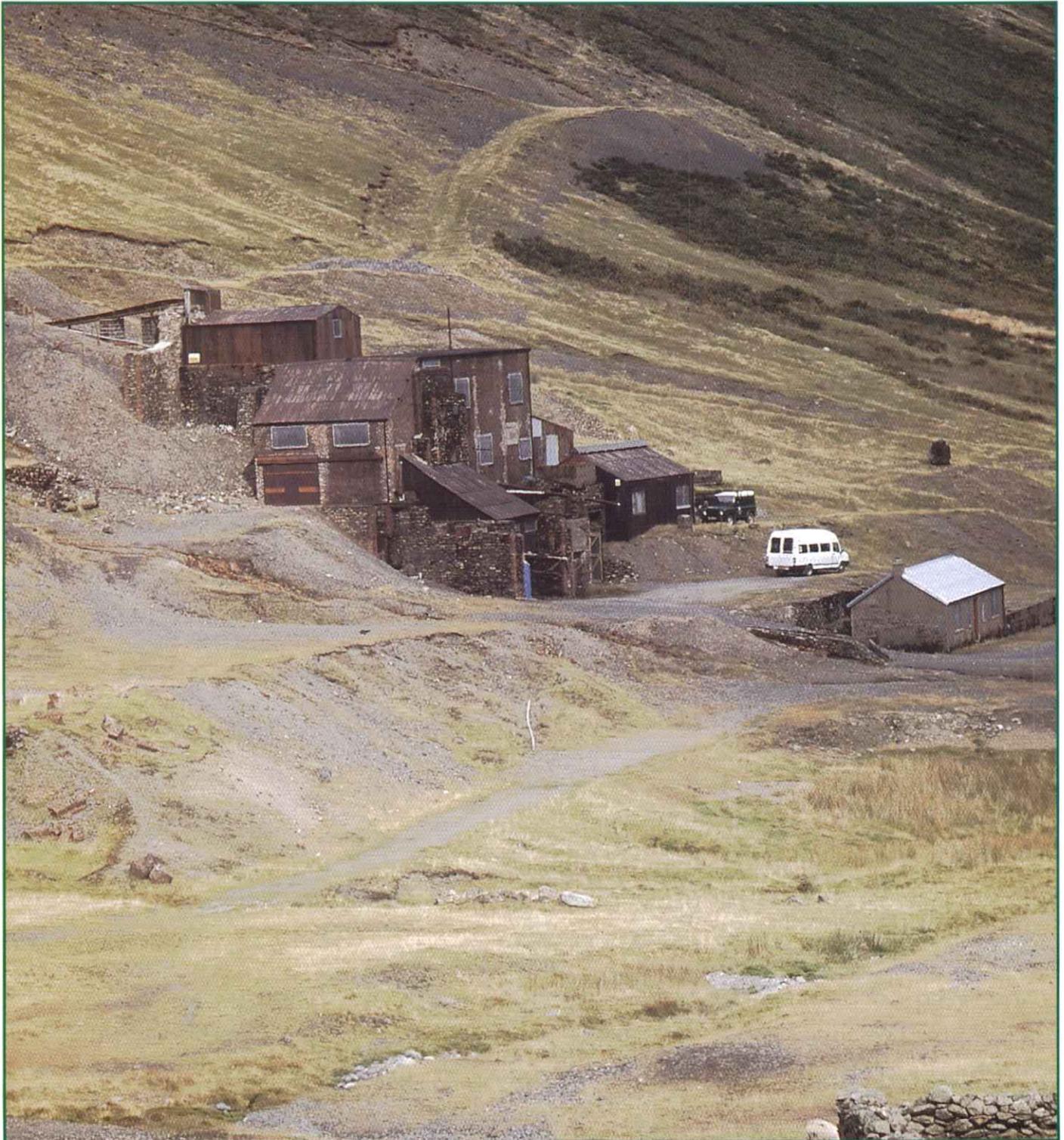


INDUSTRIAL ARCHAEOLOGY NEWS

136
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2006

THE BULLETIN OF THE ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

FREE TO MEMBERS OF AIA



TICCIH in Japan • Bakelite moulding • Detroit • Force Crag Mine conservation
Nantyglo farm • industrial town living • railway and bridge awards • regional news

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INDUSTRIAL ARCHAEOLOGY

INDUSTRIAL ARCHAEOLOGY NEWS 135 Spring 2006

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COVER PICTURE

The main buildings at Force Crag Mine after conservation for the National Trust, on the occasion of a public open day in September 2005. Winner of the Award for Conservation (see page 14)

Photo: Peter Stanier

TICCIH visits Japan

The following is a report on the TICCIH Intermediate Conference and International Forum for Industrial Tourism, held at Nagoya Aichi, Japan, in July 2005. Exhausting tours revealed the potential for industrial archaeologists in a country quite unlike anywhere in the west. The author is the UK's TICCIH representative.

Miles Oglethorpe

Members attending the AIA's annual conference five years ago in Manchester may recall meeting Japanese industrial archaeologists when they were joined by delegates from the TICCIH 2000 congress. Their presence reflects the fact that our Japanese friends have for many years been visiting Europe, and the UK in particular. Amongst their many interests has been tracing the British and other overseas technologies that provided the roots of Japan's phenomenal industrialisation in the late nineteenth and twentieth centuries. This interest has been shared by TICCIH General Secretary, Stuart Smith, who has visited Japan on eight separate occasions in recent years. As well as promoting the importance of industrial heritage within Japan itself, he has also been striving to dilute the heavy western European and American dominance of TICCIH, so the opportunity to build links with Asia was especially significant.

It was against this backdrop that the Japan IA Society was persuaded to organise an intermediate TICCIH conference, in collaboration with the International Forum for Industrial Tourism. They did so in partnership with the Chuba Society for Industrial Heritage, and combined it with a congress on industrial tourism, held in the Aichi province of Japan, an industrial region that has thrived in the recent

years of comparative stagnation in the Japanese economy. The result was a conference quite unlike any that the western TICCIH delegates had attended. At its height, it was attended by over 600 delegates, and filled a significant part of the huge and very modern Nagoya Conference Centre. To us at least, everything went incredibly smoothly. Simultaneous translation was available wherever it was needed, the papers were varied and interesting, the hospitality was outstanding, and the tours quite fascinating.

The conference was initially based in the Kanayama district of Nagoya city, on the south coast of Japan's main island, Honshu, between Tokyo and Kyoto. Access to Nagoya has recently been greatly enhanced by the opening of a new international airport, and this coincided with the 2005 International Expo, which was occurring on the outskirts of the city. The 30 or so foreign delegates were deposited in a range of hotels near the conference centre, and were able to acclimatise gently to Japanese life in what is a vibrant but safe and very clean urban environment.

The pre-conference tour commenced with a visit to the Shinkansen maintenance workshops at Hammamatsu. Here we witnessed the latest 700-series Nozomi bullet trains being dismantled, serviced and re-assembled after over one million kilometres of service. A fascinating experience in its own right, this rendered subsequent journeys on Shinkansen even more exciting, and sowed the seeds of deepening depression amongst UK delegates faced with the prospect of returning to life on Britain's railways. For those with ferro-quinological tendencies, it should be noted that there is plenty more to be seen in Japan, not least the awesome railway network around Tokyo itself. However, perhaps the greatest surprise for



Lifting a carriage in the Hammamatsu bullet train workshops

Photo: Miles Oglethorpe



Futuristic travel. An inspiring sight in the Hammamatsu bullet train workshops

Photo: Miles Oglethorpe

your correspondent was the discovery of a Thomas the Tank Engine theme park in an area of outstanding beauty right next to Mount Fuji.

The conference itself was made up of two days of intense activity based in the Nagoya conference centre. After a keynote speech from Stuart Smith, subsequent sessions included a panel discussion on 'Industrial Tourism and Community Building', followed by concurrent sessions on 'Industrial Tourism and the role of NPO/NGOs', 'Technology transfer from the west to the east and its impact on the industrial heritage', 'Revitalizing communities through industrial tourism' (with case studies from Japan), 'Preservation of industrial cultural assets and their use as a tourism resource', and 'Industrial tourism in the world'. Inevitably, this induced a wide range of subjects and presentations, some topics being worthy of a separate conference in their own right.

In particular, delegates had the opportunity to hear about a wide variety of tourism-related industrial heritage projects throughout the world, but especially in Japan. This reflects the extent to which industry is embedded in Japanese culture, and the fact the Aichi Prefecture is now actively promoting industrial tourism, and was a significant supporter of the conference.

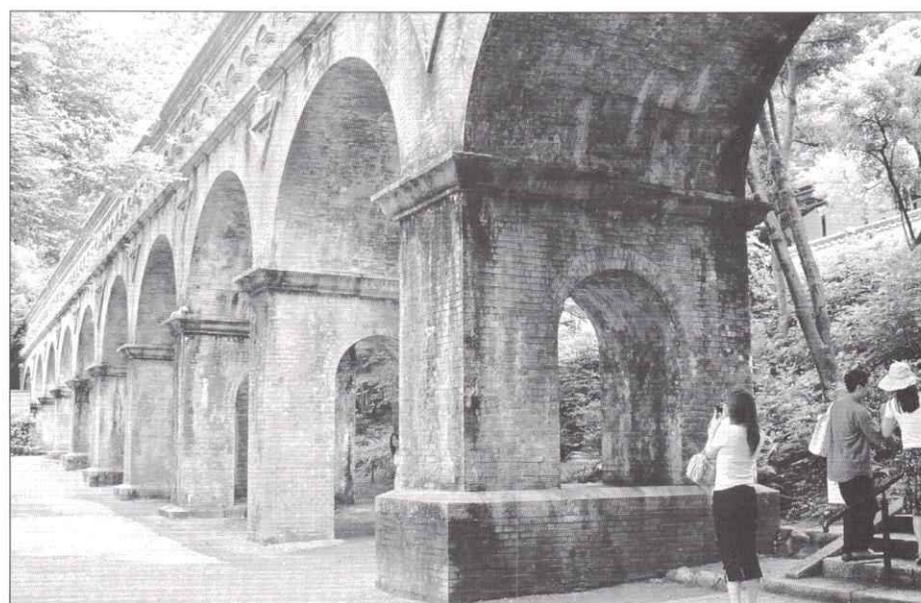
With the formal conference sessions completed, the opportunity was taken to visit this year's International Expo, which happened to be near Nagoya, and had a strong environmental theme. Apart from the astonishing scale of the place, and the structures and walkways that had been erected within it, the Expo was a fitting demonstration of Japan's appetite for efficient logistics, constant innovation, and collective entertainment. Expo Aichi 2005 had already exceeded its visitor targets, and was expecting to have received over 22 million people by its conclusion 25 September.

Several of the national exhibitions were truly outstanding, demonstrating great energy and enterprise whilst also advertising the national attributes of their countries, notable examples being Mexico and Spain. These compared very favourably with the UK pavilion, at the heart of which was what appeared to be a large patch of weeds, and at the end of which visitors were treated to a selection of fuzzy landscape photographs that could be viewed through holes in a sequence of pink bird boxes tastefully arranged on a wall.

The official conference tour began with a visit to the Toyota commemorative museum in Nagoya. This is for all tastes, the first half being devoted to the birth of the company, originally 'Toyoda', as a textile manufacturer, and its evolution into the automotive giant that it is

today. As elsewhere, the interpretation was excellent, and in Japanese and English. The day continued with visits to the Noritake porcelain factory, and a tour of the city's waterworks, which was established with the assistance of British engineers. Here, the Japanese pride in their work was well illustrated by the tour guide, who proudly wore a baseball hat bearing the words, 'Nagoya Sewage Works' in English. Inevitably, everybody wanted one.

The Japanese respect and enthusiasm for work was further illustrated by a visit to the 'Electricity Museum', which is situated adjacent to a power station belonging to the Nagoya Electric Company. As well as being a brilliant exhibition in its own right, it has a more specific educational purpose, which it claims is to 'educate the next generation of scientists'. It was



The Kyoto Aqueduct

Photo: Miles Oglethorpe



The Toyoda Museum

Photo: Miles Oglethorpe

clear that the museum is a superb training resource for the company's current and future employees. To round off the day, our hosts organised a cruise around Nagoya Harbour, which was later illuminated by a firework display specially for the conference.

The second day of the tour began with a heavy ceramics experience of great intensity. Delegates were deposited in a small village famed for its clay products and given a guided tour through narrow streets, the surface and

retaining walls of which were made from discarded clay products. Situated between dwellings could be found workshops and intermittent and continuous kilns of varying size and complexity. Examples of the products themselves, including mostly salt-glaze pipes, chemical vessels, and saki jars, were everywhere.

Whilst in Nobomigama, there was just time to visit the 'Inax' tile museum nearby at Tokoname City, which included a unique historical collection of Japanese toilets. In this context, it is worth observing that the Japanese appear to be in the forefront of toilet technology, and most visitors to Japan at some stage have the

opportunity to test drive some highly sophisticated sanitary ware, some of which are designed to render the use of toilet tissue redundant. Many of the finest examples of these modern installations just happen to be made by Inax.

Further highlights of the day included the 'Museum of Vinegar' (Su-no-sato) at Handa City, a highly unusual experience during which it was possible to witness the microbes at work producing vinegar. From there, with the monsoon beginning to kick in, the tour moved across Handa City to visit the remains of a German-built brewery previously operated by the Marksan Brewing Company in the 1890s following the introduction of beer to Japan by the British in 1869. Attempts are being made to preserve the surviving elements of the brewery, especially as some of the buildings are of great interest, having exceptionally thick brick walls with cavities designed to protect the fermentation process from the excessive heat of the Honshu summer.

It was, however, the final stop of the day that provided the greatest and perhaps the most important preservation challenge. The Yosami Radio Transmitting Station is an outstanding survivor from a pioneering era of radio communication. It dates from 1927 when the Japanese Government attempted to break its dependence upon under-sea cables, which it knew were being tapped by the UK and other foreign intelligence agencies. Yosami was built with German technology, but the associated art-deco architecture has a wonderful Japanese flavour.

As a long-wave station, it was almost immediately rendered obsolete by new technology, but remained an important means of communication with submarines. It therefore survived World War Two and the subsequent decades, when it was occupied and maintained by the US Navy. The Americans have departed and the station is now disused. Japanese industrial



Precision timing on the TICCIH Japanese tour

Photo: Miles Oglethorpe



Yosami Radio Station

Photo: Miles Oglethorpe

archaeologists are trying to save it, and it is hoped that intervention by TICCIH might assist this cause.

Those delegates who chose to stay on for the post-conference tour were taken to a traditional Japanese hotel, thereafter experiencing the delights of communal bathing in hot springs, a traditional banquet, some Japanese bingo, and then a heavy dose of Karaoke. The following day was perhaps the most difficult for the organisers, who had to shepherd 20 insubordinate foreigners (and their increasingly voluminous luggage) on and off a Shinkansen bullet train to Kyoto. The trains are always exactly on time, and only stop for a minute or so before proceeding relentlessly on towards their final destination. Fortunately, no-one was lost, all arriving safely in Kyoto. However, a Japanese colleague did lose his TICCIH 2000 Scottish conference briefcase, which was carried on to Hiroshima, only to be safely returned by Japanese Railways with great speed on the following morning.

Whilst in Kyoto, the opportunity was taken to see some of the fantastic World Heritage Site landmarks, but in the midst of these was the extraordinary Lake Biwa Canal, which incorporates an impressive inclined plane, and associated features such as a fine aqueduct. On the final evening, there was a farewell banquet at which it was possible to thank our hosts. For all of us, this had been a truly wonderful experience, and the sentiment was expressed that Japan would be an excellent place to hold a full TICCIH conference in the future. The polite but exhausted demeanour of our hosts, Akira Oita and Shoji



A pathway through ceramics at Nobomigama

Photo: Miles Oglethorpe

Ishida suggested they would like some time off first.

Details of much of what was seen during this conference, and a great deal more, can be found in a guidebook by Professor Kotaro Tanaka (President of the Chuba Society for Industrial Archaeology) on the industrial heritage of the Chuba region, which includes Aichi Prefecture,

and the city of Nagoya. It is entitled, *Rediscovering the Art of Manufacturing*, and is available in English in a condensed form reduced from a much larger Japanese volume. Anyone interested in acquiring a copy should contact Ishida by email at: ishida96@tcp-ip.or.jp. At 1,000 yen (just over £5.00), it is excellent value.

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Bakelite moulding and the Eagle Workshops

The 2004 AIA Award went to the Eagle Workshops and Exchange Buildings, High Street East, Sunderland. As mentioned in IA News 132 a firm of precision plastic moulders, Fairgrievs, occupied the Eagle Workshops until six years ago and not only were they early pioneers in the moulding of bakelite, they are still in the business of moulding plastics on a new site. Machinery, moulds, equipment and numerous records remain behind at the old premises and a brief account of bakelite moulding and what survives in Sunderland at High Street East follows. Here are important records and archaeological remains of a twentieth century industry in its primitive early stages. Particular thanks to Colin Meddes of the North of England Civic Trust for a good deal of this information.

Robert Carr

Fairgrieve Brothers started an electrical engineering business in what was the Eagle Tavern in 1908 but this changed radically after the First World War. In 1919 three of their staff were sent to the USA to learn first hand from Leo Baekeland, the inventor himself, the techniques of using Bakelite moulding materials, and from then on they became wholly a bakelite moulding firm specialising in the supply of components to the large electrical firms. How such a dramatic change in the business took place is not known but one might suppose that a prior agreement with the large manufacturers must have existed for such a risk to be contemplated. A Bakelite patent existed up to 1927 and there was also a British inventor, Sir James Swinburne, who later collaborated with Dr Baekeland.

Fairgrievs continued as a family concern, with finally one daughter who had started there at the age of 16 running the business, until 1971 when it was sold and became Fairgrieve (Mouldings) Ltd. It is significant the well-known name of Fairgrievs was retained. The firm moved out of the Eagle Workshops in 1999 to new premises in Washington, Tyne & Wear, and continue there in broadly the same line of business. Much of their work is ordered from the Far East with the completed mouldings, generally electrical components, being exported back there.

Phenolic materials, thermosetting plastics popularly known as bakelite, are synthetic resins made by condensing a phenol with an aldehyde, usually phenol with formaldehyde, in the presence of a catalyst. Subsequently a filler such as wood flour is added and generally colouring matter. The preparation of a powder suitable for moulding involved rolling the material into thin sheets and then grinding it into fine powder. To achieve the best results this powder might be again formed into a sheet by means of hot rollers and ground more finely. Nowadays bakelite powder comes to Fairgrievs from China.

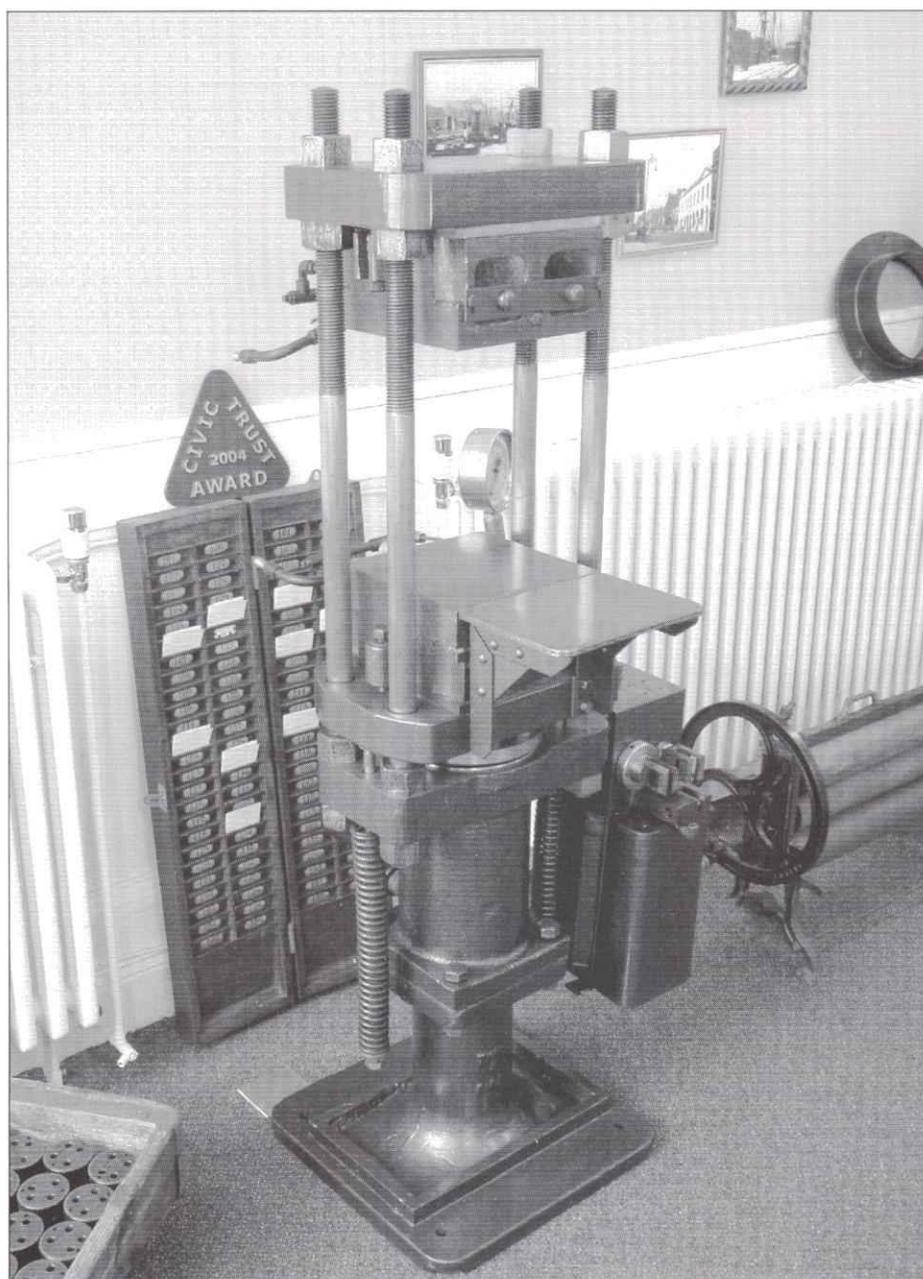
To make a bakelite moulding the process at Fairgrievs was as follows. Bakelite powder was put into a strong steel mould consisting of two

well-fitting parts which were then squeezed together in an oil-hydraulic press between steel plates heated directly by gas jets. The plates would be heated to about 160o C or so and the pressure increased in stages, the press powered by a hand pump and exerting a force of 3 to 30 tons depending on the product being moulded.

The combination of heat and pressure forms the finished moulding which when cool can be emptied out. It has acquired an attractive glossy finish and is a finished product requiring no further work. One is immediately struck by how aesthetically pleasing a bakelite moulding can be and insulating components for electrical equipment take on the character of works of art when suitably lit and displayed in a glass case - no wonder there are bakelite collectors.

Fairgrievs' bakelite products were manufactured almost entirely for the electrical industry with hardly any domestic items being made. Charles Parsons had made Tyneside an important area for electrical manufactories and components from Fairgrievs usually went to the big firms such as General Electric, Reyrolle, Siemens, C. A. Parsons and BTH. Bakelites, or phenol formaldehyde resins, have excellent heat resisting and electrical insulating properties which would have made mouldings from Fairgrievs much in demand.

Fairgrievs' records at the Eagle Workshops go back to the 1930s and there are hundreds of blueprints, letters, invoices, receipts, order books, and colour samples as well as the wooden patterns made for making ferrous castings to



A 15-ton hand-operated hydraulic press. The 'mangle' lower right has a steam-heated bottom roller for rolling sheets of bakelite, prior to grinding into fine powder suitable for moulding

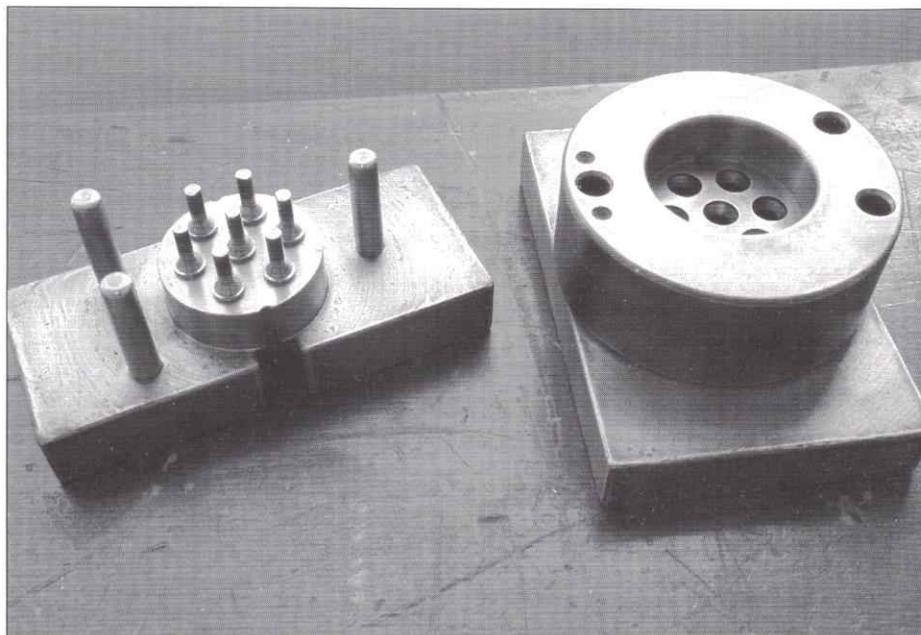
Photo: R J M Carr

build their first hydraulic presses. With bakelite moulding in its infancy, probably no one was building suitable presses at the time so Fairgrievs would have had to make them. Sunderland was noted for marine engine building and there would have been many local firms who could undertake this. Two hydraulic presses survive, one of 15 tons capacity restored to working order and a larger one of 30 tons which is understood to be in working order. A back room at the Eagle Workshops contains a great number of unwrapped brown paper parcels containing records for the period 1930s-1970s.

Very important is a card index of the steel bakelite moulds, or tools, which are numbered. There is also a 'tool book' and the two tie together very nicely giving a detailed 'recipe' for the production of each item together with customer's name, numbers made and cost, etc. During manufacture of a bakelite moulding the top and bottom plates of the press were maintained at given fixed temperatures, say 350 (top) and 320 (bottom) degrees Fahrenheit, and for a few minutes the operator would progressively increase the pressure, finally leaving things to 'cook' for a few minutes to complete the process. Trial and error would have been needed to determine the correct parameters.

What is striking about the bakelite manufacturing equipment at the Eagle Workshops is that hardly any of it needs mains electricity to operate it. Generally the power comes from human muscles and the business could have managed with just a gas supply. Despite some large orders, mouldings were made individually or in small batches. The work was labour-intensive, certainly more like that of a craft industry than mass production. Most of the current work at Fairgrieve (Mouldings) Ltd is injection moulding in a variety of plastics but they do still mould bakelite. They employ 12-15 staff as they always have done.

As well as our 2004 AIA Award, the Eagle Workshops and Exchange Buildings both received a Civic Trust Award the same year. Next door to



A two-piece steel bakelite mould

Photo: R J M Carr

the east, the four-storey Horner's Commercial Hotel has been demolished and the cleared site is already largely overgrown with vegetation. In the Eagle Workshops office is a splendid model dating from the 1950s of the fronts of buildings from here westwards, showing the two Victorian houses once sandwiched between the Exchange Building and Fairgrievs. In the recent refurbishment work these two houses were replaced by a new infill matching the Exchange Building in style. The two demolished houses were the Half Moon Inn (frontage now in the USA) and E. Patterson's general dealers shop, both with accommodation above. The back of the Exchange Building, facing over the River Wear, is stone clad and clearly demonstrates what a fine quality building this is.

The replacement Eagle on top of the Eagle Workshops has now weathered sufficiently to look correct and match the building. The Victorian original, now in Jersey, was removed from the

roof of the Workshops in the 1920s or '30s during refurbishment of the building. Owing to a conflict over payment the builder refused to return the eagle and it stood outside his depot for many years. When the builder retired to Jersey he took the eagle with him and it has stood in his front garden ever since.

There is enough at the Eagle Workshops to set up a typical small bakelite moulding shop c1930 with the possibility of giving demonstrations, at least for television. This cannot be done at the present location and a new home, say in an industrial museum, needs to be found. The Beamish open air museum comes to mind but they will not take anything post-1913. Is there anywhere else suitable? A possible relocation is the Bakelite Museum near Taunton but this means a move away from the North East. The Plastics Historical Society has shown an interest in this and a move to Taunton is now very likely.

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Detroit and the SIA Fall Tour

The Society for Industrial Archeology is AIA's sister organisation in the USA and the Fall Tour took place on 29 September to 2 October 2005. Your AIA Treasurer and author has friends in the USA and Canada and sometimes includes an SIA Tour in a trip over there. He chose Detroit because he had long wished to see the Henry Ford Museum, and went a couple of days early to do this. His observations follow.

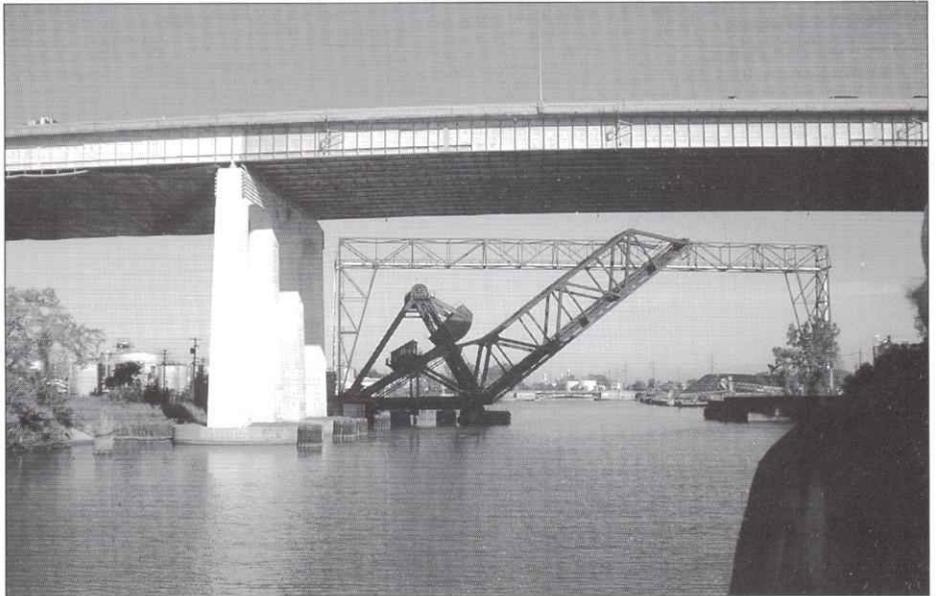
Richard Hartree

The Henry Ford Museum is in two neighbouring parts. One is a recreated historic village which is well done and gives interesting glimpses into the 1800s in small town North America. A reconstruction of the Wright Brothers' cycle workshop in which they built their first airplane was a good illustration of the small scale on which technology developments can start.

The Museum proper is large and has an understandable North American emphasis. The early Newcomen and Boulton & Watt steam engines are well displayed, even though we may complain about the manner of their removal from the original sites. I liked the use of light bulbs to indicate the power that could be generated. Later power sources are illustrated by American examples. The very good 'time line' of automobile development is exclusively American, as is most of the railway exhibit. Henry Ford was a friend of the Wright brothers and the early development of flight and the aviation industry are well covered. This all made an interesting change from what we are accustomed to.

The SIA tour itself started with a coach trip up the Rouge River valley. The valley had been a route of first French, then British and finally American settlement. It was cleared to become farmland and up the river mills were built and small towns developed. The Rouge was important to our tour because it was at its mouth on the Detroit River that Henry Ford built his great works. Up the river he had tried to help farmers stay on their land by building small component factories on the old rural mill sites. It was here that we were introduced to the 'Underground Railway'. This was the name given to the route and safe houses used by slaves escaping from the Confederate South to Canada, where they could be certain of freedom. We heard of rural mill owners who were known abolitionists having their mills burnt down by supporters of slavery! That evening we had a reception at the Piquette Plant building which is where Henry Ford first built the Model-T in 1904 and started development of mass production. A truly historic site.

During our stay we were never to forget that Detroit is 'Motown', the home of the American automobile industry. The following morning we had a guided visit to the new, state-of-the-art Ford F-150 pick-up truck assembly plant on the Rouge site. It was built to be environmentally friendly, recycling all the water and with the roof



Rouge Bridges, Detroit

Photo: Richard Hartree

covered in plants for insulation and cooling. After we had a visit to Henry Ford's home near the Rouge River. It had all modern technology of its time, was almost folksy and had no palatial pretensions. I could not but help notice both similarities and differences between it and Sir William Armstrong's Cragside which I had visited a few weeks before.

That afternoon we visited two auto part stamping plants both closer to Detroit. One supplied replacement parts for models no longer in production. It was quite old and little automated. The other belonged to the ThyssenKrupp group and was fully automated. They gave a good picture of the changes in the industry. We also had our first sight of past glories such as the Ford Highland plant where mass production of the Model -T was first implemented; now an almost abandoned building

The next morning there was a river cruise

from the Detroit waterfront. Here we saw the sculpture monument of a group of black slaves celebrating their imminent freedom in Canada; the end of the Underground Railway. Also we learned that a major industry in Detroit before automobiles had been cigar making and that much of the tobacco came from farms in Western Ontario run by escaped Southern slaves, which gave a nice little twist to the story.

The cruise was down the Detroit River, past US Steel's Great Lakes mill and then up the Rouge River, with a good variety of bridges for the enthusiasts, to the Ford plant turning basin. Ford's Rouge plant had had a remarkable degree of vertical integration with its own blast furnace and coke ovens, steel mill, glass plant, tyre plant, power plant and all services. There were 120,000 workers in WW II. It was the precursor for many heavy industrial plants around the world; much copied in the Communist economies. It is now a



The Packard Plant, Motown. The main plant is over half a mile long

Photo: Richard Hartree

shadow of its former self. The steel plant is now in Russian ownership and the power, glass and tyre plants are no longer there, but one can gain some impression of the earlier scale of things. Employment, including the steel plant is now 8,000.

That afternoon and we saw another side of Motown's past. Ford's Ford Highland plant. It was amongst a collection of large derelict factory buildings reached through run-down residential areas. The Packard plant, over half a mile long, empty for over 30 years, the Fisher pressings plant and more. It left a very depressing impression. When was urban renewal going to start? A contrasting final visit was to the Art Institute of Detroit to see the Diego Rivera murals which cover the walls of the 'Garden Court'. These are very recognisably based on Ford's Rouge plant; controversial at their time but now recognised as masterpieces of their kind.

The evening banquet was at the Great Lakes Museum on Belle Isle, a park designed by Olmsted of Centre Park fame. Over the river in Canada could be seen Seagram's distillery. The conversation touched on the time of prohibition and bootlegging car trips across the frozen river; how many Model-Ts sank through the ice - a good collection?

On the Sunday morning there was a trip to the New Center area. In the 1920s this was going to be developed as a new city centre. This never happened. The General Motors office and R&D



Detail of the Fisher office building in the New Centre area of Detroit

Photo: Richard Hartree

building of 1922, now used by state government, the Fisher building, an office skyscraper of 1925, are the outstanding buildings. In addition to these we saw more derelict factory buildings and depressed residential areas. Again I was struck by the almost complete absence of urban renewal. Was this because land prices are low and do not force redevelopment as land shortage can the

UK? Was it a demonstration of a weakness in governments at all levels? Detroit's tax base has been severely eroded, the population has fallen from 2,000,000 to 900,000 in the last 50 years.

This was my fourth SIA trip. I can recommend them to members as an addition to a North American holiday. They are publicised in *IA News*.

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Two prizes are available - a general prize and a student award. Essays must be submitted by 31 March 2006, but first contact the Liaison Officer for more details (address on page 2).



£500 Reward

The AIA, in conjunction with Dorothea Restorations Ltd, offer an annual award of £500 and a handsome Plaque to the project considered the best of that years entries.

To be eligible for entry projects must be concerned primarily with the conservation of a site or object of industrial, agricultural or domestic archaeological interest.

Initial expression of intent to submit a detailed application is achieved by completion of a simple Questionnaire, which can be obtained from the award co-ordinator, David Lyne, 10 Somerville Road, Leicester, LE3 2ET, Phone/fax 0116 29 19 706. e-mail davidlyne@ntlworld.com, who will also ensure that you receive a full copy of the rules and award information.

Entry for an Award is made by completing the questionnaire, followed by a detailed submission at a time decided by yourselves. Applications received **before the end of April 2006** should be in time to be considered for the award for that year. Applications received after this date may have to be deferred until the following year.

The winner will be notified by 31 July, in time to arrange for representation at the AIA conference in August or September, at which two places, one of which is complimentary, will be reserved for the presentation.

DO NOT DELAY, ENTER TODAY!

AIA Awards: increases in prize money in 2006

Council has been discussing the very generous legacy left to the AIA by Peter Neaverson for furthering our efforts to reward conservation, recording and publication in industrial archaeology – all causes in which Peter was very interested. In 2006, the prize money for AIA Awards will be substantially increased, as follows:

Essay Award: two prizes of £200 each

Publications Awards: three prizes of £200 each

Fieldwork and Recording Award: main award of £500, Initiative Award of £300 and Student Award of £200.

Dorothea Award for Conservation: one award of £500.

The information awards leaflet can be obtained from Simon Thomas (email: aia@le.ac.uk). So, please get the entries flowing in!! The closing date for this year's entries is 31 March 2006.

There will also be a prize devoted to Peter's memory, the criteria for which will be outlined at the next AGM in September and in *IA News*.

Peter also left legacies to The Newcomen Society, Leicestershire Industrial History Society, the Swannington Heritage Trust (winners of the 2004 Conservation Award) and the Dartmoor Tinworking Research Group. His tireless work for IA during his lifetime will be therefore continued as a result of his generosity.

Marilyn Palmer

Isle of Man 2006

The booking forms for the 2006 AIA Conference are enclosed with this copy of *IA News*. The AIA was founded in 1973 on the Isle of Man but has not been back since. Despite the passage of 33 years there is still much to see on the island.

The star attraction is the Lady Isabella at Laxey, the largest waterwheel in Europe, 72ft 6in (22m) diameter dating from 1854, but that is just one of a good number of metal mining relics on the island. On the dressing floors below Laxey, work is in hand re-erecting a 50-foot (15m) waterwheel that has been returned to the island from Cornwall, via Wales. Other restoration work at Laxey includes the 18-inch gauge

mines tramway complete with replicas of the two tiny steam locomotives originally built by Stephen Lewin of Poole. Elsewhere there are engine houses, wheel pits and other remains of metal mining whilst slate and stone quarrying has left its own marks.

Agriculture played an important part in the island economy and there were once numerous mills. Some remain and Laxey Glen Mill is still working, albeit with modern machinery. Textile production also made use of water power and an intact set of fulling stocks survives at St Johns. A linen mill at Douglas was responsible for one of the few examples of industrial housing on the island.

The island developed its own idiosyncratic transport system and whilst this is much depleted there is still a good deal to see. The horse trams still ply their trade along Douglas Promenade and the Manx Electric Railway takes a stunningly beautiful route along the east coast. The summit of Snaefell (621m) is still only accessible by the Snaefell Mountain Railway. The Isle of Man Railway is reduced to one line, from Douglas to Port St Mary, but operates during the summer with steam. On the roads the TT course has interesting features.

Inevitably, as an island, the sea has had a major influence. Shipbuilding and ropewalks are now a thing of the past but harbours are numerous and kipper smoking is flourishing. A fine series of lighthouses are on the Calf of Man, some of which, like others on the island, were designed by Stevenson. There is an excellent Maritime Museum at Castletown and the House of Mannanan at Peel includes a good display on the Isle of Man Steam Packet Co.

Tourism had a major impact during the later Victorian period and for much of the twentieth century and the superb rows of Victorian terraced hotels are a reminder of this. In Douglas the wonderfully restored Gaiety Theatre is a short walk from our hotel and the Grand Union camera obscura is across the harbour. Pleasure grounds were a particular feature of Victorian times and many survive. At Silverdale we shall have the unique opportunity to ride a water-powered carousel.

In the absence of university accommodation on the island this conference will be hotel-based with

lectures, dinners and accommodation at the Claremont Hotel in Douglas. More economical accommodation will be available at the sister hotel, Chesterhouse, just two minutes walk away. Hotels on the island maintain a very high standard but we have been able to negotiate very favourable rates, including transport. Both the Department of Tourism and Manx National Heritage and been extremely helpful and we are assured of a warm welcome on this friendly and attractive island.

Michael Messenger

AIA goes brewing at Ironbridge!

This year's Ironbridge Working Weekend will be on the subject of the brewing industry, on 29-30 April. Please note this date has changed from that advertised in *IA News 135*.

Topics to be considered include the brewing processes, brewing architecture, brewing in Somerset, vinegar brewing, the refurbishment of Southwick Brewery, the pub (the IA of consumption) and medieval brewing and malting. Members' contributions will also be welcomed. The Saturday afternoon field visit will take in a malting, and the evening dinner will be held at the Malthouse in Ironbridge, followed by the usual (hilarious but you'll be lucky to answer any) quiz.

A booking form is enclosed with this mailing, to be returned to Ray Riley, Affiliated Societies Secretary, by 7 April 2006.

To all Affiliated Societies re publications for abstracting or review

The Association is very grateful to all those societies and for that matter other publishers who send us their publications for review and/or abstracting. The arrangements for dealing with these have now been finalised, and it would be most helpful of you could follow these guidelines.

All newsletters and journals, **unless** these cover one theme only, should be sent to Ian West, Department of Archaeology, University of Leicester, Leicester, LE1 7RH.

Occasional publications, journals on one theme, booklets, etc

should be sent to David Alderton, 48 Quay Street, Halesworth, Suffolk, IP19 8EY for consideration for review.

Perhaps we should make it clear that all publications received are eventually sent to the library at the Ironbridge Institute, where they can be consulted by anyone interested, though it is always wise to make prior arrangements if intending to visit.

David Alderton

The British Archaeological Awards 2006

The British Archaeological Awards (BAAs) are made every two years and 2006 is their 30th anniversary. The 2006 Awards will be launched at The British Museum, London, on 22 February, with the Awards ceremony to be held in Birmingham in October. The closing date for entries should be June 2006.

The presentations of the last BAAs took place in Belfast on Friday 8 October 2004 (see *IA News 132*, pages 10 & 11). That year our own AIA Award went to the Exchange Buildings and Eagle Workshops, Sunderland. Initially it was the buildings that interested us but in the Eagle Workshops a veritable time capsule of the early bakelite moulding industry came to light (see page XX in this issue). The 2002 AIA Award went to the Beehive, Gatwick Airport (*IA News 124*, page 8).

The number of BAAs varies from time to time but there are now 15 and they cover a range of archaeological activities, not just excavation and recording. Of particular interest to readers of *IA News* will be our AIA Award for the best adaptive re-use of an historic building or structure of any period. Some of the other Awards are also relevant to industrial archaeology. The situation generally is quite flexible and open to fresh interpretation. Awards are made for excellence and innovation. If you decide to enter you may be advised which particular Awards are most relevant in your case.

The AIA (formerly Ironbridge) Award was introduced about 20 years ago when it was realised that turning important industrial archaeological survivals into museums could not continue indefinitely. Saturation was fast approaching and the intention was

to reward adventurous developers, who managed to turn a ruin into something which had long-term survival potential because it could once again earn its keep. We were looking for lateral thinking, fresh approaches and a willingness to take some financial risk. The AIA Award is not restricted to buildings of the industrial period.

A major professional root and branch review of all the Awards, including the AIA Award, is currently being undertaken by Gill Andrews, with the assistance of Tony Mulliken. The outcome of this should be an exciting upheaval.

The awards are entirely dependent on the participation of archaeologists whose nominations are used to compile the shortlists in

each Award category. Once the 2006 Awards are officially launched, full details will be circulated about nominating people and projects for an award. Christopher Catling, Hon Secretary BAAs, is very happy to answer any questions about the awards (and even to accept offers of sponsorship!). He can be contacted at The Society of Antiquaries, Burlington House, Piccadilly, London W1J 0BE,

email: christopher.catling@virgin.net
More information may be obtained from the Hon. Secretary of the AIA Awards, Dr Alison Sheridan, Head of Early Prehistory, National Museums of Scotland, Chambers Street, Edinburgh EH1 1JF; ☎ 0131 247 4051, fax 0131 247 4060, e-mail: a.sheridan@nms.ac.uk

Robert Carr

LETTERS

Our fascination with machines

Has industrial archaeology's 'fascination with machines' run its course, as suggested by David Gwyn in his contribution to 'Understanding the Workplace' (*Industrial Archaeology Review*, Vol.27, No.1, 2005, 129), and if it has should it have done? Fashion is no guide to the value of a subject and to suggest that there is something improper about the study of machines implies a firm entrenchment on one side of C.P. Snow's 'Two Cultures'! While I accept that social archaeology, and the 'Manchester Method', have value, I find myself out of sympathy with the view that industrial archaeology should transform itself into social archaeology. This seems to be what is being advocated by several contributors to 'Understanding the Workplace', including our one and only Professor of Industrial Archaeology.

I found even more alarming the book *Industrial Archaeology: Future Directions* (Springer: New York, 2005) whose editors maintain that we need to 'meaningfully engage' with such 'weighty issues as globalization; post/modernity; class, ethnic and gender identities; and the spread and diversification of western capitalism.' Personally I would have to confess to being very wary of such supposedly 'weighty' issues and prefer to leave them to others so as to concentrate on more tractable questions. Some authors seem narrowly prescriptive in their views; for example Eleanor Conlin Casella's claim in 'Understanding the Workplace' (page 75) that the primary significance of the subject '...lies in its ability to subvert...negative depictions [of the poor] by challenging the dominant historical transcripts that serve to reinforce the brutal inequalities of our modern era' (this implies a narrow focus, with avowed political intent, on one group of people and on one perceived aspect of the contemporary world). Or Mary Beaudry, who in her seriously indigestible conclusion (is it necessary to write paragraph-long sentences?) to *Industrial*

Archaeology: Future Directions, says (page 307) we should be writing 'antriumphalist histories' (whatever they may be, my spelling checker comes up with 'no suggestions'). Ian Mellor ('Understanding the Workplace', page 56), quoting Paul Belford, says that we '...have a duty to engage with all the meanings of industrial buildings...' (but it is not clear by whose authority this onerous sounding duty is laid upon us; will those of us who fail in this duty be awoken in the small hours by the Archaeological Thought Police knocking on our doors?).

A key feature of the industrial period was a great expansion in technological and engineering knowledge, which was applied in mining, manufacturing industry, transport, etc. Thus an understanding of technology and engineering is a vital part of understanding the industrial period. It is this that industrial archaeology has, to my mind, been quite rightly focussed on, and indeed it was this interest that brought many of us into the subject in the first place. Yes, we should have a wide outlook that enables us to relate to other contexts, not only social but also economic, financial, business, political, scientific, architectural, etc. But it is impossible for one person to have interest and expertise in all these areas (as the demand that we should consider all 'meanings' of buildings implies). We need to learn from those who do have expertise in these areas, but the converse is also true. I quite frequently come across cases where other historians and archaeologists could have benefited from a better technological understanding.

To be fair, some authors in both 'Understanding the Workplace' and *Industrial Archaeology: Future Directions* do take different views. In fact David Gwyn in 'Future Directions' (page 130) does say that 'there is nothing inherently ... objectionable about studies of machines' (is this a different emphasis for a different audience or has the author shifted his views between writing the two papers?). In the

same volume, David Cranstone (page 87), while arguing that industrial archaeology as such should disappear into something broader, does accept 'the detail of industrial sites and processes is emphatically a part of this broader picture' and that we can 'continue to wear our anoraks with pride' (for which concession I am most thankful).

However, I get the impression that mainstream, academic, archaeology is oriented towards social questions, sometimes of a very abstract nature, and ill-equipped to deal with, and indeed ill-at-ease with, the technological questions which have traditionally been of interest to those calling themselves Industrial Archaeologists. Therefore we should not be afraid to assert our 'fascination with machines' and it should not be abandoned because it is in this very area that we should be making a distinctive contribution to the history and archaeology of the industrial period.

Roger N. Holden
35 Victoria Road
Stockport SK1 4AT
roger.holden@care4free.net

Dumbed down steam engines?

I was shocked to read in *IA News 134* that steam engines on the ground floor at the Science Museum have been removed to make way for a new book shop. If this is not 'dumbing down', what is? Mind you, I'm reminded of when I went to the National Railway Museum at York several years ago. Famous engines like 'Mallard' were going hardly noticed in the main hall, while outside youngsters thronged around an old tank engine simply because it had a 'face' of Thomas painted on it.

Really, we ought to be proud of our Industrial Heritage, and not resort to gimmicks to increase its popularity amongst the general public.

Tim Mickleburgh
33 Littlefield Lane
Grimsby DN31 2AZ

VISIT THE AIA WEBSITE

www.industrial-archaeology.org.uk

Our website contains information on the Association for Industrial Archaeology, including Membership, Abstracts of *Industrial Archaeology Review*, Awards, Conferences, Affiliated Societies and Sales. The Diary gives notice of events, day-schools and conferences, often in more detail than can be published in *Industrial Archaeology News*. Links give access to other societies, museums and organisations in the world of industrial archaeology.

Roundhouse Farm, Nantyglo

The Clwyd-Powys Archaeological Trust (CPAT) has recently completed a programme of detailed building recording and evaluation at Roundhouse Farm, Nantyglo, Blaenau Gwent, in connection with the preparation of a Conservation Plan for the buildings.

The Nantyglo round towers and agricultural range, otherwise known as Roundhouse Farm, are Grade II* listed buildings, representing what appears to be a unique survival of the Industrial Revolution era. The complex was constructed in the early nineteenth century by Joseph and Crawshay Bailey, the ironmasters of the Nantyglo Ironworks, as a defensible refuge in the event of any future insurgency by their workforce and other local people. In this context they represent an integral part of a larger complex that includes the Nantyglo Ironworks and Nantyglo House and as such cannot be divorced from the other elements of the complex.

The earliest building at Roundhouse Farm is the southern stable range and although there remains the possibility that this was constructed in the later eighteenth century, cartographic evidence suggests a date after 1813. The date of the main complex remains uncertain and it is first depicted as late as 1829. It is possible that construction was prompted by an uprising in 1822, although an earlier date cannot be ruled out, and may therefore tie in with the general programme of expansion at the ironworks after Crawshay Bailey arrived in 1820.

Despite its present name the complex at Roundhouse Farm was not designed as a farm in the conventional sense. There can be little doubt that it was designed to be defensive, with a high curtain wall and imposing round towers, although without a significant garrison its effectiveness would perhaps have been limited to the short term. It is also likely, however, that it was built as a statement of the wealth and power of the Baileys. The complex essentially fulfilled two roles, as a part of the ironworks, providing stabling and other facilities, as well as functioning as the home farm for the Baileys at Nantyglo House.

The enclosure was constructed with substantial defensive round towers at the south-west and north-east corners. These would have acted as places of refuge for the Baileys and their staff in case of unrest, and may well have also provided a means of safe storage for important documents, and possibly also money, as at this time the nearest bank was in Abergavenny. The two towers were of similar construction, although the south-west tower had an additional storey. The substantial stone walls had narrow lancet windows with well-defended iron doors at ground level. The cellars would have provided storage space for provisions, while the upper floors were all divided as living accommodation. With the exception of the flooring and partitions the internal fixtures and fittings were of cast iron, including the main beams, joists and segmental roof. It is this use of iron as a building material which adds greatly to the significance of the structures.

The main complex of buildings, extending from the original stables, appears to have been added in one phase, forming an E-shaped range of buildings, but with later additions. A new three-bay stable block with storage above was added, with a transverse wing on its northern end. The original function of this wing is uncertain - divided into three bays on the ground floor, the western bay has two interesting stanchions providing additional support for the first floor. The eastern two bays were later converted into cottages, possibly during the early twentieth century, although the first floor of the end bay appears to have been originally constructed as a dovecote. As with the round towers, this range of buildings was constructed using cast iron instead of timber, not only for the joists and roof trusses, but also the door and window frames.

The northern range of buildings, forming the upper part of the E-shape, has now largely been lost, although the basal remains of walling do survive in part. Consequently, the form and function of the range cannot now be determined. The lack of any substantial tie into the fabric of the surviving building may suggest that at least the north-south element of the range was less substantial and may have been little more than an open-sided barn. The foundations of the transverse wing suggest that this, at least, was a more substantial structure and could have been of similar appearance to the surviving buildings to the south. A separate building to the east of the northern wing, which is now the farmhouse, also appears to be contemporary,

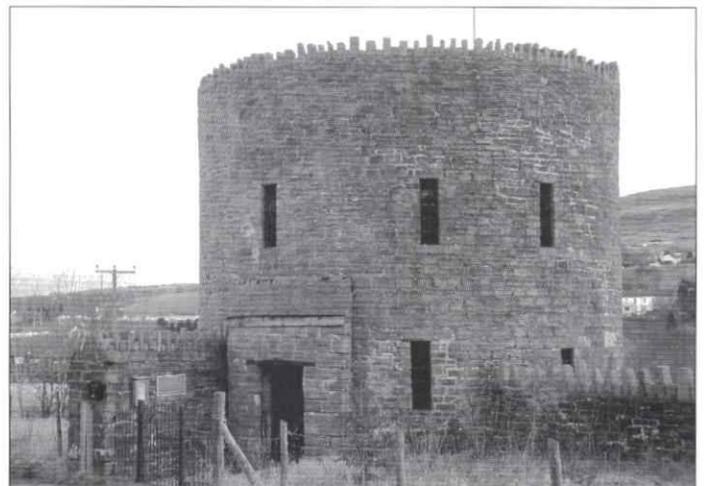
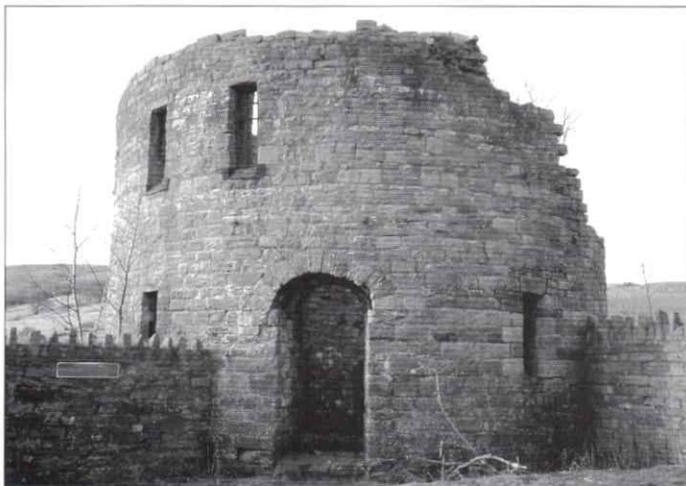
although whether it was originally built as a house is uncertain.

Pat Frost

Living in the Industrial Town

The 2005 North-West Industrial Archaeology Conference was held on Saturday, 19 November in Dukinfield Town Hall when almost 100 people gathered to consider industrial housing under the title 'Living in the Industrial Town'. As the chairman, Michael Nevell of the University of Manchester Archaeology Unit (UMAU), reminded us, terraced housing is one of the most characteristic features of north-west industrial towns. However, they are under threat from various sources. Some of the oldest housing in Manchester incorporating domestic workshops dating from the mid-eighteenth century is under threat from neglect, illustrated by the fact that the houses in Back Turner Street used to illustrate the Conference flyer had collapsed between printing and the occasion of the conference.

Lynne Walker, the Historic Buildings Officer for the CBA, opened the conference by telling us of the threat posed by councils intent on demolishing terraced housing, much of it of good quality. The situation in the Whitefield area of Nelson has already been reported in *IA News*. In one sense the battle in Whitefield was won but much of the restoration work now being carried out is to poor standards of workmanship and much original detail is being lost. But elsewhere in Lancashire the threat to demolish still exists with councillors



The two towers at Roundhouse Farm, Nantyglo, built as an ironmaster's defensible refuge. Internal fittings and fixtures were of cast-iron

Photos: Pat Frost

seemingly intent on pushing programmes through against opposition from local residents who will lose their homes (see www.fightforourhomes.com). We were shown examples from Darwen and Blackburn and also in Middlesbrough.

Geoffrey Timmins, from the University of Central Lancashire, Preston, looked at the regional context, covering the issues of quantifying the growth in housing stock from the late eighteenth century; new types of housing, such those incorporating domestic workshops for weaving; accommodation styles and housing quality. One indicator of housing quality is the number of heated rooms which can be ascertained by counting chimney pots. 'Back-to-backs' have become a byword for poor quality housing, but the best were better than the worse through houses.

Dukinfield Town Hall, which dates from the 1890s, is rather unusually situated in a largely residential area and is surrounded by terraced housing about which Mike Nevell spoke. Dukinfield experienced its fastest growth before 1850 but few buildings survive from this period. During the second half of the nineteenth century we can see developing housing styles, some of this driven by the development of building control. Later housing had larger floor areas, sometimes bay windows and front areas to set the house back from the street. Much of this housing was built for rent by speculative builders who, for the benefit of historians, often provided terraces with a name and date plaque. A majority of the residents worked in the textile mills situated in the Tame Valley below the town, although by 1901 a significant number were commuting as far as Denton to work in the hat works there. After lunch there was a short walk to look at some of the housing in the area round the Town Hall.

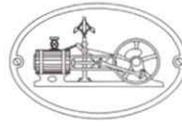
In the afternoon we moved backwards chronologically to consider another type of notorious north-west industrial housing, the cellar dwelling. Sandra Hayton, the assistant Local Studies Librarian for Salford, disclaimed any right to the title 'archaeologist', preferring to be seen as a social historian. Indeed she had made extensive use of the Census returns to trace cellar

dwellers, some 1,300 in Salford in 1851, but nevertheless had considered the physical parameters of cellar dwellings and endeavoured to trace their locations on the Ordnance Survey maps.

Geoffrey Timmins had earlier touched upon the subject of model industrial villages and David George expanded on this theme, looking particularly at Bank Top, Barrow Bridge, Eagley and Belmont to the north of Bolton. During the 1840s there was considerable interest in such model villages, partly political from the Peelite wing of the Tory Party, who feared insurrection, and partly a social and moral movement represented by writers of industrial novels such as Bronte, Gaskell, Dickens and Disraeli who drew attention to the plight of the working class. Disraeli proposed model villages as a solution in *Sybil*.

For the final two contributions of the day we returned to the centre of Manchester. Simon Askew, Community Archaeologist for UMAU, spoke of various rescue excavations carried out prior to development in the centre of Manchester. Some of these revealed dense, poor quality, housing in close proximity to industrial premises carrying out various noxious processes. These sites can be located on the large scale Ordnance Survey maps and Adshad's Map of 1851, which help one to try and imagine what living in these places was like, contributing to an 'archaeology of community'. Finally, Mike Nevell told us of the concentration of eighteenth-century workshop dwellings which still exist in the Northern Quarter of Manchester. Investigation of these properties owes much to the work of the Manchester Early Dwellings Research Group (MEDReG) in the 1980s, whose work unfortunately was never written up and published. More recently UMAU has looked in detail at a number of sites which illustrate Manchester's role as a weaving centre before the introduction of mechanised cotton spinning and weaving. Although now partly a Conservation Area with some renovation taking place, there are continuing threats from development and, as already noted, neglect of these buildings.

In conclusion, this was a useful and stimulating conference on a subject which has not been considered so widely before. It set



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me asking questions about my terraced house which I have not thought of before in the 23 years I have lived there!

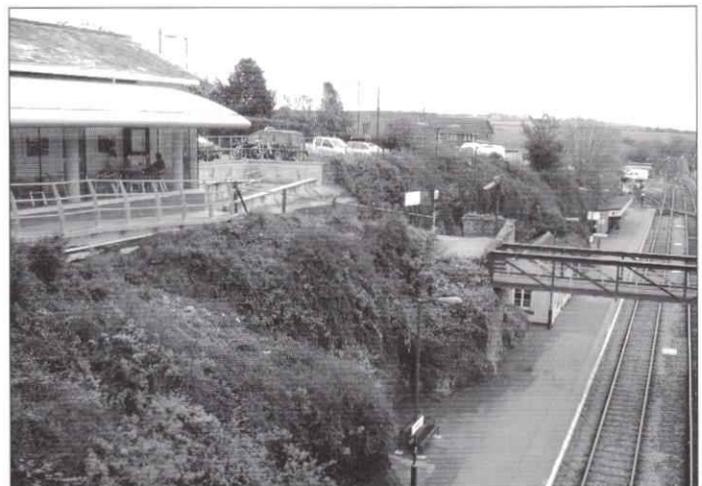
Roger N. Holden

National Railway Heritage Awards

The National Railway Heritage Awards are funded by a number of

sponsors to reward conservation and restoration on both public and private railways in Britain and Ireland. The 2005 awards were presented by John Armit, Chief Executive of Network Rail, in Merchant Taylor's Hall on 6 December 2005.

The **Modern Railways Restoration Award** for the most meritorious entry in the commercial



Refurbishment and expansion of passenger facilities at Liskeard station won the Network Rail Partnership Award for the Cornwall Rail Forum
Photo: Peter Stanier

sector went to Procon Design and Build Ltd for the restoration and conversion of the Grainstore at Helpston in Lincolnshire, a prominent feature on the East Coast mainline north of Peterborough. The **Westinghouse Signalling Award** for the best restored signal box or signalling installation was won jointly by the Swanage Railway Trust for installations at Corfe Castle in Dorset and by Network Rail for their signal box at Settle Junction in North Yorkshire.

The **Railway Heritage Trust Conservation Award** for the best restored listed structure in which the Trust had been involved went to the Settle and Carlisle Railway Trust for the restoration of Kirkby Stephen station. The **London Underground Accessibility Improvement Award** went to the Great North Eastern Railway for its improvements to customer facilities at York station. For their work on the station canopy at Minehead station, the West Somerset Railway and bluestone plc won the **First Engineering Craft Skills Award**, while the Cornwall Rail Forum received the **Network Rail Partnership Award** for its work on refurbishing and expanding passenger facilities at Liskeard station.

The **Virgin Trains Volunteers Award** went to the Northern Viaducts Trust for the creation of attractive walking routes across the Podgill and Merrygill viaducts in Cumbria. The **Ian Allan Publishing Award** went to the Churnet Valley Railway for the station and signalling at Consall and for the restoration of the station at Kingsley and Froghall in Staffordshire. Finally, the **Ian Allan Publishing Independent Railway of the Year Award** went to the North Norfolk Railway for what in the judges' opinion presented the best all-round achievement in meeting the expectations of visitors to a heritage line.

Information about next year's awards can be obtained from the NRHA Public Relations Officer, Mike Lampert, email: mike.lampert@btinternet.com or ☎ 07764 579275. As the Chairman of the judges Robin Leleux has said, the judging is done by an ever-expanding team of judges who have travelled many miles and braved rampant bullocks in the course of duty! Marilyn Palmer sits on the

Panel of Adjudicators and can also provide information on the awards, which do a very good job in maintaining the heritage value of our railway network.

Force Crag Mine wins national conservation award

The £15,000 Award for Conservation, presented by British Museum Director Neil MacGregor, has been won by Tim Martin of Context Engineering Ltd for the conservation of Force Crag mine machinery, a National Trust commission.

Context Engineering played a crucial role in fulfilling the National Trust's plan to open the site to visitors and let them experience the rugged working conditions. The 15-strong team triumphed over the extremes posed by the remote site and the unpredictable Cumbrian weather while sorting through a vast array of rusting machine parts. They identified, cleaned and treated the parts to protect them, while working out what went where inside the old mine buildings. Their success was confirmed when a party of former miners made a tour of inspection and were amazed to see that everything was back in place just as they remembered it.

The team of highly-skilled conservators worked with meticulous precision and speed to re-assemble the machinery from the ore-processing plant of the last working mineral mine in the area. Lead, zinc and barytes had all been extracted from the mine from as early as the 1600s. The machinery had been partly dismantled and left to the mercy of the elements after Force

Crag mine was abandoned in 1991.

Liz Forgan, Chair of the Judges, commented, 'Mining is at the heart of our industrial heritage, and Tim Martin's superbly planned and thoroughly researched work at Force Crag holds lessons for others working in this field. The judges were particularly impressed by the minimal intervention approach of the conservation team, which is still all too rare in industrial heritage conservation. As much scrupulous care and thought has been lavished on these heavy metal objects as we would expect from a conservator approaching a work of fine art. This is a truly remarkable and awe-inspiring project.'

Sarah Staniforth, Director of Historic Properties at The National Trust congratulated Context Engineering Ltd on winning the conservation award. She said 'The conservation of Force Crag Mine is an exemplary project demonstrating how conservation can help to make our industrial heritage understandable and relevant for the public. Furthermore, it shows the breadth of the National Trust's conservation responsibilities, which are wider than collections in country houses! Here is a collection in a site of great archaeological significance set in a dramatic landscape.'

Coalport and Standedge win Historic Bridge Awards

On 16 November, Gordon Masterton presented certificates to the Historic Bridge & Infrastructure Awards winners for 2005. The awards celebrate civil engineering heritage conservation across England and Wales, and are sponsored by

Institution of Civil Engineering's Panel for Historical Engineering Works (PHEW), English Heritage, Network Rail, British Waterways and the County Surveyors' Society. Prof Roland Paxton, chairman of the judging panel, commented: 'The 18 entrants were tremendously strong and I'd like to congratulate them all. The Awards are important because they recognise and encourage excellence and innovation in historic civil engineering.' The two winners were the Coalport Bridge and Standedge Tunnel strengthening projects.

Coalport Bridge's cast-iron arch spans the Severn within the Ironbridge Gorge World Heritage Site. Built in 1818, it is a complex but fragile-looking structure incorporating elements of two earlier bridges which had been built on the same site. The bridge's joint owners, Shropshire County Council and the Borough of Telford & Wrekin, commissioned consultants Gifford & Partners to design a scheme to strengthen the bridge in a manner that would be sympathetic to its heritage status. Before work got under way, specialist consultant Sandberg monitored the effects of traffic loading on the bridge, and as a result a strengthening scheme was drawn up which included bonding steel plates to the cast-iron arch ribs and casting a light-weight reinforced concrete deck slab. The work was carried out by Dew Construction. Mabey Support Systems designed and constructed a massive temporary steel girder bridge over the old bridge, to carry construction traffic, scaffolding and pedestrians. The judges were highly impressed by the well-researched and conceived monitoring and design programme, which enabled the strength of the complicated structure to be accurately assessed; and by the quality of the strengthening work.

The 4880m-long Standedge North Tunnel was constructed in 1890-4 by the London & North Western Railway, and now carries the Manchester Victoria to Leeds (via Stalybridge) line, near Huddersfield. By the 1990s it was clear that long lengths of the horseshoe-shaped brick lining were in danger of progressive collapse.

Network Rail's contractor, May Gurney, appointed specialist tunnel consultant Donaldson Associates to



The National Trust's Force Crag Mine during conservation. Work on the ore dressing machinery packed inside (extremely difficult to photograph!) has won the Award for Conservation
Photo: Peter Stanier

develop a scheme to strengthen and stabilise the failing sections. A phased approach was adopted, which allowed for monitoring during and between each construction stage to determine whether stabilisation had been achieved. Initially, piled ground beams were installed along the toes of the sidewalls to prevent further bulging. Where monitoring showed this to be inadequate, a three-stage second phase was carried out. Firstly pre-cast block retention units were laid in a trench excavated along the centre of the tunnel. One line of rails was then removed, and the invert was excavated so that pre-cast invert units could be installed under that half. After the track had been relaid on the new units, the other half of the invert was dealt with in the same way, so that the completed invert slab acted as a prop between the toes. The judges noted that the well thought-out staged approach, combined with judicious sizing of the pre-cast units, allowed May Gurney to transport units directly into position without double handling, thus shortening the working times within railway possessions on this very busy line. The basic structural form of the historic tunnel is unaltered.

Derek Portman and the Rolt Fellowship

Derek Portman (1927-2005) died in December last. He had been appointed as a Rolt Fellow in the Centre for the History of Technology at the University of Bath in 1997. The Fellowship was established in 1978 to honour the memory of the distinguished engineering historian and biographer L.T.C. Rolt. The University had awarded Tom Rolt an honorary degree in 1973 but he died the following year and it was decided to set up the Fellowship to promote the study of the subjects in which he was engaged. All the 14 Fellows have been mature professional people with an interest in engineering history, and the Fellowship has assisted them to undertake research in this field. Their works have been published in books and articles in learned journals, and in particular two collections of essays by Rolt Fellows have appeared in special symposia on topics in engineering history.

Derek Portman made a strong contribution on the design of

bridges to the second of these collections, due for publication early in 2006 as a symposium on 'Engineering Disasters' in the annual *History of Technology*. He also presented two papers to the Newcomen Society, the first of which was subsequently published in *Construction History* (vol. 18, 2002, 3-20) under the title 'A Business History of the Clifton Suspension Bridge'. The second was on the life and engineering career of Brunel's younger son, Henry Marc Brunel, and that also is under consideration for publication in *Construction History*. These represented the main themes tackled by Derek Portman while he held the Rolt Fellowship, and they were all significant contributions to engineering history.

Angus Buchanan

Olympic Games 2012

The threat posed to industrial archaeology in East London by the construction works necessary for the coming 2012 Olympic Games is considerable (see *IA News* 135, page 14). Compulsory purchase of a 339-hectare site has been announced. In response the Greater London IA Society is proposing a major survey of the East London corridor. Readers interested in taking part are asked to contact the GLIAS Secretary, 14 Eversleigh Road, New Barnet, Herts EN5 1NE; e-mail: secretary@glias.org.uk

Robert Carr

Opportunity for funded research in Derbyshire

The Victoria County History is pleased to announce that following a successful Heritage Lottery Fund bid, the England's Past for Everyone (EPE) project is now underway. Over the next four years, 15 projects are being researched in ten counties across England. Authors are working alongside local volunteers to create a whole range of exciting new resources, from a series of paperback books to interactive materials for schools. Each publication will also include architectural research commissioned by EPE staff and carried out by consultants with appropriate expertise.

The first Derbyshire volume *Bolsover: Castle, Town and Colliery* will include a study of the workers' housing provided by the Bolsover colliery companies and in particular

the architectural and social differences between the settlements of New Bolsover, Carr Vale and Whaley Thorns. The study will also analyse the transition from houses provided by the colliery to the early UDC dwellings and is scheduled for August 2006. With scope for both documentary research and extensive field work, this study is a wonderful opportunity for an architectural consultant to contribute significantly to Industrial Archaeology in Derbyshire. For more information contact the EPE Architectural Assistant Matthew Bristow, e-mail: matthew.bristow@sas.ac.uk

Kempton Great Engines

The engineers at Kempton Park have overcome the crankshaft bearing problem which forced cancellation of most of the steaming dates in 2005. The engine was demonstrated to the public in October and November with great success. No less than 650 visitors saw the engine running during the November weekend.

Kempton Park has two huge triple expansion engines which from 1928 to 1980 could pump 16m gallons of water a day to London. At 62ft high and weighing over 800 tons, the No.6 engine produced 1,008hp and is known to be the largest engine in the world in steam today. The magnificent engine house and its twin chimneys are a prominent landmark next to the A316.

The Kempton Park and Kew Bridge pumping stations are about 30 minutes apart via the A316. A Kempton steaming weekend will, in general, coincide with a Kew Cornish weekend to allow visitors from a distance to enjoy both sites.

Full information of dates and how to get there are on the Kempton Park website: www.kemptonsteam.org

John Porter

Kew Bridge Steam Museum changes

Kew Bridge Steam Museum has changed the pattern of engine running and demonstration. The Museum will continue to be in steam every weekend but the historic beam engines working on the Cornish cycle will only be run monthly. When they are run, it will be an enhanced experience for the visitor because all the available

Cornish engines will be demonstrated, usually at least twice. From mid-summer, this is likely to include the 70" Bull engine now nearing the end of many years of restoration. The Museum wants to attract the specialist visitor on these weekends and will also be offering trips to the top of the stand-pipe tower, workshop tours and explanatory talks on the history of the site and the technicalities of the Cornish cycle in greater depth than is possible on a general weekend.

When the Cornish engines are not operating there will be more emphasis on fun, participation and learning, particularly for the younger generation. The Museum will also continue to be open during the week except on Mondays. Although the engines will not be running, there will be video displays of them in motion and many other items to stimulate the imaginations of young and old.

Further information and details of the Cornish events are on the website: www.kbsm.org, or ☎ 020 8568 4757.

John Porter

Kew seeks gas sponsor

Rises in the price of gas needed to raise steam for the magnificent collection of stationary steam engines is causing grave concern and the operation of the large Cornish beam engines at weekends may have to be curtailed. The Cornish engines account for more than a third of the gas burnt in the Museum's Lancashire boiler and to run them as usual would cost the Museum nearly £30,000 in 2006. A sponsor is being actively sought. Any suggestions will be most welcome, contact Lesley Bossine, ☎ 020 8568 4757, e-mail: lesley@kbsm.org

Robert Carr

Stop Press: David Bick

Mining historians will be saddened to learn of the death of David Bick, aged 74, on 19 January 2006. David was a pioneer of mining history in England Wales, founder and the leading personality in the Welsh Mines Society and instrumental in the formation of the Welsh Mines Preservation Trust. He will certainly be missed by all those involved in the study of mining and industrial history in Wales and South West England.

East Anglia

To commence with Norfolk, the East of England Regional Industrial Archaeology Conference (EERIAC) was held in June 2005, based on the North Norfolk Railway. The day included a visit to the new Fishing and Lifeboat Museum, not yet open to the public. Remaining with the sea, the good news is that the Heritage Lottery Fund has offered £750,000 to cover much of the cost of replating and restoring the steam drifter *Lydia Eva*, though the trust must raise £90,000 first. Also, the new museum of the fisheries in Yarmouth, Time and Tide, reached the finals of the Gulbenkian 'Museum of the Year'. Perhaps as a consequence its visitor numbers have been very good. At the Norfolk Life museum in Gressenhall, funds from the European Commission have enabled the cleaning and restoration, though not to working order, of the steam laundry installed in 1901. The asbestos has been removed and it should be open to the public next year.

Sadly, problems have developed at Gunton Sawmill, where rot has got a hold in a beam supporting one of the main bearings, and the saw can no longer be safely operated. It is on millwright Richard Seago's work list and hopefully it will not be too long before the mill can function

again. Fakenham Gasworks has received HLF money to transfer its collection of Gas Board films to DVD for easier showing, and it also received the archives of the Gas Energy Association on the latter's dissolution.

Redevelopment of the Colman's site in Norwich has started, and unexpectedly a couple of the non-listed buildings have been retained. Most of Read's Flour Mill by the river has gone, and the original 1837 steam textile mill at its core is to have its original roof shape restored. The big area of concern is the water-powered air compressor station at New Mills, which powered the Schone ejectors used in the pumping of Norwich sewage until the 1970s. There are disturbing proposals for alternative uses for this building with its unique late nineteenth-century technology, which would inevitably mean the removal of some or all plant.

In Suffolk the former Fisons site at Bramford, which closed in 2003, has been acquired by developers. This was one of the earliest artificial fertiliser factories. The large barrel-roofed timber building, listed Grade 2, has been made weatherproof, and a full historical and architectural appraisal will be made before possible new uses are identified. Much of the rest of the site consists



New Mills, Norwich, the water-powered air compressor station which is threatened by development proposals, seen here c1978
Photo: David Alderton

of later buildings which are likely to be cleared, and it is not clear whether any record will be made of these. Most of the 1930s art deco, Grade 2 listed, Ipswich airport terminal building has been demolished, but the façade retained.

The port of Felixstowe has plans which include filling in the dock of 1884, and demolishing the fine late nineteenth-century roller mill and the seaplane hangar from WW2. It also plans to double most of the Felixstowe branch and remodel the upper yard at Ipswich which would finally sever the disused connection to Ipswich lower yard and dock.

Otherwise the impact on the line's structures will be minimal, as bridges, etc were built with doubling in mind.

The Ipswich branch of the Inland Waterways Association have successfully restored Creting Lock, bar the top gates. This has been an eight-year project, and with the already completed restorations of Bosmere Lock and Pipp's Ford Lock, opens the possibility of trip boats being able to run along part of the navigation before long. Their next project is Baylham Lock. Recently an explosion and fire damaged buildings at the xylonite (celluloid) works in Cattawade, but details of the damage are not to hand.

As always the Suffolk Mills Group have been hard at work, assisting local mill-owners with their maintenance and repairs, most notably at Drinkstone. There is a proposal here to remove the fantail which was brought from Thurston Mill in 1942 and replace it with a tail pole. The waterwheel at Layham Mill has been very well restored at the owner's expense and grinding is now possible. At the Museum of East Anglian Life in Stowmarket, the Mortlock Building has officially opened. This building was moved from the site of Frank Mortlock & Sons of Lavenham in 1993, but only now have funds been available for its re-erection. It is being used appropriately to display the museum's steam engine collection. The Museum has also taken over the adjacent Abbot's Hall, thus reuniting the site.

At the lifeboat museum in Southwold, situated in the Cromer pier lifeboat house moved here when it became redundant, the

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

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Region 3: NORTHERN ENGLAND
Cumbria, Northumberland, Tyne and Wear, Durham and Cleveland
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Region 4: YORKSHIRE AND HUMBERSIDE
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VACANT

restoration of the *Alfred Corry* is nearing completion. This, the last rowing/sailing lifeboat at Southwold, was sold out of service and converted to private use. It is being restored to its original condition, though as with *HMS Victory*, not a great deal of the original vessel will survive. Finally, the *Ardea*, the last traditional clinker-built pleasure wherry, constructed in 1927 at Oulton Broad, has returned to its birthplace, hopefully to be restored to sailing condition.

In Cambridgeshire, the steady cull of diesel engine pumphouses continues as their usefulness for standby diminishes. The early example at Overfall was suddenly demolished in December, and at Ramsey Newton there is permission to demolish, and the fate of their engines is unknown. At Southery the engine house has been sold for domestic conversion, and its Crossley engine removed. Unfortunately, the recently re-wooded scoop wheel at Strettham Old Engine has jammed, and freeing it is proving quite a problem. This means the engine cannot be turned over as normal as there is no easy way to disconnect it from the wheel.

The proposal for a system of guided buses along the route of the branch line to St Ives, mentioned a couple of years ago, has finally been approved, but so far funding has not been agreed. If it goes ahead one consequence will be demolition of parts of the station buildings, which for the most part survive in private ownership, as apparently the buses will require a greater width than the trackbed allows.

In Essex, attempts to list Ridley's Brewery at Hartford End were refused, in part because the interior had been largely stripped. Equally unsuccessful were attempts to save parts of Paxman's Standard Ironworks in Colchester. Both these sites have now been cleared. 'Jumbo', the giant water tower in Colchester, has been fully recorded prior to a proposed residential conversion. If carried out the changes will very substantially affect both the structure and appearance. A brewery in Halstead and a maltings in Bocking have been converted for housing, and the saga of the Mistley maltings continues. What also continues is the invaluable work of the Historic Environment section of Essex

County Council in attempting to list and record the county's industrial heritage - would that other counties did anything like as much. Studies currently in progress include industrial housing, brickworks, hospitals, and farm complexes. These are handled in addition to undertaking emergency recording of threatened sites.

Sources of information include Suffolk IAS and Norfolk IAS newsletters, Suffolk Mills Group Newsletter, Ken Alger, Sally Gale, Keith Hinde, Derek Manning, David Morgan and Steven Worsley. The use I have made of it is my responsibility.

David Alderton

Yorkshire & Humberside

Gayle Mill near Hawes has found, like other buildings which entered the BBC's 'Restoration' series, that this can benefit unsuccessful as well as successful competitors. It was built as a cotton mill c1776, later spun flax and then wool, and in 1878 became a sawmill. From 1882 it was driven by a Williamson Double Vortex water turbine, now the world's oldest working example. It is claimed to be the oldest unaltered cotton mill in existence, and is listed Grade II*. Since 'Restoration' it has raised £875,000, including £585,000 from the Heritage Lottery Fund, to complete the first phase of its restoration. It has been re-roofed, its gable end stabilised, and its windows repaired. The aim is to use it as a training centre for the timber industry, and it is hoped to provide some public access this year. Details of the Friends of Gayle Mill are available from Roger Emmins, Ella Farmhouse, Appersett, Hawes, DL8 3LN.

This is only one of a number of projects for important watermills. Another remarkable mill awaiting restoration is Howsham Mill, a Gothick corn mill of c1755 attributed to the architect John Carr of York, which stands on the Derwent between Malton and York. It is listed Grade II, but is roofless and the wheel has gone. The Howsham Mill Project aims to restore it as an educational resource centre promoting renewable energy, and to reinstate a wheel which will generate electricity. The project also intends to protect the existing natural environment, including cover for otters. The website is: www.rht.greenisp.org

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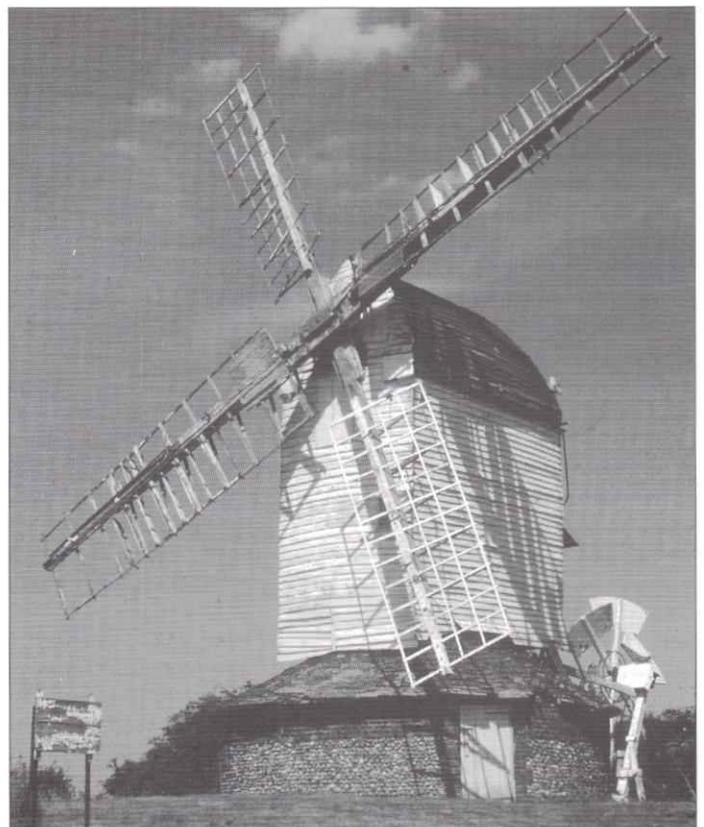
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Tel: (0117) 9715337 Fax: (0117) 9771677



The windmill at Drinkstone, where the Suffolk Mills Group may replace the fantail with a tail pole (see opposite page)
Photo: David Alderton

The National Trust's Gibson Mill at Hardcastle Crags above Hebden Bridge, another early cotton mill, has similarly been restored, at a cost of £1.6m, as a visitor centre and environmental beacon, generating electricity with water turbines and photoelectric cells. Yore Mill at Ayesgarth in Wensleydale, a 1784 mill used variously for cotton, wool and corn, was powered by turbines from 1937 until it closed in 1958, and now houses a collection of carriages; again there are plans to use the turbines to generate electricity. Gunthwaite Mill near Penistone is being restored as holiday cottages, with the remains of the wheel and machinery behind a glass viewing screen. Garnetts Paper Mill, Otley, built on the site of an earlier corn mill, is being converted to new uses, and recording of the core of nineteenth century buildings has been recommended.

Works to prepare a new park at Deep Pit, Manor, Sheffield, revealed the foundations and lower walls of a large double bank of beehive coke ovens, dating from before 1840 and disused by 1850. They were partly excavated by ARCUS and then reburied. Finds included several broken tramp plates, probably from lines linking the pit shafts and the ovens. The remains of 40 late nineteenth/early twentieth century beehive ovens, in three banks, at Dark Lane Colliery, Mirfield, are affected by plans for residential development, but parts may be preserved. The number of active coal mines in Yorkshire will be further reduced as Rossington Colliery, Doncaster, (and Harworth Colliery just across the Notts border) will be mothballed shortly when extraction of the current faces is complete. Rossington was sunk in 1916, and its headgears (c1960) are a landmark of the M18.

In an unusual conversion, the 1912 Empire Cinema of the mining town of South Elmsall has been turned into apartments. Another reminder of mining, the CEAG Lamps works in Barnsley, will go soon in a redevelopment of the Markets area. The firm, nearly 100 years old, made electric safety lamps for miners. Now it makes specialist light bulbs, e.g. for railway signal lamps, and production will move to an industrial estate. The 1936 building has outsize models of miners' lamps, which used to light

up, round the roofline and it is hoped to preserve one of these.

Kirkstall Forge in Leeds was one of the country's oldest iron working sites, probably dating from the 1580s, when it closed in 2003. Latterly it made vehicle axles. Its long and varied history calls for a programme of archaeological excavation, and recording of the present nineteenth-century and early twentieth-century buildings, before any plans for redevelopment are agreed. English Heritage are carrying out an extensive site survey at the early ironworking site of Myers Wood outside Huddersfield. An excavation in the Luddenden valley, Calderdale, has found medieval ironworking remains including charcoal burning sites, slag, and probably bloomery and finery sites.

Redevelopment in Sheffield, including a new section of the Inner relief Road through the Kelham Island and Shalesmoor area, has allowed the excavation of important sites from the early days of Sheffield's steel industry. The bases of five cementation furnaces, where imported high quality iron bars (mainly from Sweden) were converted into steel, were found at the west end of the Millsands site, where the Vickers industrial empire began in the 1820s. Another nineteenth-century cementation furnace base, at the eighteenth-century Love & Manson site in Snow Hill, had been built over an existing cellar. A remarkably well preserved crucible furnace was found on the site of Hope Works, Mowbray Street. The scheduled remains of 1820s cementation furnaces at Bower Spring, owned by the South Yorkshire Industrial History Society (SYIHS), are right by the new road. They were part of the Franklin or Spring Works, otherwise demolished. Its foundations were excavated before the road was built, revealing remains of the yard, workshops and warehouses, an arched structure thought to be a boiler water reservoir, and some of the crucible furnaces.

The last melt at Corus's Stocksbridge steel works was in mid-July 2005, but the rolling mills have remained in use while new mills are prepared at Rotherham. Stocksbridge will now be used for refining and finishing steel from Rotherham, and much of the works area will be redeveloped. Smaller

metal trades buildings in Sheffield continue to find new uses. Butcher Works in Arundel Street is a very atmospheric complex of the 1820s and '50s, which has been used as a set for Dickens adaptations and similar programmes. It is being converted for mixed uses, no doubt with a loss of character, but it is hoped to keep some of the grinding troughs. Works are being reused for charities: Sterling Works, by the Ruskin Mill Educational Trust as a residential centre, Freeman College (named after Arnold Freeman, a pioneer of adult education in Sheffield), for young people with learning difficulties to learn arts and crafts, and Sipelia Works, Cadman Street, as a residential community for the homeless run by Emmaus.

Harold Wilson was known for his trademark Gannex coat; the Broad Lea, or Gannex, Mills at Elland are being converted for residential use. Stonebridge Mills, Leeds, founded in the early nineteenth century for woollen manufacture by hand and later developed into a mechanised mill, face demolition and redevelopment, which is being opposed because the buildings show the different stages of the mill's history. A purpose-built shoddy (textile recycling) mill of around 1907, Runtlings Mill at Ossett, which is currently the Oakcliffe Engineering Works, has been listed Grade II. Relics of its first use include a 1908 tandem compound horizontal engine by Marsdens of Huddersfield.

The development agency Yorkshire Forward has given £75,000 to the Chesterfield Canal Partnership to fund a study of the final stage of restoration, from Kiveton Park in Rotherham MB, past the collapsed Norwood Tunnel to Killamarsh in Derbyshire. The Calder & Hebble Navigation Warehouse in Wakefield, a Grade II* listed building created in 1810 by joining two 1790s warehouses, which is the leading survival of Wakefield's role as an inland port and market centre in the eighteenth and nineteenth centuries, is being converted to offices. The Midland Railway's Millhouses engine shed, Sheffield, was built in 1901 for passenger locomotives; after it closed in 1962 it was converted into workshops for Jacobs Manufacturing Ltd, makers of Jacobs drills and chucks, but they left in 2002 and it is being demolished to build 222

apartments. The buildings were recorded by ARCUS, while there is a good account of them with photographs in the autumn 2005 issue of the *Midland Railway Society Journal*.

Kelham Island Museum, Sheffield, has received its third Heritage Hallmark Award from the Institution of Mechanical Engineers, for the restoration of a very early Bramah hydraulic press formerly used by the Ordnance Survey. The two others were for the Bessemer converter which stands outside the museum, and the giant River Don rolling mill engine, which celebrated its centenary in 2005. Leeds Industrial Museum, Armley, has worked with the arts organisation Heads Together Productions, with a £33,000 grant from the Heritage Lottery Fund, to record and photograph the working lives of staff at the aluminium foundry Hydro Aluminium Motorcast in Hunslet, Leeds, when it closed. The outcomes were a book, *Meltdown: Words and Pictures from a Yorkshire Foundry*, and an exhibition at the museum. The SYIHS opened Hoylandswaine Nail Forge to the public for the first time in its ownership for the 2005 Heritage Open Days; it is a row of three small forges used for nailmaking by hand in the nineteenth and early twentieth centuries in a hilltop village west of Barnsley. With a grant of £8,000 from the North York Moors National Park Authority, Beck Isle local history museum in Pickering has created a new display about the industrial past of Rosedale, a moorland valley which was a centre of ironstone mining from the 1860s to the 1920s.

2005 was the bicentenary of the birth of the railway engineer Joseph Locke, who was born in Sheffield and grew up in Barnsley, where he is commemorated by Locke Park. Barnsley Council organised celebrations with the Friends of Locke Park, the SYIHS and the Railway & Canal History Society. New plaques were placed on the site of his boyhood home, at the building where he went to school, and at his statue in the Park. A video about Locke and the Park was distributed to all Barnsley schools. The programme of events reaffirmed Locke's standing as a leading figure of the Railway Age and a 'local hero' for Barnsley.

Derek Bayliss & David Cant

Local Society and other periodicals received

Abstracts will appear in *Industrial Archaeology Review*.

- Bristol IA Society Bulletin*, 114, 115
- Cleveland IA Society Newsletter*, 89, December 2005
- Cumbrian Industrialist*, 5, 2005
- Hampshire IA Society Focus on Industrial Archaeology*, 64, June 2005
- IEE History of Technology Newsletter*, May 2005
- Leicestershire Industrial History Society Newsletters*, 27, Autumn 2005
- SAVE Britain's Heritage Newsletter*, April/May 2005
- Scottish Industrial Heritage Society Bulletin*, 37, Summer 2005
- Suffolk IA Society Newsletter*, 90 & 91, August & November 2005
- Surrey Industrial History Group Newsletter*, 147 & 148, September & November 2005
- Sussex Industrial History*, 34, 2004, 35 2005
- Sussex IA Society Newsletter*, 126, April 2005; 127, July 2005; 128, October 2005
- Sussex Mills Group Newsletter*, 126 April 2005; 127; July 2005; 128, October 2005
- Worcestershire IA and LH Society Journal*, 28, Summer 2005
- Yorkshire Archaeological Society, Industrial History Section Newsletter*, 64, Late Spring 2005

Short Notices

A History of the Byfield Mine, Combe Down, by Richard T. A. Irving. Bath: The Combe Down Heritage Society. 2005. 88pp. 15 illus. ISBN 0-9550655-0-X. £9.95. (available plus 75p for p&p from Combe Down Heritage Society, 13 Greendown Place, Combe Down, Bath BA2 5DD, cheques payable to Combe Down Heritage Society).

Bath stone was mined below Combe Down by Ralph Allen in the eighteenth century. The Firs Mine is the larger of the two mines. Byfield Mine lies to the west of the village centre and has in the past received little attention from historians and archaeologists. The old mines have recently been in the news as they have become increasingly unstable and a threat to houses above. A major project to fill the mines in is now in progress. Dick Irving is a local resident (he has a hole in his back garden) and a leading member of the heritage group. The outcome of his research appears in this attractive booklet.

Keighley Coal, by M. C. Gill. Keighley: Northern Mine Research Society, 2004. 108 pp, 31 illus. ISBN 0 901450 57 X, ISSN 0308-2199. Free to members.

This monograph builds on the work of the late Paul Davison, who gathered a store of information on the coalmines of the Keighley area, but did not live to publish his material. M. C. Gill has added his own research and produced a comprehensive account of the history of each seam in 10 miles of the Aire valley, between Keighley and Skipton. He looks at the geology (coal was won from both the Millstone Grit Series and the Lower Coal Measures), ownership, and the history and location of workings so far as these can be identified. Mining in the area started in the early fourteenth century, though possibly for iron rather than coal, but had largely disappeared by the 1870s, though there were sporadic attempts to win coal up to the 1920s. It was an area of thin seams and small pits so actual pit records are scarce. The monograph includes material on working conditions and economic factors, and is backed by fieldwork on the mining sites, though there has been no archaeological investigation. The author must be commended for bringing this material together for publication. It should be of considerable interest to both local historians of the Aire valley and those interested in mining history, especially, perhaps, those looking at seventeenth-century practice. There are full bibliographies and an index of personal names.

Milestones and Waymarkers, Vol 1, ed. David Viner, Milestone Society, 2004. 50 pp, illus. Free to members.

This first volume of the Milestone Society's journal contains an editorial, ten fairly brief articles, book reviews, a bibliography of books in print and notes on renovations by society members. Research based articles are

refereed, and though there are inevitable variations in detail and methodology, they are in general thoroughly researched and annotated. Dr Keith Lawrence's article on 'Milestones, Guideposts and other Street Furniture in Legislation and Statute' has national relevance, while Frank Brusca's article on milestones on the US Route 40 gives an international dimension. Considering the inevitable limitations of a small print run, the quality of illustrations is good. The Society is to be commended for the overall quality of its first journal and for setting up a national database so early in its history, which already lists 4,000 milestones or waymarkers.

On the Ground, No 2, ed. Terry Keegan, Milestone Society, 2004. 16pp, illus. Free to members.

This review of 12 months' work by the Milestone Society (up to June 2005) is perhaps of wider interest than might be expected, because it shows what a relatively small society of 450 members can achieve. Its database already contains details of some 65% of known milemarkers, many of its County Groups are following an active programme of searching for missing markers, encouraging the responsible authorities to repair and maintain existing markers and even co-operating with the police to secure the return of stolen items. This review, as well as recording some of the successes of its members, also has valuable advice on approaches to conservation, bearing in mind that markers are normally the property of the Highway Agency (for trunk roads) or County Highway Authorities, some are listed structures, and that conservation work can only take place with permission from the relevant bodies. This will almost certainly entail form filling and be subject to Health and Safety criteria. There is also discussion on how to get local amenity groups and parish councils involved. Other articles look briefly at conservation techniques, materials for replacement markers and the damage caused by verge cutters.

Lincolnshire on the Move, ed. by Jean Howard and Chris Lester. Lincoln: Society for Lincolnshire History and Archaeology. 2005. 72pp, 35 illus. ISBN 0 903582 22 8. £5.95.

This covers much the ground one might expect – early roads, turnpikes, ports, inland waterways and railways. Air travel is omitted, perhaps because the county's many airfields were almost entirely for military use. Less expected are separate chapters on cycle and vehicle builders and on bridges. Inevitably, with each chapter written by a different hand there is some degree of repetition and some odd omissions, for example no mention of the unique eighteenth-century land lighthouse on the Sleaford to Lincoln road, and there are differences also in style and depth of coverage. However, the chief weakness is that the four maps (one, oddly, is repeated) are reproduced too small for easy use (only 90x135 mm). Suggestions of sites to visit, addresses of local organisations and a useful bibliography should certainly appeal to the visitor wishing to see something of the county's transport heritage.

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1 APRIL 2006**PLEASE NOTE REVISED DATE
SOUTH WEST & SOUTH
WALES REGION IA
CONFERENCE (SWWRIAC)**

at Crosskeys College, Risca, organised by Oxford House IA Society. For details please send SAE to Tony Jukes, 26 Dan y Graig, Machen, Caerphilly. CF83 8RF, ☎ 029 2088 5789.

5-7 APRIL 2006**WILTSHIRE IN THE AGE OF
STEAM**

at Urchfont Manor, a residential course with lectures and field visits examining industries along the Kennet & Avon Canal corridor. Details from: Urchfont Manor College, Devizes, Wiltshire SN10 4RG, ☎ 01380 840495, Fax: 01380 840005.

22 APRIL 2006**SOUTH EAST REGION IA
CONFERENCE**

at The Medical Centre, St Richard's Hospital, Chichester, organised by Sussex IA Society. For details and booking form send SAE to Bob Allen, 7 Heathfield Road, Seaford, Sussex. BN25 1TH.

24-29 APRIL 2006**ALSACE AWAITS**

the AIA spring tour, based on Strasbourg, including a visit to Mulhouse. For further details please contact Paul Saulter, 80 Udimore Road, Rye, Sussex, TN31 7DY.

29-30 APRIL 2006**PLEASE NOTE REVISED DATE
AIA IRONBRIDGE WEEKEND:
BREWING**

at the Ironbridge Institute, Coalbrookdale, on the theme of brewing, including processes, architecture, brewing in Somerset, vinegar brewing, Southwick Brewery refurbishment, the pub, medieval brewing and malting, and a Saturday afternoon field visit. Full details and a booking form are included with this mailing.

20 MAY 2006**EMIAAC 71**

at Darley Abbey, Derby, the 71st East Midlands Industrial Archaeology Conference will be held in Darley Abbey, Derby, on the theme of the Evans Cotton Mills, their technology and the development of the surrounding community, speakers will include Adam Menuge from English Heritage. Further details from Mark Sissons, 1 Far Coton, Market Bosworth, Warks CV13 0PJ.

10 JUNE 2006**16TH EERiac**

at the Museum of Fenland Pumping in Prickwillow, near Ely, Cambridgeshire, the 16th East of England Region Industrial Archaeology Conference. Application form and programme available from Mrs Brenda Taylor, Crown House, Horsham St Faith's, Norwich NR10 3JD in March – please send SAE.

10-11 JUNE 2006**NAMHO CONFERENCE 2006:
MINES IN THE LANDSCAPE**

at the Royal International Pavilion, Llangollen, the National Association of Mining History Organisations' annual conference in Llangollen, with lectures on the subject of Mines in the Landscape and field trips for those interested. For details see the website: <http://namhoconference.org.uk/>.

2-5 JULY 2006**PAST INDUSTRIES IN THE
COUNTY BORDERS**

at Dillington House, Ilminster, Somerset, a course on IA in the attractive coastal and inland landscapes of the Somerset, Devon and Dorset borderlands, with lectures and field visits. Details from Dillington House, Ilminster, Somerset TA19 9DT, ☎ 01460 52426, website: www.dillington.co.uk.

3-9 JULY 2006**BRUNEL BICENTENARY
WEEK**

at London and Bristol, including a mid-week steam trip. Events include the Institution of Civil Engineers Triennial Conference, London, Brunel Bicentenary Steam Train Trip, Brunel Bicentenary Conference, Bristol, Brunel Tours of Bristol and Newcomen Society Events, Bristol. For more details visit the website: www.ice.org.uk/conferences.

8-14 SEPTEMBER 2006**AIA ISLE OF MAN
CONFERENCE**

a return to the Isle of Man, last visited in 1973 when the AIA was founded. Please see inside for a description of the IA delights in store. A booking form is enclosed with this mailing.

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.



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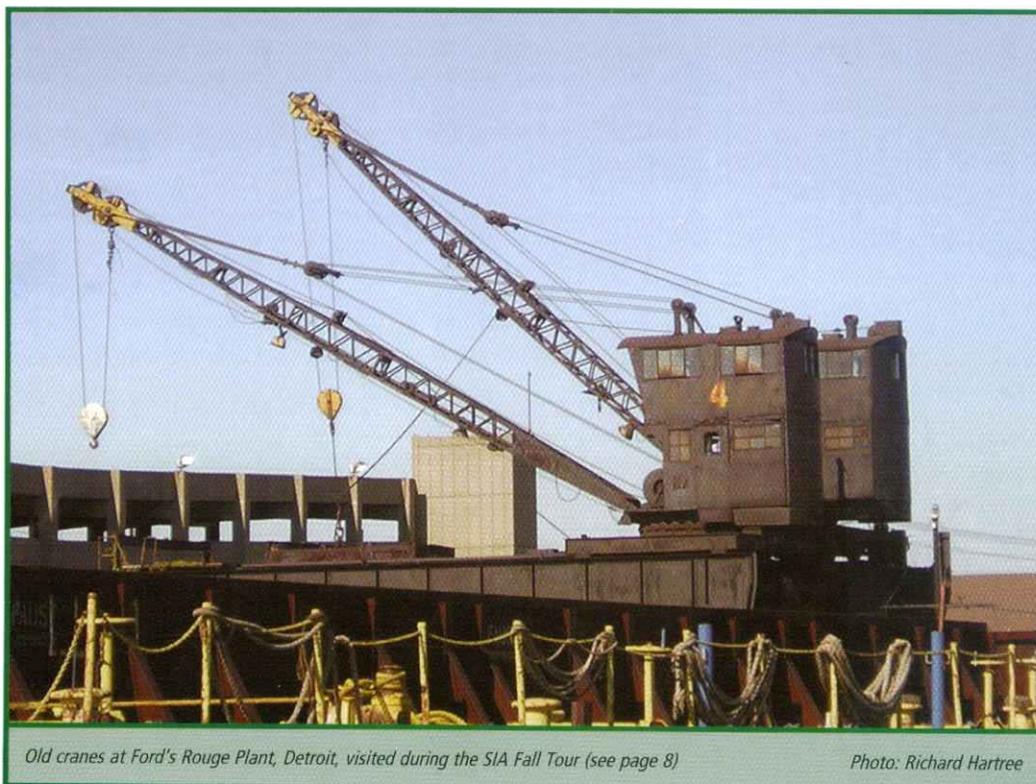
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Final copy dates are as follows:

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

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



Old cranes at Ford's Rouge Plant, Detroit, visited during the AIA Fall Tour (see page 8)

Photo: Richard Hartree