

**Neil Cossons** is leaving Ironbridge to become **Director of the National Maritime Museum.**

This simple statement, which most readers will already have heard anyway, conceals what could be the end of an era for Industrial Archaeology in general and the AIA in particular.

Of course Neil will remain an industrial archaeologist. Of course he will still support the Association's activities but equally obviously Neil will find it difficult to take the same personal interest in, and to influence the outcome of, the activities of the organisation which he was largely instrumental in setting up.

In 1964, when he began lecturing to a Group which eventually became the Bristol IA Society (and he was BIAS's first secretary) he talked enthusiastically about the need for a National IA Society. Nine years later the AIA was established in the Isle of Man and Neil became its first secretary. In 1977 he was elected AIA President and although he had to stand down in 1980 under the Association's 'three-year-rule' he has remained a more-than-usually-active Council member ever since.

As for the future, and it would be a rash person who tried to predict the outcome of any activity Neil had an interest in, we will possibly have to make our decisions without the undoubted benefit of Neil's advice and support. Our feelings seem to be summarised by the final paragraph of a 'Tribute to Neil Cossons at Ironbridge', written by Barrie Trinder for the Friends of the Ironbridge Gorge Museum, and reproduced with his permission:

*Two qualities epitomise Neil Cosson's achievements at Ironbridge. The first is his ability passionately to involve himself in all that*

*is going on. On the eve of the opening of almost every major addition to the Museum he has been among those wielding paint brushes, adjusting spotlights or sweeping floors. He has the essentially democratic qualities of the most successful officers of the war which was fought as he grew up. Had he been born twenty years earlier he would probably have led a tank regiment across the Western Desert or organised the D-Day landings. Secondly, he has believed, with J M Keynes, that the obvious course of action, that which seems correct to the great majority of right-thinking men and women, is almost always the wrong one. Ironbridge has prospered because Neil has ensured that the Museum has rarely taken the course which is predictable, safe or advisable. It will need to retain his taste for adventure if it is to continue to flourish.*

If one substitutes the words Association for Industrial Archaeology for Ironbridge or Museum, as appropriate, the challenge is very apparent.

Thank you Neil for all you have done and our good wishes go with you to Greenwich.

**The AGM of the AIA.** The Annual General Meeting of the Association will be held at the Annual Conference in Lincoln. Details of the Annual Conference were circulated with the last Bulletin. With this Bulletin are enclosed the various AGM papers and members are reminded that nominations for Council must be made not less than four days before the commencement of the AGM. The Conference papers include a nomination form and if you feel able to help the Association by proposing new members of

Council please do so as quickly as possible and return the form to the Company Secretary, c/o the Ironbridge Gorge Museum Trust, Ironbridge, Telford, Shropshire TF8 7AW, at your earliest convenience. Please note however, that the Proxy Form if you cannot attend the AGM is to be sent to Neil Wright at Lincoln.

**David Alderton**, AIA Council Member, Conference Secretary and Editor of the AIA Education Newsletter has moved house. His address is now: The Old Police House, Hackford Road, Wicklewood, Wymondham, Norfolk NR18 9TJ and the telephone number: 0953-603130.

**Atmospheric Experiment.** The failure of I K Brunel's scheme for atmospheric traction on the South Devon Railway in 1848 may not necessarily be the last word on this elegant scheme for propelling trains on steep gradients with a power plant that remains stationary. **New Civil Engineer** recently reported that contract for a 1.2 km single track line in Porto Alegre, Brazil, has recently been awarded to engineer Oskar Coester. He has already built a full-scale test track evidently in ignorance of the 19th century failures in England and France, and hopes that the success of his 1.2 km pilot line will lead on to a longer 7 km passenger line linking Porto Alegre's administrative centre with the new commuter railway serving the town.

The failure of the SDR scheme, which lost the struggling company over £350,000 when all assets had been sold, is usually attributed to faults in the greased leather seal closing the top aperture of the vacuum pipe. Rats are said to have been attracted to the grease used to keep the leather supple and water-tight. Coester is pinning his hopes on a much larger pipe of some five times the cross section, rectangular and closed at the top with a plastic material. Modern materials will also help to keep down the weight of the passenger vehicle, planned with a capacity of 150.

Some spectacular acceleration figures are recorded for some of the four 19th century atmospheric railways of which Brunel's was neither the first nor the last but certainly the longest and most costly. With the importance now realised of economising on fossil fuels, any means of transport that avoids the necessity to carry with it the heavy price mover deserves serious evaluation and the brave Brazilian experiment will be watched with interest elsewhere. In particular, control over the trains in an emergency will need to be carefully worked out.





*Tower Bridge and the Pool of London before river traffic drained away. The vessel on the left is the ss Laverock built at Troon in 1909.*

**Tower Bridge Opens Up.** What the Eiffel Tower is to Paris and the Statue of Liberty is to New York, Tower Bridge is to London; a potent symbol recognised worldwide as the unofficial emblem of the city that surrounds it. Tower Bridge achieved this popular status within a few years of its opening by the Prince of Wales in 1894, but the mysterious procedures by which its bascules are lifted to permit the passage of ships have for most of its life remained hidden. Those who since childhood may have yearned to peer behind the neo-Gothic stonework that clads the bridge's steel framework and climb up to the two pedestrian walkways that link the tops of the two main towers can now indulge their wishes. Following an extravagant and unnecessary replacement of the hydraulic lifting machinery, which had operated without mishap for nearly 90 years, by a less reliable electric system at a cost in excess of £2 million, the Corporation of London has made further inroads into the funds of the Bridge House Estates, a medieval foundation from which all Thames Bridges within the City of London are financed, to equip Tower Bridge as a tourist attraction. The cost of making it ready for tourists is estimated at another £2½ million, and it is hoped that 300,000 visitors a year will pay the admission charge, presently at £1.60 to tour the Bridge.

New electric lifts have replaced the slow old hydraulic lifts inside the main towers. On the landings and staircases around the lift shafts, new display panels provide background on the origins of Tower Bridge and of the City's three road bridges, Southwark, Blackfriars and London. Although the text of these panels is, not surprisingly, aimed at the general visitor rather than the engineer or historian, it is sad that the opportunity has not been taken to provide an engineering appreciation of a structure which, with its sophisticated mixture of cantilever and

suspension bridge principles, represents a remarkable achievement in providing an adaptable and reliable river crossing at a point where access by ocean-going ships had to be maintained and close proximity to the Tower of London imposed strict aesthetic constraints.

A 32-page souvenir brochure is available, produced like the exhibition displays by Robin Wade Associates. Although attractively produced in full colour, this regrettably represents another lost opportunity, for it relies heavily for its content on the graphic material in the displays and only nibbles at its subject. Two double page spreads are squandered on a montage of modern picture postcards depicting Tower Bridge and of tourist souvenirs featuring the same motif. Anyone seriously interested in the Bridge or its mechanism is unlikely to find much of interest in the brochure.

With an investment income estimated at £5 million per year and only 4 bridges to spend it on, the Bridge House Estates might be forgiven for attracting proposals from contractors and consultants anxious to help it spend its money. How much happier our successors would have been, however, if only 5% of that income had been devoted to maintaining the original and faultlessly reliable hydraulic machinery in its proper function rather than expensively removing it in the forlorn hope that American museums and collectors would queue up to buy it; in the event the dismantled machinery could not be given away. London has lost one of the world's finest examples of the application of silent and pollution-free hydraulic engineering, entirely self-contained with its own hydraulic power station. It will be interesting to see whether the new electrically operated lifting machinery is as reliable after ninety years as Sir John Wolfe Barry's splendid Armstrong hydraulic engines were when they were disconnected and dismantled in 1976.

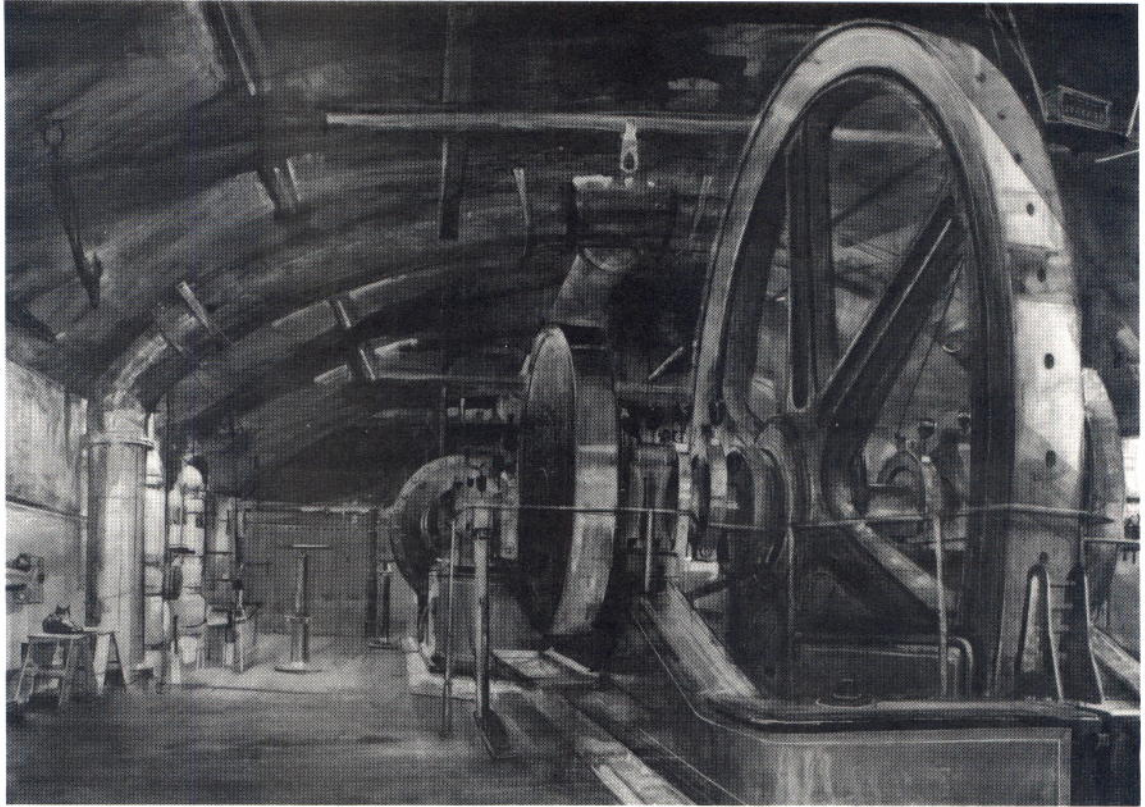
**Painter of Industry.** Regular readers of the *Illustrated London News* will have seen a series of paintings of London bridges from the palette of Yorkshire artist Edna Lumb.

Industrial subjects have always attracted this versatile artist who grew up in Leeds in the 1930s where she developed a particular feeling for the mills and machinery of Yorkshire and Lancashire. Difficult locations have seldom daunted her; in 1969 she covered the mercy airlift to famine hit Biafra, and throughout the bitter winter of 1973-4 she worked in the damp machinery spaces of Tower Bridge recording the hydraulic machinery before it was all swept away. More recently, Edna has been commissioned to paint Liverpool's dockland, the building of earth dams in Upper Volta, the interiors of London's sewers and the conversion of Covent Garden Flower Market into the London Transport Museum.

Nearly twenty paintings of bridges in London have come from her easel since 1981, since when Edna has spent more time by the Thames than anywhere else. She says 'Bridges, especially river bridges, fascinate me. They seem to be suspended in space — islands surrounded by light. Structural strength is reflected in forms with the intricacy and delicacy of lace. In other cases, grace is sacrificed for power and presence as with several of London's railway bridges. At first I painted the bridges in a 'landscape' format. It seemed the most appropriate composition. For the ILN series I had to think again. The magazine has an upright format and as each bridge painting occupies an entire page, I need to look at London's bridges with new eyes. My solution to showing a bridge taller than it is wide is to look not only at the bridge itself but the bridge in its context and setting. The tower of Big Ben and the spires of Parliament are virtually part of Westminster Bridge just as palace and bridge blend at Hampton Court. The



*Three of Edna Lumb's Tower Bridge paintings; Top: Engine house with cat. Centre: Hydraulic Bascule Engine. Bottom: South East Cabin.*



graceful spire of St Bride's sets off Blackfriars Viaduct viewed from Pilgrim Street'.

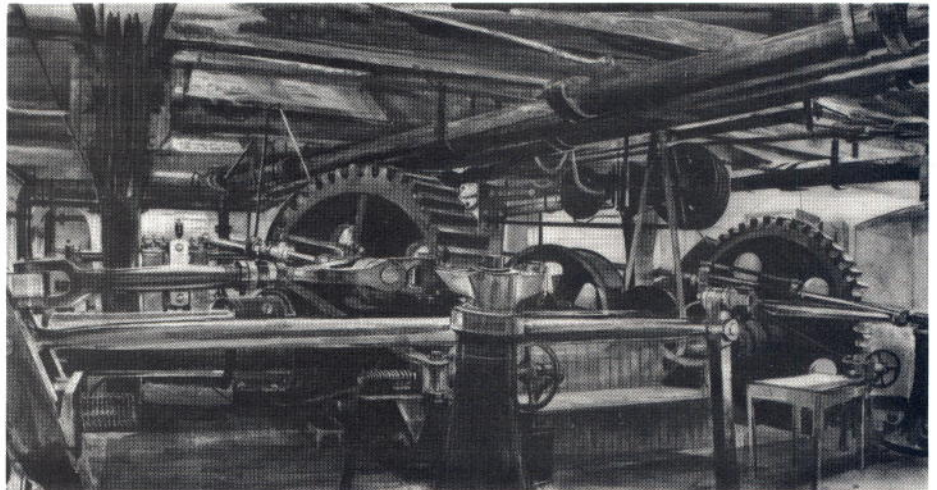
An exhibition of these paintings, entitled **A Web of London**, took place at the Campion Gallery in Barnes last year, when 37 pictures were on display. Anyone interested in the sensitive recording of our industrial surroundings would do well to look out for further work from the brush and pen of this talented interpreter.

Enquiries to Edna Lumb at 2/14 the Paragon, Blackheath, London SE3 0PA. Tel. 01 852 8189.

**Take French Leave from your Ferry Crossing.**

With its museums almost wholly under State control, and administered in the hallowed traditions of the Ministry responsible for antiquities and monuments, France has yet to see the growth of the industrial and open-air museums established by private initiative and subsequently developed by charitable trusts, whose flair and ingenuity have done so much to brighten the museum climate in Britain in the past two decades. The Ecomusee at Le Creusot in Burgundy blazed a trail 10 years ago that is now being followed rather gingerly by other municipalities in France like that at Beauvais. Less well known among British industrial archaeologists and indeed among the growing number of adherents in France itself, are the 'traditional' museums at various places in France which, although sticking to the conventional approach of labelled objects individually displayed in glass cases, nevertheless house important collections of technological exhibits which make them well worth seeking out.

At Nancy the **Musee de l'Histoire du Fer** shows a remarkable collection of artefacts in cast and wrought iron. Very much the creation of one man Bertrand Gille, this delightful museum is well worth a visit from anyone interested in the history of European iron-making. As an





added incentive to make the trek almost to the Swiss border is the French national railway museum at nearby Mulhouse. While less ambitious in scale and in activity than our own NRM in York, this collection of locomotives, rolling stock, signalling apparatus, paper ephemera and other items representative of the history of the SNCF and its constituent companies can tell us much about our mutual debt in railway development through pioneers such as Brassey, whose navvies travelled from England to build the first line from Paris to Le Havre and Chapelon whose work in locomotive development for the Nord company contributed significantly to the improvement in GWR locomotive performance in the Twenties.

Nearer Britain, there is an important museum of wrought iron work in Rouen. Situated behind the Musée des Beaux Arts is the **Musée le Secq des Tournelles**, named in honour of Henri le Secq des Tournelles who in 1920 presented his unique collection of wrought iron artefacts to the city. Of these 6,000 have been placed in display in the 15th century church of St Laurent, now converted for museum use. Derek Bayliss of Sheffield strongly recommends a visit; the emphasis of the displays is on decorative and wrought-iron work and on locks and keys. Domestic utensils, trade tools and horseshoes are also covered although, as Derek points out, there is little attention to production methods or the metallurgical background. The museum guidebook ignores the trade tools altogether, although a separate catalogue to them is available. The Museum is open from 10.00 – 12.00 and 14.50 – 18.00 except Tuesdays and Wednesday mornings. The admission ticket also gives entry to the Beaux Arts Museum and the lofty Belfry adjacent to the Cathedral.

While in Rouen a visit to the turn-of-the-century tramway station is also recommended. A very colourful building now used by the bus undertaking, it stands opposite the Town Hall. Still in Normandy, a detour from the main road is worth making for a sight of the Barentin viaduct, a cunning structure in brick erected in record time to the amazement of the French, by Brassey's unstoppable navvies in 1843. When the newly-completed structure fell down overnight, Brassey immediately undertook to rebuild it within the original contract figure: his French clients were so impressed with his determination that an ex-gratia payment was made towards the extra costs. The viaduct still carries main line trains on the line from Rouen to Le Havre. This important seaport at the mouth of the Seine was heavily bombed in World War II but still has many IA sites to offer. The port vied with Cherbourg as France's main Transatlantic terminal, and is as rich in the opulent port structures of that era as is Southampton, to which it is linked now, not by ocean greyhounds of the Cunard and French lines but by daily and nightly ferry services. In the town a cable-operated cliff railway like those at Lynton and Bridgenorth has recently been modernised for the benefit of pedestrians going to the upper part of the town. A few miles south of Le Havre is the Tanquerville suspension bridge, a modern creation in steel and concrete comparable in scale, although not in elegance, with our Severn Bridge.

Derek Bayliss also recommends visitors to Dieppe to see the local history museum in the **Chateau**, open daily except Tuesdays, and featuring a large collection of ivory carvings. There is a reconstruction of an ivory carver's workshop for this until recently was a local craft, and a very fine model of an ivory-carver's foot lathe, made, of course, from ivory. There

are 4 horse-drawn fire engines (one of them a steamer). Dieppe's railway station was built by English contractors with English bricks in 1848, for the Rouen-Dieppe railway. Although the seaborne banana trade has been lost to Le Havre, the docks in Dieppe are still busy with shipping, shipbuilding and fishing. One dock was filled in some time ago to provide a site for the new Town Hall, Jean Renoir art centre and an urban park. So if your Channel crossing lands you in either Le Havre, or Dieppe, spare an hour or so for the sights of these historic gateways to Normandy before plunging into its hinterland.

**The Cartmel Obelisk.** Long before his death in 1808 John Wilkinson had already made elaborate arrangements for the part which cast iron would play in his funerary rites. As a timeless publicist for the advantages of iron in all sorts of new applications, including building houses and ships, the 18th century iron master took every opportunity to demonstrate the versatility of this unfamiliar medium. With plates cast from his furnace at Lindale in Cumbria, Wilkinson built a small barge about 1750 to bring peat fuel from the adjacent heath. Despite the scepticism of the local populace, his first iron boat, a recent search for which was reported in Bulletin 8:3, did indeed float and encouraged Wilkinson to build larger vessels some years later, on the Severn at Willey, and at Ironbridge, which were up to 70 ft long and completely vindicated their builder's faith in iron as a structural medium.

In his middle years Wilkinson envisaged his last journey as being in a casket of cast iron, and had his foundry make two such coffins. Visitors to his house were also likely to be offered a suitable iron coffin from a small stock he kept in his garden. Over his grave he arranged for a cast iron obelisk, weighing some twenty tons. When Wilkinson died in his 80th year in the Midlands in July 1808, his corpse was encased in a double wood and lead coffin for the summer journey to Cumbria, where it was found that the cast-iron coffin which had fitted him in his lifetime was now too small for the body already sealed in two inner coffins. Wilkinson was temporarily buried in his own garden while his foundry made a larger coffin. The funeral arrangements were further frustrated when it was found that the new coffin did not fit the grave previously hewn in the rock. The corpse then had to be hauled swiftly out again and reinterred in a temporary grave while the rock excavation was enlarged.

The ill-proportioned iron obelisk specified by Wilkinson to mark his grave 30 yards from the front window of his home at Castlehead did not please the new owner of the house when it was sold some years later. Thus it was that his remains again had to be disturbed, when the rusting advertisement for the universal uses of cast iron was dismantled and the parts left lying in a hedge. The coffin found repose in the chapel graveyard in Linton-in-Cartmel and the macabre sequence was forgotten until 1863 when the then occupant of Castlehead, Edward Mucklow, rescued the parts of the monument from the undergrowth. For the past 120 years it has stood where he had it re-erected, on a rocky knoll to the south of Lindale village. Despite Wilkinson's anxiety that his name should be remembered he made no provision for the upkeep of his monument, and 170 years of frost and rain have taken their toll. Quite apart from its personal associations with the eccentric iron master, the Wilkinson monument is naturally important for its early use of iron in

an architectural role and is a scheduled Ancient Monument. Responsibility for the upkeep falls to the Allithwaite Upper Parish Council which with very limited resources (a subvention from the District Council) is trying to find the £324 quoted by a local firm to repair the obelisk, fractured in various places by freezing action and by the settlement of the plinth.

Conscious of the importance of the structure for the history of ironmaking, the Parish Council is setting up a **John Wilkinson Memorial Trust** which will arrange the immediate restoration of the monument and maintain it in future. The sum to be raised is not large but is beyond the everyday means of a small parish council. Help has already been sought from the DoE and from the district and county councils for the first-aid repairs. If you can help with a modest contribution toward the Trust fund for this little-known but important testimony to the eccentric genius of an 18th century iron-master, please write to Miss K G Hill, Clerk to Allithwaite Upper Parish Council, Kantara, Cartmel Road, Allithwaite, Grange-over-Sands, Cumbria LA11 7QZ, tel 044 84 2624.

Wilkinson's cast-iron epitaph records that 'his life was spent in Action for the benefit of Man'. It would be sad if this monument to a great industrialist were to succumb to neglect because of our lack of action.

**Queen Street Mill.** Burnley may fairly have claimed the title of cotton weaving capital of the world for of all the Lancashire cotton towns, none could boast more working looms in its heyday. It is appropriate then, that steam-powered cotton weaving should breathe its last gasp in Burnley, and this was the case when Queen Street Mill at Harle Syke, overlooking Burnley, wove out early in 1982. There was strong feeling in the area that Queen Street Mill should not go the way of so many other Lancashire mills and be razed for a car park or industrial trading estate or should simply be left to vandals and the weather. The layout of the mill happens to be convenient for adaptation to a working museum; at one corner is a spacious engine house with a moderately-sized mill engine by Roberts driving by a direct shaft and belts some 400 looms in the adjacent but separate weaving shed. A shrewd and practical scheme to retain in commission some 200 looms in the area of the sheds nearest the steam engine, releasing the rest for letting as small workshops to help finance the working museum, has been put together by Pennine Heritage Ltd, a charity based in nearby Hebden Bridge, with the support and encouragement of the Burnley Borough Planning Department. Lancashire County Council is also ready to assist the scheme, in the belief that if this opportunity is lost, never again will it be possible to preserve a working cotton mill typical of those on which the wealth of Lancashire and of the whole of Britain was built in the 19th century.

The engine house with its tandem compound engine has been scheduled as an Ancient Monument, and the Department of the Environment is likely to grant-aid its preservation. The result will be uniquely important as a mill engine preserved in its proper working environment as opposed to being removed to a museum elsewhere as is usually the case when industrial preservation is contemplated. The whole mill is an organic part of Harle Syke, a village mill around the textile industry, in a moorland setting extending eastwards towards the uplands of Widdop and the Bronte Country.



The local authorities involved are doing their utmost, within the powers available to them, to see Queen Street Mill acquired as a public amenity, made suitable for public access and re-commissioned as a working unit, albeit on a limited scale of production. In this they are assisted by the Science Museum as well as by the Ancient Monuments Secretariat of the DoE. Such a scheme must depend, however, on a large measure of volunteer participation. Participation might take the form of physical labour in tidying up the mill interior and re-arranging the machinery, or of specialist advice from those with a particular knowledge of Burnley cotton manufacture and its history. Exhibits will be required to furnish the museum displays which are planned to help interpret the mill for visitors. With the right mix of public money and private enthusiasm, this scheme will prosper as a unique example of a cotton community preserving its own **raison d'être**. Without lively volunteer support, the preservation scheme is likely to relapse into torpor, no matter how much public money may be directed to maintain it.

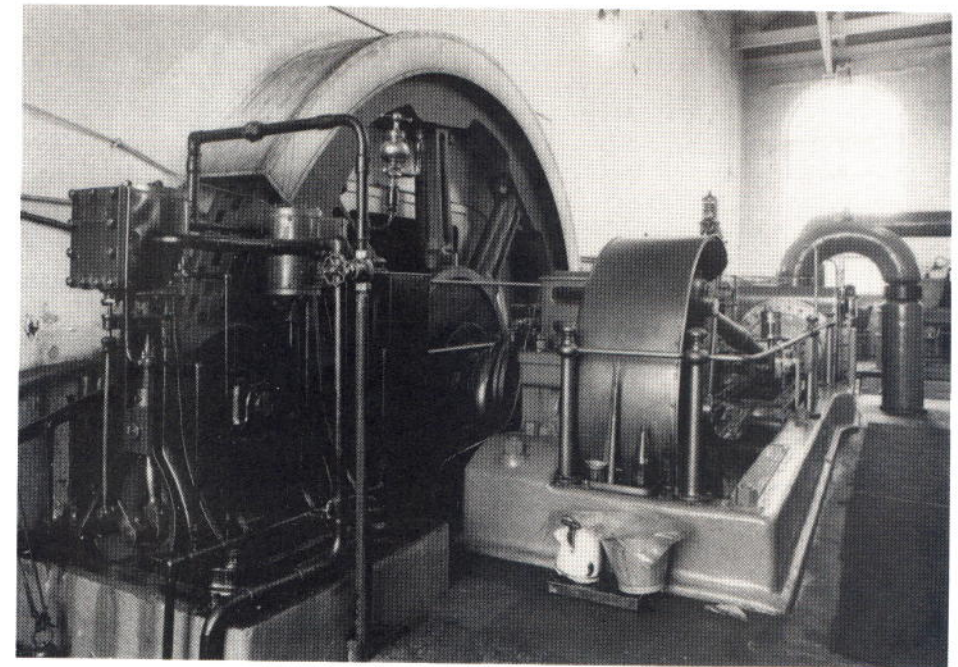
Today the archaeologist is sifting the dust of past civilisations, dating the layers, assembling the fragments in a way that has created the museum tradition as we know it. At times that evidence illuminates the past; at times it can only be the subject of speculation. The modest venture of preserving a working cotton mill in its entirety may appear to be visionary to some of us at this time, and a break with the habit of assembling fragments, but a hundred or a thousand years hence our inheritors would surely be indebted to us for our foresight. If you are interested in helping in any way with the imaginative venture, write to one of the following:

David Fletcher, Chairman  
Pennine Heritage Ltd  
The Birchcliffe Centre  
Hebden Bridge  
West Yorkshire.

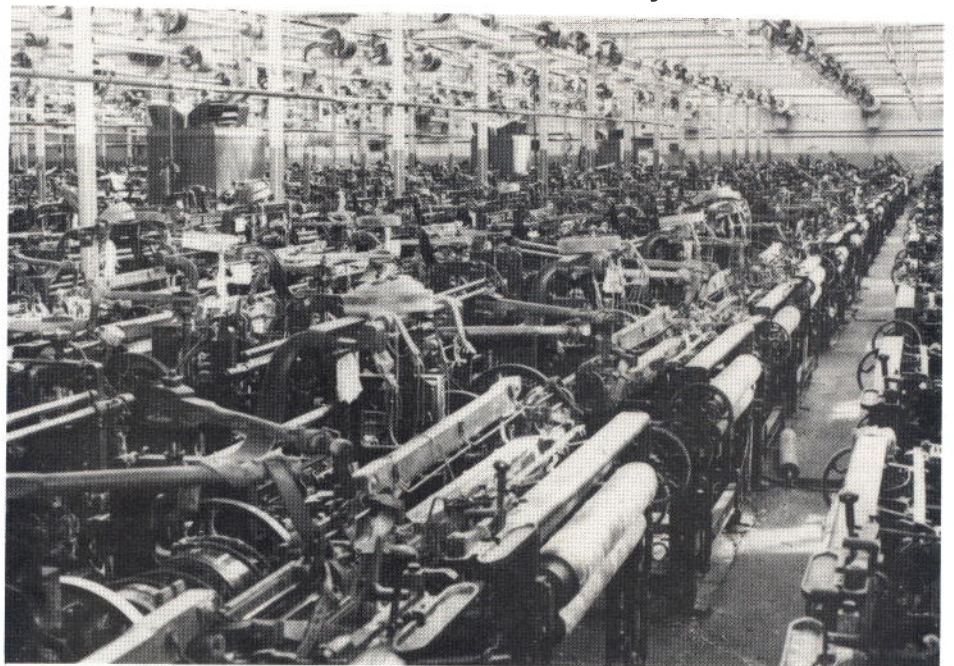
David Wild  
25A Bridge Street  
Burnley  
Lancashire BB11 1AD.

**National Symposium in France.** In October 1982 there was a national conference of industrial archaeologists at Beauvais in France, the fourth in a sequence that is steadily improving the cohesion of the subject in a country predominantly based on a rural economy. The Beauvais meeting, like earlier ones in Bordeaux (1979), Caen (1980) and Perpignan (1981) concentrated on putting people in touch with each other and in identifying opportunities for practical survey, recording and preservation work. At the time of writing, the venue for the 1983 national conference had not been announced; anyone interested should write to the secretariat for last year's meeting at: Ecomusee du Beauvais, 2 Rue du Franc-Marche, 60 000 BEAUVAIS, France, tel 445 8810. A day of field visits is likely to be part of the programme.

**Forty-Nine Years On.** Perkins of Peterborough reckon to have found the oldest diesel engine from their production line still at work. After a search covering more than four continents and extensive enquiries, they have located as a stand-by generator in Southampton a 49 year old Perkins Wolf which, records show, was installed in a fertiliser lorry in 1934. Some five years



Queen Street Mill, Burnley; Top: 'The engine'.  
Bottom: Weaving Shed.



later, when wartime conditions made such engines particularly scarce, it was rebuilt to run another lorry owned by Nobel Explosives. By 1954 it was powering a Daimler taxi, after which it passed to its present owners, F Musson & Son, who installed it in a Humber Field Command Car. Now it is coupled to an emergency generator at their Southampton engineering factory, ready to spring into action when required. In a bid to acquire it for their works museum, Perkins have offered to replace it with a new engine; but Mussons are not keen to let the old Wolf go, as it is still so reliable after nearly fifty years of varied use.

Twenty one years editing a railway journal must be something of a record for one person, particularly when kept up in a wholly voluntary capacity. The editor of the Journal of the **Irish Railway Record Society** modestly declines to set his name to the latest issue of that excellent publication, revealing only that the editorial address is at 13 Sandycove Avenue West, Dun Laoghaire,

Co Dublin. Maintaining its regular appearance 3 times a year, the well illustrated glossy journal provides well-informed and comprehensive coverage of contemporary railway happenings

**Wilts & Berks Canal.** The Wilts & Berks Canal Amenity Group is studying the industrial archaeology of the Canal, old photographs are being collected, and a survey of all remaining structures has commenced. Although the Canal was abandoned in 1914, much of the channel in rural locations remains unfilled, and many of the structures associated with it still stand: lock chambers, bridges, aqueducts, stables, cottages, wharf buildings: and at Dauntsey Lock an almost untouched canal based settlement.

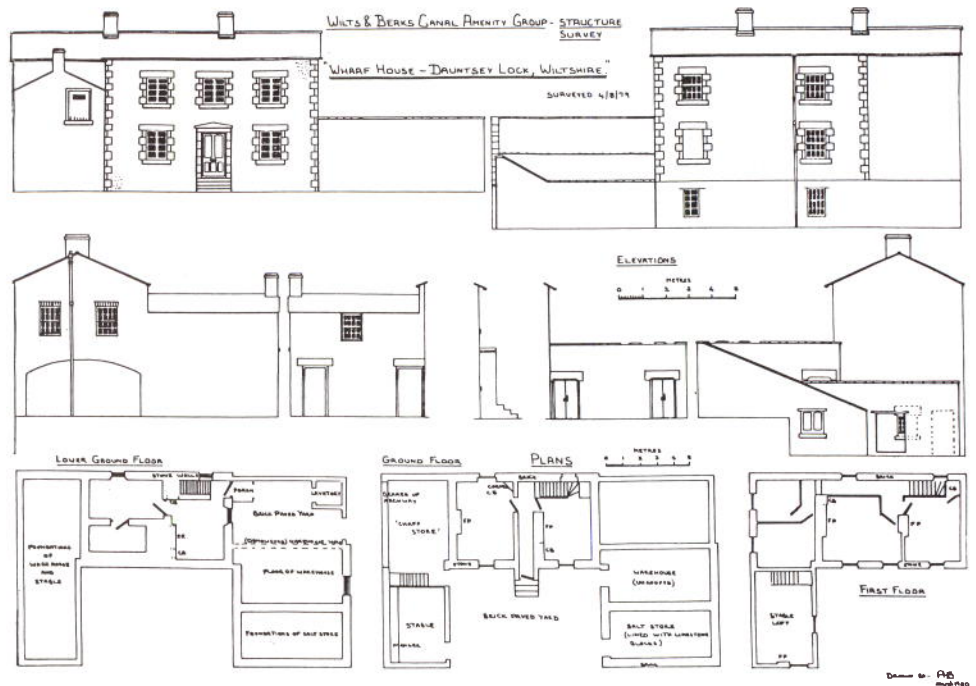
Dauntsey Lock became the base of Joseph Barnes, canal carrier, from about 1830 and he built two public houses, a wharf house, warehouses, cottages and stables over the next 40 years. He and other carriers and local business men bought the Canal from the original Proprietors of the Navigation, in 1876. The buildings and a mile of



canal still largely belong to the Barnes family. Development since 1900 consists of a service station and some ribbon housing, leaving the original settlement untouched. The Wharf House at Dauntsey Lock was the subject of a complete photographic and measurement survey in 1979, resulting in the survey drawing shown. An interesting result of storage of salt in the limestone lined salt warehouse was the subsequent heavy erosion of the external brick facing of the store. The Wharf House was extensively altered and modernised soon after the survey and both wings demolished. This settlement will possibly be the subject of an extensive study in industrial and social history.

The canal cottages and stables have since been surveyed, together with the basin and cottage at the junction of the Thames & Severn Canal with the North Wilts Canal. Many more buildings deserve attention — wharf houses at Semington, Calne, Longcot, Uffington and Wantage; lock chambers with gates still hanging; lock cottages; aqueducts. The Group is very short of effort for this important job and invites all interested parties to help before more structures are altered or destroyed.

Future prospects include at Calne, a restored section of branch canal and a town and canal museum in Marden House. At Dauntsey Lock, the wharf office and a possible interpretation centre using the canal cottages, with a 2 mile 'canal trail' to the longest lock flight. Seven locks at Tockenham Wick. Contact Peter Boyce at 31a Stafford Street, Swindon, Wilts SN1 3PH (0793 22768) for more details.



Dauntsey Lock, Wiltshire: Erosion of salt-store wall.

**Waverley's Skipper Exonerated.** On 3 August 1981 the motor ship *Prince Ivanhoe*, built by Denny Bros in 1951 for British Rail's Isle of Wight passenger as the *MV Shanklin* foundered in the Bristol Channel whilst plying for her new owners, the Paddle Steamer Preservation Society. They bought the 30 year old vessel to help generate interest in coastal cruising and thus

assist with running the Society's principal showpiece the *PS Waverley*. Since that accident, briefly reported in Bulletin 8:4, a cloud has hung over the Society and the *Prince Ivanhoe's* Captain David Neill of Troon while a Department of Trade enquiry was arranged. We are glad to know that in February this year the Captain was cleared of charges of incompetence relating to this and earlier mishaps.

The enquiry heard that when the *Prince Ivanhoe* struck an underwater obstruction about 2 cables off shore in Port Eynon Bay, Captain Neill was below with a DoT surveyor, and the ship was in charge of a 67 year old retired captain from Swansea, Captain Goldie, with 70 year old Abraham Woodward of Bristol as Chief Officer. Both had been qualified pilots and knew the area well. Captain Goldie took the ship close in to the shore to give passengers a view of the rocky coast; the *Prince Ivanhoe* then struck an obstruction, which may have been the wreckage of the fishing boat *Orion*, sunk a week previously. When it was realised that the *Ivanhoe* was holed below the waterline, Captain Neill put her on the adjacent beach, where the 460 passengers and 18 crew were safely evacuated. The *Prince Ivanhoe* broke up shortly afterwards in rough weather.

Captain Neill was naturally delighted at the outcome of the Enquiry, and now looks forward to taking the world's last sea-going paddle steamer around Britain in 1983. Well-wishers of the *Waverley* and the *PSPS* should support these cruises, for without support from *Prince Ivanhoe's* revenue, the Waverley Steam Navigation Company will have to carry even more passengers this year if the debts incurred when a new boiler was fitted in 1981 are to be paid off.

A comprehensive programme of sailings has been arranged for this coming summer. The ship will do a month in English waters from the middle of April, with excursions every weekend and many mid-week trips. Returning to Scottish waters via the East Coast, *Waverley's* programme will then take her to the Firth of Forth for a variety of day excursions before heading to her home waters in the Clyde. The whole of June is to be devoted to the Bristol Channel, where she has enjoyed consistent support in previous years. A recent innovation is the 'Waverley Commodore Club', member-

ship of which entitles regular patrons to a guaranteed ticket on all public sailings and the opportunity to sail on some of her longer coastwise trips, not featured in public timetables when she proceeds from one excursion area to another. Copies of the full programme are available on application to:

**Waverley Excursions Ltd.**

Waverley Terminal  
Anderston Quay  
Glasgow.

Tel 041 221 8152 .

All profits on these excursions go towards keeping this unique vessel in service.

**New Bridge for Old.** But for the ingenuity and historical sensitivity of its County Engineering Department, Cambridge might well have lost its 160 year old cast iron bridge over the River Cam when intensive traffic caused cracks in its arches, threatening to bring the whole structure tumbling into the river. It was thirty years ago that cracks were noticed in the course of routine maintenance in the Magdalen Bridge, and fifteen years ago that a 3 ton weight restriction was imposed. A public enquiry in 1971 decided that the bridge should not be demolished but strengthened to stand up to modern traffic conditions. The job was fraught with difficulties however, for the bridge abutments are hard up against adjoining properties, most of them owned by Magdalen College and several of them also protected by listing. Over the years, the bridge has also been burdened with a variety of pipes, culverts and power cables serving adjoining properties, including a riveted rectangular gas duct that is itself of historical interest. To minimise the disturbance to these in the course of building works required a complicated specification for tenderers; another constraint was that navigation on the river should not be obstructed at any time, for any interruptions to traditional punting activities on the Cam would have been unacceptable.

Ten years of discussions and consideration of tenders followed the public enquiry. In the end, it was the Cambridgeshire County Council's own design that was accepted, and they were appointed to act as agents for the Department of Transport in dealing with the contractors, A Monk, who undertook to strengthen the bridge while preserving its original appearance. Unlike the Waterloo Bridge of 1815 at

Betws-y-Coed which was brought up to modern requirements by concrete arches supporting the underside of the iron deck, the cast iron arches of the Magdalen Bridge supplied by Balfour Browne of Derby will be relieved of all load, and a new composite bridge of steel and concrete bearing on the same abutments as the old bridge will take over all of the traffic loads and services. The original foundations are weak and being founded on a timber mattress, may date back to the Great Bridge of 1754, a masonry structure replaced by the cast iron bridge in 1825.

Bored piles will be driven 80 ft down on each side to support the abutments and reduce the risk of the new bridge being deflected downwards into the unloaded cast iron structure, the vertical distance between them being less than an inch in places. Reinstatement of the old balustrade, locally made by Finch's Foundry, should help to ensure that the appearance of this important early 19th century monument will not be affected as it is beefed up to cope with modern traffic conditions.

**Foxton Inclined Plane.** Malcolm Tucker writes: The cast-iron window frame pattern illustrated in AIA Bulletin 10:1 can be seen in the well-pumping and back-pumping stations on the Grand Junction Canal around Tring, where it probably replaced earlier wooden frames. I have since learnt from Mr Goodwin of Desborough, that the Tring frames are in fact those from Foxton re-used, and provided the dimensions for the drawing. But he assures me that the Foxton Inclined Plane Trust has another source of window frames and that the Tring pumping station is not to be pillaged for the reconstruction of the Foxton engine house.

The inclined plane at Foxton is known to have suffered from problems of settlement of the rails. Although some have dismissed these problems as incidental (see A H Faulkner **The Grand Junction Canal**, David and Charles, 1972 p 196) it should be borne in mind that a mechanism of these type requires precision of alignment if the water seals are to work, something not easy to achieve with such heavy moving loads on top of a high embankment, particularly in the presence of water. If the plane is to be 'restored' to working order, what modifications may be needed to the design on this and other accounts? How archaeologically valid will the end result be?



**Profile.** There are now 48 IA Societies affiliated to the AIA. These include county societies such as Derbyshire, Leicestershire and Staffordshire, city groups like Bristol and Manchester, research groups such as the Northern Mine Research Society and preservation societies such as the Ryhope Engines Trust and the Dean Heritage Museum. It is intended to publish a brief profile of each of the affiliated societies and the Liaison Officer is obtaining the necessary information.

The Beam Engine Research Group, some of whose activities were described in Bulletin 6:3

has extended its membership and its scope, and last year became the **Stationary Engine Research Group**. While retaining its emphasis on steam as opposed to other stationary prime movers, the group now also deals with marine reciprocating steam engines, hydraulic and pneumatic-powered engines. Documentation continues to occupy a high priority, with a computer being used to compile a list of all surviving steam engines in the world. The primary aims of the group are described as 'to foster, encourage and co-ordinate an interest in an appreciation of the history, recording and preservation of stationary steam engines throughout the world'. Members of the Group receive the quarterly DALISY Bulletin, successor to the journal of the same name, but now published by Alex den Ouden's 'Archaeologische Pers' in the Netherlands. This includes detailed features on stationary engines, topical notes on threatened engines and accounts of Group visits. A useful and comprehensive list of dates when engines in the UK are regularly steamed is published as a supplement. Details of the Group can be obtained from John Cooper, Secretary and Treasurer SERG, 73 Coniston Way, Blossom Hill, Bewdley, Worcestershire DY12 2QA. The Group is currently involved in trying to find a home for the Uniflow engine at Abercarn tinplate works in South Wales, but is always glad to receive news of engines believed to be under threat, new preservation projects or other news items for the DALISY Bulletin, the Editor of which is Chris Allen, Flat 13, Cobham Court, Corbett Avenue, Droitwich, Worcestershire WR9 7DH.

**Sheffield Trades Historical Society** celebrates its Golden Jubilee this year. The Society has recently set up a Field Recording Group to carry out recording work in Sheffield and South Yorkshire. This Group is also engaged in related historical research and is compiling an index of historically interesting industrial buildings and machinery and sites in this area. Because of the pace of demolition at present, the Group is finding not shortage of work and its Secretary, Derek Bayliss, will be glad to hear from anyone who is interested in helping. His address is: 30 Muskoka Avenue, Bents Green, Sheffield S11 7RL, tel Sheffield 307693. Details of the Society can be obtained from its Hon Secretary, M J Tilley, Caudwell's Mill, Rowsley, Derbyshire.

**Working Weekend 1983.** Members of AIA Council and representatives of affiliated societies met at Ironbridge for the weekend of March 25th - 27th - a weekend which fortunately coincided with the arrival of Spry, the last Severn trow, at Blists Hill. The Saturday morning included discussion of the information derived from the questionnaire circulated last year and practical sessions on building measurement, field survey and the use of written sources. The evening was enlivened by Professor Butt's showing slides of IA in Australia, together with visual attractions presented by other members including David Alderton's film, dedicated to Michael Rix, of the IA of Norfolk. The Sunday morning session was largely concerned with practical activities. Mr Whitehouse of Birmingham Railway Museum spoke about their successful use of the Manpower Services Commission employment schemes which initiated a lively discussion on the problems of using the MSC. Birmingham Railway Museum have offered to host a day conference at

Tyseley to consider this problem further, and it is hoped to arrange this for June 1984. The Manpower Services Commission figures largely in many preservation projects and an exchange of ideas would be of considerable benefit to IA up and down the country. The re-use of industrial buildings was also considered and it is hoped to feature these in later issues of the Bulletin. A further **conference for affiliated societies** has been arranged for the weekend of **March 23rd and 24th, 1984**, when societies will report on their practical activities and the problems of publications will be considered at length. Do keep the weekend free and bring examples of all your publications, newsletters etc, together with slides of your restoration and recording projects.

*Marilyn Palmer*  
*Affiliated Societies Liaison Officer*

**The Industrial Archaeology of South East London.** Goldsmiths College Industrial Archaeology Group are responsible for the publication of an excellent gazetteer of the industrial archaeological sites in south east London. Several AIA members are involved in this publication including Christopher Rule, who can send you a copy of the volume at £1.50 if you write to him at Selia, 35 Grange Grove, Canonbury, London N1 2NP. The booklet of over 70 pages contains a concise description of the sites to be seen in the South East of London and is well-produced with concise descriptions, grid references, illustrations where applicable.

**Nottinghamshire Industrial Archaeology Society.** The March Journal of the Nottinghamshire Society is almost entirely devoted to a study of milestones in the County. There are some very good drawings and a complete survey of all known sites in the County where they survive. Brief articles are published on the lace market in Nottingham and a survey of Gedling Borough. Details of the Society and its publications can be obtained from H D Rees, 47 St Mary's Close, A ttenborough, Beeston, Notts.

**Sussex Industrial Archaeology Society.** The April bulletin of the Sussex Society mainly contains general notes and news which are centred on recent projects at the Chalk Pits Museum and the Sussex brick survey. The chief article in the bulletin is by J S F Blackwell on the accounts for the Brighton - Newhaven Turn Pike of 1825. Details of this Society are available from:  
The General Secretary  
R G Martin  
42 Falmer Avenue  
Saltdean  
Brighton BN2 8FG.

**GLIAS Newsletter 85.** The April issue of the Greater London Industrial Archaeology Society's Newsletter edited by Brenda Innes, 9a Upper Park Road, Bromley BR1 3HN, gives details of London's meeting throughout the Summer. There is also a report on their visit to an Ice cream factory, comments on the Old Kent Road Gasworks and requests for information on early insulators and road construction. Of considerable interest is an article by David Thomas listing buildings in London which contain ceramic and other plaques which depict industrial activities. There is a gazetteer on the mouth of Bow Creek and the Blackwall Area and also a supplement with nice drawings on the Clink Street Warehousing.



**Industrial Archaeology  
and the West Midlands**  
July 30 - August 6 1983

A residential Summer School based on Avoncraft College, Bromsgrove, Worcestershire, with the theme: The all-pervading effects of industrialisation on the English Landscape. Cost for accommodation, tuition, admission fees and travel for visits £91/£95 depending on type of room, plus VAT. Enquiries to Avoncraft College, Stoke Heath, Bromsgrove, B60 4JS, telephone 0527-31331.

**Discovering the Industrial Revolution**  
August 6-13 1983

Based on the Wedgwood Memorial College, in the Potteries, this weeklong residential course will study four key industries, coal, cotton, pottery and transport, with lectures, guided tours and discussion periods. Cost £76 (inclusive) and information from Derek Tatton, Wedgwood Memorial College, Barlaston, Stoke-on-Trent, Staffordshire ST12 9DG, telephone: 078-139 2105.

**Archaeology of the Peak District**  
August 6-13 1983

Seven days devoted to lectures, walks and practical (excavation/survey) activities on all aspects of Peakland archaeology including IA. Cost (inclusive) £112 plus VAT. Contact Peter Townsend at Losehill Hall, Castleton, Derbyshire. S30 2WB. Telephone: 0433-20373.

**The Henry Cort Bicentenary**  
September 16 - 18 1983

A conference organised by the Historical Metallurgy Society at the University of Southampton to celebrate two hundred years of wrought-iron manufacture and rolling. Lectures, films, guided tour (including Funtley where it all began) at an inclusive cost of around £50. Details from Ian Standing, Rock House, Bowen's Hill, Coleford, Gloucestershire GL16 8DH.

**The Coalport Conference**  
October 1 - 2 1983

The fifth annual meeting for collectors and historians of Shropshire Ceramics. Based on Ironbridge. Details from IGMT Ironbridge, Telford, Shropshire TF8 7AW, telephone: 095-245 3522 .

**Agricultural History and Architecture**  
October 15 - 16 1983

The second conference on the history of farming practice and buildings. Details as above.

**Industrial Archaeology in Wales Forum**  
October 22 1983

Organised by Douglas Hague and Steve Hughes for the CBA Group 2 at the University of Swansea. Promises to be a fascinating day which could easily drift into a weekend. Contact Douglas Hague at Maesglas, Llanafan, Aberystwyth, Dyfed SY23 4BA, telephone: (as late as you like) 09743-277.

**Industrial Archaeology of the Brecon  
Beacons area**  
November 4 - 6 1983

Sites of mans' past involvement with coal, silica, gun-powder, copper, tinsplate and water will be interpreted by experts and explored with fellow enthusiasts. Cost £28.50. Details from Danywenallt Study Centre, Talybont-on-Usk, Brecon Powys, LD3 7YS telephone: 087-487 677.

**The Steam Engine and the  
Industrial Revolution**  
November 7 1983

Held at Birmingham University, this Institute of IA course which deals with the relationship between Newcomen, Watt and the 19th century high pressure engines is directed by Professor John Harris.

**Towpaths Welcome Walkers.** Contrary to public opinion, there is no automatic public right of way over all of the towpaths under the jurisdiction of the British Waterways Board. Rights of way do exist over some such towpaths, and information on these will be available from local Councils and from the Board itself. Where they do **not** exist, the BWB hitherto required members of the public to obtain written permits to walk the waterways. In the interests of simplicity and of improving the accessibility of the countryside to responsible walkers, naturalists, industrial archaeologists and others interested in quiet pursuits, the Board dropped the requirement for such permits in 1978.

The Board does not intend to dedicate these routes as public rights of way, for to do so would make even more difficult the management of the waterways as an amenity, the closure of lengths for repair to the banks etc. Instead the Board is seeking to enter into agreements with Local Authorities for discretionary public access without the full paraphernalia of a statutory right of way, which implies an obligation by the Highway Authority (not always carried out in practice) to maintain the surface and to comply with the Highways Act of 1979. The organisation of fishing matches, boat rallies etc becomes difficult where a public right of way runs through the site. Hence the Board's concern to work together with local planning bodies to let the public onto its towpaths for recreation but without the complications of a permanent statutory right of way.

**The Best Buildings in Britain - SAVE** Britain's Heritage, 3 Park Square West, London NW1 4LJ - £5 50 incl. postage.

Referring to the 'lists' of historic buildings can be time-consuming if this has to be done at local planning offices or at the DoE itself. SAVE has completed a very useful service in bringing together in a single catalogue the Grade I listed buildings in England and Wales, Category A buildings in Scotland and Grade A churches in England and Wales, arranged in alphabetical county lists, with dates of the buildings and types of ownership. Grade I listed buildings in England are also tabulated by period and by type. With several thousand buildings to include, there is no room for detailed descriptions, but the breakdown of county lists by districts helps to make up for the absence of grid references.

## AIA Bulletin

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*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 .*