

### Carry on Ribblesdale

There is a salutary lesson to be learned from the splendid news that British Rail had decided to keep open the **Settle-Carlisle cross-country Pennine route** for at least the next five years. This is that organised public protest, supported by sound, un-emotive arguments and well-marshalled and collated objections does work.

British Rail announced the closure plans in December 1983 and later widened the scope of the May 1984 Public Enquiry so as to accept more objections. By this date these had risen to over 11,000 and the Transport Users' Consultative Committees of Manchester, the North West and Yorkshire, were involved. By the time that BR had realised that the route also involved the North East TUCC, the official list of objectors had risen to 21,000. And so a

decision was made to delay the closure, push ahead with a major marketing exercise for 1985 and a plan for single-line working over Ribblesdale viaduct. But BR insist that long-term, they have no alternative but to go through with the closure procedure, and admit that they have been surprised at the scale of the organised objection. Mr Ron Cotton, British Rail project manager for the line said:

'The closure has now become a national issue. People who have never used or heard of the line are now protesting'.

And writing in the *Daily Telegraph* (5th October 1984) Robert Bedlow, the paper's Estates Correspondent says:

'With the delays to the closure because of the public inquiries the issue could become important in the next General Election in 1987.

Mrs Thatcher, who has become increasingly aware of the growing conservationist lobby may feel that closure of the line would be politically inexpedient, as it passes through marginal seats.

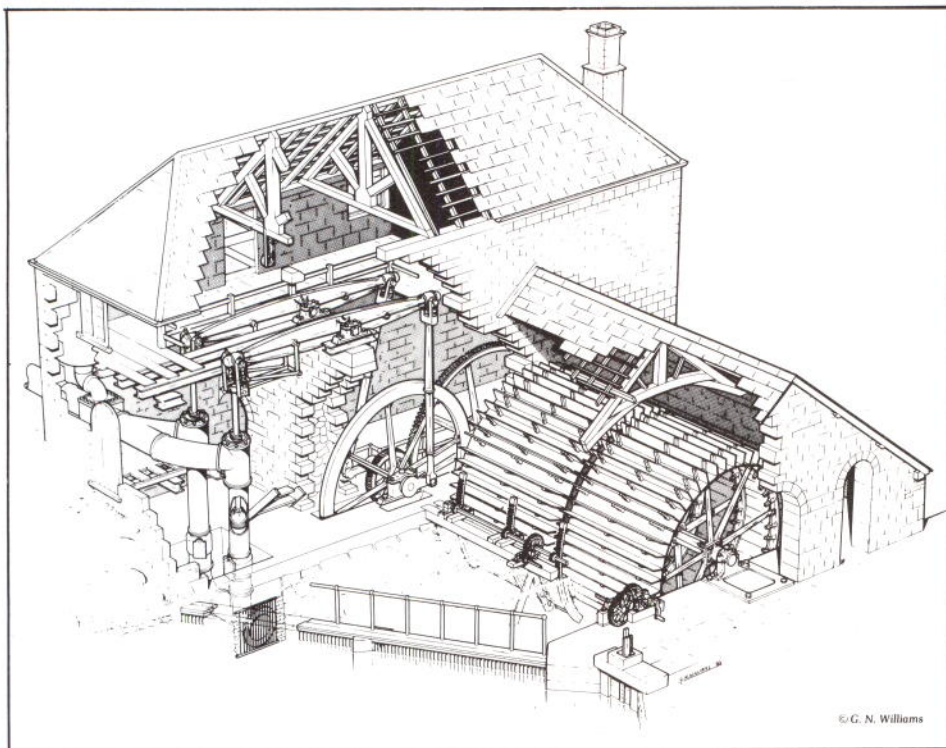
Among them is that of Penrith, in which the Conservative candidate, Mr David Maclean, received a majority of only 552 ahead of the Liberals in the by-election of July 28 last year, after Mr Whitelaw was created a Viscount. The line closure was a major issue in the election'.

For the last several years the winter issue of *AIA Bulletin* has published a pithy, tongue-in-cheek resume of the previous September's AIA Conference by Douglas Hague. This year it is missing as Douglas was providing the scenario and was himself a principal actor. Together with Hilary and Brian Malaws plus a host of willing helpers, Douglas put on a superb presentation against the backcloth of central Wales and as this splendid picture by John Powell shows, had his audience spellbound whilst inspecting a hushing dam near Cwymystwyth. Thank you Douglas, Aberystwyth now takes its place in our memories of unforgettable conferences.

This last summer has brought to fruition two projects dear to the hearts of those interested in







rehabilitation and conservation plans for the Kennet and Avon canal in the area between Bath and Bradford-on-Avon. The first was the publication of *Claverton Pumping Station (A Definitive Study)* by the small group of super enthusiasts who have been working on the pumping station virtually every spare moment, in some cases, since 1969.

On November 13th 1952 there was a serious failure of the 1813 (John Rennie) waterwheel driven pumping mechanism . . . it is reported that a log jammed the waterwheel feed . . . resulting in some seventy oak teeth being stripped flush with the iron rim of the pitwheel. Following this disaster British Transport Commission (by then owners of the pumping station) withdrew any regular maintenance from the plant and installed a 6 inch centrifugal pump driven by a Lister diesel engine to ensure that the statutory water level in the canal was complied with. In January 1969 however the British Waterways Board accepted a report by the Kennet and Avon Canal Trust that work should be carried out jointly by the Trust and the Engineering School at Bath University to try to restore this pumping facility. Work started immediately, with the Trust providing money for materials, and Bath University providing the engineering expertise and student labour under the supervision of John Butt, who was then employed by the University School of Engineering, and had previously worked on the pump whilst employed by the GWR prior to 1948.

Bath University did sterling work in those early years but, as is the way with students, they graduated and went away, making continuity of work difficult. However during this initial period the British Aircraft Corporation at Filton, north of Bristol had also become involved and in 1972 Derrick Dudden, an engineer with Rolls Royce Aero-Engines, who are virtually integrated with BAC on the Filton site, became Claverton Restoration Manager, whilst volunteers from the Kennet and Avon Trust members were added to the workforce.

After that what had started as a simple mechanical restoration project, involved virtually every engineering, building and conservation discipline until triumphantly, in February 1976,

despite flood conditions on the River Avon limiting the waterwheel speed to three revs per minute, *'A fine flow of water emerged into the Kennet and Avon Canal some 47 feet higher'*.

This delightful little book sets the scene for the supply and construction of the John Rennie pump in 1809-1813. Tells briefly the years between commissioning and the 1952 accident and concentrates, quite logically, on the restoration story from 1969 to date. It is an on-going project with the pumphouse now open to the public every weekend from April to October (and working at least once every month) and now providing money (from admission charges and publication sales etc) for other projects on the Kennet and Avon canal, notably the enormous task of restoring the flight of seventeen locks near Devizes. It describes each aspect of the restoration programme, has a technical description of the site and its equipment and an Appendix which discusses the accuracy of the James Watt Linkage mechanism controlling the vertical path of the piston rod cross head. Nineteen photographs, and seven line drawings, including the one shown above, are included in the 72 page booklet, which can be obtained from The Kennet and Avon Canal Trust, The Wharf, Couch Lane, Devizes, Wiltshire SN10 1EB at £1.25 plus 28p p/postage.

The second notable occasion this summer was the official re-opening on Sunday July 1st of the stretch of the Kennet and Avon canal passing through Dundas Aqueduct and which means that the K and A is navigable once again from the beginning of the 'cut' at Bath through to Bradford-on-Avon and beyond although of course the biggest obstacle remains, the famous Devizes flight of locks which probably will not be open until 1987.

**Halton Chemical Industry Museum Project.** It is perhaps surprising that at a time of growing public interest in the past and a growth in the number of museums concerned with industry, there is no museum devoted solely to the Chemical Industry. The Science Museum in London has a section on the heavy chemical industry, but whilst Northwich has its Salt Museum, St Helens its Glass Museum, the neighbouring towns of

Widnes and Runcorn (encompassed by the 'Borough of Halton') have no centre to record the massive contribution that they made to the industrial development of Great Britain.

During the late nineteenth century, entrepreneurs capitalised on the advantages which the region offered in terms of the availability of raw materials and an excellent transport infrastructure, to make it the dominant alkali producing area in the country. This dominance continued into the present century, although a far broader range of chemicals are now produced in the Borough. Perhaps the lack of any permanent record is one reason why this considerable contribution has been so undervalued.

In an effort to repair this historical omission, a Research Team was appointed in February 1982 to study the feasibility of establishing a chemical industry museum in Halton. They were sponsored by the Manpower Services Commission and aided by gifts from local industry, the Institute of Chemical Engineers and the Society of Chemical Industry. In the absence of any existing collection of records and artefacts it was necessary to visit all the chemical firms in the area and embark on a systematic search of records in local libraries and the County Records Office. The team also collected material which had been in private hands particularly, rare photographs. It was found that virtually no chemical plant survives from the first hundred years of the industry; even material of great technical interest is being scrapped at an alarming rate, a fact which lends a sense of urgency to the Museum's work.

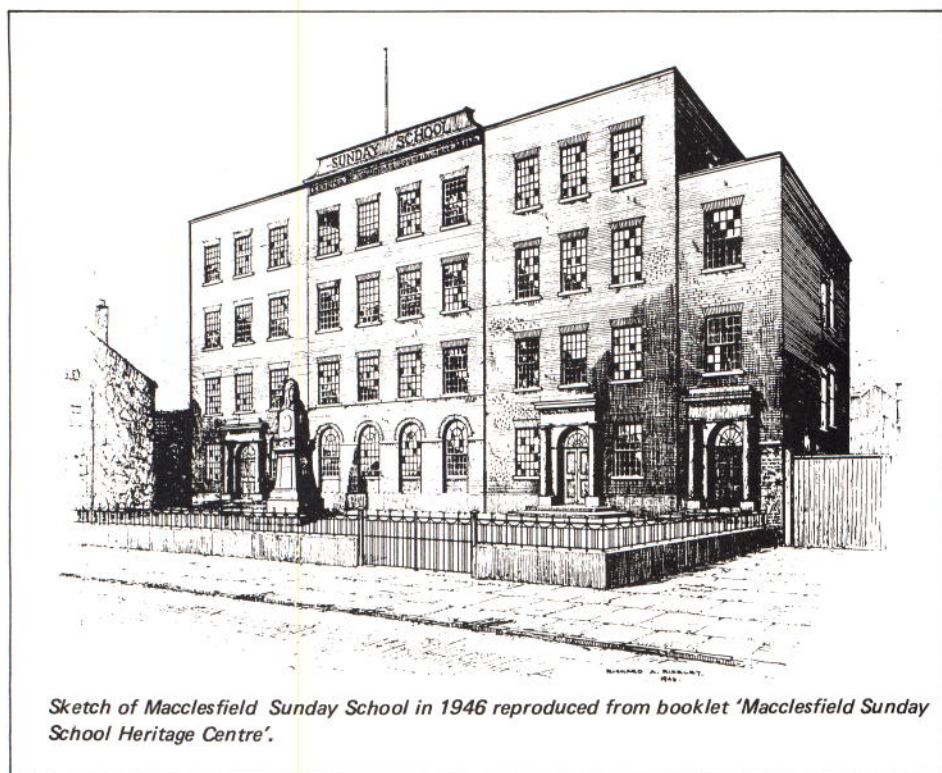
This is situated in the Old Town Hall, Victoria Square, Widnes and contains a permanent display on the history of the Chemical Industry in Widnes and Runcorn. It also features temporary displays which change every month or so. Travelling displays are also placed with local industry, libraries and information centres, usually staying for about a month. School parties form a large proportion of the Museum's visitors and are given guided tours, slide talks and video displays. The Museum has helped in the making of a programme for the Open University about the Alkali Industry, and more recently has contributed to the programme on the Chemical Industry for the BBC series 'All our Working Lives'.

We are open to the public every week day from 2 - 4.30 pm, but welcome enquiries from enthusiasts at any time. If you are unable to visit you can write c/o Municipal Buildings, Kingsway, Widnes or 'phone 051-424-2061 ext.149. We would appreciate any help with documents, maps, photographs or artefacts.

Elections for the Council of the AIA, held at the Association's annual general meeting at Aberystwyth, resulted in only one change. Julia Elton (GLIAS) did not stand for re-election and her place was taken by Pam Moore (Southampton University Industrial Archaeology Group) who can be contacted at **6 Prestwood Road, Hedge End, Southampton, Hampshire.**

**C B A Industrial Archaeology Committee.** The current constitution of this committee includes Michael Robins (Chairman), K A Falconer (Secretary), Owen Ashmore, Angus Buchanan, Neil Cossons, Edwin Course, John Crompton (AIA Representative), Douglas Hague, Steven Hughes, Michael Lewis, Keith Reedman, John Robinson, John Stengelhofen and Peter White.





#### **Macclesfield Sunday School Heritage Centre.**

The only museum in the country devoted entirely to the silk industry is in the process of being established in the former Sunday School (opened 1814) in Roe Street, Macclesfield. Charles Roe, a notable Macclesfield industrialist erected the town's first silk mill in 1743-4. Besides the silk museum, it is planned that the building will house meeting rooms, information centre, archive store, library, exhibition gallery and tea room. In addition, the assembly room (occupying the entire two top floors and built to accommodate over 2000 children) will be used for conferences, public meetings, etc.

The wider aim of the scheme is that it should create a social, cultural, and educational centre for Macclesfield and a focal point for visitors. Besides the silk industry heritage and several fine mills and interesting terraces of weavers' housing, the town and its immediate neighbourhood has much to offer visitors interested in industrial history and kindred subjects. It is on the edge of western gritstone fringe of the Peak District, the early working environment of James Hindley: Buxton and all that its limestone hinterland can offer is only eight miles away; Alderley Edge (Copper mines and Nether Alderley Mill) is only four miles to the west, and Styal about six. The Macclesfield Canal runs through the eastern outskirts of the town (at 518 ft OD) and the North Staffordshire Railway terminated there before being joined end on to, and appropriated by, the LNWR.

The museum scheme, therefore, can act as a focus for such varied heritage. The first phase involves the restoration of the building, an exhibition which relates the history of the Sunday School and the town, an information centre and tea room. It is hoped that the last two will be opened by summer 1984. Work, meanwhile, proceeds on the silk museum, which will be a permanent exhibition describing the silk industry in the town; it will be supported by research and educational facilities. It is hoped to open the first phase of the museum by Spring 1986.

The principal future aim is to restore the fine assembly room in a manner in keeping with its

former elegance. This will include the restoration of the organ, built by Samuel Renn of Manchester in 1837 (later extended by Alexander Young in 1882). This work is estimated to cost over £25,000 and will be made possible with the aid of pipework taken from another Renn organ in St George's Church, Hulme, Manchester, now closed. This organ, Renn's largest and most important, was built originally for the Chester Cathedral Festival in 1829, being transferred to St George's soon afterwards. It is unfortunate that it could not be preserved in its entirety since it had outstanding musical qualities (Sayer, 1974).

The Macclesfield Sunday School Heritage Centre had its origin in 1979 with the establishment of the silk Heritage Project funded by the Manpower Services Commission. In 1980, the Friends of Macclesfield Silk Heritage was formed as a support and co-ordinating group. In 1981, the Macclesfield Sunday School Heritage Trust was established and an Appeal to complete the Heritage Centre formally launched. Current estimates for completion are approximately £400,000. Grants have been obtained from the Department of the Environment, Macclesfield Borough Council, Cheshire County Council, English Tourist Board and North West Museum and Art Galleries. £226,000 is sought by Public Appeal. Further details including an attractive and informative Appeals Leaflet and a separate booklet (from which much of the information here is taken) can be obtained from the Macclesfield Silk Heritage Appeal Fund, 1 Canal Street, Macclesfield, Cheshire SK10 1JG (Tel: 0625 616880 or 25560).

Associated with this imaginative project, is the preservation of Paradise Mill on Park Lane, a typical Victorian silk mill which housed the last handloom weaving business in the town, closed as recently as 1981. The building still contains 28 hand silk looms with Jacquards, a remarkable survival from the late nineteenth century. The building is now opened to visitors, afternoons 2-5 (Tuesday-Sunday). Enquiries to Paradise Mill, Park Lane, Macclesfield, Cheshire SK11 6JT

(Tel: 0625 618228).

*Derek Brumhead*

#### **References**

- Sayer M (1974). Samuel Renn: English Organ Builder, Phillimore.  
 Chaloner W H (1951, 1952). Charles Roe of Macclesfield, an eighteenth century industrialist. *Trans Lancs and Ches Ant Soc*, Vol.62, Vol.63.  
 Davies C S (1961). A history of Macclesfield. Manchester Un Press.

#### **Statutory Protection of Historic Machinery.**

The CBA Industrial Archaeology Committee has become increasingly concerned about the fate of historic machinery, especially on sites otherwise protected under the Town & Country Planning Acts. These Acts would seem to give little, or no, protection of the machinery within a building, but such machinery can be protected under the 1979 Ancient Monuments Act. This Act specifically allows for the protection of machinery, deemed of national importance, provided that it cannot be detached from the site without being dismantled.

The Committee has therefore resolved to compile a list of machinery that might be eligible for scheduling under the Ancient Monuments Legislation and to submit the list to the Historic Buildings & Monuments Commission. The Committee is seeking assistance in the compilation of this list and its Honorary Secretary would welcome suggestions of items for inclusion on the list.

In the first instance, these suggestions should, if possible, be accompanied by an illustration with a short description giving some technical and historical details and a preliminary assessment of the installation's merit stressing its significance in a national context (eg earliest surviving . . . , least altered . . . , only example . . . , etc). Substantiation of the candidate's claim to significance would be especially welcome.

*K A Falconer*

*Hon Secretary:*

*Industrial Archaeology Committee*

*Industrial Monuments Survey*

*3 East 3.26, University of Bath*

*Claverton Down, Bath BA2 7AY, Avon*

**Dorothea Training Workshop.** This new training workshop has recently been established in Bristol to combine the skills and experience of Dorothea Restoration Engineers and the facilities and labour resources of the Brunel Engineering Centre Trust. The workshop has been approved for funding under the Manpower Services Commission Community Programme and will be housed in the vaults of Bristol Old Station beneath Brunel's original Engine Shed.

The work of DRE is now well-known throughout the country by individuals and groups involved in many aspects of the preservation of Industrial artefacts and also by Museums, Trusts and Local Authorities.

The BECT, established in 1981, has a 99 year lease on the whole of Brunel's surviving Bristol Station at Temple Meads. A full programme of repair and conservation work is currently underway on the building which will be partially opened to the public in 1985 as part of the 150th anniversary celebrations of the Great Western Railway.

The Dorothea Training Workshops will be available to undertake commissions for clients who may be faced with difficulties in funding works on a commercial basis. This is due to the

subsidised nature of the facility of a training workshop. However, due to a management contract with DRE, quality, price and delivery will be guaranteed.

Please direct all enquiries to Geoff Wallis at Dorothea Restoration Engineers Ltd, Southern Works, Churchill Road, Brislington, Bristol BS4 3RW.

**Water Power — Small Scale Hydro-Electricity in the U.K.** If you mention 'water power' to the average person they may well have a romantic picture of creaking water wheels and derelict buildings, decaying water courses and broken sluice gates. Mention the generation of your own electricity and people frequently ask 'is it DC?', 'don't the batteries take a lot of looking after?' and 'did the Electricity Board or Water Authority charge you?'. The answer to all these questions is **No**.

The water wheel has been used for thousands of years. By 1850-1870 the water turbine had become established and was a fairly universal means of rotative power at the beginning of the 20th century. By 1935 the turbine had been developed in its various forms (Francis, Pelton, Schiele, Kaplan) to a state which is broadly recognised today. By 1950 centrally generated electricity was so cheap and broadly distributed throughout Great Britain that many water power sites and turbine installations fell into decay and, with rare exceptions, no new installations were constructed.

In 1962 Osman Goring bought 13th century Coaley Mill near Dursley, Gloucestershire. It was a former flour mill and edge tool works — making spades and shovels. The water mill itself was derelict and now over a period of time, has been completely reconstructed. The early Schiele and Vortex type turbines were excavated and the smaller overhauled and was used to generate 3 phase electricity for three years. Despite predictions from the area Electricity Board and the River Authority that the modernisation project would be unsuccessful, Osman Goring was sufficiently encouraged to invest £12,000 in the project.

The sole British manufacturer of small scale turbines advised that modernisation would not be cost-effective and declined to quote for new equipment. After enquiries abroad, a new cross-flow turbine manufactured by Ossberger of Bavaria was ordered in December 1976 and delivered in April 1977.

A cross flow turbine was chosen because of its efficient operation from full flow to one sixth of full flow providing 24 kW in the winter and 4kW in the summer drought conditions.

As a direct result of the success at Coaley Mill Ossberger turbines have now been installed in Scotland and Southern England and several second hand turbines removed from derelict sites, overhauled and refurbished for use in the Midlands.

In the 1970s a *Water Power Users Association* was formed to oppose the water charges which some Water Authorities intended to impose for abstracting water passing through a privately owned turbine. The **Under Secretary of State for Energy** was eventually persuaded to visit Coaley Mill and see for himself the absurdity of such charges. In April 1981 the Energy Bill was revised in the House of Commons to insure such that Water Authorities may no longer charge for water passing through a turbine. In September 1983 the Energy Bill was signed into law and now allows for private generators, including hydro-electric installations, feeding

electricity into the National grid and for owners to be paid a realistic price for the energy produced.

There are many thousands of old Mill sites in the British Isles and many more potential sites which have not yet been exploited. The latest legislation and the concern for energy conservation must surely encourage mill owners to invest in small scale hydro-generation and obtain a useful supplementary income. The return on capital invested could be repaid over a 5 - 15 year period depending upon site conditions and continuity of water supply. Allowing for inflation the pay-back period might well become 3 - 7 years, the Coaley Mill installation having paid for itself in 4½ years.

Osman Goring's *Water Power Engineering* uses its own 3 phase power to supply an engineering workshop, small country flour mill and a large house. The Midlands Electricity Board Bill for 3 months (to end November 1983) was zero units used — £5.82p standing charge.

People with large country houses frequently have large winter energy bills amounting to several thousands of pounds. Modern small scale hydro installations would offer such people the opportunity of an inflation proof independent energy supply; and an additional income from the power fed into the National Grid, should the natural resources be large enough to warrant parallel operation.

For very small domestic users it is now possible to purchase an inexpensive (if less sophisticated) small hydro installation which comes ready assembled and only requires fixing to previously prepared foundations. The turbine is largely manufactured from engineering plastics, resistant to water corrosion and is available as individual components for the DIY enthusiast.

In order to make the smaller turbines easier to install, with regard to civil works, both the inlet chamber and the turbine house can now be supplied in a prefabricated form requiring concreting in on prepared flat foundations.

The fact that some continental buyers are advertising for hydro sites in the British Isles is indicative of the importance which should be given to this useful source of energy and its investment potential. So far British mill owners have not widely recognised this.

One of the reasons that small scale hydro generation has been slow to make a come back is possibly the lack of practical expertise. There are many consultants offering advice and manufacturers who will supply equipment, but there are very few firms undertaking a complete installation.

Osman Goring is a working miller, a practical general engineer and a very competent mini-hydro-generation specialist, who would be pleased to answer questions, at: Coaley Mill, Coaley, Dursley, Gloucestershire GL11 5DS. Telephone 0453-89376.

**A Cornish Export to the World.** One result of the industrial revolution was that Britain became a pre-eminent supplier of manufactured goods to countries throughout the world. A more intangible export was, however, the skills developed by working people, and of these a particularly outstanding example is the spread of mining skills throughout the world by virtue of emigration from Cornwall.

Mining in Cornwall was an old established industry, before the industrial revolution, and the development in Cornwall of steam pumping technology by Richard Trevithick et al, after the initial work of Newcomen, Savery and Watt,

resulted in its expansion on the grand scale. But, with the discovery of overseas ore deposits the Cornish industry suffered a decline from the 1860s.

This was not to say that Cornish miners had not left the County much earlier — local newspaper advertisements clearly confirm a history of emigration to North America where they were known for their ability to work mines in hard rock areas. Whether they landed in Canada or America, the first large Cornish community was established in Wisconsin, but Northern Michigan, California and the south western states can all provide evidence of the industry and expertise of Cornish miners. Two works giving the story of Cornish miners in America are *The Hard Rock Men* by John Rowe (published by Liverpool University Press — 1974) and *The Cornish Miner in America* by Arthur Cecil Todd (published by D Bradford-Barton Limited, Truro and the Arthur H Clarke Co, Glendale — 1967).

It is said that wherever a hole has been dug anywhere in the world, a Cornish miner will be found in the bottom of it. Another example was the part played by Cornish Miners in the re-opening and further development of the Pachuka Pachuka and Real Del Monte Silver Mines in Mexico in the period 1824-1947. Here there had been a previous history of mining, but one which had suffered during the wars of independence from Spain. Worked at a height of some 8,000 feet above sea level, these mines had first been developed and worked in 1528. The expertise of Cornish miners included their steam technology, and the experience and judgement of John Taylor, the well-known mining promoter. With no possibility of obtaining mining supplies in Mexico itself, everything had to be taken from Britain — including 9 Cornish beam engines. The Cornish found Mexico a very different place, but it is perhaps one of their established characteristics to be adaptable. The history of the mines has been set out in *The Search for Silver; Cornish Miners in Mexico* by A C Todd and published by the Lodenek Press in 1977.

The latest account of the Cornish miner abroad is *The Cornish Miner in Australia* by Philip J Payton (published by Dyllansow Truran in 1984). The effect of emigration is perhaps nowadays hard to understand. There is clear evidence that in the 10 year period between 1841-51 and 1871-81 and even as late as 1891-1901 individual Cornish parishes lost over 20% of their population, and this was a continuing loss. In Australia, the greatest period of Cornish immigration was between 1836 and 1886, and they mostly went to South Australia. It is said that in South Australia in 1900 there were some 30,000 people of Cornish birth or descent. Advertisements were placed in the Cornish newspapers advertising free passages to Australia and a common thought must have been that for an unemployed miner in Cornwall, there was little to lose by taking up such an offer. Mr Payton covers the whole of Australia, commencing with the central colony of South Australia with the well-known mines at Noonta. Thereafter, the book chronicles the spread of Cornish miners throughout the continent.

While Cornish miners left physical evidence of their presence in the characteristic design of their chapels and mine buildings, it is undoubted that the memory of their skills will outlive even the works of their hands.

**Information Required for Foden Steam Wagon.** Mr Richard Sadler of Hertford has purchased a



Foden 6 ton steam wagon of 1928, works No 13036, Registration Number OT 9452. Its first owner was J S White, haulage contractor, of Winchester Road, Eastleigh, and Mr Sadler would like to restore the wagon in his livery. He would be most grateful if anybody with information or, above all, a photograph, would communicate with him at 25A Old Cross, Hertford SG14 1RE. Tel: Hertford 52728 (day) Thaxted 830537 (evening).



The fascinating outline logo which appears above this note introduces **Sloss Furnaces: National Historic Landmark**, official address, PO Box 11781 **Birmingham** . . . Alabama. And it typifies the differences between industrial preservation and presentation in the USA and in the UK. The Sloss Company ironworks was established in the 1880s, was reconstructed in the 1920s and continued in production until 1970. The works basically encompass the entire pig iron production process for the foundry trade, and have been taken over as a **Museum of the City of Birmingham** . . . Alabama.

The 1984 September holiday weekend (Labor Day weekend in the USA) marked the first anniversary of the Sloss Furnaces Museum opening to the public and during the year since September 1983, over 55,000 people have visited the site. The anniversary celebration began with a barbecue supper (the only event for which there was a charge during the weekend) and this was followed by an address by Dwight Young, Vice-President of Preservation Services at the **National Trust for Historic Preservation** in Washington DC. There was music by the Birmingham Heritage Band and guided tours of the Blower and Dehumidification Buildings, recently restored. Other weekend activities included a concert of labor songs (with 'name' singers from Nashville, Tennessee), clogging, raffles, a watermelon cutting competition and demonstrations of blacksmithing in the Sloss forge, situated on Water Tower Plaza. All very different from the way in which we do things (or sometimes don't do things) in this country. Possibly alien to our concept of Heritage preservation but in **Birmingham** . . . Alabama . . . there is a blast furnace complex still existing apparently quite successfully whilst **Birmingham** . . . UK . . . is on the edge of a vast metallurgical area with not a blast furnace in sight, just historic records and bitter-sweet memories.

The **Scottish Industrial Heritage Society** is a lively new amalgamation of the former Scottish Society for Industrial Archaeology and the Scottish Society for the Preservation of Historic Machinery.

The Society had the assistance of many professionals in the museum and heritage field in arranging a major conference at New Lanark in October of this year entitled '**Preserving Scotland's Industrial Heritage**', dealing with voluntary and professional activities and putting them in a historical context.

Speakers and topics included:

**Dr John Hume**, 'Industrial Heritage in Scotland, a historical overview'.

**Don Storer**, Keeper of Technology, Royal Scottish Museum, 'Industrial Heritage and the National Museums'.

**Dr Eamon Hyde**, 'Scottish Mining Museum'.

**Bill Watt**, 'The Union Canal'.

**Campbell McMurray**, 'Scottish Maritime Museum'.

**Isobel Crawford**, 'Dalmellington Heritage'.

**Dr Robin Chesters**, 'Scottish Railway Preservation Society'.

Further information about the Society can be obtained from Stephen Kay at the Scottish Maritime Museum, Laird Forge, Gottries Road, Irvine, Ayrshire. KA12 8QE, telephone: 0292 78283.

The **Westonzoyle Engine Trust** have now finalised the list of steaming dates for 1985, which are:

All times 2 - 5 pm except those marked \* when 11 am - 5 pm.

January 1 — Tuesday, New Year holiday.

April 7/8 — Sunday, Monday - Easter.

May 5/6 — Sunday, Monday - May holiday.

May 26/27 — Sunday, Monday - Spring holiday.

June 2 — Sunday - first Sunday in month.

\* June 29/30 — Saturday/Sunday, 16mm narrow gauge railway display.

\* July 6/7 — Saturday/Sunday, Battle of Sedgemoor Tercentenary.

August 4 — Sunday - first Sunday in month.

August 25/26 — Sunday, Monday - Summer holiday.

September 1 — Sunday, first Sunday in month.

October 6 — Sunday, first Sunday in month.

A total of 17 steamings in all. On July 6/7 they hope to put on a special display showing drainage methods in use in 1685 when the **Battle of Sedgemoor** took place, and improvements up to the present day. Private parties can be shown around at any time, given at least a week's prior notice, for £5; 'in steam' private viewings can be arranged for an evening or weekend, for £25. Society programme Secretaries book your visit now with Mary Miles at Rose Cottage, Lower Durston, Taunton, Som. TA3 5AH. Tel: (0823) 412713.

## Letters to the Editor

Dear Editor

On recent trips along the Winchester bypass, I have observed the gradual demolition and replacement of that grand concrete arch bridge which carried the A31 as the bypass cuts through the ridge. The same style of bridge carried the bypass over the low level A272. Although with lanes too narrow and bends too sharp for today's traffic, this bypass has survived 50 years in practically its original form. (It is marked on a 1935 Bartholomew's map as 'under construction'). It still has that typical feature of early bypasses, the hedge in the central reservation. Another example of such a road

scheme was the Preston bypass, incorporated into the M6 in the 60s, retaining its hedge and narrow lanes. Has there been a comprehensive study made into these pre motorway age motor roads? They are as much part of our transport history as canals and railways, and the pre-war examples were the proving grounds of the techniques of modern motorway construction.

Yours sincerely

**Holworth House  
Holworth**

**Pete Boyce**

**Dorchester Dorset**

Dear Editor

We are hoping to set up a small working museum of hand and treadle tools for wood and metal, in Victoria Park, Hackney, London. We have spent some years collecting 19th and early 20th Century tools and machines, not originally for a museum, but just for a workshop of interest. Since then we have noted the need for such a museum.

The museum would be part of a larger scheme consisting of a landscaped rock and water garden with miniature people and buildings based on life in earlier times.

It is hoped to raise the water to feed the streams using a steam powered beam engine.

At present we are doing a feasibility study with the GLC. If anyone has any tips or hints on running a working museum and/or beam engines we would be most grateful.

Yours sincerely

**127 Cadogan Terrace  
Old Ford  
London E9 5HP**

**John Peck**

Dear Editor

**Penetrating? the Fortress.** The title of John Powell's leader in Bulletin 11/4 probably caused wry amusement to past AIA Council members who have spent many hours trapped in Fortress House. Some of these members are **actually employed** in, or by, Fortress House and several others have spent a great deal of time at committees in 23 Savile Row. Indeed there were several occasions when Angus Buchanan, Neil Cossons, Douglas Hague, Michael Rix, John Robinson, Peter White and myself met on a Friday at the **Advisory Panel on Industrial Monuments** and re-convened in Birmingham at the **AIA Council** the next day. It is symptomatic of the turnover in recent years in AIA Council membership, that there is not a collective memory of this close connection with Fortress House.

John Powell's article did not make sufficiently clear that the AIA delegation met two, quite separate, bodies on its visit to Fortress House — **The Historic Buildings and Monuments Commission** in the morning and the **Royal Commission on Historical Monuments (England)** in the afternoon. The **HBMC** (or **English Heritage** as it is to be popularly known) is a statutory, but non departmental, agency created in April 1984 as a result of the 1984 Heritage Act, whereas the **RCHM(E)** has been in existence for more than 75 years and being a **Royal Commission**, functions independently of government departments. Matters relating to the protection and grant aiding of monuments are the responsibility of **HBMC** while the academic recording of monuments and the National Monuments Record are the responsibility of the **Royal Commission**.

**Keith Falconer**



**Report of Judges.** The first year of any Award scheme has its teething troubles. This one suffered from shortage of time between publicity and completion of judging. The rules and entry forms became available in early June, and thus may require clarification and modification.

Six entries were received, of which four were short-listed for further examination and visits. Three entries arrived after the stipulated closing date; which must be more carefully administered, and **June 30th 1985** has been fixed already.

Conservation is an activity of many facets, which makes the task of assessment difficult. The judges therefore attempted to distinguish between the support roles of fund-raising and research on the one hand and of display and interpretation on the other, from the labour of conservation itself. Primary consideration was given to conservation:- repair, replacement of missing or life-expired parts, preservation of materials, and restoration to working order. Additionally evidence was sought that the applicant group had been involved in the conservation activity — in other words, to receive this award, you must have got your hands dirty!

In the light of these policies, groups whose chief role was to press for, or to sponsor conservation, from the sidelines, as it were, were not serious contenders. Similarly, those whose role was mainly to collect, display, and curate will need to seek the encouragement of other award schemes.

The judges were most disappointed, with one exception, with the quality of record keeping in relation to the conservation activity. To the professional conservator, detailed records are axiomatic: they record the state of the object in great detail before work begins, and they record in detail the treatments used. This latter aspect allows future generations to build upon good work, and to reverse poor conservation techniques if and when necessary. This cannot be done from a few photographs in a group member's private collection. The judges feel that these policies will support and encourage high standards in this element of good conservation practice.

After visiting four projects, the judges agreed that two stood clearly above the rest. They had both started from small resources and reached an advanced state of completion, and it was obvious that the whole of the work had been achieved through the skills and initiative of the group members.

**The Sussex Industrial Archaeology Society**

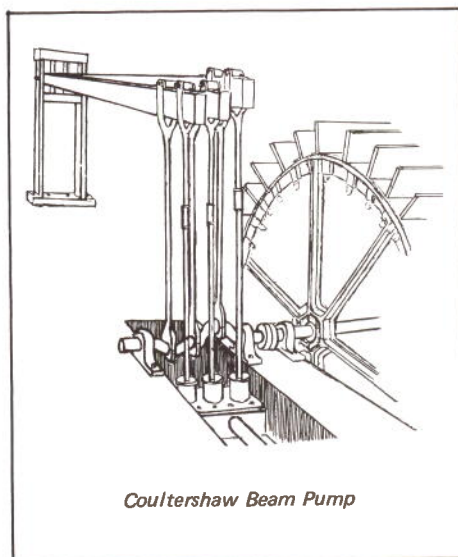
had restored the **Coultershaw waterwheel and beam pump**, a rare apparatus which was installed in 1784 to pump water from the River Rother to the house and town of Petworth. It is now in working order, protected by a reconstructed farm building moved from Goodwood, and open to the public as the centre-piece of a display on rural water supplies. The range of conservation work and the enthusiasm of the group is worthy of high praise.

The **Ruddington Framework Knitters Shops Preservation Trust** had restored a **group of three workers' cottages**, conserving the outer shell and restoring two historic interiors; again, a project well advanced towards completion. The judges were impressed by the care and skill which group members had given to this work, and most particularly by the very high quality of records which had been kept, of all evidence relating to the former state of the cottages, and of the changes which have and are being made.

The judges therefore make the main **Dorothea Award** to the **Ruddington Framework Knitting Shops Preservation Trust**, for their restoration of three workers' cottages.

The Second Award is made to the **Sussex Industrial Archaeology Society** for their restoration of the **Coultershaw Water Wheel and Beam Pump**.

*Douglas Hague  
David Palmer  
John Crompton*



*Coultershaw Beam Pump*

Entries were also received from:

Southampton University Industrial Archaeology Group: **Restoration of the interior of Southwick Brewery.**

The Papplewick Association: **Restoration of Papplewick Pumping Station.**

Brunel Exhibition Project/Rotherhithe: **Preservation of Brunel Engine House and Establishment of a Permanent Exhibition.**

Foxton Inclined Plane Trust: **Reconstruction of former boiler house at Foxton to form a new Waterways Museum facility.**

**Southampton Hall of Aviation.**

Southampton's first ever purpose-built museum opened its doors to the public on May 30th 1984. As well as the three main exhibits — Spitfire, Supermarine S6A and the Sandringham flying boat, Southampton Museums has mounted a magnificent display of photographs and objects relating to local aviation, including the Schneider Trophy, Supermarine works and Imperial Airways. Many smaller exhibits have been fitted in — a Saunders-Roe 'Skeeter' helicopter — dwarfed beside 'Beachcomber', a Rolls-Royce Merlin engine, some air training items which came from the recent auction at Hamble Airfield, and the hull of a Supermarine 'Seagull' flying boat which has been on display at Yeovilton since its discovery some years ago in use as a garden shed in Fareham. The museum is open 10am to 5pm Tuesdays to Sundays, admission £1 for adults, 50p for children and senior citizens. It is run by a registered charity called the R J Mitchell Memorial Museum, Company Limited. Much credit must go to Squadron Leader Alan Jones and his dedicated team from the 424 Southampton Air Training Corps for carrying out much of the work both on exhibits and on the building itself.

**Focus**, the Bulletin of the **Southampton University IA Group** has recently contained several items of considerable interest to those interested in aviation history in general and that of flying-boats in particular. The **Southampton Sunderland's Progress**. Meanwhile, down at Calshot Spit work has been steadily advancing on **Beachcomber's** former sister, the Sunderland G-BJHS (ex **Islander/Excalibur VIII**). External renovation of the hull was completed during the



*Ruddington Framework Knitters Shops; the Chapel Street Complex*



summer and winter work is being concentrated inside. The interior has been stripped out for treatment to slight corrosion in the framework and aluminium skin. Although these areas have possibly not been exposed for 20 years there is surprisingly little corrosion, the worst being in the tail cone. Finally, unless undercover facilities can be found locally, Hampshire will definitely be losing this sole surviving flying Sunderland in 1984, much to the regret of those of us who have worked on it.

**Another Sunderland for Display?** Unknown to almost everyone a Sunderland flying boat has been at Calshot for the past 40 years . . . underwater! The Marine Aircraft Preservation Society carried out survey dives during summer 1983 on this unique aircraft (the only MkIII variant still with its Bristol Pegasus engines). It is believed to have been in 423 Squadron, Royal Canadian Air Force, and sank at its moorings during a gale in 1944. It was found to be in good condition with the only damage being to the tail, caused during a previous salvage attempt. However, 40 years in salt water and mud will not have done it much good and even restoration to external display standards would be costly and lengthy.

Unique it may be . . . but so is G-BJHS as it is the only Sunderland in flying condition, and no one seems to want that for static or flying display. Aircraft enthusiasts everywhere seem to be fighting a lonely battle to preserve historic examples of our aviation history.



The Conference has been and gone, and it was good to see friends from so many Societies there. Representatives from 12 Societies attended the Friday meeting and provided useful comment and discussion; my thanks to you all for making the effort to get there early enough.

Information was collected on several continuing projects — to provide an exchange of information on the re-use of buildings, and an opportunity for comment on the usefulness or otherwise of the panel of lecturers and the directory of local societies. Members were reminded about the *British Humanities Research Index*, and the need for more Society profiles if the column here is to cover all our affiliated groups.

The insurance scheme will lapse with effect from 31st March 1985; the insurers will write to the individual societies concerned in due course, but you are covered until then. After the comments in the last *Bulletin*, this news can't come as a surprise, though it may seem regrettable that the scheme has died.

A summary paper on Society publications (arising from the March weekend) is being circulated to Society secretaries, though advance copies were distributed to members at Aberystwyth. This will be updated if more material comes in.

Following discussion in March on the recording of sites, and the comments sent to me since, the general feeling was that Societies will use whatever methods best suit their needs, but that the AIA should encourage recording regardless of method. Those present recommended

that Societies be urged to visit the local planning department and/or records office to see if there is already an adopted system which should be followed; and that records should be deposited if possible with the Sites and Monuments Record locally, as well as nationally. It was also suggested that a checklist of guidelines, rather than a prescriptive card, be drawn up as an aide memoire to groups, and Stephen Hughes and I will see what we can do with this for March. Generally, everyone felt that those willing to record should be given every encouragement. The national bodies have all said that they will receive records from local groups, and may be able to help with photocopying.

The question of voting rights, raised last year and considered with care by Council since, seems to have been solved by re-wording the forms. Representatives felt satisfied by the changes, so new forms will be issued.

I did point out last time that a crisis over Profiles was approaching, but disaster has been averted by the Tramway Museum Society:

**The Tramway Museum Society.** The Tramway Museum Society is one of the oldest bodies affiliated to the AIA, being formed in 1955. Its origins stretch back even further, however, and in fact the first tram (Southampton 45) was bought in 1949 by the Museum Committee of the then Light Railway Transport League. By 1955 seven trams had been acquired and the most urgent job for the new Society was to find a suitable site where they could be stored under cover. Sadly, two of the seven had to be scrapped due to vandalism on the temporary open storage which was all that was available.

Numerous places were visited but it was not until 1959 that the Crich site became available. At that time the quarry was closed and the historic Stephenson narrow-gauge railway down to Amergate was being lifted to provide track for the Tallylyn Railway. Initially a small site at Town End was leased, but the following year this area was purchased and subsequently other land was purchased or leased to provide the ground for the Museum as we know it today.

The original site comprised a deep cutting, two workshops, a powder magazine and sundry other stone huts. Today, in our Museum Jubilee Year, we have six depots, two workshops, a cafe, two shops, the Derby Assembly Rooms facade fronting an exhibition hall and library, plus all the other small buildings and shelters needed to run a tramway. We now have 52 trams in our care, plus one steam, one electric and two diesel locos. Not all the trams are at Crich. Some are still in store and others are on loan to tramways such as Heaton Park and Blackpool. We aim to have about a dozen cars in running order each season to provide a passenger service along the mile of track to Glory Mine and most of the present running fleet has been completely overhauled in the Museum workshops.

Although the main interest at Crich is, of course, the trams themselves, it is by no means the whole story. Gradually we are developing an Edwardian street scene and to this end have added the Assembly Rooms, gas lamps, railings, setts, and even a complete Victorian cast-iron bridge which spans the main line. We also have a large library, a photographic collection second to none in its tramway coverage, and a growing collection of films showing trams. Increasing requests for help from outside bodies has resulted in our setting up a consultancy service, which has been used by both municipal and

private bodies, including some on the other side of the Atlantic. In fact, we claim to be able to design, build and operate a tramway representing any era from 1850 to the latest technology should we be asked to do so.

The organisation of the Museum is in the hands of a Board of Management elected by members, who are in addition directors of the Limited Company which actually owns the Museum (for legal reasons). There is also a small but devoted band of full-time workers who never seem to have heard of union hours, restrictive practices and the like, and on whom much of the day-to-day running devolves. But the main amount of work is done by the members themselves, and it is worth noting by anyone thinking of starting a museum that a busy weekend can mop up 100 volunteers, without anyone being spare for restoration and development work. But these jobs do get done somehow, and if you have not been to see what can be done by a bunch of determined enthusiasts then do try and come in 1985 — we are open from Easter to the end of September.

Outside the Museum, the Society has many related interests and is represented on most enthusiast bodies, such as the Transport Trust, and the Private Museums Association. We are also members of EMIAC, having been host to two of the area conferences, and have been affiliated to the AIA since the scheme started. Now, the problem is to look forward to the next 25 years and to make sure that in 2015 there will still be someone shouting cheerfully 'Hold very tight please! — Ting! Ting!'

Janet Spavold



At the 1984 annual general meeting of the **Surrey Industrial History Group** on June 29th, the first two SIHG Conservation Awards were made to Mr and Mrs J Loarridge of *Casford Mill* and the Thomas brothers of *Outwood windmill*, for the tremendous efforts both have made in restoring their properties. The awards took the physical shape of cast aluminium plaques 12 inches in diameter, painted white on a black background, which were designed by Tony Harcombe and manufactured by J I Blackburn Limited at Catteshall Mill, Godalming. The design includes the SIHG logo . . . a millwheel . . . and the pattern was cut using a computer controlled milling machine at the University of Surrey at Guildford. The plaques will be fixed to the respective mills in an appropriate place and as time goes on such endorsements of excellence in conservation will become highly sought after.

It is pleasant to receive details of local society publications giving valuable information about the industrial past of particular areas, particu-



larly when they are part of a series planned to cover many aspects of local life and work.

**The Kenilworth History and Archaeology Society** have already produced two leaflets entitled *Kenilworth at Work*. The first describes how the geology of the district led to stone quarrying and brickmaking in addition to the traditional country occupations of fell-mongery, tanning, rope-making and cornmilling, plus a rather surprising (Kenilworth is in the heart of rural Warwickshire) chemical industry (c1805-1830) producing Prussian blue and sal ammoniac. The second details horticulture, light engineering and more latterly (from the 1920s) motor vehicle-associated trades of coachbuilding and caravan construction, plus a short lived two-stroke motor-cycle called the Priory. A third leaflet (actually number 5 in the series) is concerned with the coming of the railway (the London and North Western) which built a splendid Italianate station in 1844 and which functioned until the Beeching axe in November 1964. Full details of its 120 year life and of the IA remains are given and a very

to include a building survey, tape recording of dockyardmen's work experiences and publications on topics such as dockyard slang, and the yard as it was in 1929.

The timing of the inauguration of the Society was opportune, and as dockyardmen retired, many donated their tools to form the basis of a museum. 1983 saw this collection grow at a remarkable speed, so much so that our 'grace-and-favour' store became quite inadequate. Through the good offices of the President, Councillor John Marshall, who was also the General Manager of the yard, and the enthusiastic support of the Admiral, we received larger premises in the shape of the 1852 Iron Foundry, a building of dramatic proportions. Although shipbuilding and repair functions have been drastically curtailed, the centralisation of various Ministry of Defence units in south-central England at Portsmouth has meant that our building is now required for other purposes and we shall shortly be moving again.

The older part of the yard pre-dating 1810

8 Florence Road, Southsea, Hants PO5 2NE.

The **Suffolk Industrial Archaeology Society** has entered the publication market with *Malting in Suffolk* which it is intended will be the first of a series on industries of the county. Copies can be obtained from John Jones, secretary of the Society, Hines Farm, Earl Stonham, Stowmarket, Suffolk IP14 5HQ, at 90p including postage.

**Malting in Suffolk, by Robert Maltster.** An encouraging first publication from the Society, which appropriately deals with one of the county's major industries. Consisting of 17 A4 pages of text and 3 of architectural detail relating to Kersey Maltings, it provides a useful summary of the origins, processes and developments of the malting industry in Suffolk, with reference to adjoining counties. Emphasis is on technological progress but there is also much interesting detail on such aspects of excise regulations and changing distribution of the industry. Sites are referred to throughout, but future editions would benefit from the addition of a gazetteer and list of related reading.

*Michael Bone*

Glenys Crocker, editor of the Surrey Industrial History Group's *Newsletter*, has recently written a very attractive A5 sized booklet entitled *Chilworth Gunpowder* which has been published by the SIHG. Copies can be obtained direct from Glenys at 6 Burwood Close, Merrow, Guildford, Surrey at £1.75 post free.

This comprehensive little booklet of 28 pages traces the history and records the archaeology of gunpowder manufacture at Chilworth, near Guildford in Surrey, from the early 17th century until the years following the First World War. There are good clear maps, diagrams, old views and illustrations and photographs old and contemporary. The text describes the manufacture of gunpowder, briefly but in a fairly wide context, then goes on to describe the industry at Chilworth in detail. There is an extensive list of references and sources and the book concludes with a well-ordered and clear field guide to the remains that can still be seen.

*Joan Day*



evocative post card showing a 6 ft 6 inch Newton class locomotive in the station pre-1914 is obtainable. Leaflet number 6 gives brief biographical details of wealthy businessmen who lived in Kenilworth from the mid-1870s to the 1950s including such men as Sir Alfred Herbert (machine tools), Percy Martin (Daimler Motor Company) and John Davenport Siddeley (Armstrong-Siddeley). Each leaflet is priced at 10p with the post card at 15p (plus postage) and all can be obtained from Richard Storey, Burnt Cottage, 9 New Street, Kenilworth, Warwickshire CV8 2EY.

**The Portsmouth Royal Dockyard Historical Society** was set up in 1982 as a direct consequence of the government's plan to run down the yard from a strength of 8000 to a workforce of 2000. At the same time a whole series of crafts which had endured from the nineteenth, and in some instances, the sixteenth century were to be phased out. The contraction implied the scrapping of tools, machinery and conceivably of buildings, and a number of dockyardmen and others with interests in industrial archaeology and dockyard history joined together with the aim of salvaging artefacts, drawings, plans and documents, relating to the crafts, buildings and docks of the yard. This original strategy has now been expanded

is, within the next couple of years, to be designated as the South-West Heritage Area and will include Nelson's flagship, *HMS Victory*, Henry VIII's famous vessel the *Mary Rose*, and Britain's first ironclad, *HMS Warrior*, quite apart from a number of architecturally important storehouses, Bentham's dock system and Marc Brunel's block-making mill. The Society, which is a registered charity and has a seat on the RN Museum Executive Committee (the body likely to steer the Heritage Area Package) will clearly be able to contribute to the overall concept by illustrating the evolution of the yard itself.

There are plans for use to mount exhibitions in Number 6 Boathouse, the former masthouse of 1846, whose first and second floors incorporate the world's first examples of stressed wrought-iron. However, the question of the use to which the block mill will be put is a tantalising one, for not only does it still contain some of Brunel's machinery, but it would represent an excellent location for the Society's displays. The thought of a museum of industrial archaeology in the block mill housing machinery conceived and fashioned by Marc Brunel and Henry Maudsley respectively is a breathtaking prospect.

The Society's chairman is Dr Ray Riley, 48 Maplehurst Road, Chichester, W Sussex PO19 4RP; the Secretary is Mrs Celia Clark,

## AIA Bulletin

ISSN 0309-0051.

*Is edited by Roy Day from 3 Oakfield Road, Keynsham, Bristol BS18 1JQ and is published by the Association for Industrial Archaeology. The AIA was established in September 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, conservation and publication. It aims to assist and support regional and specialist survey and research groups and bodies involved in the preservation of industrial monuments, to represent the interest of Industrial Archaeology at national level, to hold conferences and seminars and to publish the results of research. Further details may be obtained from the Membership Secretary, Association for Industrial Archaeology, The Wharfage, Ironbridge, Telford, Shropshire, TF8 7AW, England. Telephone 095-245-3522.*