ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

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The Iron Bridge 1779–1979

Join in the Iron Bridge Celebrations The 1979 AIA Annual Conference will be held at Ironbridge, Shropshire from Friday 14 to Sunday 16 September and will be an important part of the Celebrations marking the bi-centenary of the world’s first iron bridge.

AIA President Neil Cossons, Director of the Ironbridge Gorge Museum, has just released preliminary details of what promises to be the finest AIA Conference yet and impressive reading it makes. Based on Maw’s Tile Works at Jackfield, on the south side of the River Severn and within easy reach of Blights Hill, the Iron Bridge, Coalport China Museum, Bedlam Furnaces and of course Coalbrookdale, the Conference will have the usual lecture, exhibition and field excursion facilities, plus industrial and craft demonstrations and trade stands.

The Maw’s Works site contains a lecture theatre, a large exhibition area, catering facilities (where in fact most of the Conference meals will be taken) and ample car-parking space. Tile and pottery manufacture will take place during the Conference period and other demonstrations will include book-binding, blacksmithing, coracle making, clay-pipe manufacture, brick making, the manufacture and decoration of Coalport china and possibly a working bloomery. It is anticipated that the provision of trade-stands will result in survey and preservation equipment and materials being on show, plus of course all shapes and sizes of books.

A country-wide survey of the work of local industrial archaeological societies is to be undertaken in the near future (by an Ironbridge Museum based team supported by the Manpower Services Commission) and the results of this investigation will be presented at the Conference. Conference Transactions are also planned.

Accommodation will be in hotels, guest-houses and in the homes of local people. All bookings will be made by the Museum Trust and delegates will be offered a complete range of price levels and categories of accommodation within which they will be able to state their preferences. Accommodation will be available for up to two hundred people.

Although the Conference proper will start with registration at Maw’s on Friday afternoon, and traditionally and after lunch on Sunday, a series of pre-conference excursions is being planned for Wednesday/Thursday and post-conference on Sunday. In addition a special Complimentary Ironbridge Gorge Museum ticket will be added to each delegates Conference Pack and access to all the Museum’s sites will thus be available. Enquiries should be directed to the AIA’s Conference Secretary, Bill Thompson, 71 Albert Road West, Heaton, Bolton, Lancashire BL1 5HW.

Shropshire, Caving & Mining Club Journal 1977 Published formerly as the Shropshire Mining Club Journal, this new issue has a different cover feature and colour but follows generally the pattern set by previous issues. It contains 44 pages A4 size with 4 pages of maps and diagrams. The principal contents are short articles on the Tar Tunnel as a public show mine; an underground structure at Morsey Green near Kettle; a collection of Shropshire Miners’ Ballads; some notes in novels with a mining flavour; Prince Edward Mine, Merioneth and Archaeological relics by the River Dulas, Clwyd. A special feature in this issue is a list of the principal contents in all previous SMC publications. Price £1.30 (includes postage) and available from the Shop in the Square, Ironbridge, Telford, Salop.

Archaeological Excavations will take place next Easter on the seventeenth century blast furnaces at Rockley, South Yorkshire, under the direction of Mr David Crosley (Sheffield University) and at Allensford, Northumberland, under the direction of Stafford Linsey (Newcastle University) and Peter White (Ancient Monuments Inspectorate).

Both sites provide a good opportunity both to learn excavation techniques and to become conversant with the main features associated with the furnace and its environment. At Allensford particularly it is hoped that visiting lecturers will attend to discuss other sites and methods.

Allensford March 19 for 3 weeks Rockley April 6 for 2 weeks

If you would like to be kept in touch with either excavation, with a view to attending, please write to: Mr P R White, Inspector of Ancient Monuments, Room 224, Fortress House, Savile Row, London, W1.

Sussex Industrial History, Volume 8 of the Journal of the Sussex Industrial Archaeology Society has just been published and contains their high standard of research by producing articles on watermills, iron making, bridges at Newhaven and pumping plant. There are also reports on current field projects in which the society is engaged. Their excellent newsletter, published four times a year, covers a wide variety of industrial archaeological activities in Sussex.

Further details of the society are obtainable from A J Hazelfoot, Albion House, Cobough Place, Hastings.

The Greater London Industrial Archaeological Society are continuing their series of monographs, and recent publications include W A Cripps & Son, Bermondsey’s Last Chainsmith price 65p, Tower Bridge Workshops price 50p, Walton Lodge Laundry The story of an enterprise price 50p, Vincent & Sons Ltd Cabinet-makers, Brick Lane, London 45p, Town Trail No 1 Waterloo to London Bridge 5p, and No 2 Blackfriars to Tower Bridge price 5p. Please add 15p post and package for each booklet, 8p for trails. All cheques/POs should be made payable to GLIAS and publications are obtainable from Adrian Taylor, GLIAS Publicity Officer, 28 Tower Hamlets Road, Walthamstow, London E17.

Continued use for New York’s oldest Pier New York’s City Landmarks Preservation Commission recently declared the oldest active pier in the Port of New York, dating from 1884, as a historic landmark. The structure is known as Pier A, Battery Park and when completed in 1886 it accommodated the headquarters of the city’s Department of Docks. Among its features when opened were a 70ft lookout tower and classical decorations in cast metal. Although now bereft of some of its more notable architectural features, Pier A is still of strategic use as the headquarters of Marine Fire Company No.1, one of New York’s specialist teams to combat dockside fires.
It is the occupational hazard of the amateur that he often has to tell his grandmother how he thinks the eggs should be sucked. I find myself in this position now. There are a few seeds I would like to sow in your collective minds but before doing so wish to assure you that these ideas are not thrust on you in arrogance but proffered in humility.

I come into frequent contact with enthusiasts and well meaning amateurs. I should explain that I run a steam engine commercially; in other words we make money and if we don’t, we stop. This is expressed by the machine and fascinated by the old-fashioned processes in the factory. The question most commonly asked is “when will it be scrapped?” or “has anyone done anything about preserving it?” The artifact rules, OK.

How many of the professional Industrial Archaeologists think differently? I know there are many and the number grows all the time, but there are many who don’t. It seems to me that there are far too few who have realised that the resources wasting away fastest, are the vast amounts of human experience, lost with the death of old craftsmen and skilled artisans.

I can hear the rustle of grey hair as the collective heads shake but is this statement so far from the truth? Walk into any museum in the land and pick out an old machine. Then find the man who ran it and ask him what is known about the machine and it’s operation. The odds are that you will receive plenty of information about who made the machine and how many horsepower was needed to drive it but nothing about the practicalities of running it. This is true of the published histories. I am sure that the main reason is that the men who wrote the books were not the men who ran the machines. This was understandable in days gone by when the only tools available were the sketch pad and the notebook. Today we have the 35mm camera and the tape recorder and things are better and so books in future will have the practical side as well. Will they?

This state of affairs was first brought home to me by the way we have to work in the practical running of steam engines. This was forced on me by the fact that I found I had one to run and practical help was thin on the ground. Always a great believer in the written word I went to the library and put in my requests. Books flowed in with monotonous regularity from Boston Spa and I soon became an expert on the design, construction and indicating of steam engines, especially the indicating. I could write a thesis on the traps contained in the thousands of words written on indicating.

Formuals and mathematics abounded but I was no nearer the actual day-to-day nitty gritty information that I needed. At this point I started using my head and went out and found myself a genuine, 100% copper-bottomed, hairy-backed steam engine. A few meaningful interviews with him resulted in two things, first I found out all I wanted to know. Second, I found I had made a firm friend mainly by listening and paying him the compliment of trusting his experience.

All this was far too long and as I haven’t had a runaway or a crop of hot bearings it looks as though my informant might have done a good job. My search for knowledge had whetted the appetite for history that had long been suppressed by the need to earn a living, and I began to think that it was perhaps time I did something about the things I considered to be wrong instead of just moaning about them. I started to photograph the people in the mill using their skills in the old processes which have almost died out. This developed into a large ‘folio and was well received by certain men of quality who persuaded me to go a stage further and add tapes with people describing in their own words what the were doing. The result is a clear, factual description of how to do these jobs. It would be possible to learn the basics of the job from this material. This would seem to be to be the ideal way of doing the job. It has cine film beaten because you can spend as much time looking at one particular frame as you want without loss of quality. Anyone who has ever tried to do this with cine film will vouch for the fact that the loss of definition is such as to make this difficult.

This then is the axe I want to grind. I believe that a lot of the time, effort and money that at present goes into the collection and preservation of artifacts could more usefully be employed in saving the old skills for posterity before some of them vanish completely.

I admit to being biased. I find the detached, objective role very difficult but I believe I have something to offer. I am sincere and my work is practical and cost-effective. It also has the great merit that it is based on a wide experience of the people and machines I love so much. Another small point in its favour is that up to now it has cost no one else a penny; I have supported the costs myself. Hopefully this may change in the future. A lot depends on the reception given to it.

I believe we have a great opportunity to do good in this field. I also believe that historians in the future will find it very hard to forgive us if we miss out. The buck stops here.

Editor's note:

The recording project described above was mounted in the nick-of-time, as it turns out. In the few weeks since Stanley Graham’s words were written, it has been announced that the unit in Barnoldswick will weat out before the end of 1978. The last steam mill in England will thus follow so many other Lancashire spinning and weaving mills into oblivion — except that in this case photographic and sound records of the work of the mill will survive it at the Department of Regional Studies, University of Lancaster and at the Science Museum.

Aerial Archaeology, a new journal published by the Committee for Archaeological Air Photography (Anglian region). Volume 1 1977 was published at £3.75 per copy but by affiliation which costs £3.00 per annum, one can receive all copies of the journal published in that year. The journal contains reports of the committees for archaeological air photography and surveys interpretation and results. There is an article on air photography and industrial archaeology by John H Boyes in Volume 1 which points out several interesting uses of air photography including the surveying of rivers and associated river improvements and the location of vanished windmill sites. It would also seem obvious that photography would be extremely useful in tracing the routes of abandoned canals, railways and other transport systems. Further details of the journal are obtainable from Mr S G Upton, Hon Librarian, Committee for Archaeological Air Photography (Anglian region), 6 Highgate Green, Eton, Peterborough, Cambridgeshire.
Further information on the course is available from Dr Martin Doughty, Lecturer in History, King Alfred’s College, Winchester SO22 4NR. Telephone 0962-62281.

WELSH FOUNDRY HISTORY

John Mills and Co (Llanidloes) Ltd, Railway Foundry, J B Groucott writes: The present Works site has been occupied since the early 1860’s, having removed there from another part of the town of Llanidloes, shortly after the Llanidloes and Newtown Railway opened (1858). The firm was then engaged in general engineering, particularly in the field of providing machinery for metal mines in Wales and elsewhere. The present range of buildings within the Works site (15956854) includes those built by William Thomas when he moved there. He made the bricks and cast the window-frames himself, a very necessary self-sufficiency exercise in an area then far-removed from the main manufacturing centres. The cast window-frames are the fairly typical 19th-century round-headed type, while the roof of the main central workshop they light has an open timber roof also typical of that era.

The Company maintained the locomotives of the Llanidloes and Newtown Railway in the early years of the railway’s existence, prior to the completion of the connection northwards from Newtown; it seems that before the present Works was occupied, the locomotives were moved across the town to the old works, by the well-known process of laying rails before the engine to enable it to progress through the streets under its own power, a method known well in railway history in the last century. The new Works, however, had a siding laid in direct to the Works, maintained by the Railway company; the last waggon out (in the year before the whole Moat Lane - Brecon line closed, 1962), was a ferry-waggon carrying one of the firm’s present products, the ‘Oillautic’ press, to a customer in Italy. All traffic now goes by road, but there remains in partial use an internal narrow-gauge railway of about 600mm gauge, using hand-propelled trucks. Standard-gauge rails however can still be seen in the Works yard area.

There is in the Works yard, a hand-operated crane, manufactured by Lloyds and Fosters of Wrexham, dated 1866; this was formerly in the Blacksmith’s shop. In one of the shops there is also an overhead travelling crane, the rails for which are supported on cast-iron columns; very similar in appearance to those seen as pier columns on the Brynwen bridge at Newbridge-on-Wye. These sets of columns were cast at the Works, and as a jobbing foundry it would probably be the custom to retain patterns of such items for a very long time. However, the foundry side of the business has now ceased altogether, and all necessary components are fabricated; the former foundry is now occupied by a firm of aluminium casters, BSK Ltd.

There was formerly an association with the South Wales coal industry through Lord David Davies of Llandinam, whose Ocean Coal Company collieries used metal pit-props at the turn of the century; these were sent back to be straightened at the Railway Works, by rail naturally, and this in fact led to the firm developing a present manufacture to the ‘Oillautic’ presses widely used in industry of all types. The general engineering side of the business has declined, but in former times ironwork was produced for such local
works, as the Brynwear bridge, Newbridge-on-Wye (1886). Erwood bridge (date unknown, but possibly of about the same period), machinery for the Cwm Elan Mine, in the Elan Valley (1871); there was also until the early part of this year, a cast-iron lamp-post and associated railing in Broad Street, Knighton. However, in an incredible piece of official vandalism during the destruction of the old Police Station, these were carried off by the Contractor. The lamp-post carried the legend "THOMAS L LLIANDOES FOUNDARY" in a very mid-19th century style. Of the other sites mentioned above, only at Brynwear can a major product of Railway Works still be seen, and the future even of this structure is in some doubt. Erwood bridge has been demolished and replaced by a modern bridge, while at Cwm Elan, only a few items remain of the machinery. It is also said that the ironwork for the former railway bridges on the old Moat Lane — Brecon line, was of a similar sort to Brynwear bridge, and could conceivably have been also a product of Railway Works; the railway dates from the early 1860's.

The family history of the firm is as follows: Mr William Thomas's nephew, John Mills, who was the grandfather of Mr Thomas's sons, was appointed Managing Director of the Company, took over when William Thomas died at the end of the 19th century. John Mills was succeeded by his two sons, William and John Mills. William was the father of Mr Arthur Mills, the present Managing Director, while he (William) also worked as an apprentice on Erwood bridge. The present working Directors of the Company, are Mr Arthur H O Mills and his son Mr William K Mills, together his nephew Mr William Michael Mills.

Outside the Works area, a terrace of houses adjacent to the Works known as Foundry Terrace, was built by William Thomas for his employees; these houses seem to date from the 1860's or 1870's, and are a good example of the better sort of 19th-century industrial workers' housing. From observation they are soundly built, and they remain in occupation to this day.

The whole Works and Company history are most interesting and would repay detailed research among records, particularly as the site is surely one of the few engineering companies in Mid-Wales that are still in the management of the original family, and as such most interesting in the broader historical context of Mid-Wales.

The writer of these notes is indebted to Mr Arthur Mills, Managing Director, for supplying the information outlined above.

The observations on the Works themselves are from a visit arranged by courtesy of Mr Arthur Mills, on 23 February, 1978. Comments on sites such as Cwm Elan Mine and Brynwear bridge, are from the author's own notes.

Reprints of Old Maps. The First Edition of 6” Ordnance Survey maps of Glosoceshire was based on surveys carried out between 1873 and 1884. Recognising that the information contained therein is likely to be of great interest to local historians, geographers and industrial archaeologists, AIA member David Bick has set out to make this series more widely available by reprinting selected sheets in high quality reproductions, each covering six square miles. These are printed on heavy cartridge paper, and notes issued with each map draw attention to the changes that have taken place in the ensuing 100 years. Four sheets are available so far: Gloucester North and East, Gloucester South and East, Cinderford and Coleford. Each is priced at £1.20, with 10% reduction for 4 or more, and 20p per order for postage. If this venture is successful, it is hoped to extend the coverage considerably. Also available from the same address are a colour reprint of Somerich's 1835 map of the Forest of Dean on 2' to the mile (60c + 7p postage) and a modern mining map of Central Wales, recently compiled by the Institute of Geological Sciences on a sheet 20” x 35” (£1.25 plus 15p postage). Write to David Bick at The Pound House, Market Square, Newent, Glos GL18 1PS. Telephone Newent 820650.

OBITUARY

David Morgan Rees, Keeper of the Department of Industry at the National Museum of Wales, died on 22 September 1978 aged 64. Born at Aberaeron, Dyfed, on 7 October 1913, he spent his boyhood in the Rhondda and was educated at the Rhondda County School, Porth, University College of Wales, Aberystwyth and Gonville and Caius College, Cambridge.

After graduating he joined HM Factory Inspectorate and during the 1939-45 war was commissioned in the Royal Army Ordnance Corps. In 1949 he became Education and Training Officer to the British Iron and Steel Federation, a position which he held for almost ten years, until in fact, he became a member of the Staff of the National Museum of Wales, charged with the responsibility of setting up the Department of Industry which opened to the public in February 1969. The creation of this Department virtually coincided with the appearance of industrial archaeology as an emerging leisure activity and by 1960 Morgan Rees had been invited to become a member of the CBA's Panel and Research Committee on IA. With Gwyn Thomas (who joined the Museum as an Assistant Keeper in 1963) he set up the first regular extension lecture series in conjunction with the Extra-Mural Studies Department of University College, Cardiff in February 1966 and from this grew the South East Wales Industrial Archaeology Society. In 1966 Morgan Rees was appointed a member of the Ancient Monuments Board for Wales and this had the effect of bringing the Department of Industry into close contact with the Ancient Monuments Inspectorate of the Department for the Environment. Many joint visits to former industrial sites were made with a view to scheduling or taking into guardianship. As a direct result of this collaboration such places as Elliot Colliery engine house, New Tredegar, Bryn Talid mine near Llanidloes, Dyfi Furnace in Dyfed and the Biaenavon Ironworks have now been taken into guardianship.

Following joint representations by the Department of Industry and the D of E, Caernarvonshire County Council purchased the workshops at the Dinorvic slate quarry at Llanberis and on 25 May 1972 the North Wales Quarrying Museum opened to the public.

At about the same time as negotiations for the Dinorvic museum site began, Morgan Rees had the satisfaction of seeing a committee established to actively plan for a Welsh museum of industrial archaeology, a project which was soon to become known as the Welsh Industrial and Maritime Museum, and which, housed in an imaginative purpose built exhibition hall near the West Bute Dock Basin in Cardiff, was opened by the Prime Minister on 15 April 1977. In 1972 Morgan Rees was elected to the Council of the Newcomen Society, in 1974 was appointed a Royal Commissioner of Ancient Monuments for Wales and in the 1975 New Years' Honours List was awarded an OBE. He was a Fellow of the Society of Antiquaries, a member of the Courts of the University of Wales and UWIST and a Justice of the Peace. His publications include: Mines, Mills and Furnaces ( HMSO 1969), The Industrial Archaeology of Wales (David and Charles) 1976 and very many articles in the journals of learned societies.

These are the visible achievements of a remarkable Welshman. To have been privileged to have known Morgan as a friend, was to become his companion in the hills, to scramble with him on spoil heaps, hold the measuring tape at remote and breathtakingly beautiful mine sites and talk late into the night on the enthusiasm we shared. To quote his own written words: "It was almost unfair that a person's work should involve him in so much enjoyment". The pleasure that David Morgan Rees gave to a countless number of industrial archaeologists is only surpassed by the sorrow in losing him.

Joan and Roy Day

AIA Bulletin is published by the Association for Industrial Archaeology. The Association was established in September 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, publication and conservation. It aims to assist and support regional and specialist survey and research groups and bodies involved in the preservation of industrial monuments, to represent the interest of Industrial Archaeology at a national level, to hold conferences and seminars and to publish the results of research.

Further details of the Association and its activities may be obtained from the Membership Secretary Association for Industrial Archaeology, The Wharfage, Ironbridge, Telford, Salop TF8 7AW England (096-245 3622).