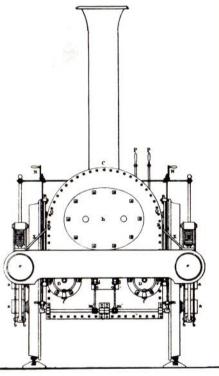


ASSOCIATION FOR INDUSTRIAL ARCHAEOLOGY

VOLUME 6 NUMBER 4 1979



Need it be the end of the line?

If there is any comfort to be drawn from the four reports in this issue of railway buildings threatened with destruction, it is that campaigns by the AIA, SAVE Britain's Heritage and local civic societies amenity groups can now have an important influence on the fate of such buildings. This situation has shifted very much in our favour over the past 15 years. The loss of the Euston Arch in 1962 is recognised with hindsight as a watershed in official attitudes to conservation, and as an act of destruction which could not conceivably have been sanctioned even three or four years later. By the end of the same decade the British Railways Board found themselves obliged to heed the overwhelming aesthetic and historical arguements in favour of retaining St Pancras Station at a time when operational considerations dictated extensive redevelopment of the station or transfer of its functions to Euston. In the succeeding ten years public debate on the future of historic buildings has become an important and recognised part of the planning procedure, with a number of specialist advisory groups including the Ancient

Monuments Society, the Georgian Group and the Victorian Society (but not yet the AIA) statutorily entitled to comment on proposals to alter or demolish such buildings.

But the reassurance we may draw from the involvement of 'vox populi' in the planning process should be tempered with vigilance that the favourable wind of public participation does not shift and take us all unawares. At Bath the indication is that the failure of the hotel scheme proposed for the Green Park site and favoured by the City Council would leave the way clear for listed building consent to demolish. At Starcross one can chide BRB at best with frivolity, at worst with cynical manipulation of the listed building procedure, in applying for consent to demolish the Brunel pumping engine house in order 'to find the strength of public and official viewpoints for its retention' as a railway spokesman put it. Had the inconspicuous announcement in a South Devon newspaper not been spotted in time and objections lodged. can we assume that the BRPB owners would have have proceeded with their published intention to demolish the monument? Too often the fate of such buildings is allowed to teeter on the brink, with negotiations continuing around the clock as the deadline for demolition approaches. Some, like the Starcross pumphouse, are brought back from the brink while others like the Severn Tunnel pumping engines or the Fairbairn heavylift crane at Hart lepool (Bulletin 1:6) are lost while talks are still continuing.

We may not associate the name of National Car Parks Ltd with building conservation, yet they it is who have led the campaign to get the Great Northern Warehouse at Manchester listed. Philanthropy or a sense of the building's history may not be high on their reasons for wishing to see the building saved, for they wish to adapt it for use as a multi-storey car park. But should we be any less grateful that the particular campaign has succeeded? A building preserved without a role is an expensive luxury, and if the conservation movement is not to lose credibility. we must continue to be selective and realistic in the buildings for whose retention on architectural or archaeological grounds we press. The surest way to safeguard the future of the Great Northern Warehouse is to make certain that it continues to play an economic role as well as an aesthetic one in Manchester. Edwin Course sums matters up when he says 'If Cirencester Station is to survive, the next move must be to find a use for it'. This is the test on which the Bath Green Park issue must ultimately be judged: in pressing for the retention of empty buildings, the onus is on us to put them back to work earning their keep.

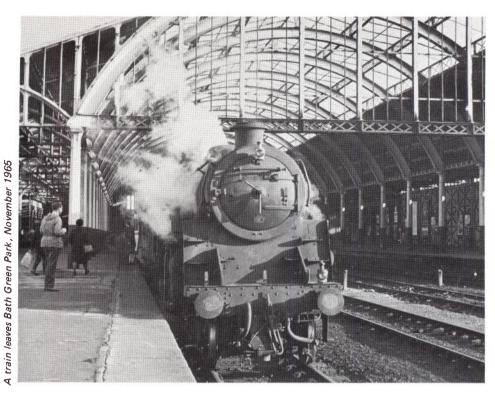
Green Park Under Siege Again The Association was represented by Past President Dr Angus Buchanan at the public enquiry in January to investigate four alternative schemes for the occupation of Green Park station. Bath terminus of the Somerset and Dorset Railway, Designed by J C Crossley who was engineer to the Midland Railway Company from 1857-78 and whose frontage has been described as 'one of the most beautiful classical facades to survive', the building was listed Grade II following its closure as a station, but the City Council in Bath applied for listed building consent to demolish, a proposal which aroused alarm both in Bath and nationally. Since then more enlightened counsel has prevailed, the Council has withdrawn its application to demolish and has given detailed consideration to no less than six schemes for the commercial re-use of the site. Three of these schemes are for supermarkets, all of which will use the covered train shed as a car-park, and are backed respectively by Tesco, J Sainsbury and the Co-operative Society. Another scheme envisages the conversion of the office building to a Holiday Inn Hotel, the train shed housing an elaborate foyer and swimming pool. Two further and more extensive schemes involve a complex development of the Green Park site in association with the Midland Road site on the opposite bank of the Avon.

In his evidence to the enquiry, presented on behalf of the AIA and BIAS, Dr Buchanan pointed out that despite its comparatively late date (1874) the station is a most distinguished specimen of the dwindling type of covered train shed, using iron girders and glass panels, of which St Pancras is the outstanding national example. The office block, in the Palladian style and local stone which is the characteristic architectural idiom of Bath, is a splended example of the willingness of railway companies, in their hey-day, to conform to local styles; it fits naturally and unostentatiously into the Bath townscape and is capable of sympathetic adaptation into a variety of acceptable uses. He went on to express alarm at the inclusion in the hotel scheme (which had the strong backing of the City Council) of 'unembellished mirror glass' as cladding for the new building, described by its proponent at the enquiry, Roy Worskett, as 'architecturally exciting'.

The absence from the enquiry of any representative of the Holiday Inn Group to explain in detail their scheme for conversion suggests that the likelihood of this or any other hotel scheme actually going ahead on the site is remote and in the event of the hotel scheme obtaining planning acceptance and then failing to materialise, Professor Worskett's evidence

made it clear that the Council would then re-apply for listed building consent to demolish. Dr Buchanan's evidence at the enquiry favoured the 'eminently reasonable' supermarket scheme put forward by J Sainsbury Ltd, but a decision must await the outcome of a separate Enquiry into plans to redevelop the Midland Road site across the river, since two of the recently submitted schemes for Midland Road also involve the Green Park site. The Minister is expected to announce his decisions on both Enquiries simultaneously.

Starcross Engine House Remains survive of four of the pumping stations built to serve the South Devon Atmospheric Railway, engineered by I K Brunel to convey trains over the steeplygraded route west of Exeter towards Plymouth. but abandoned as a total failure in 1848 after less than 2 years. Two of these pumping stations, located at Torre and Totnes, were never used; that at Exeter went on to form the base for a water column, and the fourth, at Starcross, survives as the most complete, having been used lately by its owners British Railways for storing coal. The building now lacks some of the Italianate detail recorded by Nicholas Condy in his pencil and washdrawing, now in the Elton Collection, produced at some time during the pumping station's short working life. But the walls and floors are still substantially sound, and the site offers some 4,000 sq ft of floor space and 140 sq yds of adjoining land. Planning consent was granted some time ago to convert the building into a Masonic hall but this scheme has lapsed and details of the pump house, listed Grade II, were included in a recent quarterly list of properties issued by the DoE's Historic Buildings Bureau as being available on a long lease to a tenant prepared to undertake the necessary repairs. Late in January this year. however, the Teignbridge District Council published 21 days' notice of the owner's intention to demolish the Starcross building. The AIA was one of several organisations which reacted promptly to this threat; Keith Falconer wrote on behalf of the Association protesting most strongly at the idea of demolition and pointing out the national significance of the



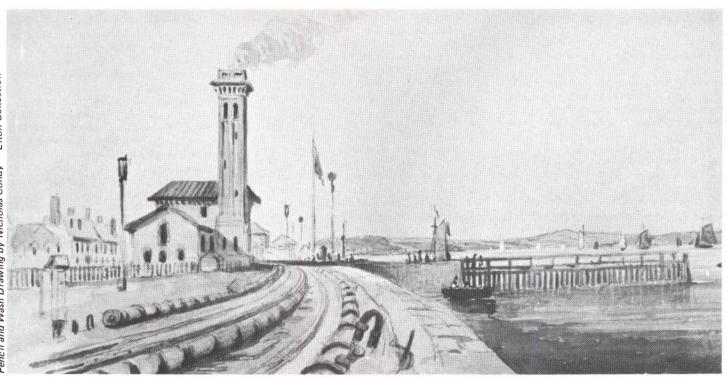
building as an early railway monument. Some three months later it was announced that BR had withdrawn its application for consent to demolish, and was about to approach local authorities and the Historic Buildings Council for financial help with restoring the building. BR's estimate for repairing the roof is £40,000 'money which the Board simply does not have for a project which is of no operational benefit to the railway system', said a spokesman. All main services are either connected to the building or are readily available for connection, and it is conveniently close to the existing railway station at Starcross as well as having road access from the A379. But its proximity to the road may impose a further constraint on its use, in that passing motor traffic must not be impeded. Proposals will be welcomed by its owners, and any enquiries should be addressed to the British Railways Property Board, South

West Region, Temple Gate House, Bristol BS1 6PX, whose Mr H C Jones FRICS can be contacted on 0272 24191 extension 2720.

COSIRA is one of a number of organisations that have expressed interest in the building, but no firm arrangement has yet been made for the building to be put back into use, which is the only hope for this unique monument if it is to survive.

Deansgate Goods Warehouse, Manchester

Professor Owen Ashmore (AIA) was one of nearly twenty representatives of various national and local conservation groups, including the Duke of Grafton, Professor Sir Colin Buchanan and Sir Hugh Casson who collectively appealed to the Secretary of State for the Environment, Peter Shore MP, in March this year to list the massive Deansgate goods warehouse in Manchester, leased like its near-neighbour Central Station





(Bulletin 5:4) to National Car Parks, but threatened with demolition by its owner who would like to realise the considerable re-use value of the building materials. Built in only 15 months and opened in 1898 at a cost of £1m (about £50m at today's prices) the warehouse represents the last of the massive engineering projects associated with the growth of Victorian railways. Its conception as a multi-level road, rail and canal interchange gave the Great Northern Railway a long-sought freight facility in Manchester to replace the previous unsatisfactory and vulnerable arrangement for interchange of traffic with the Great Central Railway. Designed as two separate goods stations one over the other, the building was linked to the Cheshire lines metals by a massive approach viaduct, Communication between the high and low level yards was by means of two rail inclines of 1 in 28 enabling up to 8 wagons at a time to be raised or lowered by hydraulic capstans and shunting locomotives, a marked improvement on previous two-level goods stations which depended on hydraulic lifts accommodating only one wagon at a time. Both high and low level goods stations were connected by lifts to the 3 warehouse floors above. In addition a link with the Manchester Ship Canal was achieved via an underground dock 140 ft long x 40 ft wide linked by canal with a dock on the River Irwell. This interchange facility meant that the Deansgate building was the first railway warehouse directly connected to the Ship Canal, completed only 4 years previously. This link between rail and canal was used regularly particularly for corn until 1922, and occasionally until 1936. During WWII the tunnel was sealed and floored with concrete, transverse blast walls were constructed and it served as an air raid shelter. When visited by a party of industrial archaeologists in rubber boats three years ago. the tunnel was found to be in excellent condition (Bulletin 2:6).

As well as providing a unique example of a Victorian 3-way goods interchange the building is nationally important for its fire proof construction, framed in mild steel as opposed to cast iron. The high level yard is built upon a series of steel stanchions supporting steel beams,

from which spring 9" brick jack arches. The stanchion bases, protected by cast iron guards against damage from wheeled vehicles, rest on granite blocks which are laid on concrete piles going down to bedrock. The jack arches are covered with concrete and a layer of asphalt to render them water tight. The 3 warehouse floors above are of similarly robust construction, and roadways are paved with granite setts or blocks of jarrah. Aesthetically the building is a striking and distinguished example of functional architecture, its characteristic features unaltered since the day of its opening. The proposed insertion by National Car Parks of internal ramps to give motor car access to the top 3 floors will leave its external appearance unchanged, but NCP could not contemplate the £½m required for these alterations unless the threat of demolition could be lifted. Not long before the recent change of Government it was announced that the Deansgate warehouse had been listed Grade 2; while this by no means rules out demolition, Manchester as the premier Victorian city of England is now less threatened with the loss of one of its foremost surviving Victorian railway monuments, and one for which an appropriate and remunerative use is available,

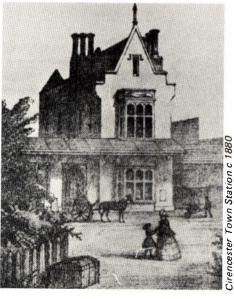
Cirencester Town Station Edwin Course has supplied the following note: - Members may be pleased to know that following a Public Inquiry, the Inspector recommended that listed building consent for the demolition of the Railway Station at Cirencester should not be granted, and that his decision has been confirmed by the Secretary of State for the Environment. The building has been acquired by the Cotswold District Council who wish to demolish it. The opposition came from three directions — the Town Council, the Victorian Society and the Association for Industrial Archaeology in association with the Gloucestershire Society and Southampton University Group.

In his report the Inspector listed the points which seemed to him most relevant — first, the importance of the building, second, its structural condition, and third, the cost of repair and adaption for future use. Each of the

objectors concentrated on one of these points. The two speakers for Cirencester Town Council stressed the possibility of alternative use, including the possibility of an annexe to the Corinium Museum. The Victorian Society was represented by a qualified architect and his evidence was particularly important as the District Council had stated that the structure was unsound. The speaker for the Victorian Society refuted this and convinced the Inspector that in fact the building was in a very fair state of repair. The industrial archaeology interest was represented by the Rev Awdry for the Gloucestershire Society and myself for the AIA and the Southhampton University Group (I should explain that our special interest arises from field visits to the Cotswolds, and from the fact that the Curator of the Corinium Museum is a former secretary of the University IA Group). I pointed out the importance of the building as a relic of the transport history of the local area. Attention was drawn to the association with Brunel and to the use of the building for meetings of the Cheltenham and Great Western Union Company until its absorption by the Great Western. Various modifications were made over the years, including the removal of the overall roof and the addition of a new annexe by British Railways, Western Region. These did not, however, destroy the character of the original building. While it was not a major feature, in the same class as Temple Meads or St Pancras, Cirencester Station was of importance as a good example of a station for a market town.

I would suggest that two major factors in achieving a stay of execution on the station were the expert architectural evidence and the support of the local community. However, this is only a beginning. If Cirencester Station is to survive, the next move must be to find a use for it!

David Viner, Curator of the Corinium Museum adds that the Cotswold District Council has included monies for the upkeep and improvement of the building in the current year's estimates. The survival of the building looks reasonably assured but the CDC still seeks a suitable tenant for it. With its convenient proximity to the M5 motorway, it would for instance form a convenient store for a travelling theatre group, or a workshop for a craftsman setting up on his own. Suggestions would be welcomed by David Viner, who can be reached at the Corinium Museum, Park Street, Cirencester, Glos GL7 2BX. Telephone 0285 5611.



Lion Steams Again Adrian Jarvis, Keeper of Social and Industrial History at Liverpool Museum, has supplied the following note: Lion was built for the Liverpool and Manchester Railway in 1838 by Todd, Kitson & Laird and was their first locomotive. For the railway company she was numbered 57 and served until about 1857 on main-line duties, being transferred to ballast-train duties prior to her sale in 1859. She remained in service with her new owners, the Mersey Docks and Harbour Board, from 1859 until 1928.

Towards the end of her life with the Dock Board she had attracted growing notice from local steam enthusiasts and historians and she was rescued by the Liverpool Engineering Society for preservation and for participation in the centenary celebrations of the Liverpool & Manchester Railway. She is, therefore, one of the most important preserved locomotives still in this country as a representative of the first real mainline railway in the world and as the only surviving operable locomotive of that railway company.

For the railway centenary in 1930 she was thoroughly restored, both bodily and mechanically by the LMS Railway Company and much of that work stood her in good stead through the making of various films the most celebrated of which was the Ealing Comedy 'The Titfield Thunderbolt', and into her so-called retirement with Merseyside County Museums. The arrival of the 150th anniversary made it clear to us that we should contemplate the possibility of steaming her once again and preliminary examinations indicated that both her boiler and her mechanical parts were in sufficiently good condition to make this a definite possibility. Unfortunately, recent accidents involving boiler tubes have meant that we must pull out her existing boiler tubes, regardless of their condition, which appears good, in the interests of safety and Lion has now gone to the Vulcan Works of Ruston Diesels Ltd where this work will be undertaken on our

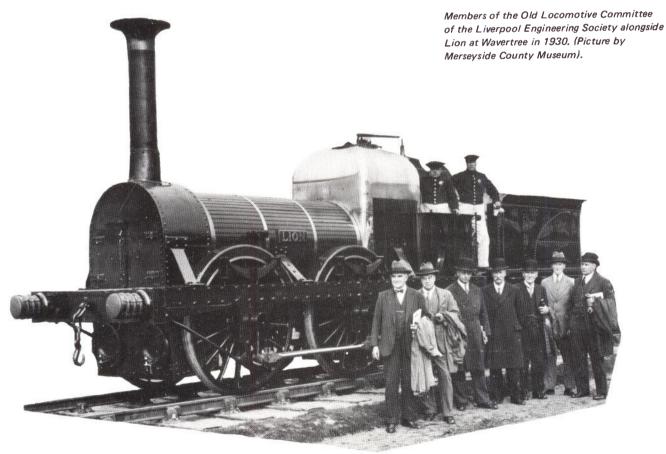
behalf. It is intended that she should have her first experimental steaming later this year. There may be some scope for public demonstrations in the late autumn or early winter but her major appearance will, of course, occur at the Rocket 150 celebrations at Rainhill next May. Following that *Lion* will tour various other exhibitions before returning to her home in the Museum in October of next year.

Relics of the Great Western Railway in its Broad Gaugelera are rare indeed. One broad gauge locomotive is known to survive, the little vertical-cylinder contractors locomotive Tiny that stands on Newton Abbot station. (the North Star locomotive preserved at Swindon is largely a replica, built by the GWR during the present century in penance for having destroyed Gooch's original when more room was required at Swindon loco works). Bristol Museum has the remains of a broad gauge coach, and odd lengths of bridge rail (not all of which necessarily dates from the broad gauge era) are a familiar feature on West Country farms, reused as fences and gateposts. There was excitement last year, therefore, when the Great Western Society received reports of broad gauge point work surviving in situ in a quarry adjacent to the WR main line at Westleigh near Burlescombe, near the Devon/Somerset border. Research showed that the components were acquired by the Westleigh Stone and Lime Company as surplus material following the gauge conversion in 1892. The private sidings at Westleigh continued in use until about 20 years ago. When the connection to the main line was severed in January 1961 they were left and forgetten. Clearance work by the Society's Taunton Group has confirmed that several complete sets of broad gauge pointwork and lengths of bridge rail survive, much of it hardly worn despite being over 80 years old (the Westleigh Sidings were never heavily used). With permission of the present owners, ECC Quarries, a number of items are being removed, some of

which will go to the National Railway Museum at York and others which will be installed inside the wooden transfer shed originally used by the GWR at Didcot to transfer goods from broad gauge wagons to those of standard gauge and vice versa and now being re-erected by the Society at its Didcot steam centre.

Still on rails, there is news from Manchester of two new preservation schemes. The **Greater Manchester Transport Society** has acquired part of the Queen's Road Garage from Greater Manchester Transport for use as a museum, and although not yet open to visitors, the building already accommodates a 19th century horse bus under restoration and a pre-war Salford motor bus. Members of Manchester Region IA Society are cooperating in recording existing tram depots, bus garages and workshops in the city.

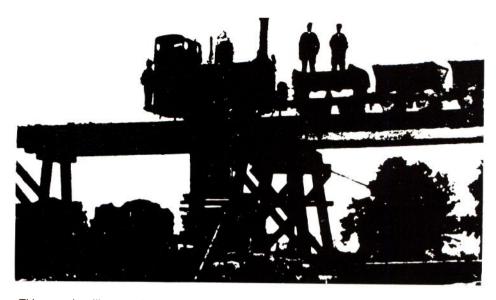
A more unusual scheme will involve the Manchester Transport Museum Society in operating electric tramcars over a 200 yard length of track in Heaton Park, at weekends and on public holidays. Initially two trams will work over this short route, an open-top doubledecker rescued from a garden at Middleton and now being restored by engineering apprentices of Greater Manchester Transport, and a singledecker no. 765, retired in 1936 and sold to a Yorkshire farmer who used it as a toolshed. The MTMS bought it back in 1959 since when it has been fully restored and is now on display at the Crich Tramway Museum. Existing track at Heaton Park had to be exposed from beneath its asphalt covering, and labour from the Community Industry Scheme has assisted with this and other aspects of re-commissioning this tiny microcosm of Manchester's tramway system which once boasted 900 trams and was part of a network of connected lines stretching from Bacup to Liverpool. Help has also come from Greater Manchester Transport and Wilson's



Brewery; Manchester City Council and the GMC have subscribed £7,750 and £5,200 respectively. It is hoped that the first service in Heaton Park will operate some time in the summer of 1979,

Another transport museum with specific regional collecting policies is that being established later this year at Enstone by the Oxford Bus Preservation Syndicate, founded in 1967 to coordinate the activities of those interested in local transport in Oxfordshire. Twelve vehicles have been collected, dating from 1932 to 1971. and work is being done on restoring several of these to make them ready in time for the commemoration of the centenary of public transport in Oxford in 1981. A garden shed examined in Oxford several years ago turned out to be the body of a single-deck bus built for service in the city in 1920. No suitable chassis was then available, but last year the Syndicate located an example of the chassis required, a Daimler Y-type which had been repatriated from the Canary Islands some years previously. Derived from a typical 1st World War vehicle, this chassis exemplifies what many provincial bus companies began their operations with, the War having also in many cases provided the opportunity to learn to drive which gave the companies their first bus drivers. Oxfordshire being a predominantly rural county, local buses had an important effect in opening up areas of the county remote from railways which had previously relied in the horse and cart for movement of goods. The Syndicate has acquired both body and chassis, and when restored the Daimler bus will feature sash windows for maximum ventilation, a luggage rack on the roof accessible by ladder at the rear and possibly solid tyres. It is thought that this will represent the only single-deck bus from the early 1920's surviving in Britain. Further details of the Syndicates' plans are available from NJR Taylor, Hon Chairman, at 35 Yarnells Hill, North Hinksey, Oxford OX2 9BE, who would also be delighted to receive contributions towards the costs of restoring this rare and important vehicle.

Links with ia societies having areas of common interest with its own are sought by the British Aircraft Preservation Council, founded in 1967 following a meeting called to co-ordinate preservation efforts in this field. Membership of the BAPC is by election, and includes the Fleet Air Arm Museum, Imperial War Museum, RAF Museum and Science Museum. Associate membership is available to organisations wishing to support the preservation of aeronautical items, but there is no category of individual membership. Meetings take place quarterly at the premises of member organisations, and much useful collaboration and exchange of information results. A major aircraft preservation symposium was arranged by the Council at Stoneleigh in October 1977 to mark its tenth anniversary. Regional conferences of IA societies are likely to provide a useful opportunity for member groups of the BAPC to collaborate with wider-based IA societies, and member groups in the North West were invited to participate in the NW Regional IA Conference at Liverpool in October 1978. Organisers of similar regional conferences might like to contact the Council's Information Officer, Brian Robinson, so that arrangements can be made for aircraft preservation to be represented there; his address is 25 Cormwell Grove, Manchester M19 3QD.



This evocative silhouette shows work taking place in the Westleigh stone quarry in 1902. Picture from E C C Group Library.

Saddleworth Historical Society is campaigning to restore the Woolroad warehouse, a stoneroofed building beside the Huddersfield Narrow Canal where cargoes were transferred to and from boats on the partly-completed canal prior to the opening of Standedge Tunnel in 1811. British Waterways who own the building have granted a lease to the Society, and members propose to re-roof the building and fit new doors to make it suitable for storing heavy items belonging to Saddleworth Museum. Support has been promised from the Huddersfield Canal Society, Saddleworth Civic Trust. local Scout groups and private individuals. Donations are sought towards the £2,000 required to purchase roofing materials and timber; please write to Mr K Booth, Hon Treasurer, Saddleworth Historical Society, 'Ceann', Friezland Lane, Greenfield, Oldham OL3 7EU. The Society is a registered charity.

Council member Douglas Hague has been closely associated, in his professional capacity as Investigator with the Royal Commission on Ancient and Historic Monuments (Wales), with the excavations at Scott's Pit, Swansea being pursued by the South West Wales IA Society. This former colliery near the M4 motorway at Birchgrove boasts the substantial remains of a Cornish engine house, scheduled some time ago, as were subsequently the structures of boiler and furnace houses, tunnels and shaft excavated by the Society. A waggon boiler more than 40 ft long and 13 ft wide has been uncovered, as have the foundations of an older haystack boiler, detailed drawings of which are being prepared. The base of the original condenser was discovered inside the engine house, and after measurement and drawing has been covered up to thwart vandals. The Prince of Wales' Committee has given the Society £40 towards Its work, and ten school leavers aged 16-19 have been engaged under the Youth Opportunities Programme work under three Supervisors on completing the excavations, cleaning, and pointing the exposed stonework and landscaping the site to make it safe and attractive.

Glamorgan/Gwent Archaeological Trust will assist the Society in directing the work of this team, whose salaries will be met by the Manpower Services Commission. Volunteers are still required however from the ranks of industrial archaeologists to assist with investigations on this important site. Monthly

digs have gone on all through the winter, (on dates chosen to avoid the major rugby fixtures!) and further details of how you can help are available from P R Reynolds at 12 Beaconsfield Way, Sketty, Swansea SA2 9JR. From the same address can be obtained the commendable and useful index to the first 20 issues of the Society's lively and informative newsletter. Please enclose sae when writing.

In 1977 a group was formed to restore and operate one of the earliest surviving steam pumping stations on the low-lying Somerset Levels. The site, at Westonzoyland near Bridgwater, saw the commissioning in 1830 of the first steam pumping engine on the Levels, a beam engine and scoop wheel. This eventually proved to be inadequate, and in 1861 a twincylinder vertical Easton and Amos engine was installed, its overhead crankshaft geared to an Appold centrifugal pump in the well beneath. The installation still survives in the ownership of the Wessex Water Authority, and the Westonzoyland Engine Group was formed in 1977, mainly among members of the Somerset IA Society. The Group is negotiating for charitable status, and has the full backing of the WNA in restoring the steam machinery, which was taken out of use in 1951 when a diesel pump was installed alongside. A working forge is being established as a potential exhibit and restoration facility and there are plans for a narrow-gauge contractor's railway to illustrate the use of this means of handling sand, dredgings etc by River Authorities. The Group is particularly on the lookout for exhibits and photographs illustrating land drainage, whether in Somerset or elsewhere and specifically for a small vertical boiler enabling steam to be raised at short notice. If you can help please write to: the Group Chairman, Ian D Miles at Brierley Cottage, Lower Durston, Taunton TA3 5AH tel West Monkton 412713.

Otterburn Tweed Mill for Sale A D George of the Manchester Region IA Society writes: — The closure of Langthwaite Mill in 1977, brought to an end nearly 200 years of textile working in Warwick Bridge near Carlisle. The original building had been erected by the Fergusons in 1793 and measures 66 ft by 33 ft. Although burnt out once, it is essentially the building we see today. Powered in the first phase by twin mill races from the Cairn and the Trout becks,

a 4-storey extension was added by the Dixons who also owned the famous Shaddongate Mill in Carlisle. In 1832 there was a general reequipping when a steam engine was supplied from Peel, Williams in Manchester (an example is preserved at the Higher Mill Museum, Helmshore, Lancs). Throstle frames were installed and the firm seems to have done its own bleaching and dyeing on the premises.

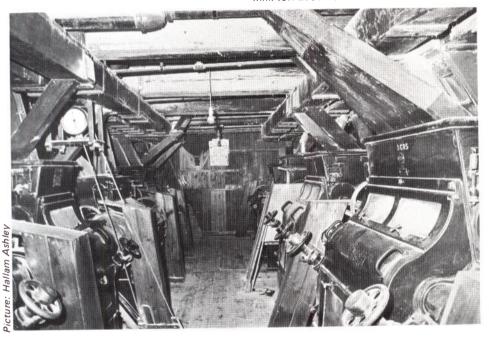
The mill is a very attractive building in red Eden sandstone in a country setting. Part is dated 1814 and the interior has wooden beams resting on slender iron columns round in section. It is all of piece with Peter Dixon's elaborate gothic mansion Holme Eden Abbey (1833) and Holme Eden Church (1846). There are or were some 34 cottages associated with the factory and a schoolroom for 150 children.

In 1883 the mill was sold to the Otterburn Woollen manufacturers in whose hands it remained until closure, weaving sheds having been added in 1925. Recently, an unsuccessful attempt was made to set up an artists and carftworkers co-operative at the mill, but it is hoped that this early industrial complex might find a use of benefit to tourism or the local community.

and after several months of negotiations with E Caudwell Ltd, the Peak Park Planning Board and other interested parties, agreement was reached that the application to demolish should be withdrawn.

Seventy people attended a public meeting in Rowsley last December and the Friends of Caudwell's Mill was formed to preserve the mill as a working museum. The mill is being cleaned from top to bottom by a STEP team of six under Arthur Fox, and it is hoped to have the mill in first-class working order by the end of this year. Help from volunteers would be welcome at the Mill 0800-1630 Monday to Friday and helpers should introduce themselves to Arthur Fox. Further details from Christopher Charlton, Friends of Caudwell's Mill, c/o Tawney House, Matlock, Derbyshire. When open to the public, the mill at Rowsley will take its place with Wortley Top Forge, Kirkstall Abbey, Shepherd Wheel and Abbeydale, Thwaites Mill at Leeds, Worsbrough Mill and Cromford as part of Europe's most exciting trail of water-powered

The water turbine driven roller-mills at Caudwell's mill. (SK 256657)



The addition of another pearl to the necklace of water-powered industrial sites preserved in South Yorkshire and North Derbyshire is likely to be the happy outcome of a proposal last year to demolish several of the outbuildings and gut the machinery of Caudwell's flour mill at Rowsley. The mill is distinguished in being a rare survivor of a water-powered mill with roller machinery. When the mill celebrated its centenary in 1974, the Caudwell family were busy in commercial production. Early in 1978, however, listed building consent was sought to remove much of the historic machinery, to meet the requirements of the 'Miller's Mutal' schemé, an agreement dating from the Depression whereby millers claimed a 'bounty' for the destruction of their mill machinery which was financed by a fund into which they had paid a small amount regularly during the working life of their mills. The scheme was intended to prevent an excess of milling capacity during the lean years of the Thirties. The Arkwright Society led the fight to prevent destruction of the mill

Industrial Verse from Cornwall AIA Secretary Paul Stephens is working on an anthology of Cornish Industrial Verse, and seeks the help of Bulletin readers in locating examples for possible inclusion. So much of the ballad and broadsheet type of doggerel, composed in recognition of a wealthy mining strike, the launch of a large ship, or a mining or railway disaster, was only intended as ephemeral and may only have been published in the form of cheap paper sheets. Some have survived however, tucked between the pages of family Bibles, in photo albums or even lining the backs of pictures or the bottoms of drawers. If you know of any poetry devoted to the industries of Cornwall, please write to Paul at Prospect Villa, Greenbank Road, Devoran, Truro, telephone 0872 864938. He will also be glad to answer advance orders in for the book!

IA in Cornwall For those who were unable to attend the week-long festival of industrial archaeology organised by the Trevithick Society

in conjunction with the AIA Conference in Penzance last September, there is still an opportunity to obtain copies of the 32-page book in which detailed accounts of all the sites visited on the seven days of excursions are presented in a permanent form. The publication is in A4 format and, as well as information on several little-known and secluded ia sites, include includes reproductions of several 18th and 19th century illustration of industry in Cornwall. Copies can be obtained by sending £2 to Paul Stephens, AIA Secretary, Prospect Villa, Greenbank Road, Devoran, Truro, Cornwall.

Lincoln Castle to Stay on Humber Bulletin 5:5 outlined some of the obstacles confronting Humberside County Council and local preservation groups in their efforts to keep the paddle steamer Lincoln Castle operating on the river following her withdrawal by Sealink. With no co-ordinated scheme having been put together on Humberside, the National Railway Museum was unable to press its claim for the vessel to be handed over to the national transport collection; dock dues in Hull had been mounting up for more than six months and the Museum itself, being unable to accommodate the coal-fired paddle steamer at York could only hope to lend out the ship to a 'foster-parent' with the necessary waterside access and preservation facilities. An eleventh-hour bid to moor the *Lincoln Castle* on the Manchester Ship Canal, adjacent to the Boat Museum at Ellesmere Port failed to attract the necessary quarantees of support, and with no prospect of a sound scheme being agreed before the deadline for sale by tender expired, the NRM had to abandon its claim. The Clyde-built ferry, last survivor of a trio built to link Hull with New Holland and the last coal-burning paddler in service in Britain, has been bought by Brian Daly, a Hull night club owner. He plans to moor her in Hull as a floating restaurant.

Granada Funds New Chair The inter-action between Art and Industry has been explored on a number of levels in recent years; Francis Klingender's seminal 'Art and the Industrial Revolution', published in 1947 opened many people's eyes to industry's role as a subject for artists, and the exhibition of the same name mounted at Manchester City Art Gallery in 1968 in Klingender's memory brought together 373 items from many sources, more than one hundred of them from the Elton Collection. The emphasis in this and other less comprehensive exhibitions has been the reliance by some artists on industrial scenes for subject matter.

Salford University is breaking new ground with its recently-announced establishment of a Chair in Art and Industry, part of a new Department of Visual and Applied Arts to be formed on 1 August this year. Little work has been done so far on the impact of art on industry; the assumption has been that the growth of technology is a spontaneous and organic process, whereas artistic development is a luxury, desirable after other requirements have been met but not casually or intimately linked with economic progress. The new Department at Saltford will encourage work on the role of art in forming socio-cultural values; the art surrounding people conditions the way they think and ultimately what they produce, and the products of a manufacturing society are thus an expression of the art which moulds its

tastes and aspirations. The role of television will certainly come in for a fair deal of attention when the new Department begins work, a fact no doubt recognised by Granada Television who have generiously part-funded the new professorship.

Bringewood Furnace The existence of a furnace and forge at Bringewood on the Herefordshire/Shropshire border near Ludlow has long been known, but the exact location of the charcoal furnace has only recently been established by John van Laun, who has supplied the information which follows. The forge is known to have been in production in the late 16th century but the first firm mention is not until 1637, although by inference it was probably in production well before. Some of its products can be seen in the nearby churchyard at Burrington (SO 442 721) in the form of cast iron grave slabs, the earliest of which dates from 1619.

A survey of 1662 shows the layout of the works with a weir some 200 m upstream supplying water to furnace and forge. The furnace as built into the southern abutment of a bridge (demolished c.1772) for charging

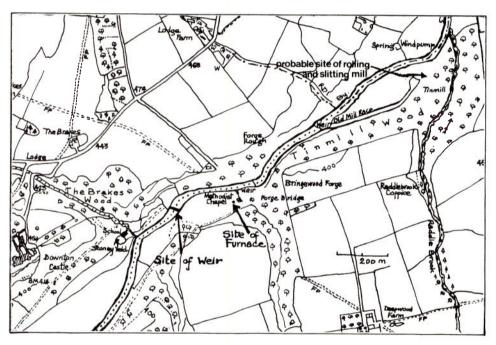
for 31 years. At this time it consisted of three fineries and one chafery. The site must have been very congested with the six wheels needed to operate the bellows and hammers. Further downstream was a rolling and slitting mill. In 1783 this had two rolling stands as well as the slitting mill.

Production for furnace and forge is reputed to have been 450 tons and 340 tons respectively in 1717. By 1759 the make at the forge had increased to 450 tons.

Bringewood is perhaps best known for Forge Bridge, built by Thomas Arnolls Pritchard for Richard Payne Knight in 1772 a few years before Pritchard submitted his design for the Iron Bridge. It is tempting to suggest that this Shrewsbury architect was drawn to the idea of an iron bridge by the proximity of the defunct furnace at Bringewood. Similarities between the stone Forge Bridge and the Iron Bridge are obvious to the visitor.

The site of the furnace is on private land and represents a charcoal furnace site scarcely touched by later development.

Site of Bringewood Furnace. Ludlow is about 5 miles to the North East



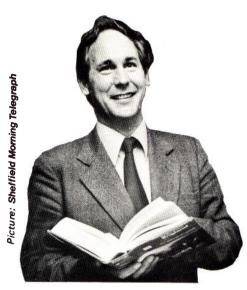
purposes and the forge appears adjacent to the furnace, an unusual procedure where demand for water power normally meant the separation of primary and secondary processes. The furnace today can be identified as being built into the ancient bridge abutment with two sides of the throat discernible. The stone pillar which supported tuyere and forepart lintels can be identified, plus some of the stone wall cladding. In spite of the 1662 survey the site of the forge is debatable. Slag analysis from the presumed site has revealed a content of 66 percent iron oxide, this being consistent with forge slag.

In 1698 Richard Knight (b. Madeley 1659) took over the works, and he was followed by his youngest son Ralph on whose death the furnace probably went out of blast. At one time Charlcotte furnace (which Richard Knight took over in 1713) and Bringewood were assoicated enterprises. In 1733 Charlcotte pigs (7 cwt each) lay at Bringewood.

In 1784 the forge was repaired and leased

Water-Powered Machinery Register Bulletin 5:2 mentioned Kenneth Major's offer to act as a clearing-house for people with waterwheels and associated machinery to offer or those looking for such items. A Gloucestershire engineer Mr O M Goring, now makes a similar offer in respect of all water-powered machinery, including turbines. His Water-Powered Machinery Register has the backing of the National Association of Water Power Users, and will list equipment available for re-use elsewhere and the needs of would-be water power users and those seeking replacement parts. Further details from Mr Goring at Water Power Engineering, Coaley Mill, Coaley, Dursley, Glos. Telephone Cambridge Glos (0453 89) 376.

Research Enquiry J S Hodgkinson seeks information on the activities of Edward Raby, Ironmaster, during the period 1750-70. If you can help him please write to Mr Hodgkinson at 14 Bowers Place, Crawley Down, Crawley, West Sussex. RH10 4HY.



OBITUARY

Bill Silvester's death at the early age of 43 has robbed us of one of the museum profession's most imaginative and best-loved curators, and the industrial archaeology world of one who strove to awaken people to the importance of preserving what is best and most significant in their changing environment. Born in Sheffield with strong family connections in the steel industry, J W H Silvester completed his schooling in HMS CONWAY, where he distinguished himself by achieving Chief Cadet Captain in his final year. A foot ailment cut short his career in the Merchant Navy, and he moved ashore to a post with an East Coast shipping and export firm, qualifying as a Chartered Shipbroker. He later entered the family forge and engineering firm in his native Sheffield and from these appointments he accumulated a wealth of practical management expertise as well as a deep knowledge of industrial processes which were to distinguish him in his subsequent museum career.

A mature State Studentship enabled Bill to graduate in economics and business administration at Hull, following which he was appointed Keeper of Industry and Technology at Sheffield City Museums in 1970, where he was closely involved with the final stage of restoration at Abbeydale Industrial Hamlet, In January 1974 he obtained the Diploma of the Museums Association and almost simultaneously was appointed Deputy Director of Museums at Sheffield, a promotion which although it gave greater scope to his administrative skills did not divorce him altogether from the practical side of museum work, to which he continued to make a distinguished contribution. His vision of a museum's role was a broad one; as well as making better known in Britain the concept of the 'eco-museum', 'the living museum without walls', of which Le Creusot in Burgundy is our nearest example, Bill advocated persuasively the importance for museums of involving themselves with the whole life of their neighbourhood and of making themselves attractive to ethnic minorities and groups of society for whom museums conventionally have no significance at all. His eloquent arguments for the museum as a mirror for mutal understanding between people divided by social class, income group or racial origin opened the eyes of many curators beyond the mere acquisition of objects for their own sake, and underlined the importance of linking them with the lives of the people who use them.

His imaginative ideas on the role of museums in society characterised his teaching when he was appointed Lecturer in Museum Studies at the University of Leicester in 1978; in his spare time he had completed the post-graduate Diploma in Adult Teaching at Hull University. Bill brought his wisdom and wide experience of museums and of the wider world to the benefit of his post-graduate students at Leicester, and his unique appreciation of the nature of materials and of their cultural implications enriched his teaching of museum studies.

His high sense of service to the community involved him as chairman of the Northern General Hospital schools board, a Justice of the Peace, lay member of Sheffield Cathedral council, committee member of the Yorkshire and Humberside Federation of Museums and Diploma examiner and tutor for the Museums Association with special emphasis on the history of technology. He attended the London meetings of the Newcomen Society whenever his professional duties permitted, and pioneered the idea, through a letter to the Museums Bulletin in 1973, of a specialist group for science and technology curators, a proposal which he saw come to fruition a few months before his death.

Bill Silvester deplored what he called the 'jackdaw principle of museum collecting' and saw the museum's role, not as competing with the private collector in amassing groups of attractive artifacts, but in interpreting the products of human skill to those who might be totally unfamiliar with them and in encouraging the public to shape museum collecting policies by speaking up for what objects were important for **them**. He leaves a widow, Hilary, and a six year old son, Hal, to whom we extend our sympathy. Bill's passing has robbed us prematurely of a man with a rich vision of the role of industrial archaeology in opening our eyes to the world around us.

Exchange and Mart A 1938 Bedford 2-ton lorry that has not run for 30 years and is described as being 'in a sorry state' is likely to be sent for scrap by its Derbyshire owner unless he receives a satisfactory offer from someone prepared to restore it or use the parts. The lorry is to be seen at the premises of J F Farnsworth, Central Garage, High Street, Riddings, Derbyshire.

A quantity of baking equipment has come to light in a private storehouse and is on offer to any museum interested. Included are a cast-iron baking oven of 216 cu ft, two other ovens arranged one above the other with doors approximately 2 ft x 4 ft, a proving cabinet 2 ft x 2 ft x 6 ft high, a dough mixer and a pie mould both of cast iron and about 3 ft high. Enquiries to Mrs M Guest, 14 Birches Road, Dam Mill, Codsall, Wolverhampton, W Midlands WV8 2JR.

With the scrapping of the **Tyre Commissioners'** electric floating crane *Titan* comes the opportunity to preserve some of the steam driven generating plant. An invented vertical compound engine of about 150 bhp made in the Netherlands in 1922 by Werf Gusto stands about 9 ft high, on a base plate 7 ft square. It is coupled to a 70 kVa DC generator, 230 volts, 60 cycles, and the whole set weighs about 18 tons. It was in regular use until recently. Initial enquiries to J C Hallam, Tyne and Wear Museums, Blandford House, West Blandford Street, Newcastle on Tyne NE1 4PT.

AIACalendar

Bricks and Stones

17-18 August

Bridges and Communications in Gwynedd 11-18 August

Design and Industry 6–9 September

English Tin-Glazed Earthenware 8–9 September

'Rocket' locomotive anniversary 8–9 September

AIA Conference 14--16 September

Panel for Historical Engineering Works 20–22 September

Residential conference at St Martin's College, Lancaster organised by Centre for North West Regional Studies. Visits to IA sites in Lancaster and talks on cotton mills, working-class housing, watermills, chemical works etc. Cost £11 including accommodation. Details from Dr J D Marshall, Centre for N W Regional Studies, University of Lancaster, Bailrigg, Lancaster.

Summer school at Coleg Harlech, with special emphasis on Telford's road building and on narrow gauge railways. Tutors Dr Michael Lewis and Richard Keen, Cost £60. Write to: The Registrar, Coleg Harlech, Harlech, Gwynedd LL46 2PU.

Annual conference of the Design History Society, based on Keele University and Ironbridge. Details from: Roger Newport, Faculty of Art and Design, The Polytechnic, North Street, Wolverhampton, WV1 1DT.

Seminar at Morley College Adult Education Centre, 61 Westminster Bridge Road, London SE1. Speakers include Michael Archer (Assistant Keeper of Ceramics V & T), Alan Smith (University of Manchester) and Cleo Witt (Curator of Applied Art, Bristol Museum). Cost £21 includes lunch both days and evening reception. Details from H G Bradley and Michael Courtney, 14 Dorset Square, London NW1.

Organised by Newcomen Society to mark 150th anniversary. Accommodation at Castle Leazes Hall of Residence, University of Newcastle. Visits to Springwell workshops, Bowes Railway, Wylam, and unveiling of plaque at site of Robert Stephenson and Company's premises. Cost ca £20. Details from: Executive Secretary, The Newcomen Society, Science Museum, London SW7.

Annual meeting hosted by Ironbridge Gorge Museum. Cost about £20. Details from Bill Thompson, 71 Albert Road, West, Heaton, Bolton, Lancs BL1 5HW.

Annual meeting at Newcastle on Tyne, restricted to members of this ICE Panel, but others may be accommodated on visits. Write to R W Rennison, 25 Graham Park Road, Newcastle on Tyne NE3 48H

A private collector, G A Shotbolt of Conigree, Worcester Road, Ledbury, Herefordshire is anxious to preserve and restore any stationary engine. Information from readers of engines likely to be available would be

welcomed by Mr Shotbolt.

The Windermere Steamboat Museum seeks a small triple expansion marine engine suitable for installation in the launch *Osprey* recently acquired by the Museum from another owner on the lake with a view to running on regular trips for visitors. Already in the WSM's fleet is *Osprey's* sister vessel *Swallow*, whose engine features cylinders of 4½", 6" and 8" bore by 5½" stroke. News of suitable engines for *Osprey* would be welcomed by George Pattinson, Beresford Road, Windermere, Cumbria.

AIA Bulletin is published by the Association for Industrial Archaeology. The Association was established in September 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, publication and conservation. It aims to assist and support regional and specialist survey and research groups and bodies involved in the preservation of industrial monuments, to represent the interest of Industrial Archaeology at a national level, to hold conferences and seminars and to publish the results of research. Further details of the Association and its activities may be obtained from the Membership Secretary Association for Industrial Archaeology, The Wharfage, Ironbridge, Telford, Salop TF8 7AW England (095-245 3522).